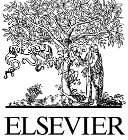

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A proposed corporate governance reform: Financial statements insurance

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Abstract

The inherent conflicts of interest in the auditor–client relationship and the unobservability of financial statement quality are likely culprits in the recent corporate scandals such as Enron and WorldCom. The solution proposed here is a financial statement insurance (FSI) mechanism. Instead of appointing and paying auditors, companies would purchase financial statement insurance that provides coverage to investors against losses suffered as a result of misrepresentation in the financial reports. The coverage and the premiums would be publicized. The insurance carriers then would appoint and pay the auditors. Those announcing higher limits of coverage and smaller premiums would distinguish themselves in the eyes of the investors as companies with higher quality financial statements. In contrast, those with smaller or no coverage or higher premiums would reveal themselves as having lower quality financial statements. Every company would be eager to get higher coverage and pay smaller premiums, lest it be identified as the latter. By transferring the hiring decision to the insurer, this scheme eliminates the auditor's inherent conflict of interest. The publicization of the coverage and the premium credibly signals the quality of the insured's financial statements and direct investments towards better projects. At the same time, the ability to signal the quality of financial statements provides companies with incentives to improve them. Thus, FSI will result in fewer misrepresentations and, accordingly, in fewer suits and smaller shareholders' losses, as well as a more efficient allocation of resources.
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1. Introduction

The cascade of recent audit failures has given rise to a regulatory initiative, the Sarbanes-Oxley Act of 2002 (the Act), and to an ever growing commentary on ''corporate governance,'' a

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major theme of which is the role of ‘‘gatekeepers’’ and, in particular, that of auditors. Arthur Levitt (2002, page 116) complains:

‘‘More and more, it became clear that the auditors didn’t want to do anything to rock the boat with clients, potentially jeopardizing their chief source of income. Consulting contracts were turning accounting firms into extensions of management—even cheerleaders at times. Some firms even paid their auditors on how many non-audit services they sold to their clients’’.

The issue of auditor independence (or its absence) has occupied a major place in the debate over the failure of corporate governance. The Act seeks to address the problem by increased regulation and penalties, empowerment of audit committees, and reduction of the auditor’s involvement with the client. But the Act does not untie the auditor/management knot; without realignment of the auditor’s incentives and the establishment of a corporate governance framework, matters will return to the status quo ante. This paper introduces a financial statement insurance scheme designed to eliminate conflicts of interest that plague the auditor–client relationship and, at the same time, to credibly signal the quality of financial statements. This is expected to result in security prices that reflect the differential qualities of financial statements and thus become better guides to resource allocation.

Clearly, audit failures are not the sole reason for the debacles in the financial markets. Diverse causes have been suggested: the greed of the 1990s, the market’s ‘‘irrational exuberance’’ (Greenspan, 1996), executives’ cooking the books to maintain inflated stock prices (Jensen, 2004), the escalating use of executive options, that magnify incentives to manage earnings (Jensen et al., 2004), waves of acquisitions using inflated stock, and so on. Such forces could in turn exert great pressure on auditors to acquiesce in dishonest reporting. Sifting among these causes is a diagnostician’s nightmare.

Regulators have been busy trying to address corporate governance failures manifested in the workings of boards of directors and of audit committees. Section 301 of the Act, for example, stipulates and describes such matters as independence of audit committee members, procedures for resolving complaints, authority to engage advisers, and funding. It is doubtful, however, that these provisions will be effective. Legislating the independence of audit committees or directors does not, by itself, induce it. Even a cursory analysis of their incentives and motivations suggests that directors and audit committee members are themselves subject to an agency problem not significantly different from that perverting the relation between managers and shareholders: they wish to be re-appointed to their board positions. Pearl Meyers and Partners (2002) report average director compensation in the 200 largest US corporations in 2001 of $152,626. Good relations with the CEO and his team also bestow valuable benefits beyond the immediate monetary rewards, including social connections, prestige, and other opportunities. For example, directors or audit committee members could have their interests aligned with the CEO or CFO because they depend on the latter’s recommendations to become members of other company boards, etc.

The SEC has recently proposed rules that would create a requirement for companies subject to the Commission’s proxy rules, including registered investment companies, to include in their proxy materials the names and certain other information regarding security holder nominees for election as director under certain specified conditions (SEC, October 8, 2003). However, this will fall short of a remedy. Board elections are by slate, and dissidents face impediments to putting forward a competing slate (Bebchuk and Kahan, 1990). Hence, the management-proposed slate of directors is the one that typically ends up being offered. As a result, the CEO and his team dominate the nominating process, and directors feel compelled to accept the CEO’s compensation structure.

Also militating against the independence of directors and audit committee members is the pay structure. If well paid, directors have little incentive, if any, to oppose the CEO's pay or his other policies; they are de facto dependent on management. If not well paid, the directors and audit committee members seldom bring an independent perspective to bear on policy issues or managerial pay: they are not paid enough to justify the effort and risk tense relations with management. Moreover, directors typically have only nominal equity interests in the company (Baker et al., 1988; Core et al., 1999). Yet even if directors owned a significant share of the equity, as long as they were free to dispose of their interest, they would still have incentives to overlook attempts by management to inflate earnings or other accounting measures, which would help them to sell their stock at higher prices! Suppose directors hold restricted stock with lock provisions that bars them from selling it before a certain date. This may create the perverse incentive to encourage management to ''cook the books'' so as to inflate the price immediately before the expiration of the lock-up provisions on the sale of their held shares. Randomizing the date at which the lock-up provisions expire would only exacerbate matters: incentives to inflate the stock price would remain unabated until the lock-up provisions expire.

There is another serious dilemma. Even if shareholders were endowed with real power to affect corporate decisions, attempts to paint the company's prospects as rosier than they truly are might persist. Inevitably, some shareholders, possibly with increasing number and intensity since the beginning of the Internet boom, apply a short-horizon orientation to decisions on buying, holding, or selling stock. They are the day-traders, the speculators whose interest is mainly to buy cheap and sell dear, and to exit the corporation as early as they can make a profit. If these hold sway over the corporation's executives and directors, they induce the kind of accounting obfuscation and deceit that we have witnessed during the last 2 years (Ronen and Yaari, 2002). A reformer is hampered by the inability to distinguish, ex ante, between such short-horizon shareholders and those with a longer horizon, who would be interested in maximizing the long-term, fundamental value of the company. Hence, empowering shareholders in not a panacea: one must know which shareholders to empower!

Addressing this particular conundrum is beyond the scope of this paper. But even without injecting short-run-profit-maximizing shareholders, we face the knotty problem of aligning management's interests with those of shareholders. Nowhere is this task more daunting than when attempting to induce managers to tell the truth.

Where outside capital providers are not privy to the inner workings of the enterprise, there is a compelling need to inform them truthfully of the financial status (balance sheet) and performance (income statement) of the organization. This poses a difficulty: what is being asked is that management report on itself, which is inherently an act of subjectivity. Over time, the resolution of this dilemma has taken two forms, independent, non-employee members of the board of directors and independent outside auditors. It was assumed that independent directors would represent the outside stakeholders, assuring that the financial statements were a reasonably accurate reflection of the organization's state and performance. But without some method of independently verifying the information, they act in vain. That circumstance has called forth the independent outside auditor, the CPA. The responsibility has now shifted to this outside auditor to carry out, in significant part, the function of verifying and validating financial reporting.

The role of the auditor as gatekeeper thus emerges as a key element in corporate governance reform. In the next section, I discuss the genesis of this function and the problems associated with how it evolved over time. I then suggest some potential remedies, and, finally, I offer my proposal for financial statement insurance.

2. The gatekeeping conundrum

Never before has the auditing profession faced the challenges it confronts today. Accounting scandals seem to have eroded public confidence in auditors, leading to the sweeping Sarbanes-Oxley Act as well as the new Public Company Oversight Board (PCOAB). To understand the antecedents of this storm, it is useful to focus on the value of audits to society.

Auditing has emerged to satisfy a need to facilitate business transactions among differently informed parties. Information asymmetry gives rise to a "market for lemons" (Ackerlof, 1970) phenomenon: investors, uncertain that privately informed issuers of securities will meet contractual and implicit obligations, will refrain from committing their savings—leading to a market failure. This impending breakdown creates a demand for an attestation product: a "Good Housekeeping" stamp of assurance that financial presentations and claims security sellers implicitly project in these presentations provide a fair view of the enterprise the sellers are seeking to finance (Ronen, 1981). To gain credibility, the attestation must be made by auditors who are perceived to be both technically competent and independent of the client to whose financial statements they attest.[1] State licensing of auditors who meet minimal educational and testing requirements facilitates both the attainment and the perception of technical competence. Similarly, the Securities and Exchange Commission (SEC) has the authority to penalize auditors who violate rules of independence. These regulatory enforcement instruments are buttressed by a variety of self-regulatory mechanisms implemented by the American Institute of Certified Public Accountants (AICPA), which sets rules of ethical conduct whose violation can trigger sanctions.

Before the creation of the PCOAB, the AICPA also set auditing standards, which, if not followed, exposed auditors to civil liability under federal and state laws. In light of the recent scandals and the perceived failure of self-regulation, this standard-setting function has been transferred to the PCOAB—an arm of a government agency.

This regulatory framework, while necessitated by the demand for credibility, creates certain risks. The auditor can use two types of information in the exercise of his professional judgment: "hard" information, which is observable and verifiable, and "soft" information, which is observable but not verifiable (Grout et al., 1994). The soft information complements the hard, as it endows the auditor with better knowledge about the underlying business and can ensure that the financial statements more fairly present the economic reality of the enterprise. Yet penalties imposed by the regulatory framework can push the auditor into a conservative posture such that he insists on reflecting only the verifiable information and thus ends up providing less information. However, this only applies to an auditor who truly exercises independent professional judgment. If the rules are too lax, some auditors might bow to the demands of their clients, rendering clean opinions when they are not merited. To a certain extent, the market for reputation can mitigate the risk of laxity, but the risk associated with excessive strictures cannot be corrected as easily: auditors withhold most soft information from the market. Thus, paradoxically, the attempt to enforce independence can defeat the exercise of independent professional judgment.

This discussion points to independence as the critical quality that auditors should possess to resolve the tension between the regulatory requirements to enforce independence and the exercise of professional judgment. If auditors had an independent state of mind, there would be

[1] Together, independence and technical competence have been seen to define audit quality (DeAngelo, 1981). They are not independent of each other: lack of independence can be manifested in reduced effort to detect weaknesses the auditor prefers not to unveil. This would be tantamount to incompetence.

less need for the strictures that hamper professional judgment; financial statements would become more informative. Unfortunately, the existing structure of the market for auditing impedes the adoption of an independent state of mind. The auditor is effectively retained by the management of the client in the case of public companies, so that he becomes beholden to his client's management. Theoretically, auditors are supposed to be agents of the shareholders. In practice, it is management that engages the auditor and ultimately pays for his services and structures his auditing and consulting fees so as to elicit actions, including opinions and assurances, that it desires from the auditor. The risk of losing fees from a long-term audit engagement—even without the limitations on non-audit services imposed by the Act—effectively guarantees that the auditor complies with management's wishes. In fact, the rendering of qualified opinions is a rarity. When identical, uniform opinions are rendered for most financial statements, auditors provide no information that allows investors to differentiate among financial statements of differing quality.

The anticipation of potential gains from acquiescing to management's wishes more than offsets the effect of liability arising from shareholder class action suits. In effect, clients compensate their auditors for the risk of legal liability, thus depriving the liability regime from its deterrent effect. Even if litigation penalties become draconian, clients that derive very large benefits from inflating their earnings and stock prices could still reimburse them. Moreover, imposing higher litigation penalties on the auditor ex post fails to address the misallocation of risk and resources: it does not enhance society's ability to distinguish, ex ante, between firms with intrinsically high returns from the Enrons and WorldComs of the world, which have intrinsically low or negative returns but misrepresent themselves as high-return firms. Also, considerably increasing exposure to liability may drive auditors out of the business of auditing altogether.

There are other factors that aggravate the position of the auditor vis-à-vis the client. At least two major changes have had a significant impact on the auditor: the computer and the change in the nature of assets and liabilities. The computer has substantially expanded the amount and quality of data available, and the auditor has become dependent on data processing systems. The movement from tangible to intangible assets with very long lives and from liabilities whose principal and terms are known and specified to liabilities whose principal and terms are legally related to and dependent on other factors, such as is found in derivatives, has substantially reduced the auditor's ability to validate the values presented in the financial statements. Current financial statements are a blend of largely verifiable, but uninformative, depictions of past transactions and largely unverifiable, but possibly informative, projections of future outcomes. Under existing GAAP, many of those projections show up in the balance sheets as assets, and even as revenues. Consider the Interest Only Strip, shown as an asset in the balance sheets of specialty finance companies under Financial Accounting Standard 140. This asset is simply the present value of a future stream of unrealized income, recorded as current income. Its valuation is highly subjective and acutely sensitive to changes in assumptions. It is extremely difficult, even for a well-intentioned auditor, to dispute and reject the projection of a manager wishing to improve the appearance of his financial statements. Or consider Rebecca Smith's report (Wall Street Journal; January, 17, 2002) on Enron's Braveheart venture (incorporated on December 28, 2000): "Enron assigned the partnership a value of $124.8 million based on its projections of the revenue and earnings potential of the Blockbuster venture, according to company documents". Such largely unverifiable intangibles make financial statements difficult to audit.[2]

[2] We do encounter sweeping admonitions in the press to the effect that accountants should make sure that "... the overall impression created by GAAP fairly portrays the underlying economics" (Michael Young's statement in Steve Liesman's "SEC Accounting Cop's Warning:" Wall Street Journal, February 12, 2002). Easier said than done!

They constitute private information that cannot be perfectly verified ex post. We can only observe whether a manager's forecasts were accurate; we cannot know that he did not truly believe that the forecasts were accurate when made. Under these circumstances, in equilibrium, and on average, managers' presentations will not be truthful (Ronen and Yaari, 2002). Even detailed standards have not prevented unverifiable intangibles from creeping into the financial statements.

This changed environment puts the auditor in a very difficult position, especially within the extremely competitive market for audit services. In an uncertain environment marked by the difficulty of verifying valuations that are necessarily soft and subjective, an auditor who is paid by a potentially prevaricating client is naturally tempted to adopt the client's position. Thus, although some audit failures were precipitated by incompetence and corruption, the conditions that created audit uncertainty likely contributed to these failures.

3. Potential cures for the lack of independence

What are the potential remedies for the auditors' conflict of interest? The usual remedies don't seem to be satisfactory. Consider the alternatives.

3.1. More regulation

We have already discussed some of the adverse effects of regulation. Introducing additional layers such as those legislated by the Act has the potential to make things worse. The Act prohibits certain actions while mandating others, and the means of enforcing the prohibitions and the mandated duties are penalties imposed upon discovery that prohibited acts were committed or that mandated actions were not taken. For example, the Act bars some non-audit services (paragraph 201(a)) and prescribes that audit committee members be independent (paragraph 301). An example of mandated duties is a requirement of timely disclosures to the issuer's audit committee of ''all alternative treatments . . . that have been discussed with management officials of the issuer . . . ramifications of the use of such alternative disclosures and treatments, and the treatment preferred by the [audit] firm'' (paragraph 204). As with any rules or regulations, there is no reward for doing the right thing. How effectively can PCOAB implement these stipulations?

It remains doubtful whether the aims of the Act can be achieved. A necessary condition for effective implementation is willingness to enforce the regulations. However, regulators' incentives are shaped by groups with interests that likely diverge from those of investors. Witness, for example, the SECs backtracking on the requirement that lawyers resign and blow the whistle on securities law violations (influenced by the lawyers' lobby) and on barring tax shelter planning by auditors (effected by the accountants' lobby). Moreover, regulators seek entrenchment in bureaucratic power and marketability after their regulatory career, and these goals require the goodwill and cooperation of interest groups whose desires are different from those of investors.

Further, enforcement is costly, and funding depends on political priorities that typically lie elsewhere. Competing demands for budgets can arise unexpectedly, such as when wars or tax cuts are imminent; eventually corporate governance reforms may be accorded low priority.

In addition, mandatory penalties are effective only if agents expect their misdeeds to be detected. If the probability of detection is perceived to be small, the errant are not deterred. Regulatory hesitancy and backtracking are expected. And if draconian penalties are administered upon the discovery of a wrong, will corporations be able to staff their boards of directors and

audit committees with able members in the face of such heightened risks? Finally, even if wrongdoing is ultimately detected and penalized, justice typically comes too late to properly rectify the wrongs, compensate investors for their losses, or restore their confidence. Punishments beyond the horizon are not effective deterrents.

Another drawback of regulation is that regulators frequently lack the required knowledge to define an efficient framework. This is inherent in their position as neither producers nor clients. They also lack incentives to install such a framework, since it may exaggerate possible external effects such as public criticism, and consequently require higher effort than they are willing to exert.

Consider an example of how a rule can have pernicious effects. Section 201 of the Act makes it unlawful for a registered accounting public accounting firm to provide, contemporaneously audit, and certain non-audit services, including bookkeeping, financial information systems design and implementation, appraisal or valuation services, actuarial services, internal audit outsourcing, management or human resource service, broker, dealer, or investment adviser services, or investment banker services, legal and expert services unrelated to the audit, and any other service that PCAOB determines by regulation is impermissible. This section was crafted to address two distinct concerns. First, additional consulting revenues may increase the auditor's dependence on any given client, and second, some consulting services create conflicts of interest that may bias an opinion rendered on financial statements that partially reflect the auditor's own work (such as financial information system design and implementation). Whether these prohibitions effectively ameliorate the conflict of interest is doubtful. As to the first concern, an indefinite stream of future audit fees is sufficient temptation (consider Enron's audit fees of $25 million a year). As to the second, a troublesome trade-off comes to mind. Rendering some of these barred consulting services endows the auditor with intimate knowledge of the client that makes him (paradoxically) less dependent on the client's management for information. Barring the services therefore may diminish the auditor's independence rather than enhancing it.

3.2. The market for reputation

Can market forces alone or as facilitated by regulation provide sufficient incentives for auditors to exercise professional judgment independently? I contend that this is not possible under the existing market structure, wherein management hires the auditor. Consider the possible arguments.

The first market safeguard strategy that comes to mind is for auditors to wish to build a reputation by providing higher-than-expected quality and refraining from opportunistic behavior.[3] This, however, can result in allocative inefficiencies when introductory pricing is used.[4] More important, it presumes that clients demand high-quality auditors. At the very least, a segment of the market, which could be very large indeed, seeks opportunistic auditors that are willing to be bribed and to render a clean opinion on financial statements they know to include omissions and misrepresentations. Penalties will not be imposed unless the misdeeds are detected, and even then, the errant clients will reimburse litigation costs. In a sense, auditors may enhance their reputation among opportunistic clients by advertising and otherwise demonstrating their willingness to cooperate with the clients to the detriment of investors.

Second, there is the strategy of using specific assets with a value that deteriorates when clients are lost. The data obtained on clients and their markets form such assets in the case of auditing. The

[3] Craswell et al. (1995) discuss the cost of developing a reputation as one who safeguards auditing quality.

[4] See Carlton et al. (1994) for a discussion of signaling quality through pricing.

assets can act either to enhance or to hamper quality, depending on the degree of client diversification. The threat of losing a single-client-specific asset may make the auditor less independent (Dye, 1991). With a diverse clientele, compromising independence from one client may endanger the assets specific to other clients. For this to work, however, the lack of independence with respect to that one client must be discovered. As we sadly know from the case of Enron, such discoveries come very slowly, and by the time they do, investors and employees have lost fortunes.

4. Financial statement insurance: a market solution[5]

Is there yet another alternative cure for the auditor's "conflict of interest"? As mentioned, prosecution and punishment may not adequately deter wrongdoing, as intentional misrepresentation is difficult to discover or prove. Overhauling the regulatory structure and adding layers of supervision and monitoring by the government would be inefficient and socially wasteful, and little can be done in the short run to cultivate ethical personalities. I believe that the solution lies in restructuring the audit market to eliminate the conflict of interest auditors face and properly align their incentives with those of shareholders.

The solution proposed is a financial statement insurance mechanism: instead of appointing and paying auditors, companies would purchase financial statement insurance that provides coverage to investors against losses suffered as a result of misrepresentation in the financial reports. Insurer and insured would agree in advance on the appointment of a judicial body whose role would be akin to that of debentures trustees. Since the insurance is underwritten for the benefit of shareholders directly, it is anticipated, just as in the case of directors and officers insurance, that agents who specialize in representing shareholders, such as plaintiffs' attorneys, would be alert to drops in the stock price of an insured that are likely caused by the remedying of a past omission or misrepresentation. Such agents would file a claim with the pre-appointed judiciary body. After vetting the claim, the judiciary body would pass it on to the insurance carrier. There would be no requirement of scienter, so that, assuming the validity of the fraud on the market doctrine, and hence presumed reliance, once it is determined that a material omission or misrepresentation occurred during the insured year, both the judiciary body and the insurance carrier would agree on the damage to shareholders caused by the misrepresentation.[6] Disputes about the quantum of damages might arise. The carrier and the judiciary body would each appoint a claims adjuster to determine whether a covered claim existed in the amount of covered loss. If necessary, just as in the case of Directors and officers insurance, experts could be appointed by each side to analyze the quantum of damages. Once a consensus was reached, the insurance carrier would pay the damages so long as they were within the policy limit. This arrangement, which would eliminate the discovery stage, should be far less costly than the prolonged litigation process typically associated with directors and officers insurance claims.[7]

[5] This section is partially based on Ronen (2002). See Dontoh et al. (2004) for analytical modeling of aspects of the scheme, Cunningham (2004a) for a discussion of implementation issues and suggestions for legal reforms that would facilitate putting the scheme into practice, and Cunningham (2004b) for a model Act of Financial Statement Insurance.

[6] The procedure for determining whether there was an omission or misrepresentation, whether it was material, and whether it caused losses would pretty much mirror the procedure now in place for doing this in the case of directors and officers insurance claims. These determinations are routinely made in class-action securities litigation involving violation of the Securities Acts.

[7] See, however, Cunningham (2004a,b) for certain implementation issues involving the adjudication of insurance law disputes and for suggestions on molding these into congruence with federal securities regulation objectives.

How much insurance coverage would insureds likely seek? It is anticipated that they would require an amount of coverage equal to the expected value of losses to shareholders as a result of omissions and misrepresentations. It should not be too difficult to make this calculation. First, the probability of omission or misrepresentation would be assessed, through analysis of internal control weaknesses, corporate governance procedures, and past incidents. The next step would involve estimating the impact of a curative disclosure of past omissions and misrepresentations on the price of the stock. Time series regressions of the firm's abnormal returns on earnings surprises or regressions using similar data of peer companies would yield earnings response coefficients, and multiplying the probable amounts of misrepresentations (per share) by these estimated coefficients would yield the expected loss. This loss could be expressed as a percentage of market capitalization, so coverage would be expected to vary from time to time depending on variations in the firm's value. Firms would not be expected to demand insurance coverage that exceeded the expected loss (why pay a larger premium for unneeded insurance coverage?). Hence, I expect that the coverage demanded would not differ significantly, on average, from coverage currently underwritten for directors and officers policies. That is, the insurance industry should have the capacity to underwrite financial statement insurance coverage.

The insurance coverage that the companies were able to obtain would be publicized, along with the premiums paid for the coverage. The insurance carriers then would appoint and pay the auditors, who would attest to the accuracy of the financial statements of the prospective insurance clients. Those announcing higher limits of coverage and smaller premiums would distinguish themselves in the eyes of the investors as companies with higher quality financial statements. In contrast, those with smaller or no coverage or higher premiums would reveal themselves as having lower quality financial statements. Every company would be eager to get higher coverage and pay smaller premiums, lest it be identified as the latter. A sort of Gresham's law would be set in operation, resulting in a flight to quality.

The inherent conflict of interest facing the auditor would thus be removed by severing the agency relation between the company's management and the auditor. In the context of a free market mechanism, insurance carriers, rather than the firm's management, would serve as principals.

The critical features of the FSI scheme underlying this study are: (i) the shifting of the decision on employment of the auditor from the client firm's management to the insurer and (ii) the effect of publicizing the premium charged.

The insurance carrier would retain and pay the auditor. FSI providers would have a list of approved auditors from which a company could select.[8] Nevertheless, it is expected that the auditor would owe his duty and loyalty to the FSI carrier for at least two reasons. First, the FSI carrier would pay the auditor to focus his efforts on protecting its own interests. Second, it is reasonable to assume that any given auditor would be providing audit services to more than one of the FSI carrier's insureds, so that a costly ''audit failure'' would jeopardize the auditor's relationship with the FSI carrier, resulting in the loss of numerous other audit assignments. The Appendix A (containing material taken from Ronen (2002)) provides a more detailed description

[8] Of course, the insurance carrier could select the auditor rather than presenting a list to the insured. The advantage of a pre-approved list out of which the insured selects an auditor is to allow for a better client–auditor match to the extent that the client firm, with intimate knowledge of its own business, is better informed than the insurer about the necessary professional expertise and experience an auditor must possess to most efficiently conduct the audit. At the same time, the insurer, with the help of its team of expert reviewers, gets to decide on a limited set of auditors. Also, nothing in this proposal would prevent any insurer from hiring an in-house auditor to conduct the audits of the insureds. It is anticipated that insurers would individually decide on the optimal organizational structure.

of the proposed FSI process, with graphs showing the sequence of the steps required in the implementation as well as the inter-relationships among the various parties participating in the insurance mechanism and the roles they play.

Under FSI, the auditing firm would not necessarily be prohibited from performing consulting services for any insured; rather, it would merely have to seek permission from the FSI carrier. In fact, it would be in the carrier's best interest to permit consulting, since the more the auditor knew about the systems and operations of the insured, the better the auditor could carry out the audit. Moreover, given the FSI carriers' vetting of auditors and their principal–agent relationships, the pool of qualified and respected auditors would grow, because auditors would deem it in their own interest to move toward professional excellence in an effort to garner more audit assignments.

Below, I describe how the incentives of the participants in the FSI game result in: (1) better quality financial statements, (2) better quality audits, (3) fewer and smaller shareholder losses caused by omissions or misrepresentations, and (4) more efficient resource allocation.

4.1. The insurer

First, consider the insurance carrier. Having extended coverage at a certain premium, it would wish to minimize its claim losses, which is tantamount to minimizing shareholder losses. By aligning the interest of the auditors with the interest of the insurance carrier who hired them, we would align their interest, by extension, with the interests of shareholders.

Market tensions would ensure that the premium would be determined as accurately as possible. On the one hand, to maintain or expand market share in a competitive industry, the insurer would seek to minimize the premium for a given amount of coverage it extended to the insured. On the other hand, the carrier would have to charge a premium that was sufficient to cover the expected claim costs and other expenses, including the industry-wide profit designed to compensate for the entrepreneurial and managerial services insurers provide. If the premium were not high enough, the insurer would not survive. These opposing market forces would compel the insurance carrier to compute as accurate a premium as possible. The insurer thus would design an optimal incentive scheme to motivate the auditor or risk assessor to adopt the perspective of his principal—the insurer—and conduct the review or audit with diligence and with the aim of ensuring the absence of omissions or misrepresentations.

Suppose we fixed coverage under FSI at the same level investors recover under the current regime. In equilibrium, the premiums paid under FSI would at most equal the total cost to corporations of directors' and officers' insurance, audit fees, and the additional litigation settlement costs they incur as a result of class-action suits filed against them.[9] Under this condition, the coverage would be affordable. The auditors' incentives, however, would be better aligned with those of shareholders, thus eliminating the conflict of interest and improving audit quality. That is, other things being equal, the proposed regime would be superior at least from the standpoint of improved audits.

Now suppose the coverage extended under the proposed regime would exceed the insurance coverage under the current regime. Would the insurance industry have the capacity to pay? As suggested above, firms would not need coverage that exceeded a fraction of the firm's

[9] However, for the same coverage the equilibrium magnitude of the premiums paid under my proposed regime would be less than under the existing regime because of the improved audit quality, improved financial statement quality, and hence smaller shareholder losses.

capitalization. Since this amount would be similar on average to amounts of coverage currently underwritten in directors and officers insurance policies, insurers should have the necessary insurance capacity. Moreover, unlike property and casualty insurance for example, the losses insured against—decreases in the valuation of companies resulting from omissions or misrepresentations in the financial statements—could be hedged in the capital markets with properly constructed derivatives, the exercise of which could be made contingent on the same triggering events that would cause loss to shareholders. Specifically, the insurer could buy a special put option with a duration that corresponded to the period covered under the policy. The put would be exercisable upon a stock price decline of the insured that was determined to have resulted from misrepresentations or omissions in the insured's financial statements.

The incentive to assess accurate premiums would create demand among insurers for review and risk assessment services. These could be conducted by the same auditor who ultimately would opine on the financial statements. At the same time, the incentive for an insurer not to extend the contemplated coverage upon the discovery of large risks would create a demand for the familiar external audit. This audit, which would be of higher quality than under the current regime, would ultimately determine whether the insurer agreed to extend the coverage. If the auditor issued a qualified opinion, the insurer would withdraw coverage or renegotiate. Thus, two layers of monitoring would protect the insurer: the initial risk review and assessment, and the external audit that finally determined whether the tentative agreement (policy) would become effective. Since shareholders would be on notice that with some probability the opinion would be qualified and no insurance would be provided, they would factor this eventuality into the price of the stock, bidding it down by an amount that reflected the probability of a qualified opinion. This would magnify the incentives of a firm seeking insurance to improve the quality of its financial statements.

The sequence of activities would be dictated by: (1) the need to contract at the beginning of the fiscal year (or the end of the prior fiscal year) on coverage and the premium so that these could be publicized and made available for the capital markets to assess the quality of the financial statements and to accurately price the securities, and (2) the subsequent need to conduct the external audit, geared toward assuring the absence of material loss-causing misrepresentations. The plan for the external audit would be prepared in consultation with the insurer—the principal—and the risk assessor who conducted the initial review so that its details would be tailored to the findings of the initial risk review. Such a coordinated audit plan would de-emphasize the mechanical sample testing of journal postings and emphasize the more costly but more meaningful verification of assets and revenues.

4.2. The auditor

Under the proposed regime, because of the incentive structure, the auditor would be predisposed to insist on a greater degree of verifiability before acquiescing in management's valuations. The auditor would be identifying with the persons or entities that would suffer a loss in the event of a misrepresentation or omission in the financial statements. Although this greater insistence on verifiability might cause management to be less willing to undertake ventures that perforce required the evaluation of forward-looking consequences of transactions and hence to exhibit greater risk aversion, this might not be a bad outcome from a societal point of view. The system should overall result in a better balance between risk-taking and the needs of the users of financial statements. Companies would attempt to balance their quest for higher returns against the possibility of being penalized by the capital markets for unreliable numbers in their financial statements.

The auditor would choose the audit quality so as to maximize his expected compensation,[10] based on the compensation scheme designed by the insurance carrier. Specifically, the auditor would attempt to maximize the difference between the audit fee revenue he expects from the insurer and the expected costs of misrepresentations and omissions. This attempted maximization would induce him to choose the optimal audit quality. Under the proposed regime, the auditor would also face two kinds of penalties from an audit failure: tort liability pursuant to his contractual relationship with the insurance carrier and loss of the possibly very many clients the insurer had assigned him to audit.

4.3. The market

Assuming a semi-strong efficient stock market, the publicized coverage that the shareholders of the insured approved and the premium paid to obtain that coverage would provide a credible signal to the marketplace regarding the underlying quality of the financial statements, i.e. the degree to which they might include omissions or misrepresentations. The FSI mechanism would satisfy the conditions required for a signaling equilibrium (Dontoh et al., 2004). The market would be able to compare different companies and reckon which presented more reliable financial reports. These different qualities would be priced into the securities offered by the insureds to the public or traded in the secondary markets, contributing to market completeness.

But this is not the whole story. Consider the policy coverage. Since the FSI procedure would require that the coverage be approved by the shareholders, and since the coverage would be common knowledge, publicized both in the proxy and in all financial reports issued by the insured, the market would be aware of the coverage, and having priced it into securities, an implicit contractual agreement would have been formed. The market would come to understand the limit to which it was to be indemnified in the case of loss. Although a plaintiff class might still be able to sue for damages beyond the limits of the policy, it would be less likely to prevail. This would have the effect of decreasing the dead weight loss to society caused by lengthy litigation.

The implication of the pricing of the quality of financial statements is that the traded securities would be more complex instruments than the ones we have under the current regime. The securities would reflect two additional dimensions: the coverage shareholders could claim upon the triggering event of misrepresentation or omission, and the underlying reliability of the financial statements, as reflected in the premium for the given coverage. This more accurate pricing of the securities would provide more precise signals to institutional and individual investors to help them better channel their savings and capital to worthy projects. Companies undertaking more promising ventures would be able more reliably and credibly to transmit information about the potential of these ventures to the markets, and hence to obtain funds to finance them more cheaply and easily. Resources would be allocated more efficiently; social investment would yield a higher return.

4.4. The company—the insured

Under FSI, a company with better quality financial statements would have an incentive to signal its superiority to the marketplace by demonstrating that it could obtain higher coverage at a lower premium than other companies in its industry. It would do so because the coverage

[10] What I mean by quality in this context is the combination of effort that the auditor exerts on the job and the level of his objectivity and freedom from bias.

it obtained and the premium it paid would be made public, and, furthermore, would be viewed by the market as credible signals of the true quality of its financial statements. Companies with poorer quality financial statements would be forced to reveal the truly lower quality and reliability of their financial reports because they would not be able to obtain the same coverage as companies with better quality financial statements except by paying a higher premium; recall that the risk assessment conducted by the insurer's agent would have resulted in a higher premium, commensurate with the poorer quality the assessor would have discovered. Thus, the company with poorer quality financial statements would have no choice but to reveal the true state of its financial reports: either it would pay the higher premium or it would decide not to purchase any insurance. Both actions would reveal the truth. Thus, a company with poorer quality financial statements would no longer be able to pretend that it was one of the better companies: the insurer would impose the necessary discipline by having the company's management and internal controls reviewed as a condition for extending the coverage and determining the premium. Moreover, the coverage would not be extended if the external auditor does not issue a clean opinion. Reckoning that if the coverage were not extended, a significant drop in the stock price would ensue, the company would refrain, ex ante, from attempting to emulate the better companies by purchasing higher coverage than would likely be approved were the external auditor to decline to issue a clean opinion. Of course, in addition, the potential emulator would have had to pay a higher premium at the outset because of the unfavorable findings by the risk assessor. The company now would find it in its best interest to improve its internal accounting and auditing controls so as to qualify for higher coverage and a lower premium. That is, it would now compete with the better companies by actually improving its systems so that the risk assessor would induce the insurer to assess a low premium, correctly signaling to the marketplace the improved quality of the insured. Formally, the company would choose the quality of its financial statements to maximize the difference between the proceeds of shares it issued and the premium it would have to pay for the insurance, recognizing at the same time, that the premium would be set by the insurer so as to minimize its claim losses.

5. Some issues of legal liability

Undoubtedly, the implementation of FSI has the potential to change how the different parties to this game relate to each other in the context of a possibly changing legal environment. The social and political effects of the proposed insurance mechanism would extend beyond the boundaries of the accounting profession. Consider, for example, the effects of the auditors' legal liability. As agents of the insurance carriers, they would be contractually obligated to their principals—the insurance carriers—and not to their traditional clients. The consequences they may face as a result are significant. Instead of penalties they face under the existing regime—threats of non-renewal of engagement if they displease their clients (by not acquiescing to offering clean opinions on misleading statements) and/or recoveries by misled investors—they face under FSI the more incentive compatible threats of being dropped by the carrier from lucrative engagements if they do not exert optimal effort. At the same time, they would be less likely to face liability suits initiated by investors: plaintiff attorneys would perceive the difficultly of winning the case against auditors who, given the FSI arrangement, cannot be shown to have had the incentive to cooperate with a management intending to mislead; that is, plaintiffs would be far less likely to be able to prove scienter. Similarly, directors and officers of clients would face fewer investors suits after having been subjected to vigorous underwriting reviews

and more effective audits and now that they can claim they had the incentives to effect high-quality financial statements so as to reduce their cost of capital.

6. Conclusion

Several causes have been advanced in the media for the accounting meltdown in 2001–2002: irrational exuberance, infectious greed, the stock market bubble, the moral turpitude of executives, unethical accountants, non-audit services, and related ills. Yet reforming boards of directors, audit committees, and top managements of corporations is very difficult at best. The inherent conflicts of interest in the auditor–client relationship and the unobservability of financial statement quality are likely culprits, however, and are more amenable to reform.

Financial Statement Insurance provides a market-based solution that acts as an effective check on the issuance of overly biased financial statements. First, by transferring the hiring decision to the insurer, this scheme eliminates the auditor's inherent conflict of interest. Second, the publicization of the coverage and the premium credibly signals the quality of the insured's financial statements and direct investments towards better projects. At the same time, the ability to signal the quality of financial statements provides companies with incentives to improve them. Thus, FSI will result in fewer misrepresentations and, accordingly, in fewer suits and smaller shareholders' losses, as well as a more efficient allocation of resources.

Appendix A. The FSI procedure

The FSI underwriting procedure starts with a review of the potential insured. The review is performed on behalf of the FSI carrier by an expert risk assessor, who investigates the nature of conditions such as the following:

- The nature, stability, degree of competition, and general economic health of the industries in which the potential insured operates.
- The reputation, integrity, operating philosophy, financial state, and prior operating results of the potential insured's management.
- The nature, age, size, and operating structure of the potential insured.
- The potential insured's control environment and significant management and accounting policies, practices, and methods.

The FSI process might proceed as follows (see Fig. A.1):

- Step 1. The potential insured requests an insurance proposal from the FSI carrier. The proposal contains, at a minimum, the maximum amount of insurance being offered and the related premium. Typically, it also specifies a schedule of amounts of coverage below the maximum along with associated premiums. The proposal request is made before the preparation of the potential insured's shareholders' proxy on the basis of the underwriting review. The reviewer can be the same auditor who will eventually audit the financial statements.
- Step 2. The proxy offers the following alternatives:
  - The maximum amount of insurance and related premium as offered in the insurance proposal.
  - The amount of insurance and related premium recommended by management.
  - No insurance.

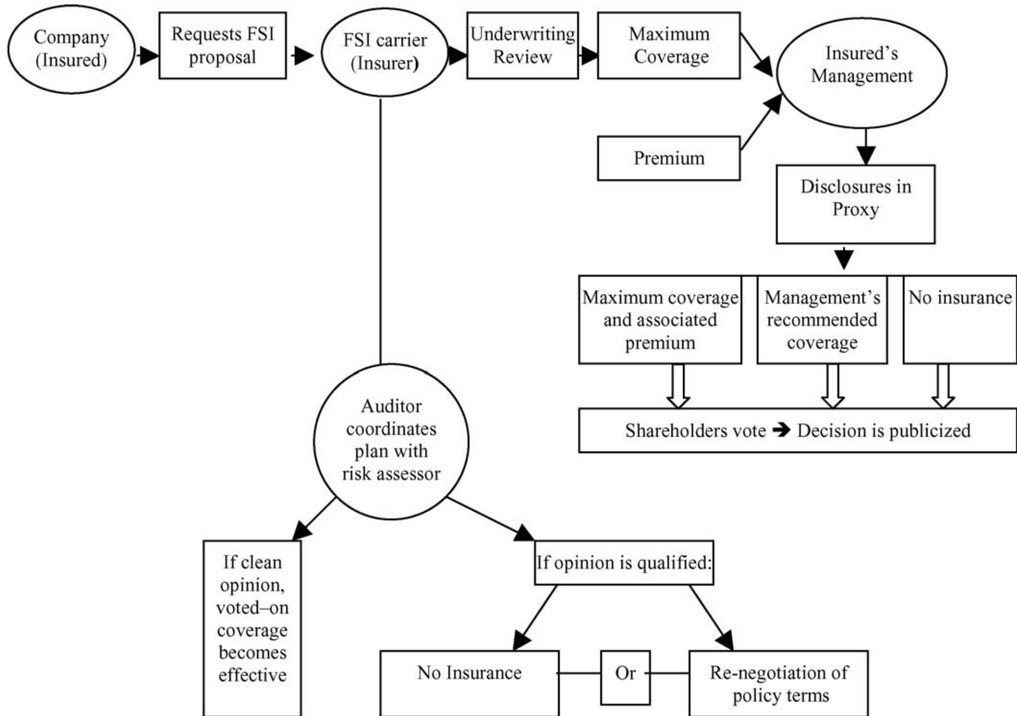

Fig. A.1. The FSI process.

- Step 3. If either of the insurance options set forth in Step 2 is approved, then the reviewer and the auditor cooperatively plan the scope and depth of the audit to be conducted.
- Step 4. If, after the audit, the auditor renders a clean opinion, the insurer issues the policy. That is, the originally proposed coverage and premium will be binding on the insurance carrier if the auditor's opinion is clean. If the auditor's opinion is qualified, the insurer provides no coverage unless the company can renegotiate different terms, which depend on the auditor's findings and the reasons for qualification. The renegotiated policy terms are be publicized. Since shareholders are on notice that with some probability the opinion will be qualified and no insurance will be provided, they factor this eventuality into the price of the stock, bidding it down by an amount that reflects the probability of a qualified opinion. The larger this probability, the greater the price discount. This magnifies the incentives of a firm seeking insurance to improve the quality of its financial statements and consequently avoid a qualified opinion.
- Step 5. The auditor's opinion contain a paragraph disclosing the amount of insurance that covers the accompanying financial statements and the associated premium.

A.1. Claims settlement process

The FSI concept also contemplates an expeditious claims settlement process. The FSI carrier and the potential insured cooperatively select a fiduciary organization whose responsibility is to represent the users of the financial statement when a claim is made. Part of the fiduciary's responsibility is the assessment of claims before it notifies the FSI carrier. After the fiduciary

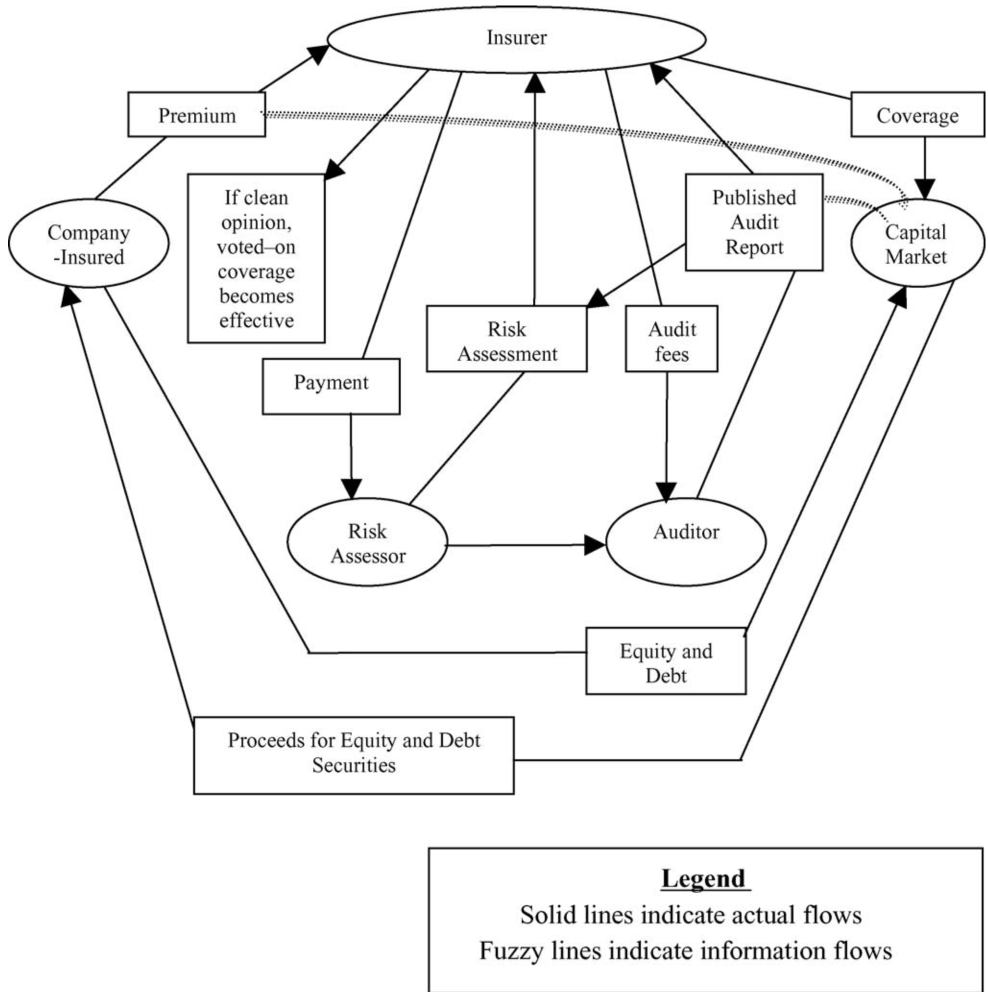

Fig. A.2. Relationships among the parties.

notifies the FSI carrier of a claim, the FSI carrier and the fiduciary mutually select an independent expert to render a report on whether there was an omission or misrepresentation and whether it gave rise to the amount of losses that resulted. Within a short time after receiving the expert's report, the FSI carrier compensates the fiduciary up to the face amount of the policy for the damages (Fig. A.2).

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