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## SECURITIZING AUDIT FAILURE RISK: AN ALTERNATIVE TO CAPS ON DAMAGES

LAWRENCE A. CUNNINGHAM\*

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## INTRODUCTION

This Article contributes a new transactional alternative to address risks of catastrophic audit failure: having auditing firms issue bonds, called catastrophe bond securitizations, to capital markets to provide coverage for these risks. This innovation follows from this Article's analysis of longstanding debates about the relative merits of establishing caps on damages for auditing firms in securities liability cases. In those debates, a common argument favoring caps is the absence or limited availability of insurance to address the liability. This forces auditors to resort to self-insurance programs that they operate through captive affiliates. This Article's transactional proposal responds to this insurance-based argument.

On the evidence available, self-insurance appears to be better than external insurance, such that the insurance-based argument does not necessarily support damages caps. The former bundles risk monitoring and distribution within audit firms whereas the latter separates the two functions. Even if the argument is valid, moreover, this inquiry reveals superior alternatives that can be designed to address losses arising from audit failure. These are: (1) financial statement insurance, which has been discussed in the literature and tailors coverage to risks of ordinary audit failure; and (2) catastrophe bond securitization, which has not been mentioned in the literature and is introduced here as a way to pool and distribute risks of catastrophic audit failure through capital markets. The former bundles risk monitoring and distribution within insurers, while the latter re-bundles them outward to capital markets.

This Article thus tentatively concludes that the insurance-based argument favoring damages caps warrants analytical skepticism. Analytical skepticism is the most the conclusion can reach, however, because the evidence available for a definitive determination is limited. Auditing firms, which are privately owned, provide virtually none of the public information necessary to evaluate these issues.<sup>1</sup> Auditing firms do not publicly disclose any meaningful information about their financial condition or results, disclosing instead summary data on assets and total worldwide revenues broken down by

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1. See *infra* Part II.B.1.

geographic region and business line.<sup>2</sup> They provide no disclosure concerning internal or external insurance models or capacity and only cursory information about internal organizational structures, controls, or governance. In the course of some of the following analysis, therefore, an inferential picture of practices will be developed.

Subject to those limits, after reviewing the terms of the debate and introducing basic principles concerning the role of insurance in public policy governing auditing, this Article explores two alternative models that exist and two that could be created to address auditor liability for audit failure. The first of the two existing models is, of course, traditional professional liability insurance. This insurance is still commonly obtained by smaller and medium-sized auditing firms and was once commonly used by the four large auditing firms but now only to a modest, specialized extent. What is remarkable about this form of insurance is how it separates monitoring by auditors from distribution of the risk of audit failure. This separation or unbundling of risk monitoring and risk distribution can contribute comparative disadvantages to the audit function.

In comparison, the second of the two existing models is the more recently evolved self-insurance program. Beginning sometime in the late 1970s and early 1980s, the large auditing firms all developed highly sophisticated internal structures using captive insurance affiliates to manage and fund exposure to legal liability for audit failure.<sup>3</sup> While some participants in the debate view this as evidence of the firms' dire straits, analysis supports the view that the decision to self-insure is both rational for the firms and relatively appealing systemically. Most notably, compared to the unbundling and separation of functions that external insurance presents, self-insurance programs bundle the monitoring and risk distribution functions together within audit firms.

As for two new possible alternatives to address audit failure, the first is financial statement insurance, which has been discussed somewhat in the literature and is summarized briefly here. Rather than auditors using professional liability insurance or self-insuring against the risk of liability from audit failure, this insurance covers

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2. For an example, see *infra* notes 108-11 and accompanying text.

3. See *infra* note 106 and accompanying text.

particular financial statements. Issuers buy coverage from external insurers which, in turn, engage auditors to conduct financial statement audits; the resulting insurance then covers those statements. Like self-insurance, this device bundles monitoring and risk distribution, although it bundles them into insurers rather than into audit firms. Even so, in a regime of financial statement insurance, existing commercial insurers as well as existing audit firm captives could compete to underwrite coverage.

The second novel alternative is insurance-based securitization, which has not been mentioned in the literature and is introduced here. Since 1995, financial innovators have packaged insurance-like products into securities using special purpose entities that pool and distribute risks through capital markets.<sup>4</sup> Insurance securitizations have concentrated on risks of catastrophic loss arising from such phenomena as hurricanes and floods. But, to date, they have not included professional liability insurance of the kind auditors have obtained externally or developed internally. Although this market remains young and thin, as it matures and deepens, it could be an attractive vehicle to contribute resolution to the longstanding debate over damages caps for auditors by establishing a vehicle to cover catastrophic losses.

An intriguing feature of insurance-based securitization of risks of audit failure is how this concept could partially re-bundle the risk monitoring and risk distribution functions outward to capital markets. Investors could essentially invest in functional insurance policies covering the risk of audit failure. Using capital markets could reduce the insurance market volatility that appears to be at the heart of insurance-based arguments favoring damages caps. It could add pressure on auditors to promote audit effectiveness and possibly reduce the incentives that plaintiffs' lawyers have to pursue excessive damages claims against auditors of public companies—an important adjunct of such insurance-based arguments. Best of all, it could precisely address catastrophic audit failure risk, which most seem to agree is the most important context in which damages caps warrant serious policy consideration.

Part I of this Article summarizes the audit function and debates over damages caps. The latter are often supported by lamenting a

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4. See *infra* Part III.B.

lack of insurance, absence of insurability or, sometimes, an “insurance crisis.” Part II considers existing insurance for audit failure. It evaluates how audit failure risk may be better addressed by self-insurance than by traditional liability insurance because of closer bundling of risk monitoring with risk distribution. Part III explores potential insurance for audit failure. It reviews previous proposals for financial statement insurance to address ordinary risks of audit failure and then introduces the novel idea of insurance-based securitization to address catastrophic risks of audit failure.

### I. AUDIT FAILURE: RISK AND CONTROL

The following discussion introduces the parameters and stakes of the audit function, considers public policy matters implicated, and addresses the role of insurance in policy design. The stakes of audit failure are potentially staggering when only four large firms are competent to audit the vast majority of public enterprises. This has revived debates dating back several decades about whether the law should set limits on the amount or type of damages auditors face for audit failure, in which proponents often cite the relative absence or expense of related insurance.

#### *A. Audit Constituents and Stakes*

The audit function addresses multiple constituent classes and, within each class, many variations of type. The primary constituent class is investors, who range from sophisticated institutions to retail clients investing personal funds. The secondary class is issuers, who can be of any form, including non-profits and for-profits, private enterprises or public enterprises. Tertiary constituents include other participants in financial reporting, chiefly an issuer’s officers and directors—especially its audit committee—and professional advisors, mainly lawyers and underwriters. The latter group also includes insurers of issuers, directors, and officers, and professional service firms, including auditors, regulators—mainly the SEC, but also state, securities, and insurance regulators—and courts.

As a group, auditors exhibit some variation in kind. They may usefully be grouped into three tiers by size—either by total revenues, or by total employees or professionals, which tend to be commensurate measures. The largest firms generate annual global revenues approaching \$20 billion each, employ more than 100,000 people each (a large portion of whom are accounting professionals), and operate in nearly every country in the world. There have never been more than eight firms in this league in recent decades, and there are presently only four—which increasingly bear a fairly homogenous character.<sup>5</sup> A mezzanine tier of medium-sized firms generates a fraction of those revenues, with a fractional employee base: their revenues are closer to \$1 billion at the high end of the scale.<sup>6</sup> Thousands of yet smaller firms, meanwhile, populate the third tier in the accounting profession. The four largest firms audit the vast majority of public enterprises in the world, although mezzanine tier firms audit a meaningful share.

At stake in any audit for a given issuer is the production of relevant and reliable financial statements that enable investors to make efficient capital allocation decisions. At stake for the audit function as a system is social welfare, which is a product of the relative efficiency of overall capital allocation. Investors buy securities from issuers in part on the strength of reported accounting. The reports are prepared by management and attested to by an auditor, under the supervision of an audit committee.

Audit failure occurs when an auditor incorrectly issues an opinion that financial statements fairly present an issuer's financial condition and results in conformity with generally accepted accounting principles (GAAP). Under federal law, a limited risk of auditor liability for negligence exists in connection with initial securities offerings, although most federal law actions involve secondary market trading and require a showing of scienter for private actions.<sup>7</sup> On the other hand, under many state laws, negligence

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5. See *infra* notes 112-15 and accompanying text.

6. U.S. GEN. ACCOUNTING OFFICE, PUBLIC ACCOUNTING FIRMS: MANDATED STUDY ON CONSOLIDATION AND COMPETITION 47 (2003), available at <http://www.gao.gov/new.items/d03864.pdf> [hereinafter STUDY ON CONSOLIDATION].

7. Principal federal laws are section 11 under the Securities Act of 1933, 15 U.S.C. § 77k (2000), and section 10(b) under the Securities Exchange Act of 1934, 15 U.S.C. § 78j (2000). The latter applies to secondary trading in securities and exposes auditors to liability under

liability risk is considerable when relaxed privity standards apply instead of the more rigorous traditional privity requirement established in Judge Cardozo's classic opinion *Ultramares Corp. v. Touche*.<sup>8</sup> Federal law imposes further jurisdictional limitations on what kinds of securities-related claims may be brought in state, rather than federal, court.<sup>9</sup>

The magnitude of legal liability that auditors face for audit failure ranges from routine claims not posing systemic calamity—claims in the range of \$10,000 to \$250,000 whose significance for individual firms varies with firm size—to episodic claims involving hundreds of millions of dollars that could be systemically catastrophic. The frequency of relatively routine exposures is meaningful but not catastrophic: for smaller firms, perhaps once per year, and for larger firms, perhaps a dozen per year.<sup>10</sup>

Debate exists concerning the relative probability of auditor liability in larger cases, which some confidently believe is high, while others are less certain.<sup>11</sup> Federal securities fraud class actions

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fraud theories if scienter is shown; the former applies to registered public offerings of securities and exposes auditors to nominally strict liability, which becomes essentially a negligence standard because auditors can defeat liability by showing reasonable investigation and belief. Section 11 liability also depends on the investor's ability to prove tracing. Other relevant federal laws include section 17(a) of the Securities Act of 1933, 15 U.S.C. § 77q(a) (2000), which imposes on auditors the duties of inquiry and disclosure, and section 18(a) of the Securities Exchange Act, 15 U.S.C. § 78r (2000), which creates private rights of action against persons, including accountants, who "make or cause to be made" materially misleading statements in reports or other documents filed with the SEC.

8. 174 N.E. 441 (N.Y. 1931). The privity rule essentially forecloses public shareholder claims against auditors. *See id.* at 444-48. Beginning in the 1980s, several state law cases overturned that principle, including *Rosenblum v. Adler*, 461 A.2d 138 (N.J. 1983), although a few courts clung to a watered-down version of the privity rule based on a foreseen plaintiff principle as articulated in the Restatement (Second) of Torts. *See Bily v. Arthur Young & Co.*, 834 P.2d 745, 757-58 (Cal. 1992) (citing RESTATEMENT (SECOND) OF TORTS § 552 (1977)). Auditors also face a remote chance of criminal liability for audit failure that, if it occurs, can have high-magnitude effects. *See United States v. Arthur Andersen*, 374 F.3d 281, 289-91 (5th Cir. 2004), *rev'd on other grounds*, 544 U.S. 696 (2005); Kathleen F. Brickey, *Andersen's Fall from Grace*, 81 WASH. U. L.Q. 917, 930 (2003). But criminal liability cannot be effectively addressed using either insurance or caps on damages.

9. *See* Securities Litigation Uniform Standards Act of 1998, Pub. L. No. 105-353, 112 Stat. 3227 (codified in scattered sections of 15 U.S.C.) [hereinafter SLUSA] (restricting securities fraud class actions to federal court, although not covering individual actions or derivative litigation in state court); *see also* Richard W. Painter, *Responding to a False Alarm: Federal Preemption of State Securities Fraud Causes of Action*, 84 CORNELL L. REV. 1 (1998).

10. *See infra* text accompanying notes 83-84.

11. Two models suggest high probability of a medium-term, litigation-induced exit by one



against auditors are few, but the size of resulting damages or settlements can be staggering, with four recent settlements reaching into the \$200 and \$300 million range and two others also exceeding \$100 million.<sup>12</sup> At much higher levels, it could be impossible for an auditing firm to continue in the face of such a payout. Whichever view in the debate on probability is correct, the magnitude of loss is overwhelming; it could spell the demise of one of the four large auditing firms which, in turn, could threaten the industry's viability.<sup>13</sup>

### *B. Public Policy*

Policy discussions, which date back decades, have considered mechanisms to improve the audit function and manage systemic effects of audit failure. Analysis has concentrated on promoting year-to-year audit effectiveness, striking the optimal level of deterrence based on liability standards, and, particularly in recent years, preventing cataclysmic audit failure.

Two kinds of tools can be used to promote the effectiveness of the audit function. The first concerns structural arrangements designed to induce professional skepticism and objectivity among auditors. The second concerns liability devices designed to deter auditors and their clients from temptations to misreport. The liability system is

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of the four large auditing firms. See LONDON ECONOMICS & RALF EWERT, STUDY ON THE ECONOMIC IMPACT OF AUDITORS' LIABILITY REGIMES 164 (2006) [hereinafter EWERT, EU STUDY] (examining existing and possible caps on auditor damages in Europe); Eric L. Talley, *Cataclysmic Liability Risk Among Big Four Auditors: An Empirical Analysis*, 106 COLUM. L. REV. 1641 (2006).

12. See John C. Coffee, Jr., *Gatekeeper Failure and Reform: The Challenge of Fashioning Relevant Reforms*, 84 B.U. L. REV. 301, 342 (2004) (detailing five settlements through 2004 exceeding \$100 million: settlements of \$110 million, \$125 million, \$217 million, \$250 million, and \$335 million); Talley, *supra* note 11, at 1670 (noting Fortress Re settlement in 2005 of \$250 million). Despite these figures, it is not uncommon for commentators or judges to speak of the potential of "billion dollar judgments" against auditors. See, e.g., *Bily*, 834 P.2d at 764 (expressing concern about the "specter of multi-billion dollar" judgments against auditors); John Cummings, *Top of Mind: Do Accountants Need Liability Protection?*, BUS. FIN., Apr. 7, 2007, at 10 (quoting Deloitte CEO Robert Kueppers as concerned about "a multibillion-dollar claim" and mentioning figures of \$3 billion, \$5 billion, or \$10 billion).

13. Lawrence A. Cunningham, *Too Big To Fail: Moral Hazard in Auditing and the Need To Restructure the Industry Before It Unravels*, 106 COLUM. L. REV. 1698, 1775 (2006) [hereinafter Cunningham, *Too Big To Fail*].

also designed, in part, to provide compensation to investors who suffer damages from audit failure caused by violations of law.

Policymakers and scholars endlessly work to refine these tools, in light of dynamically changing circumstances, to achieve the optimal system. Throughout related debates, arguments for limitations on auditing firm liability tend to change over time as markets, reforms, and laws evolve, but they invariably and steadily appeal to absence or expense of insurance.

### *1. Audit Effectiveness*

Considerable changes have been made in the past five years in an effort to promote more effective audits. A leading example is the creation of the Public Company Accounting Oversight Board (PCAOB) as an oversight body to supervise and regulate the public company auditing industry.<sup>14</sup> Specific reforms designed to improve audit effectiveness include: (1) requiring audit committee supervision of the audit function; (2) tightening limits on an auditor's right to provide non-audit services to audit clients; and (3) providing for audits of internal control over financial reporting.<sup>15</sup> Some proponents of capping auditor damages cite these changes to support the prescription.<sup>16</sup>

Although such reforms would likely improve the audit function and reduce risk of audit failure, their probable success is qualified. Before considering qualifications as to each of the foregoing reforms, a continuing structural feature constraining audit effectiveness

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14. COMM. ON CAPITAL MKTS. REGULATION, INTERIM REPORT OF THE COMMITTEE ON CAPITAL MARKETS REGULATION (2006), *available at* [http://www.capmktsreg.org/pdfs/11.30 Committee\\_Interim\\_ReportREV2.pdf](http://www.capmktsreg.org/pdfs/11.30%20Committee_Interim_ReportREV2.pdf) [hereinafter PAULSON COMMITTEE REPORT].

15. This is a partial list of reforms mandated in the Sarbanes-Oxley Act, but these are the main reforms. *See* Sarbanes-Oxley Act of 2002, 18 U.S.C. § 1514A (Supp. IV 2004). More modest reforms include federal law mandating audit partner rotation on given engagements every five years. This is only a modest reform, however, because the previous rotation requirement was set at seven years. Bolder reform would require audit firm rotation, but this poses difficult questions that are hotly debated, including whether the familiarity that arises from repeat audits is a benefit that outweighs any gains—such as from independence, objectivity, or competition—from mandatory firm rotation. *See generally* U.S. GEN. ACCOUNTING OFFICE, PUBLIC ACCOUNTING FIRMS: REQUIRED STUDY ON THE POTENTIAL EFFECTS OF MANDATORY AUDIT FIRM ROTATION (2003), *available at* <http://www.gao.gov/new.items/d04216.pdf>.

16. *See, e.g.*, PAULSON COMMITTEE REPORT, *supra* note 14, at 86-87.

must be emphasized: issuers still pay their auditors. This creates an inherent conflict of interest that can impair auditor objectivity and thus reduce audit effectiveness. Many proposals have been made to eliminate this conflict, yet none have been adopted in the United States.<sup>17</sup>

As for reforms that have been made, PCAOB faces inherent limitations as a matter of institutional capability to promote effective auditing. True, PCAOB appears to be a more proactive overseer than its predecessors, but that conscientiousness has created credible political objections to its performance. These objections have led political leaders and regulatory officials to reconsider many of its efforts.

The striking example concerns PCAOB's standards governing audits of internal control over financial reporting. Although such audits can increase financial statement reliability, this is the leading context in which participants have alleged that PCAOB overreached.<sup>18</sup> Accordingly, not only is PCAOB's existence a non-compelling argument for establishing caps, but criticism of its handling of internal control audits also neutralizes the argument favoring caps based on the existence of those audits.

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17. Alternatives have been proposed to address the payment conflict for auditors as well as for other intermediaries, including financial statement insurance, public funding, funding through stock exchanges, and voucher financing programs. See, respectively, Lawrence A. Cunningham, *Choosing Gatekeepers: The Financial Statement Insurance Alternative to Auditor Liability*, 52 UCLA L. REV. 413, 427-29 (2004) (proposing that, instead of having companies pay auditors, companies should be authorized to buy insurance and have insurers hire and pay auditors); Steven L. Schwarcz, *Rethinking the Disclosure Paradigm in a World of Complexity*, 2004 U. ILL. L. REV. 1, 29 & n.180 (suggesting but discounting the possibility of having gatekeepers such as auditors paid through public funding); Larry E. Ribstein, *Sarbox: The Road to Nirvana*, 2004 MICH. ST. L. REV. 279, 289 (proposing that stock exchanges coordinate and compensate auditors (citing Paul M. Healy & Krishna G. Palepu, *How the Quest for Efficiency Corroded the Market*, HARV. BUS. REV., July 2003, at 76)); Stephen J. Choi & Jill E. Fisch, *How To Fix Wall Street: A Voucher Financing Proposal for Securities Intermediaries*, 113 YALE L.J. 269 (2003).

18. See Press Release, SEC, SEC Commissioners Endorse Improved Sarbanes-Oxley Implementation To Ease Smaller Company Burdens, Focusing Effort On "What Truly Matters" (Apr. 4, 2007), available at <http://www.sec.gov/news/press/2007/2007-62.htm>. At its open public meeting on July 25, 2007, the SEC approved a replacement standard governing audits of internal controls over financial reporting in lieu of the one that the PCAOB initially adopted. See Christopher Cox, Chairman, SEC, Opening Remarks at the SEC Open Meeting (July 25, 2007), available at <http://www.sec.gov/news/speech/2007/spch072507cc.htm>.

As to audit committee supervision, this may be one of the most important of the recent reforms.<sup>19</sup> For many enterprises, this reform can strongly promote audit effectiveness. Marking an important shift, recent reforms require that members of audit committees possess some expertise in financial accounting.<sup>20</sup> This is a striking change in corporate governance discussions, which for several generations have emphasized the quality of independence rather than expertise.<sup>21</sup> There is emerging evidence that having expertise on the audit committee increases the quality of financial reporting.<sup>22</sup> That said, reliance on this important innovation may be premature.<sup>23</sup>

Although evidence is mixed, limiting non-audit services may promote audit effectiveness,<sup>24</sup> and in any event creates other concerns.

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19. See William W. Bratton, *Enron, Sarbanes-Oxley and Accounting: Rules Versus Principles Versus Rents*, 48 VILL. L. REV. 1023, 1034-36 (2003) (noting the importance of empowering audit committees to supervise auditors, discuss auditor-management disagreements, and retain their own professional advisors).

20. See, e.g., Listing Standards Relating to Audit Committees, 17 C.F.R. § 240.10A-3(b) (2007) (codifying Exchange Act Rule 10A-3(b)); Standards Relating to Listed Company Audit Committees, Exchange Act Release No. 8220, 68 Fed. Reg. 18,788 (Apr. 25, 2003).

21. The trait of director independence emerged as an important value in corporate governance when the monitoring board replaced the advisory board during the 1970s. See Jeffrey N. Gordon, *The Rise of Independent Directors in the United States, 1950-2005: Of Shareholder Value and Stock Market Prices*, 59 STAN. L. REV. 1465, 1514-15 (2007). Ever since, independence, rather than expertise, has been the clarion attribute of "good" corporate governance. See Donald C. Langevoort, *The Social Construction of Sarbanes-Oxley*, 105 MICH. L. REV. 1817, 1826 (2007).

22. See Jean Bedard et al., *The Effect of Audit Committee Expertise, Independence, and Activity on Aggressive Earnings Management*, 23 AUDITING: J. PRAC. & THEORY 13 (2004); Gopal V. Krishnan & Gnanakumar Visvanathan, *Does the SOX Definition of an Accounting Expert Matter? The Association Between Audit Committee Director's Accounting Expertise and Accounting Conservatism* 10-13 (July 29, 2000) (unpublished working paper), available at <http://www.ssrn.com/abstract=866884>.

23. For example, an emerging debate concerns whether audit committee experts and others engaged in the financial reporting process should promote a financial statement orientation towards equity investors or debt investors. At stake is the degree to which historical cost or fair value accounting should be preferred. This hinges, in turn, on issues such as whether value relevance (usefulness) or efficient debt contracting are important components of the demand for accounting reports. See, e.g., Ray Ball, Ashok Robin & Gil Sadka, *Is Accounting Conservatism Due to Debt or Equity Markets? An International Test of "Contracting" and "Value Relevance" Theories of Accounting* (Oct. 26, 2005), available at <http://www.csom.umn.edu/Assets/51165.pdf>; see also Lawrence A. Cunningham, *Independence, Expertise and Accounting* (Aug. 2007) (unpublished manuscript, on file with author).

24. See, e.g., William R. Kinney, Jr., Zoe-Vonna Palmrose & Susan Scholz, *Auditor*

At present, some issuers of public securities face limited or no choice of auditors, and if only three large audit firms were to exist, many would have no choice. This restricted choice, which exists in part because of the small number of capable firms, is amplified by both legal limits on non-audit services that firms can supply to clients and the auditing industry's practice of firm specialization in certain industries. To the extent that only such a small coterie of firms are capable of auditing the vast majority of public enterprises, a risk arises that firm partners and employees may consider their firms "too big to fail," which could impair rather than promote effective auditing.<sup>25</sup> Damages caps could have a similar unintended side effect.

## 2. Deterrence

The second category of tools available to promote effective auditing concentrates on deterrence, both as to auditors and their clients. Deterrence strategies pursue designing the optimal type and scope of legal duties and liabilities that should be placed on auditors and others. As with structural tools, policymakers and scholars regularly reevaluate system design and the law periodically changes in response to debates. Issues include the standard of liability,<sup>26</sup> the

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*Independence, Non-Audit Services and Restatements: Was the U.S. Government Right?*, 42 J. ACCT. RES. 561 (2004); see also Jayanthi Krishnan, Heibatollah Sami & Yinqi Zhang, *Does the Provision of Nonaudit Services Affect Investor Perceptions of Auditor Independence?*, 24 AUDITING: J. PRAC. & THEORY 111 (2005) (noting mixed results of empirical research on the effect of non-auditing services on auditor independence, investigating whether investors perceive such an effect, and interpreting the results affirmatively).

25. See Cunningham, *Too Big To Fail*, *supra* note 13.

26. See Michael R. Lane, *Legislating Accountant's Third-Party Liability*, CPA J. (June 1989) (surveying various standards of liability risk of accountants to third parties, including negligence and various tests of privity, intentionality, and foreseeability). Compare *Ultramares Corp. v. Touche*, 174 N.E. 441 (N.Y. 1931) (limiting liability of accountants for ordinary negligence to third parties), with *Ernst & Ernst v. Hochfelder*, 425 U.S. 185 (1976) (restricting Section 10(b) actions to scienter, not negligence).

scope of exposure,<sup>27</sup> and adjective devices, such as statutes of limitation,<sup>28</sup> pleading standards,<sup>29</sup> or jurisdictional limitations.<sup>30</sup>

Detailed exploration of this terrain is unnecessary to conduct this Article's principal inquiry, except to note that optimality means sufficient deterrence at reasonable cost. Suboptimality can arise from a liability regime in which potential damages are so high that they induce over-auditing or so high that imposing them on a firm could lead to its dissolution and eventually cause the auditing industry to unravel. It is possible to address these problems by creating limitations on damages. Various types of limitations are possible, including safe harbors, proportionate liability, and stated damages caps—which, in turn, can assume many forms.<sup>31</sup>

Safe harbors can fairly and usefully be justified for certain auditing practices. An example concerns audits of internal control over financial reporting to the extent that auditors make forward-looking statements in their related reports on the relative effectiveness of those controls.<sup>32</sup> These safe harbors have not been adopted and this Article does not address them directly. This Article does

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27. See *Cent. Bank of Denver v. First Interstate Bank of Denver*, 511 U.S. 164, 177-78 (1994) (holding that section 10(b) does not expose auditors or other professionals in private litigation to liability for aiding and abetting securities fraud); see also Donald C. Langevoort, *Words on High About Rule 10b-5: Chiarella's History, Central Bank's Future*, 20 DEL. J. CORP. L. 865 (1995); Robert A. Prentice, *Locating That "Indistinct" and "Virtually Nonexistent" Line Between Primary and Secondary Liability Under Section 10(b)*, 75 N.C. L. REV. 691 (1997).

28. For section 10(b) actions, the current statute of limitations period is two years from constructive knowledge, subject to a maximum five-year period of repose. 28 U.S.C. § 1658(b) (2006) (negating *Lampf, Pleva, Lipkind, Prupis & Petigrow v. Gilbertson*, 501 U.S. 350 (1991), which provided a one-year-from-constructive-knowledge limitations period subject to a three-year period of repose, and in turn altering the traditional judicial approach of borrowing the relevant limitations period from the analogous common law fraud context).

29. See *Tellabs, Inc. v. Makor Issues & Rights, Ltd.*, 127 S. Ct. 2499, 2504-05 (2007) (holding that plaintiff's pleadings must support a "strong" inference of scienter: "more than merely plausible or reasonable[, the inference] must be cogent and at least as compelling as any opposing inference of nonfraudulent intent"); *Novak v. Kasaks*, 216 F.3d 300, 311 (2d Cir. 2000) (interpreting pleading standards that Congress enacted in 1995 to endorse the pre-existing Second Circuit approach requiring that pleadings demonstrate "strong inference" of scienter); see also *In re Advanta Corp. Sec. Litig.*, 180 F.3d 525, 530 (3d Cir. 1999).

30. See SLUSA, *supra* note 9.

31. An additional functional cap arises when firms opt to use the limited liability partnership form of business organization, which all four large auditing firms have adopted since this became possible in the early 1990s. See generally Larry E. Ribstein, *Limited Liability of Professional Firms After Enron*, 29 J. CORP. L. 427 (2004).

32. See Lawrence A. Cunningham, *Facilitating Auditing's New Early Warning System: Control Disclosure, Auditor Liability and Safe Harbors*, 55 HASTINGS L.J. 1451, 1468 (2004).

contribute insights, however, concerning any arguments supporting safe harbors that are based on the absence or limited availability of external insurance.

As to proportionate liability, in 1995, the Private Securities Litigation Reform Act (PSLRA) eliminated joint and several liability for negligence, replacing it with liability in proportion to fault.<sup>33</sup> This is, in substance and effect, a functional damages cap.<sup>34</sup> Proportionate liability limits auditor liability at the level of culpability so that auditors are not exposed to all losses from financial calamity arising after an audit failure occurs. A theoretical defense of this limitation was made in 1984 by Professor Ebke.<sup>35</sup> The analysis emphasized the need for a link between the extent of auditors' fault and the resulting liability.<sup>36</sup>

As to stated damages caps, these have been debated since at least the 1970s.<sup>37</sup> Three varieties can be identified: fixed dollar, variable dollar, and fixed percentage. They can be implemented by legislation, regulation, or contract. A primary criticism of any variety of caps, of course, is that they reduce the deterrent effect of the liability threat. But that criticism misses the point, which is to

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33. Private Securities Litigation Reform Act of 1995, Pub. L. No. 104-67, 109 Stat. 737 (codified as amended at 15 U.S.C. § 78u-4 (2000)).

34. See EWERT, EU STUDY, *supra* note 11, at 205-06.

35. See Werner F. Ebke, *In Search of Alternatives: Comparative Reflections on Corporate Governance and the Independent Auditor's Responsibilities*, 79 NW. U. L. REV. 663 (1984) (studying negligent accountant cases altering *Ultramares*, preceding *Bily*). Professor Ebke also mentioned, in passing, another option for risk distribution by creating a federal insurance fund akin to the FDIC. See *id.*

36. Professor Ebke also recommended that state courts adapt federal law's scienter standard into their analysis of non-privity cases. *Id.* at 696. He suggested that if scienter could be shown, then liability could expand to parties not in privity with the auditor, but that privity should be required in all other cases, including negligence cases. *Id.* Doing so is appealing because the scienter standard keeps auditor liability within reasonable bounds while extending it to all foreseeable third parties; since insurance generally excludes coverage for scienter, liability's deterrent effect remains.

37. See, e.g., T.J. Fiffis, *Current Problems of Accountants' Responsibilities to Third Parties*, 28 VAND. L. REV. 31 (1975) (proposing damages caps measured in terms of revenue for given client or total revenue). For a sampling of the literature across the decades, see Constantine N. Katsoris, *Accountants' Third Party Liability—How Far Do We Go?*, 36 FORDHAM L. REV. 191 (1968); David L. Menzel, *The Defense of Contributory Negligence in Accountant's Malpractice Actions*, 13 SETON HALL L. REV. 292 (1983); Michael A. Mess, *Accountants and the Common Law: Liability to Third Parties*, 52 NOTRE DAME L. REV. 838 (1977); Howard B. Wiener, *Common Law Liability of the Certified Public Accountant for Negligent Misrepresentation*, 20 SAN DIEGO L. REV. 233 (1983).

design the system to achieve optimal deterrence, not maximal deterrence.<sup>38</sup> A cap could contribute to the optimum.<sup>39</sup>

Professor Ebke also evaluated fixed dollar caps in 1984. He noted that the main benefit of fixed caps is to improve risk analysis, by either the auditing firms or their insurers.<sup>40</sup> Optimal design would assure that auditor exposure is not out of proportion to auditor gain. Yet to be effective for risk analysis, the amounts of both would have to be relatively low.<sup>41</sup> But this means, in turn, that fixed caps per case would be both unfair and ineffective. When the limit is too low, it would lead to nominal recoveries; however, even low limits that provided fair recoveries could still pose a catastrophic risk for auditors.<sup>42</sup>

If the main concern is the catastrophic case, then the cap would be some fairly large number today, in the range of \$450 million to \$2 billion; for smaller firms, perhaps \$30 to \$100 million.<sup>43</sup> That could help with cutting out the mega-claim, but does not meet

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38. Damages caps are not an uncommon component of a liability system's design. Early examples appeared in maritime law. *See* Limitation of Liability Act of 1851, 46 U.S.C. § 181 (2000) (seeking to encourage investment in shipbuilding by capping owners' liability at vessel's net value). Other examples appear in the ALI's Federal Securities Code, insider trading class actions, and some state corporate laws, as well as those sought by auditors for decades. *See, e.g.*, COMMISSION ON AUDITORS' RESPONSIBILITIES: REPORT, CONCLUSIONS, AND RECOMMENDATIONS 154 (1978); R. JAMES GORMLEY, THE LAW OF ACCOUNTANTS AND AUDITORS: RIGHTS, DUTIES AND LIABILITIES 17-11 (1981).

39. Two additional challenges are federalism within the United States and global coordination worldwide. Within the United States, any effective cap would require federal legislation that preempts contradictory state laws. Furthermore, given that the four large firms are global in scale, an additional challenge would be assuring worldwide adoption of caps. Efforts to overcome these obstacles are ongoing. For example, both the UK Parliament and the European Union (EU) are flirting with the notion of damages caps. When first proposed, however, the Statute for European Companies and the Fifth Company Law Directive of the European Community did not provide statutory limitations on auditor damages. *See* Ebke, *supra* note 35, at 695 n.172. The EU's pending project on the Eighth Company Law Directive has commissioned a study of the subject. *See* EWERT, EU STUDY, *supra* note 11, at xxiv; *see also* Directorate General for Internal Market and Services, Summary Report, *Consultation on Auditors' Liability* (Oct. 2007), available at [http://ec.europa.eu/internal\\_market/auditing/docs/liability/summary\\_report\\_en.pdf](http://ec.europa.eu/internal_market/auditing/docs/liability/summary_report_en.pdf) (summarizing public comments on European proposal to consider capping damages against auditors).

40. Ebke, *supra* note 35, at 694-95.

41. *Id.* at 694.

42. *Id.* at 695.

43. *See* Talley, *supra* note 11, at 1679 (estimating viability thresholds of large auditing firms in terms of what level of damages they could support before likely electing to dissolve, with estimates from \$454 million to \$2.15 billion).



Professor Ebke's objection about being sufficiently low to enable superior risk analysis. Risks below that level are just as analytically tractable or intractable as without any cap.

In contrast, Professor Fiflis's 1975 proposal offered a variable dollar cap proposal. It would cap damages either (1) for a given client's audit, at a multiple of fees received from that client during a stated period, or (2) for all clients, at a multiple of revenues from all clients for a period.<sup>44</sup> Critics of Professor Fiflis's proposal observed that investors in companies audited by smaller auditors stand to recover less than investors in companies audited by larger ones.<sup>45</sup> That would increase audit industry concentration, as enterprises would tend to appoint larger firms. That would, in turn, hurt smaller firms and increase prices, and could reduce audit quality and hurt investors if demand is relatively inelastic. This critique is particularly apt today, when encouraging additional rivals to the dominant four firms is, for many, an important policy objective.<sup>46</sup>

The debate continues today. Professor Partnoy offers a fixed percentage approach to establishing caps on auditor liability for audit failure.<sup>47</sup> He envisions statutory authorization permitting auditors and their clients to contract for allocation of damages from audit failure according to a stated split.<sup>48</sup> A question about the fixed percentage approach is whether it nevertheless could bankrupt an auditor. Even a small percentage of a large judgment could produce auditor insolvency. As a result, Professor Coffee prefers the approach offered earlier by Professor Fiflis.<sup>49</sup> Another concern about the fixed percentage approach is how publicity of such arrangements could also harm smaller firms, which are less able to commit to high allocations; if such harm is possible, this approach poses the same adverse effects as multiples-based caps.

Related pending debates consider the extent to which auditors and clients should be permitted, in engagement letters, to control

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44. See Fiflis, *supra* note 37, at 113 & n.304.

45. See Ebke, *supra* note 35, at 695.

46. See STUDY ON CONSOLIDATION, *supra* note 6, at 25, 46.

47. See Frank Partnoy, *Strict Liability for Gatekeepers: A Reply to Professor Coffee*, 84 B.U. L. REV. 365, 365-66, 375 (2004).

48. See *id.*

49. See Coffee, *supra* note 12, at 341.

liability contractually. Examples apart from the fixed percentage proposal are contracts that require alternative dispute resolution rather than jury trials, or expressly exclude punitive damages.<sup>50</sup> Debate has also addressed the optimal vehicle to establish any caps. Examples of alternative means of implementing a cap are by regulatory formula, as in the proposals by Professors Fiflis and Coffee; contractual negotiation, as in Professor Partnoy's proposal; or by insurance-driven measurements, a proposal by Professor Ronen that I have endorsed.<sup>51</sup>

### 3. *The Insurance Argument*

All the various proposals mentioned above, the relative merits of which are beyond this Article's focus, share a common argument supporting them in principle: the relative expense or limited availability of insurance.<sup>52</sup> The insurance-based argument is ultimately that simple, but more complex variations of the argument appear. The first is the more subtle claim that the *cause* of expensive or limited insurance is legal uncertainty and/or unpredictably expanding legal liability. Professor Ebke's 1984 analysis, for example, expressed concern that increased civil litigation against auditors increases insurance premiums or restricts its availability "at any price."<sup>53</sup>

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50. See generally Council of Institutional Investors, Roundtable Discussion on Auditor Agreements: Discussion Summary (Nov. 10, 2005), available at <http://www.issproxy.com/pdf/AuditorRoundtableDiscussionSummaryNov2005.pdf>; Interagency Advisory on the Unsafe and Unsound Use of Limitation of Liability Provisions in External Audit Engagement Letters, available at <http://www.federalreserve.gov/boarddocs/srletters/2006/SR0604a1.pdf> (last visited Nov. 23, 2007) (opposing such provisions). Notably, the exclusion of punitive damages already exists under federal securities law and under many state laws.

51. See Joshua Ronen, *Post-Enron Reform: Financial Statement Insurance and GAAP Revisited*, 8 STAN. J.L. BUS. & FIN. 39, 48-60 (2002) (arguing issuers should obtain insurance at predetermined levels to cover their financial statements with benefits that include increased investor monitoring of financial statement reliability); see also *infra* notes 175-78 and accompanying text.

52. Although the merits are beyond this Article's scope, it is worth noting two important facts about proposing that all auditor liability matters be established by contract rather than tort law: (1) considerable agency costs are embedded in the existing corporate governance structure, which limits the probability that managers interact with auditors in favor of investor interests; and (2) the oligopoly of the auditing industry restricts issuer choice and reduces audit firm incentives to compete on service or product variation.

53. See Ebke, *supra* note 35, at 690.

The second is the more dramatic claim that rivets concern not on the quotidian case but on the catastrophic case from that unpredictable expansion: staggering liability threatening auditing firm insolvency with systemic ripple effects that could demolish the entire auditing industry. In the late 2000s, for example, proponents of establishing damages caps for auditors arising from audit failure contended that caps below catastrophic levels “would allow insurers to re-enter this market. Insurance would ... allow audit firms to price risk and create a source of recovery for shareholders.”<sup>54</sup>

Although these more subtle and dramatic claims are worth separate attention, they ultimately do not make much of a difference to the basic argument from relative expense or limited availability of insurance standpoints. After all, legal uncertainty is endemic and pervasive, so it cannot be eliminated for auditing and is not unique to it. And auditor-friendly reform efforts are not directed so much at promoting legal certainty, but at limiting legal liability. That is the essence of a cap, for instance, which does not so much increase legal certainty as simply put an upper financial limit on legal judgments.

Indeed, legal certainty and predictability could be provided by a law such as one that always makes auditors strictly liable in the amount of \$200 million for every audit failure. Yet despite the certainty and predictability of such a law, insurance could remain expensive and limited. This is due, in part, to the fact that uncertainty is a prerequisite to the effectiveness of insurance. As explained in the next section, events that are certain to occur do not benefit from the risk distribution function that insurance can provide.

True, unpredictability can impair insurance effectiveness and present catastrophic risk that insurance cannot cover. Analysis and empirical evidence, however, indicate that expensive or limited insurance is not due solely to unpredictably expanding liability and accompanying catastrophic risk, but also to traditional insurance limitations arising from moral hazard, adverse selection, and the rarity of catastrophic cases.<sup>55</sup> As explored in Parts II and III of this Article, although these matters pose difficulties for existing and

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54. PAULSON COMMITTEE REPORT, *supra* note 14, at 14.

55. See Peter Moizer & Lisa Hansford-Smith, *UK Auditor Liability: An Insurable Risk?*, 2 INT'L J. AUDITING 197, 205-08 (1998); see also *infra* text accompanying notes 138-58.

potential insurance to address quotidian and catastrophic risk from audit failure, they also reduce the insurance-based argument to the basic claim of expense or limited availability of insurance, rather than implicating the more subtle or dramatic theories about legal uncertainty or unpredictably expanding liability.

However conceived, the insurance-based argument resonates forcibly during periods when insurance markets contract. Insurance markets expand and contract cyclically through periods designated as either “hard” or “soft” markets, in cycles that approximate seven years.<sup>56</sup> As a thumbnail sketch of such cyclicity, the market for professional liability insurance for auditors hardened considerably from the late 1970s through the early and mid-1980s, in partial response to increasing risk of negligence liability for audit failure;<sup>57</sup> the market then softened in the late 1980s;<sup>58</sup> it hardened again in the early 1990s in response to the dissolution of the firm of Laventhol & Horwath;<sup>59</sup> the market remained hard for a few

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56. See FRANK CRYSTAL & CO., INSURANCE MARKET OVERVIEW 5 (Winter/Spring 2006) (“A hard market is one in which insurance rates increase (net written premiums increase substantially) and coverage tends to be relatively restricted. A soft market is one in which rate reductions are common (net written premium increases only nominally) and broad coverage terms are readily available. The cycle from hard market, to soft market, and back to hard market occurs regularly at a peak-to-peak or trough-to-trough interval of approximately seven years.”).

57. See John Siliciano, *Negligent Accounting and the Limits of Institutional Tort Reform*, 86 MICH. L. REV. 1929, 1950 n.111 (1988) (reciting evidence from: (1) the late 1970s, of a “sharp premium rise and exit of some firms from insurance market” (citing H. JAENICKE, *THE EFFECT OF LITIGATION ON INDEPENDENT AUDITORS* 4 (2d ed. 1981)); (2) the early 1980s, of loss claims that “resulted in insurance becoming unavailable or prohibitively expensive” (citing Stephen H. Collins, *Malpractice Prevention and Risk Management*, J. ACCT., July 1986, at 52); and (3) the mid-1980s, that the number of E&O insurers to small and mezzanine firms shrunk from twelve to three).

58. See Dan L. Goldwasser, *Accountants’ Liability 1989: The Year in Review*, in PLI CORPORATE LAW AND PRACTICE COURSE HANDBOOK SERIES 11, 28-29 (PLI 1989) (noting market softening which led to: (1) insurers writing policies for small and medium-sized firms with larger limits of liability; (2) insurer Crum & Forster, under an AICPA sponsored program, being induced to increase limits to \$5 million from \$1 million; and (3) entry of Home Insurance Co. and Orion Insurance Co.; yet, still noting difficulty of large firms obtaining high limit coverage and facing large deductibles, so that insurance covered only catastrophic loss levels—meaning large firms must “in essence” self-insure smaller claims).

59. See Robert A. Prentice, *Can the Contributory Negligence Defense Contribute to a Defusing of the Accountants’ Liability Crisis?*, 13 WIS. INT’L L.J. 359, 360-61 (1995) (claiming high level of unresolved claims plus legal costs and demise of Laventhol & Horwath “made it nearly impossible for the [large auditing] firms to find insurance, and has caused approximately forty percent of smaller firms to go without insurance altogether”); *id.* at n.13

years—and this appeared to be global rather than U.S.-specific;<sup>60</sup> then it softened again in the late 1990s in partial response to the PSLRA, but has hardened yet again since the early and mid-2000s amid both accounting scandals and resulting regulatory reform.<sup>61</sup> The professional liability insurance market for auditors should soften further to the extent that such reforms increase audit effectiveness and reduce liability risk from audit failure. At present, the market remains hard.<sup>62</sup>

This cyclicity, which is explored at more micro levels in the next Part, presents a preliminary implication. Proposals to cap liability that are supported by arguments about a lack of insurance may be unable to respond to the dynamics of those markets. A legal mechanism would have to be in place to suspend and reinstate caps as insurance markets fluctuate. Given competing demands on lawmakers and the difficulty of fashioning legislation that includes

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(citing Michael Schachner, *Big Six Losses Don't Add Up To Cover Crisis for Small Firms*, BUS. INS., Nov. 22, 1993, at 3 (suggesting that “capacity has all but evaporated for Big Six firms, causing several to entirely self-insure”)); *id.* (“Those who do buy insurance are paying much more than previously. Auditors, for example, are paying three times the premium with six times the deductible as compared to 1985. Some firms are paying premiums of \$150,000 per year—more than is paid by most surgeons—for the reduced coverage.” (citations omitted)).

60. See Carl Pacini, Mary Jill Martin & Lynda Hamilton, *At the Interface of Law and Accounting: An Examination of a Trend Toward a Reduction in the Scope of Auditor Liability to Third Parties in the Common Law Countries*, 37 AM. BUS. L.J. 171, 220-21 (2000) (“[A]uditors have been unable to spread or socialize risk through the purchase of professional liability insurance. The unavailability of liability insurance may also reduce the quality of corporate financial reporting.”). The authors went on to make an international comparison, noting that:

In the United States, large accounting firms are now able to buy only a portion of the coverage they could buy prior to 1985 and only for much higher premiums. Virtually all mid-size firms tend to be highly underinsured. Liability insurance for small firms is expensive with almost 50% not carrying any insurance at all. In the United Kingdom, below \$75 million the Big Five retain the risks themselves as self-insurance using their own captive insurance companies. The effective ceiling on coverage is \$340 million. In Canada and Australia, the scale of the problem is such that auditors are finding it increasingly difficult to obtain insurance and that where it is available it is extremely expensive.

*Id.* at 384 (citations omitted).

61. See Dan L. Goldwasser, M. Thomas Arnold & John H. Eickemeyer, *Professional Liability Insurance* § 11.2.1, in ACCOUNTANTS' LIABILITY (Aug. 2006) [hereinafter Goldwasser et al., ACCOUNTANTS' LIABILITY] (“Although the market for professional liability insurance softened in the late 1990s, it has become tighter in the wake of the accounting scandals in 2001-2002 and the subsequent regulatory response.”).

62. See FRANK CRYSTAL & CO., INSURANCE MARKET OVERVIEW, *supra* note 56.

sufficient prospective flexibility, a legislative solution to the challenge is not likely to work. The observation does point in a more promising direction. It could be desirable to develop mechanisms that reduce insurance market volatility, if not strategies that would expand and sustain availability for all time.<sup>63</sup>

The insurance-based argument for caps raises numerous issues, including the following: Are insurers really not willing to provide this insurance? Is there really little or no insurance available? How does the existence of large firm self-insurance programs affect the analysis? Are damage caps really necessary to support the efficacy of the audit function? If rejuvenating insurance is appealing, are there alternatives that would enable doing so? For example, could insurance cover *financial statements* rather than *auditors*? This could contribute a mechanism other than fiat to establish caps, assuming caps were desirable, and thus at least address risks of ordinary audit failure. Finally, could audit failure risk be distributed more widely by securitizing this risk through capital markets? Could insurance-based securitization reduce the volatility of professional liability insurance markets? Could it at least be used to address the specific concerns associated with catastrophic audit failure risk?

### C. *The Role of Insurance*

Before pursuing such questions in the next two Parts, some initial perspective on the role of insurance in system design is in order. It may seem backwards to design the parameters of a liability system in relation to the capacity of insurance coverage to meet it. The system should set liability to achieve optimal deterrence, or perhaps, compensation. But determining such an optimum requires examining all system components, including out-of-pocket costs imposed on targeted actors; the share of losses to be absorbed by insurance, indemnification, or other devices; the consequence of insurance losses as translated into future premiums, and so on. In this calculus, it is reasonable to evaluate the role and capacity of insurance in overall system design.

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63. See *infra* text following note 222.

### 1. *Optimality*

Allowing that insurance capacity should inform system design does not mean that its availability should be the basis for enlarging liability levels by assuming its continued availability, nor should its lack of availability be the basis for the opposite. Insurance and similar resources cannot be assumed to exist or not to exist. Insurance affordable today may not be affordable tomorrow, and vice versa.<sup>64</sup> Accordingly, the investigation that follows is not intended to reach conclusions concerning the exact design of the liability system, or the precise role insurance availability or unavailability should play in that design. Rather, it is intended to identify and estimate the scope of available insurance and how to expand its availability so that the maximum level of potential resources can be identified. That knowledge can then be used to inform system design.<sup>65</sup>

Nor is this to conclude that maximizing the aggregate available insurance is necessarily ideal. Perversely, expanding insurance capacity can actually reduce recoveries available to injured parties, and this can frustrate any compensatory objectives that a liability system may be intended to achieve.<sup>66</sup> This peculiarity more nearly raises questions about the function of compensation in the liability system compared to deterrence, yet the two goals continue to play

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64. See, e.g., Siliciano, *supra* note 57, at 1948-49 (criticizing “the standard bromide of modern tort law: the use of insurance to offset tort liability ...” then citing and discussing *H. Rosenblum, Inc. v. Adler*, 461 A.2d 138 (N.J. 1983), which “concluded that because accountants have been able to obtain malpractice insurance against claims made directly by their clients, there was ‘no reason to believe’ they could not similarly insure against third-party claims,” and noting how this belief is “dangerously misguided”).

65. See George L. Priest, *The Antitrust Suits and the Public Understanding of Insurance*, 63 TUL. L. REV. 999, 1000 & n.6 (1989) (opining that “few would dispute that a central ambition of a civilized society is to maximize the availability of insurance against all forms of prospective loss,” and that “this conclusion is the heart of the most influential philosophical justification for the modern state” (citing JOHN RAWLS, *A THEORY OF JUSTICE* (1971))).

66. See John C. Coffee, Jr., *Reforming the Securities Class Action: An Essay on Deterrence and Its Implementation*, 106 COLUM. L. REV. 1534, 1553 n.74, 1585 (2006). *But cf.* Roberta Romano, *What Went Wrong With Directors’ and Officers’ Liability Insurance*, 14 DEL. J. CORP. L. 1, 4 (1989) (“The availability of insurance need not lead to an increased level of misconduct: in a competitive insurance market, even if insurers cannot monitor insureds perfectly, they can adjust insurance contract terms and offer partial insurance to mitigate the moral hazard of insurance inducing suboptimal levels of care by insureds.” (citing Steven Shavell, *On Liability and Insurance*, 13 BELL J. ECON. 120 (1982))).

at least some role in policy design. Still, evaluating claims concerning lack of insurance and optimal system design, including as to damages caps, can be improved by an appreciation of the range and type of insurance products that could be fashioned to address risks.

## 2. *Statistical Independence*

Risks are susceptible to the risk management functions of insurance if they are statistically independent of one another. The risk of audit failure leading to legal liability generally satisfies this condition. It cannot be predicted with certainty and it is not necessarily random. Auditors can make reliable predictions and can even influence outcomes. But fraud can be hidden, illegal acts obscured, measurements imprecisely made, papers lost, and rogue managers evasive. Audit failures occur through ordinary carelessness, actual negligence, gross negligence, and sometimes scienter. Some audits are failures but are never uncovered as such.<sup>67</sup>

If these matters could be controlled, then prediction would be perfect. At the extreme, if two events both are certain to occur, insuring them does not contribute to risk pooling or distribution; even if two events are not certain to occur, but are likely to occur in exactly the same circumstances, insurance cannot contribute to risk distribution. But if the risks have probabilities of occurring and those probabilities arise from different circumstances, then insurance is useful to pool and distribute both risks. Because there is invariably some non-random chance of audit failure, as there is with death, earthquakes, floods, and clouds on title, the condition is generally met: the risk of any given audit failure is statistically independent of the risk of any other, and non-correlated, audit failure.<sup>68</sup>

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67. Bishop Berkeley might have asked, as with trees falling in unpopulated forests, whether an undiscovered audit failure is really an audit failure.

68. "Generally" is used because there is some reason to believe that certain kinds of audit failures—or audit failure risks—congregate in particular industries or proliferate during certain economic environments. See David B. Kahn & Gary S. Lawson, *Who's the Boss? Controlling Auditor Incentives Through Random Selection*, 53 EMORY L.J. 391, 428 (2004).



### *3. Limiting Probability*

Two broad categories of strategies can be deployed to address risk by managing its two components: limiting the probability of occurrence, and limiting the magnitude if it does occur. As to limiting probability, common examples outside auditing are driving carefully, using fire-resistant materials in buildings, installing safety devices on machines, and engineering beach erosion protection.

For auditing, steps to reduce the probability of legal liability from audit failure include the reforms in the Sarbanes-Oxley Act discussed earlier: installation of PCAOB as an oversight body for the industry; vesting audit committees with direct supervisory power over individual auditors; limiting the scope of non-audit services; and providing testing of and opinions on the effectiveness of internal controls.<sup>69</sup> Additional devices include increased probing, strategic detection tools, investing in training of personnel, and having multiple teams of professionals review the performance of the engagement, as when a firm dispatches an engagement team but provides oversight by the national office.

### *4. Limiting Magnitude*

Limiting magnitude means taking steps designed to reduce the effects of a loss once it occurs. Non-audit examples are using air bags and seat belts when driving, installing sprinkler systems in buildings, and providing first aid kits on shop floors. For auditing, steps include prompt disclosure of corrections, swift preparation of financial restatements, continuous disclosure and, especially to address collateral effects, delisting of issued securities when they are accompanied by materially misleading financial statements. Magnitude-limiting steps include developing reserve funds available to meet such losses without disrupting an ongoing enterprise.

Investors may exert themselves to reduce the magnitude of audit failure. A key device available to them is diversification.<sup>70</sup> Under

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69. *See supra* notes 14-15 and accompanying text.

70. In theory, public company shareholders are entitled to vote to ratify the selection of independent auditors. In practice, however, this selection is made by audit committees. Rational shareholder apathy limits the exercise, and there is limited choice for most large

modern portfolio theory, investors can reduce the risk of a single stock price drop by owning opposite-behaving stocks or a group of differently behaving stocks.<sup>71</sup> The result is that peculiar risks associated with given securities are reduced, for the price of also reducing the “risk,” or positive chance, of a single stock price surge.<sup>72</sup> This theory is designed to address business volatility rather than effects precipitated by financial misstatements, but the strategy nevertheless can reduce the latter’s effects.

### 5. *Distributing Residual Risk*

Some risk remains even after taking prudent steps to reduce probability and magnitude. The traditional way to distribute residual risk is by transferring it to another party using an insurance contract.<sup>73</sup> Risk-averse persons are willing to pay a relatively small but steady amount to avoid shouldering the risk of a possible one-time, staggering payout. Insurance enables people to do so.

At the limit, insureds can completely eliminate their risk for the price of their premium: they opt for a certain small loss instead of an uncertain large loss. And if insureds renew annually, they opt for a certain stream of small losses in exchange for eliminating an uncertain large loss. Insurers profit by pooling these individual risk aversion payments to generate a resource base that exceeds the aggregate amount of probable losses.<sup>74</sup> This pooling function thus not only transfers risk, but also distributes risk across all insureds in the pool.<sup>75</sup>

Although risk aversion is generally assumed to obtain across a wide range of persons to whom insurance appeals as a risk distribution mechanism, risk aversion can vary with absolute and relative stakes. The standard example of risk aversion illustrates this point. It imagines a person facing a choice between a certain loss of \$500 and a 50 percent chance of losing \$1,000, meaning an expected loss

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enterprises. See EJan MACKAAY, *THE ECONOMICS OF INFORMATION AND LAW* 175-76 (1982).

71. *Id.*

72. *Id.*

73. See *id.* at 176-77.

74. See *id.* at 173-74, 176-80; A. MITCHELL POLINSKY, *AN INTRODUCTION TO LAW AND ECONOMICS* 53-58 (2d ed. 1989).

75. See KENNETH S. ABRAHAM, *DISTRIBUTING RISK: INSURANCE, LEGAL THEORY AND PUBLIC POLICY* 2 (1986).

of \$500. People who are risk averse choose the certain loss, as they are averse to the risk of doubling it, while risk-preferring people take that chance, and risk-neutral people are indifferent.

To see how risk aversion can vary with absolute stakes, imagine how increasing the stakes affects the distribution of persons who are risk averse, risk neutral, or risk preferring. The population of persons who are risk averse tends to increase as the stakes rise: given a choice between a certain loss of \$1 and a 50 percent chance of losing \$10,000 (meaning an expected loss of \$5,000), very few offered the choice would roll the dice.

To see how risk aversion can vary with relative stakes, consider how a decision maker's background position affects choices made in the foregoing examples. Suppose that persons in the first example command, respectively, a net worth of \$1,000 and of \$1,000,000. In that fact pattern, the former person will be more risk averse to the uncertainty of a \$1,000 loss compared to the millionaire, for whom such a loss is a drop in the net worth bucket. A potential insured's relative wealth can thus be an important driver of relative risk aversion.

Even so, the more risk averse one is, the more one is willing to pay to avoid risk. Avoidance strategies include paying a third party insurer to assume risk. To modify the preceding examples, suppose that 100 risk averse people each face a 1 percent chance of losing \$1,000, which equals an expected loss of \$10. But also suppose that they have the choice, using insurance, to part with a certain \$15 instead of facing that chance. A third party might be willing to accept the \$15 from each of those 100 people, grossing \$1,500, in exchange for accepting the risk of having to pay \$1,000. If so, the result is an insurance market with 100 insureds paying the insurer to take each of their risks.

## II. EXISTING INSURANCE FOR AUDIT FAILURE

Auditors and investors typically handle risk of legal liability in much the same way that others address kindred risks: by monitoring risk to control it, thereby limiting probability and magnitude, and by using insurance to distribute the residual risk. This Part discusses two classes of tactics that auditors have long used to deal with the residual risk by distributing it: third-party insurance and

self-insurance. It tentatively concludes that self-insurance is comparatively superior to third-party insurance in promoting audit effectiveness.

#### A. *Errors & Omissions (E&O) Insurance*

Auditors have long used insurance to transfer and distribute risk of legal liability arising from audit failure. The insurance is variously dubbed professional liability insurance, malpractice insurance or, most broadly, errors and omissions (E&O) insurance. Such insurance is accompanied by two general limitations—moral hazard and adverse selection—plus several limitations that raise issues of peculiar significance to the audit function concerning monitoring.

##### 1. *Moral Hazard*

As to moral hazard, insureds who completely eliminate their risk for a price have lesser incentive to limit probability or magnitude than those who do not.<sup>76</sup> The result is that insurance can perversely increase both. A theoretically appealing response to this problem is for insurers to monitor insureds and adjust premiums according to steps that each insured takes to minimize probability and magnitude of risk.<sup>77</sup> Ideally, premiums would then be matched precisely to risks.<sup>78</sup> Alas, when pooling risks, monitoring each insured is costly and sometimes impossible.<sup>79</sup> The second-best strategy emerges of incomplete risk elimination—that is, having the insured retain some risk.<sup>80</sup> Risk retention devices in insurance include deductibles, co-insurance, and self-insured retentions.<sup>81</sup>

To appreciate how retentions function, first note that E&O insurance is written with limits-of-liability, meaning an express contractual limitation on the insurer's responsibility to pay under

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76. See MACKAAY, *supra* note 70, at 179-80.

77. *See id.*

78. *See id.*

79. *See id.*

80. *See id.*

81. Under a deductible, the insured bears any loss up to a stated amount; under co-insurance, the insured bears a stated percentage of any loss regardless of amount.

a policy.<sup>82</sup> Traditional policies use a single amount to establish both coverage per claim and aggregate limits—that is, the aggregate policy amount that is available to cover any one claim. This is satisfactory for most small and medium-sized auditing firms which, on average, face one claim per year for every one hundred professionals employed.<sup>83</sup> Larger firms face more frequent annual claims, and related policies accordingly separately state limits per claim on the one hand, and aggregate limits on the other.<sup>84</sup>

Virtually all E&O policies, with the exception of some for small firms, use deductibles or self-insured retentions.<sup>85</sup> Deductibles require insureds to cover losses up to a stated amount before the insurer is obligated to contribute; self-insured retentions require insureds to cover losses before the insurer is obligated to pay the full amount of the limits-of-liability.<sup>86</sup> Deductibles, which are less favorable to insureds, are more common in traditional E&O insurance for smaller firms, while larger firms tend to obtain policies using the more favorable self-insured retention terms.<sup>87</sup>

In the audit function, moral hazard can cut multiple ways. For example, expansive liability presents moral hazard to shareholders *ex ante*. If shareholders know they will be able to successfully sue an issuer's auditor to recover losses due to audit failure, they enter the picture with fewer incentives to self-protect.<sup>88</sup> This is a theoretical defense not only of the privity rule for auditor negligence as in *Ultramares*,<sup>89</sup> but also to support a case for limiting liability in other ways—either doctrinally, such as through tort law's economic loss doctrine, or by fiat using damages caps. With such public policies in place, investors have increased incentives both to monitor issuers

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82. Goldwasser et al., ACCOUNTANTS' LIABILITY, *supra* note 61, § 11.4.

83. *Id.*

84. *Id.*

85. *See id.*

86. To illustrate the difference, consider a policy with an aggregate limits-of-liability of \$2 million applicable to audit failure damages of \$2.5 million. With a deductible of, say, \$100,000, the insured must cover the first \$100,000 and the insurer the remaining \$1.9 million of policy coverage (leaving a \$500,000 uninsured shortfall and a total obligation of \$600,000). With a retention of, say, also \$100,000, the insured must cover \$100,000 of the total loss, meaning the insurer pays the full \$2 million limits-of-liability and the insured the rest, for a total of \$500,000. *Id.*

87. *Id.*

88. *See Siliciano, supra* note 57, at 1948 & n.101.

89. *Ultramares Corp. v. Touche*, 174 N.E. 441 (N.Y. 1931).

and their auditors, and to effectively self-insure through investment portfolio diversification.<sup>90</sup>

On the other hand, such doctrinal or fiat limitations pose a different problem of moral hazard, increasing moral hazard among auditors on an engagement who are aware that their loss exposure is capped. One issue is whose behavior is more likely to be influenced by such moral hazard. This hinges, in large part, on the strength of other incentives that shareholders face to self-protect on the one hand, and auditors have to avoid conduct leading to audit failure on the other. My purpose is not to settle that issue, but to observe how that variable in the audit function contributes a kind of uniqueness compared to other tort liability and insurance contexts.<sup>91</sup>

An additional complication concerns auditors' capacity to pass insurance-related costs through to clients. Shifting financial risks from auditors to insurers would not diminish deterrence so long as auditors as a group suffered when one auditor failed. But group suffering will not occur if auditors can pass insurance costs on to their clients, and, in turn, the public.<sup>92</sup> Cost-passing reduces the deterrent effect of imposing the costs on auditors, although some deterrence may remain from risk of harm to reputation. Expanding auditor liability would not help much, either. Whether auditors can pass costs through is uncertain, even though public enterprises do not have any choice but to hire an auditor, and that choice is limited. On the other hand, insisting that auditors retain some

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90. See *infra* text accompanying note 222.

91. The auditing context is not *sui generis*, of course, as two examples suggest. First, it is possible to conceive of the problem of auditor liability as a problem of legal error risk arising from juries or judges awarding excessive damages. Cf. EWERT, EU STUDY, *supra* note 11, at ch. 26 & annex 6 (evaluating various theoretical economic arguments in favor of auditor liability caps that exist apart from the issue of availability and expense of insurance). But this problem pervades the U.S. liability system and is certainly not unique to auditing. Absent a comprehensive systemic solution, context-specific solutions should be sought. Second, one might observe that purchasers of securities discount the purchase price to reflect the probability of financial catastrophe from audit failure, among other risks. Yet this does not distinguish the securities investor class from many others, including, for example, owners of properties in areas prone to natural disaster, such as coastal areas, who also discount their purchase price in light of catastrophic risks.

92. See Kent D. Syverud, *On the Demand for Liability Insurance*, 72 TEX. L. REV. 1629, 1644-49 (1994). But see Randall R. Bovbjerg, *Liability and Liability Insurance*, 72 TEX. L. REV. 1655, 1665-66 (1994).

liability risk, through retentions, might incrementally frustrate their cost-passing ability. It may be more convincing to defend high audit fees by citing high insurance premiums than by citing losses incurred on liability claims.

## 2. Adverse Selection

As to adverse selection, ideally, a premium should equal an insurer's expected loss plus administrative costs and a fair profit.<sup>93</sup> Yet it is rarely practical to calculate each insured's individual expected loss perfectly.<sup>94</sup> The best that can be done, at reasonable cost, is systematic classification of each insured into groups with similar probabilistic attributes. For example, in automobile insurance, insureds may be classified according to a combination of discrete attributes such as specific accident histories, called "experience rated," and whether the vehicles they drive are equipped with air bags or not, called "feature rated".<sup>95</sup>

Risk classification grouping implies that, within groups, individuals pose different risks while paying the same premium.<sup>96</sup> As a result, more applicants will seek classification in lower-risk/lower-premium groups.<sup>97</sup> Resulting groups will have in them more relatively higher-risk than lower-risk people for that classification.<sup>98</sup> Insurers respond to this adverse selection by estimating its effects using increasingly refined models that enable adjusting the scope of coverage and premium charged for each risk group classification.<sup>99</sup> These exercises are limited, however, and when the costs of increasing refinement are greater than the benefits, no further refinement is made.

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93. In the market imagined above, *supra* Part II.A.1, the insurer's total expected loss is \$1,000, and with one hundred people, that means \$10 each plus \$5 for costs and profit.

94. See MACKAAY, *supra* note 70, at 177.

95. See Kenneth S. Abraham, *Efficiency and Fairness in Insurance Risk Classification*, 71 VA. L. REV. 403, 413-14 (1985).

96. See *id.* at 415-16.

97. See *id.*

98. See *id.*

99. See *id.* at 422-24.

### 3. *Monitoring*

The monitoring-related limitations of using E&O insurance to address audit failure risk are serious. First, auditor E&O insurance addresses an audit firm's exposure using general policies for specific time periods. They are not tailored to particular audit engagements or associated risks of audit failure. Such coverage generality may pose perverse incentive effects that prevent calibrating auditing tasks to the risks of audit failure arising from particular engagements.

Second, and more importantly, this method separates the risk monitoring function from the risk distribution function. That is, auditors are in control of their insured activities with little or no oversight by insurers. Monitoring is a way to control risk, but when risk monitoring is separated from risk distribution, moral hazard increases.<sup>100</sup> The theoretical appeal of bundling monitoring and distribution evaporates to a point at which even second-best strategies of retentions are impaired.

Put differently, the issue raises a problem of asymmetric information when considering the various constituents in the audit function. Relative access to information is greatest among issuers, then auditors, and then the latter's external insurers. Issuers have superior access to the basic financial data and are in the best position to determine its reliability; auditors have superior knowledge in determining their capability of assessing that information and thus estimating the risk of audit failure. Insurers must rely upon abstract models and command data sufficient to validly estimate expected losses from audit failure.

Exposure from audit failure is more difficult for insurers to evaluate, as it involves matters of investor demographics. Estimating the magnitude of audit failure is more uncertain when gauging the scope of claims is difficult. This can occur due to limited information about the number, identity, or type of third-party shareholders or other investors who may assert claims. Such informational asymmetry can lead insurers to increase premiums or retentions, limit coverage, or add exclusions. When asymmetry is acute, premium surges may occur, which increase the adverse selection that leads

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100. See MACKAAY, *supra* note 70, at 179-80.



to lower-risk insureds withdrawing from pools. With only high-risk insureds left, pools unravel; self-insurance becomes the preferred route for the low-risk insureds, and insurance for the high-risk evaporates.

Consider an analogy from directors' and officers' (D&O) insurance. Premiums and coverage may provide clues about liability risk to the extent that they are valid proxies for corporate governance quality.<sup>101</sup> Yet scholars observe that D&O insurers do not appear to have or act upon any monitoring incentives.<sup>102</sup> Although similar data on E&O insurance does not appear to have been published, it is reasonable to suppose a similar phenomenon in this line.<sup>103</sup>

#### 4. *Insurance Levers*

As with all insurance products, the market for E&O insurance changes dynamically in response to prevailing macroeconomic and social conditions that have specific effects on insurance underwriting decisions. These factors influence the supply and price—the premium—of insurance available, and are characteristically used to describe aspects of the familiar “cycle explanation” for insurance market dynamics. Thus, the thumbnail sketch of such cyclicity provided earlier can be explored more fully by considering underlying components of statistical independence, adverse selection, and moral hazard, as well as the bearing of monitoring capabilities on

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101. Compare Tom Baker & Sean J. Griffith, *Predicting Corporate Governance Risk: Evidence from the Directors' & Officers' Insurance Market*, 74 U. CHI. L. REV. 487, 489-90 (2007), with Larry E. Ribstein, *Market vs. Regulatory Responses to Corporate Fraud: A Critique of the Sarbanes-Oxley Act of 2002*, 28 J. CORP. L. 1, 54 & n.337 (2002) (arguing that premiums for D&O insurance accurately reflect governance quality (citing John E. Core, *The Directors' and Officers' Insurance Premium: An Outside Assessment of the Quality of Corporate Governance*, 16 J.L. ECON. & ORG. 449 (2000))).

102. See Tom Baker & Sean J. Griffith, *The Missing Monitor in Corporate Governance: The Directors' & Officers' Liability Insurer*, 95 GEO. L.J. 1795, 1807-08 (2007); see also Joseph A. Grundfest, *Punctuated Equilibria in the Evolution of United States Securities Regulation*, 8 STAN. J.L. BUS. & FIN. 1, 7-8 (2002) (invoking this basis to question Professor Ronen's proposal, discussed *infra* in Part III.A of this Article, favoring financial statement insurance).

103. A policy parallel appears: Commentators who lament unavailability of auditor E&O insurance and/or rising liability risks dramatize their arguments by warning that the combination may drive auditors out of the auditing business with calamitous effects, while those lamenting the unavailability of D&O insurance amid rising liability risks do so by warning that the result may discourage talented and capable persons from serving on corporate boards of directors.

the latter.<sup>104</sup> In particular, consider a few examples of how retentions can be used to address each of these three components.

First, retentions enable insurers to neutralize correlations among risks that otherwise impair insurance's efficacy to pool and distribute them, that is, to address reduced independence of risks. That is, if all pool members are certain to suffer losses of a given amount, say \$100,000 per year, then there is no independence as to that amount, so it is not susceptible to risk-pooling and distribution. Hence, deductibles rise to that level of uniformly certain loss. Likewise, if all pool members are equally as likely to suffer losses in a given category—say, from secondary debt offerings of highly-leveraged enterprises—then the low independence of that pool would increase the appeal of internal retentions compared to external coverage.

Second, retentions address adverse selection by enabling insurers to distribute total risk more heavily to high-risk than to low-risk insureds. This is because uniformly high retentions for members of a pool have the effect of charging more losses to those pool members that suffer claims more often or in higher amounts than other pool members. High retentions are thus better than higher premiums for low-risk insureds. Their existence may suggest a strategy for redressing high-risk variability in a pool and an effort, in response to external macro forces, to keep insurance "available."

Third, retentions, as noted, reduce moral hazard. In part, this arises from how they increase incentives for internal monitoring. Indeed, high retentions may reflect that firms, rather than external insurers, are better able to monitor, evaluate, and control associated risks. But the second-best strategy of replacing monitoring with retentions becomes even less effective the more unbundled the risk monitoring and risk distribution functions become. This insight contributes a partial explanation for why large auditing firms initiated more ambitious self-insurance programs.

After all, volatility in E&O insurance markets also reflects the competitive forces prevalent in most insurance markets, which are financial in character and therefore pose few structural limitations to industry expansion.<sup>105</sup> Insurers face competition not only from

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104. See *supra* Part I.B.3.

105. See Romano, *supra* note 66, at 18 (noting that capacity constraints or withdrawals are

other insurers but from their customers and potential customers. Customers who regularly negotiate with insurers over retentions increasingly appreciate the need to develop formal strategies to manage and fund related risks. Customer responses vary according to different risk classification groups. Among auditing firms, these classifications parallel firm size: large, mezzanine, or small. In recent decades, periods labeled “insurance crises” led the large firms to pursue more systematic programs of self-insurance.

### *B. Self-insurance Programs (SIPs)*

Hard insurance markets, and perhaps other factors, lead insureds to strategy options other than transferring risk, often called self-insurance. This is a colloquial term that actually designates a complex variety of tools. In general, however, self-insurance involves setting aside a portion of revenues from activity to meet losses should they occur—a strategy that became increasingly common throughout the U.S. economy in the late 1970s and early 1980s.<sup>106</sup> Of course, risk-retention devices prevalent in general insurance contracts, such as deductibles and co-insurance, are a partial form of self-insurance. What distinguishes the strategy usually described as self-insurance is a more comprehensive program of reserving funds to pay losses, more fully internalizing those risks.<sup>107</sup>

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puzzles in a competitive insurance market where premiums should adjust to changing conditions, but noting how, for professional liability insurance, “desired terms of coverage—and for some firms any coverage—became unavailable, at apparently any price”); *see also id.* (noting that the capacity constraint story is hard to believe “[g]iven that the input for insurance is wealth and not the physical capital of a factory which could have productive capacity limits”).

106. *See* Priest, *supra* note 65, at 1005 (documenting that “the extent of corporate self-insurance has increased substantially over time through the creation of firm or industry captive insurance subsidiaries and industry-wide mutuals”); *see also id.* (noting that “the corporate purchase of commercial liability insurance has proven something of a puzzle because corporations have many potential methods of diversifying to reduce the effect of potential losses”).

107. More precise vocabulary distinguishes among self-insurance, self-funding—which, in turn, assumes the various forms of retentions such as deductibles and co-insurance, and no insurance.

### 1. Large Firm Programs

It is a commonly stated, although stylized, fact that large audit firms have embarked on comprehensive self-insurance programs (SIPs) using their own separately organized insurance affiliates.<sup>108</sup> Note, however, that public details of such programs are scarce, as the audit firms are privately held and do not produce the kinds of disclosure that public enterprises do. Subject to this opacity, it is possible to assemble a composite sketch of important outlines, including operational and organizational scale, parameters of the programs, and the types of reinsurance involved.

As to operational and organizational scale, consider, as a representative firm, Deloitte (formerly called Deloitte Touche Tohmatsu). It is actually a network of some seventy different member firms organized in numerous jurisdictions of the world and operating in nearly 140 different countries.<sup>109</sup> As a whole, Deloitte claimed total worldwide revenues of more than \$20 billion in 2006 and reported commanding total assets of \$10 billion, with total liabilities plus partner capital of \$6.4 billion.<sup>110</sup> Deloitte's public materials—and its internal training programs—emphasize quality control throughout the organization and place a premium on

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108. See Talley, *supra* note 11, at 1643 (noting “the stylized fact that, at least since the savings and loan crises of the late 1980s, auditing firms have been effectively self-insured, often through ‘captive’ (i.e., wholly-owned) insurance companies”); see also Goldwasser et al., ACCOUNTANTS' LIABILITY, *supra* note 61 (noting that “large [auditing] firms since the mid 1980s have been unable to purchase sufficient liability insurance to satisfy their needs”).

109. See About Deloitte, <http://www.deloitte.com> (follow “About Deloitte” hyperlink) (last visited Nov. 23, 2007).

110. DELOITTE, THE JOURNEY 50-52 (2006), available at [http://www.deloitte.com/dtt/cda/doc/content/dtt\\_2006arfinal101606.pdf](http://www.deloitte.com/dtt/cda/doc/content/dtt_2006arfinal101606.pdf) [hereinafter THE JOURNEY]. Note that these publicly reported figures do not balance and that Deloitte's public reports offer no explanation. Perhaps the \$3.6 billion difference between total assets of \$10 billion and total liabilities plus partner capital of \$6.4 billion produces a functional insurance reserve. Whether formally or even informally so denominated on the firm's private financial statements, some portion of the difference could be available to meet liability arising from audit failure. The full amount, \$3.6 billion, is considerably larger than Professor Talley's “plausible range” of large firm viability thresholds estimated at between \$454 million and \$2.15 billion. See Talley, *supra* note 11, at 1679. Separately, of the reported total assets, accounts receivable appeared to be the largest portion at \$4.8 billion, with total current assets of \$7.8 billion and total current liabilities of \$3.6 billion. THE JOURNEY, *supra*, at 52.

maintaining uniform standards across those firms, evidently to promote a sense of single-firm identity within the network.<sup>111</sup>

The U.S. member firm of Deloitte is Deloitte USA. It provides audit, tax, consulting, and financial advisory services through three main subsidiaries: Deloitte & Touche LLP, Deloitte Tax LLP, and Deloitte Consulting LLP.<sup>112</sup> Deloitte USA contributed almost \$10 billion of the Deloitte annual worldwide revenue in fiscal year 2007 and employed 40,998 people, of whom 2,758 were partners; 32,438 were professional staff; 8,515 were administrative staff; and 8,108 were CPAs.<sup>113</sup> Deloitte USA operates through 101 U.S. offices in 92 cities.<sup>114</sup>

The other three large auditing firms present themselves in roughly similar, and similarly vague, ways.<sup>115</sup> All are networks composed of scores of separate member firms; all boast in the range of 100,000 employees; all generate annual revenue approaching \$20 billion; and all derive revenue from three service categories: audit, tax, and consulting/advisory. For each firm, about half the total revenues are from audit and assurance, and the other half are from other activities. Some variation appears in breakdowns of their respective service lines and by geographic regions of the world as well as by industry specialization. Importantly, all four firms emphasize trans-network quality control and uniformity as part of each firm's investments in both human capital and firm brand identity.

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111. See, e.g., THE JOURNEY, *supra* note 110.

112. Deloitte Facts & Figures, <http://www.deloitte.com> (follow "Press" hyperlink; then follow "Facts & Figures" hyperlink) (last visited Nov. 23, 2007).

113. *Id.*

114. *Id.*

115. As examples, PricewaterhouseCoopers (PWC) describes itself as composed of many different firms, some large and some small. It provides audit as well as non-audit and transactional services. PWC's total worldwide revenues for fiscal year 2007 were \$25.2 billion. See PricewaterhouseCoopers Fact Sheet, <http://www.pwc.com> (follow "Press Room" hyperlink; then follow "Fact Sheet" hyperlink) (last visited Nov. 23, 2007). Likewise, KPMG describes itself as a "global network of professional service firms providing audit, tax and advisory services." Press Release, KPMG, KPMG Firms' Combined Global Revenues Rise to US \$16.9 Billion (Nov. 3, 2006), <http://www.kpmg.com/Press/11.30.06.htm> (last visited Nov. 23, 2007). It has a large number of "member firms" which together employ 113,000 people worldwide, with 6,800 partners and operations in 148 countries. *Id.* It has one member firm in China and one member firm in the United States. *Id.* Total member revenues for 2006 were \$16.9 billion, and for 2005, \$15.7 billion. KPMG, INTERNATIONAL ANNUAL REVIEW 2006, at 55, available at <http://www.kpmg.com/About/IAR2006>.

As to the nature of the firms' SIPs, again while the firms provide scant public details concerning them, the various alternative methods of self-insurance are well recognized. Consider two: the captive form and the mutual form. In the captive form, an enterprise creates a wholly-owned affiliate—domestic or, more frequently, offshore—and contributes requisite capital. The enterprise—and its designated component members, such as firms within a network—pay periodic premiums to support network-wide coverage. The captive sometimes is managed using a separate management company rather than the larger enterprise's own staff. Various attributes can be created, but in general the captive thus acts as the enterprise's primary insurer and usually, in turn, obtains reinsurance policies to cover portions of its exposure.<sup>116</sup>

In the mutual form—commonly used among industrial enterprises in given industries—members coordinate to form what are commonly called risk-retention pools.<sup>117</sup> Participants contribute premiums to the mutual and it, in turn, covers member losses on prescribed terms. The program often is designed using retrospectively rated policies, meaning that each member pays premiums initially for agreed coverage, but the premiums are later adjusted based on actual loss experience.<sup>118</sup> If the member enjoys a favorable loss experience, a portion of its initial premium is rebated, but if it suffers an unfavorable loss experience, it pays an additional premium surcharge.

A SIP's structure may be influenced by tax considerations. To the extent that an enterprise allocates revenues to cover future legal

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116. A captive insurance affiliate can (1) use reinsurance or not and (2) insure only internal risks or also insure external risks. Those not using reinsurance and covering only internal risks are in the same position as the simple residual self-insurance created under policies containing retentions—that is, the parent, or network, does not transfer any risk. Those using reinsurance and covering only internal risks do transfer risk, so long as the reinsurance is with reputable, liquid, solvent insurers and the premium is fixed. See David R. Coburn & Stewart J. Kahn, *Accounting and Auditing Aspects of Operating a Captive or Self-Insurance Program*, in *TECHNIQUES OF SELF-INSURANCE* 499, 501-03 (PLI 1987).

117. Examples of mutuals include Lumbermen's Mutual, Millers Mutual, and Hardware Mutual.

118. According to Professor Priest, "mutuals typically provide for subsequent assessments against firm members based upon the liability experience of the mutual for the year." Priest, *supra* note 65, at 1007. That is, "mutuals set premiums by making assessments to member firms after, rather than before, the loss experience, thus insuring for variations in loss among the firms, but providing self-insurance for losses common to mutual members." *Id.* at 1012-13.

liabilities in ways that impose substantial limitations or restrictions on access to the funds, they are not includible in U.S. taxable income.<sup>119</sup> The exact requirements of this tax treatment are intricate<sup>120</sup> and controversial as a policy matter,<sup>121</sup> but when properly designed, the benefits of self-insurance can make it at least as appealing as paying regular premiums to an external insurer, certainly at the level of periodic costs. Using separately organized network affiliates, whether captives or mutuals, can be a good way to establish the requisite restrictions on use of funds.

As to the terms of reinsurance that the four large auditing firms' SIP affiliates obtain, once again, the firms provide little disclosure concerning these matters. But it appears that these affiliates all obtain reinsurance for portions of network-wide exposure. These reinsurance programs probably vary slightly across the four firms, especially as to amounts, but again a fairly standardized picture emerges. In general, the reinsurance policies resemble E&O policies in form, but appear to be more intricate in the following ways.

First, the policies contain high retentions.<sup>122</sup> The levels fluctuate over time, usually in tandem with insurance pricing. For example, retentions ran to \$25 million in the early 1990s and then grew to \$45 million in the mid-1990s; they dropped to \$20 million by the end of that decade before rising again in the 2000s.<sup>123</sup>

Second, the policies are obtained from multiple insurers covering portions of different layers of exposure and use high limits-of-liability coverage.<sup>124</sup> As an example, a firm's SIP reinsurance may provide "coverage for 85 percent of the layer covering \$10 million in excess of \$50 million, 90 percent of a layer covering \$20 million in

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119. See Dan L. Mendelson & Burton M. Mirsky, *Malpractice Self-Insurance Plan Defers Income*, 76 J. TAX'N 16, 16-17 (1992) (reporting on IRS Letter Ruling 91-36-005 that fees deferred under medical malpractice self-insurance arrangement are excludable from gross income until paid or made available because they are subject to substantial limitations or restrictions, including that the firm only received them to pay claims on dissolution or at a fixed date ten years later; also noting that the ruling likewise applies to other professionals, including accountants).

120. See I.R.S. Priv. Ltr. Rul. 91-36-005 (Sept. 11, 1991) (interpreting Treas. Reg. § 1.451-2).

121. See, e.g., Karen Gantt, *Federal Tax Treatment of Medical Malpractice Insurance Alternatives for Nonprofits*, 52 DRAKE L. REV. 495 (2004).

122. See Goldwasser et al., ACCOUNTANTS' LIABILITY, *supra* note 61.

123. See *id.*

124. *Id.*

excess of \$60 million, and 80 percent of the layer covering \$20 million in excess of \$75 million.”<sup>125</sup>

Third, while most insurance policies, including E&O insurance, are written using standard forms with extensive boilerplate clauses and minimal negotiation or tailoring, policies for the four large auditing firms’ SIP affiliates are negotiated and tailored; they are usually issued in typewritten form, containing non-standard terms, and commonly described as “manuscript policies.”<sup>126</sup>

Finally, a related alternative is to use insurers not as a means to pool and distribute risk as traditional insurance does, but as a funding source to meet losses.<sup>127</sup> Audit firm SIP affiliates appear to execute financing agreements with their reinsurers. These provide that the latter will fund losses on designated terms but require the firm to repay those funds in full.<sup>128</sup>

## 2. *Decisions To Self-insure*

A decision to self-insure or use external insurance with some self-funding can be influenced by many factors, but ultimately must be based on a comparative cost-benefit analysis.<sup>129</sup> The threshold element in the decision is whether the risk is calculable.<sup>130</sup> An important requirement is that an enterprise operates using a sufficient population of “homogenous exposure units ... to allow an actuarially sound calculation of risk.”<sup>131</sup> For auditing firms, such units could include, for example, total personnel, total professional personnel, or total audit engagements.

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125. *Id.* For example, assuming a \$100 million covered loss, the firm pays a total of \$57.5 million and insurers pay \$42.5 million:  $[\.85 (60 - 50)] + [.90 (80 - 60)] + [.80 (95 - 75)] = 8.5 + 18 + 16 = \$42.5$ . Assuming no other external coverage, for settlements greater than that, the firm pays 100 percent of the excess.

126. *Id.* Manuscript policies are not common in primary insurance underwriting, but are more the norm in reinsurance underwriting, in which the term “facultative” is also used (referring to the reinsurer’s “faculty” to accept or deny risks), and in the programs that reinsurers use to reinsure their exposure, in which the term “necessary” is also used.

127. *Id.*

128. *Id.*

129. See Ken Brownlee, *Defending the ‘Self-Insured’ or ‘Self-Funded’ Entity*, INS. LITIG. REP., Sept. 1, 2000.

130. *Id.*

131. *Id.*



So armed, the comparative set of costs are principally the costs of obtaining insurance, chiefly premiums—which, in turn, comprise insurer costs, surpluses, and profits—plus brokers’ or agents’ commissions, versus administrative costs of a program such as operations and maintenance, claims handling, and litigation.<sup>132</sup> Quantifying the comparison in abstract terms is impossible because too many variables are involved.<sup>133</sup> Indeed, comparative benefits are difficult even to state, as they range from internal loss control capability and claims administration efficiency to external dynamics of litigation and the power to manage it.<sup>134</sup>

Nevertheless, simply viewing the question from a comparative cost-benefit perspective suggests that characterizations such as whether a risk is “insurable” or “uninsurable” can be imprecise.<sup>135</sup> For example, it may be superficial to say that self-insurance arose among the four large auditing firms because insurers regard the risk as “too high” or “too unpredictable.” It can likewise appear facile to opine that such conclusions are due to expansion of legal liability that auditors face.<sup>136</sup> Indeed, that claim is somewhat counterfactual in the current period, given how the PSLRA, SLUSA, and *Central Bank* all reduced such exposure and how empirical data show a decline in the frequency of suits against auditors.<sup>137</sup>

True, as noted, factors that affect the comparative cost-benefit analysis vary with the circumstances creating hard external insurance markets, which can include both legal uncertainty and legal liability risks.<sup>138</sup> Yet those circumstances of the macro environment are influenced more fundamentally by micro factors, and these provide a more concrete analytical basis for exploring the comparative calculus than conclusions about whether risks are insurable.

The question is whether it is more efficient or cost-effective for a party to obtain external insurance or create self-insurance.<sup>139</sup> The answer depends on whether the party or an external insurer is

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132. *Id.*

133. *Id.*

134. *See id.*

135. *See Priest, supra* note 65, at 1011.

136. *See id.* at 1001.

137. *See supra* text accompanying notes 26-34.

138. *See Brownlee, supra* note 129.

139. *See Priest, supra* note 65, at 1010-11 (making this point and furnishing the analytical architecture upon which the following evaluations are based).

better positioned to monitor and distribute the risk.<sup>140</sup> Because firms and insurers have some capacity to diversify risks, the issue is ultimately which has the superior ability to do so. That hinges, in turn and in general, on risk independence, adverse selection, moral hazard, and monitoring capability.<sup>141</sup> Consider each point.

As to risk independence, for insurance to be appealingly priced, risks that insureds within a pool face cannot be too highly correlated.<sup>142</sup> There must be sufficient statistical independence for an insurer to make valid predictions that the aggregate premium and investment income from the pool will be enough to fund reserves to meet loss payouts, including covering administrative costs and providing a profit.<sup>143</sup> If requisite insurer reserves equal or exceed those that a self-insuring firm would require, it is more effective for a firm to self-insure.<sup>144</sup>

If the four large auditing firms operate SIPs akin to the mutual form used by industrial enterprises, this could reflect decreased risk independence over time, which may be due to many factors including legal liability or increased uniformity in audit quality achieved by increasing homogeneity among the large firms.<sup>145</sup> Mutual insurance may be better than external insurers at furnishing coverage for any loss category in which there is substantial correlation among members.<sup>146</sup> The external insurer's solution to the challenge would be to offer coverage for some group losses, but with exclusions for the highly correlated type.<sup>147</sup> Yet, defining the highly correlated type contractually can be difficult; this difficulty may make external insurers a less effective discriminator compared to the mutual approach, which can enable members to pool individual member risks of all sorts while also covering all group losses.<sup>148</sup>

As to adverse selection, it can be exacerbated when there is an acutely wide disparity of risk profiles in a single insurance pool.<sup>149</sup>

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140. *Id.*

141. *See id.* at 1011, 1034; *see also* Talley, *supra* note 11, at 1644.

142. *See* Priest, *supra* note 65, at 1011.

143. *See id.* at 1012, 1099.

144. *Id.* at 1011.

145. *See id.* at 1012.

146. *Id.* at 1012-13.

147. *Id.* at 1013.

148. *See id.*

149. *Id.*

At an extreme, no insurer can sustain such pools and too few low-risk insureds will remain in them; thus, the pool can unravel and the market for that insurance disappear.<sup>150</sup> To say that the risk is “uninsurable,” however, remains imprecise.<sup>151</sup> It means that insureds who are otherwise candidates for that pool will not participate in it because they are better off meeting the risk by other means. Of course, the word “uninsurable” may be apt to the extent that the absence of low-risk insureds means that insurers will not make the insurance available to high-risk insureds.

Acute adverse selection arising from highly disparate risks means that there is so much variation among pool members or candidates that insurers cannot effectively segregate low-risk from high-risk members and thus offer equivalent insurance terms as to premiums, retentions, and exclusions/coverage (limits-of-liability). When that occurs, lower-risk members will not participate because what they pay and receive is worth less than the risk that they would contribute to the pool.<sup>152</sup> At the extreme, that could mean that the particular insurance product is unavailable to anyone and, to that extent, the related risks may be described as “uninsurable.”<sup>153</sup>

As to moral hazard and monitoring, self-insurance bundles risk monitoring and risk distribution functions, as noted.<sup>154</sup> Whereas E&O insurance separates risk monitoring from risk distribution, self-insurance combines the two. Risk-monitoring is performed by the same enterprise that distributes the risk. Within the networks that constitute each of the four large auditing firms, members may eliminate the costs of moral hazard and adverse selection. At a minimum, the network character of the firms enables internal monitoring in ways that external insurers cannot replicate.<sup>155</sup> This appears particularly likely given that each of the four large firms devotes considerable resources to promoting uniform internal quality control programs.<sup>156</sup>

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150. *Id.* at 1011.

151. *See id.*

152. *Id.* at 1028.

153. *Id.* at 1011.

154. *See supra* Introduction.

155. *See* Talley, *supra* note 11, at 1659.

156. *Id.* at 1658-60.

All or some combination of the foregoing factors likely have played some role in the decisions that the four large auditing firms have made to engage in substantial self-insurance programs.<sup>157</sup> No firm would have opted for a self-insurance program unless it had determined that the costs of supporting it are less than the premiums and commissions required to buy equivalent external insurance.<sup>158</sup> This determination is based on a firm's knowledge or belief that the risk it would otherwise contribute to an external insurance pool, for a given price, is less than the risk that an insurer would estimate that the firm contributes (the price should be lower). The self-insuring firm determines, in other words, that bearing the risk is more cost-effective than paying the price an external insurer charges to pool that risk for it.

Two additional factors may help to explain the rise and persistence of SIPs among the four large auditing firms, as well as why the medium and smaller firms have not tended to opt for such ambitious programs. The first is a path dependence story. Once induced to adopt SIPs due to macro events plus the scale that makes them possible, it may be more cost-effective to sustain the formal program permanently than to allow it to fluctuate according to the relative supply and pricing of E&O insurance.

The second is a wealth story. Risk aversion can vary with the net worth of a decision maker, with those having fewer resources being more risk averse and those commanding considerable resources being less risk averse.<sup>159</sup> It is possible that smaller public accounting firms are more risk averse than the four large firms. If so, this also would explain why they show a stronger appetite for self-insurance compared to smaller firms. Put differently, the larger firms may be more willing to take chances than smaller ones.<sup>160</sup>

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157. See Romano, *supra* note 66, at 27 (discussing directors' and officers' insurance and noting that issuers are "often better informed about [novel litigation] risks and some of these risks are within the insured's control. This situation may be one of the reasons for the rise in policyholder-formed insurers: the adverse selection and moral hazard problems created by the information asymmetry between insured and insurer will obviously be remedied if the insured becomes the insurer. It is plausible, in this context, to anticipate that policyholder-formed insurance groups could screen members more effectively than commercial insurers.").

158. See Priest, *supra* note 65, at 1010-11.

159. See *supra* Part I.C.5.

160. Yet another possibility is firms' relative ability to pass insurance-related costs to clients, but it is difficult to see how the costs of external versus internal insurance would be easier or harder to transfer that way.

This analysis does not negate the possibility that expanded legal liability may explain the rise of SIPs among the four large auditing firms, or that legal uncertainty and associated catastrophic risk may continue to play a role in their continued use.<sup>161</sup> Indeed, this is a common theory explaining the rise of self-insurance programs throughout the U.S. economy in recent decades.<sup>162</sup> For example, for corporations generally, expanded tort liability increases risk variability by shifting the burden of losses from first to third parties—that is, from violators to insurers—thus encouraging adverse selection, meaning high-risk insureds seek out pools containing low-risk insureds.<sup>163</sup> It also reduces risk independence because tort-expanding laws are or can be systemic rather than discrete, putting all pool members or candidates at increasingly uniform levels of risk.<sup>164</sup>

This account appears to be plausible for many industries generally, and possibly for auditing in particular. Consider, for example, the empirical frequency and magnitude of securities fraud class action claims against auditing firms.<sup>165</sup> Their statistical distribution exhibits greater density in the right tail than under a normal distribution, meaning that there are a larger number of larger risks.<sup>166</sup> Such fat-tail distributions present an exception to basic principles of risk distribution through diversification that support establishing insurance pools.<sup>167</sup> Although basic theory prescribes diversifying risk away by adding to a portfolio, for fat-tail distributions the opposite obtains (not to diversify) as each additional investment increases risk.<sup>168</sup> If this occurs in the large audit

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161. See *supra* text accompanying notes 132-34.

162. See Priest, *supra* note 65, at 1013 (attributing variability increase and independence decrease to the “obvious explanation” that “[i]n the mid-1960s, courts began to expand tort liability for corporate activities, both by extending affirmative duties and restricting available defenses”).

163. See *id.*

164. See Romano, *supra* note 66, at 15 (explaining that if all insureds are equally affected by new developments, including uncertainties arising from legal change, “the increased liability risks will not be independent. A dependency in insureds’ losses disrupts insurance markets because the law of large numbers will no longer apply for pricing risks, so that premiums will be greater than expected losses.”).

165. See Talley, *supra* note 11, at 1644.

166. See *id.* at 1645-46.

167. *Id.*

168. *Id.* at 1645.

firm insurance market, it could explain insurer reluctance to provide E&O insurance and the rise of SIPs among large auditing firms.

Yet this general critique as applied to auditing may insufficiently account for matters of adverse selection, moral hazard, and monitoring in the audit function.<sup>169</sup> Consider alternative interpretations of the data that do so. Moral hazard and adverse selection can lead to premiums greater than insureds are willing to pay.<sup>170</sup> That is, an insurer may determine, under adverse selection, that policies would underwrite industry “lemons.”<sup>171</sup> That could lead them to price policies so high that the non-lemon insureds opt out of the pool. The non-lemons are those insureds capable and willing to engage in sufficient risk monitoring on their own to reduce the probability of loss, and its magnitude should it occur.

Among the large auditing firms, this would mean that they have simply become the lower cost avoider compared to external insurers.<sup>172</sup> Accordingly, while liability and catastrophic risk may partially explain the rise of SIPs and decline of attractively priced E&O insurance, these basic components of insurance analysis—and the effects of scale that the SIP affiliates command—contribute at least equally important explanations.<sup>173</sup>

This tentative conclusion is reinforced by an analytical view of the strategies available to insurers seeking to provide insurance at prices that customers find appealing. In theory, the premium on every insurance pool should be measured according to the pool’s

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169. It also may discount the significance of investment diversification that investors can pursue. See Romano, *supra* note 66, at 15 (citing Ralph K. Winter, “Crises” in *Competitive Insurance Markets* 4 (Hoover Inst. of Stanford Univ., Working Paper No. E-86-74, 1986) (stating that “dependent risks, that is, nondiversifiability in the insurance market, should not matter in a stock market economy because insurers could diversify those risks in the capital market”).

170. See Romano, *supra* note 66, at 27.

171. See Talley, *supra* note 11, at 1645.

172. See *id.* at 1646. In this view, auditors can “more efficiently internalize agency costs [that is, costs of both adverse selection and moral hazard] by self-insuring.” *Id.* They also can address their overall risk profile because they have “the ability to raise fees in the face of litigation risk [and this] permits auditing firms to engage in a form of effective self-insurance, extracting actuarial payments that reflect downstream liability risk.” *Id.* at 1688.

173. See *id.* at 1690 (“While [catastrophic] risk exposure may well be playing a partial role, it is plausible that scale economies and agency costs also help explain the absence of an insurance market for dominant auditing firms.”).

average risk.<sup>174</sup> If so, the pool premium will exceed the risk that low-risk members contribute. When risk variability increases, that gap increases and low-risk insureds pay even more than the risk they contribute. Low-risk insureds are thus the marginal buyers, and insurers compete to obtain their business. Competition may include refining pool categories and channeling customers into lower-risk pools with lower premiums or better terms, which insurers attempt to do by more accurate risk segregation and discrimination methods.

To work, the strategy requires insurers' ability to conduct sufficient monitoring of their customers. For that strategy to be cost effective, in turn, the cost of refining the classifications must be less than the gains from attracting targeted business. But high-risk variability pools limit an insurer's ability to compete effectively in this way and discourage low-risk customers from buying offered policies. Monitoring is central to this exercise, which supports the view that the capacity of SIPs to combine risk monitoring with risk distribution renders them a potentially superior model of insuring audit failure relative to E&O insurance. Although still not conclusive, this alternative approach casts analytical doubt upon the persuasiveness of insurance-based arguments favoring damages caps on auditor liability. Even if the alternative is incorrect, it seems premature to accept the damages caps argument without considering potential models of insuring audit failure that are yet untried.

### III. POTENTIAL INSURANCE FOR AUDIT FAILURE

Although E&O insurance and self-insurance programs are the extant models used to address liability for audit failure, two alternatives deserve further exploration as a matter of public policy: financial statement insurance and insurance-based securitization. Previous proposals concerning financial statement insurance will be summarized briefly below before presenting the novel alternative of adapting insurance-based securitization to address catastrophic audit failure risk.

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174. See Priest, *supra* note 65, at 1027.

### A. *Financial Statement Insurance (FSI)*

Financial statement insurance (FSI) was introduced by New York University accounting professor Joshua Ronen,<sup>175</sup> and I have elaborated upon it in a series of articles.<sup>176</sup> Although not yet in place on a large scale for public companies, embryonic versions of FSI are used in private market merger and acquisition (M&A) transactions, and analogues are in use in other contexts. This vehicle offers numerous attractions, including not only a way to establish functional caps on auditor liability and address relatively ordinary risks of audit failure, but also several other benefits, such as increased transparency and monitoring as compared to existing practice.

#### 1. *Structure*

FSI's basic idea is simple. In M&A transactions, a seller represents that its financial statements fairly present financial conditions and result in conformity with GAAP; an insurer then engages an auditor to review the statements and backs the representation with insurance.<sup>177</sup> Should the seller breach that representation—equivalent to audit failure—the insured pays losses up to the contractually agreed-upon amount.<sup>178</sup>

To put FSI to work on the broad scale necessary for public companies and their auditors, several somewhat radical structural

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175. Ronen, *supra* note 51, at 48-60.

176. See Cunningham, *Choosing Gatekeepers*, *supra* note 17; Lawrence A. Cunningham, *A Model Financial Statement Insurance Act*, 11 CONN. INS. L.J. 69 (2004); Cunningham, *Too Big To Fail*, *supra* note 13.

177. See DALE A. OESTERLE, *THE LAW OF MERGERS AND ACQUISITIONS* 289 (2d ed. 2002); Darian M. Ibrahim, *The Unique Benefits of Treating Personal Goodwill as Property in Corporate Acquisitions*, 30 DEL. J. CORP. L. 1, 41-42 (2005).

178. Analogous insurance products are used to cover both tax opinions and ERISA compliance, in each case involving a lawyer or other expert investigating and providing formal opinions that are then backed by insurance. See Kenneth A. Gary, *New Opportunity for Tax Lawyers: Insuring Tax Transactions*, 104 TAX NOTES 26 (2004) (discussing the proliferation of tax insurance); Kyle D. Logue, *Tax Law Uncertainty and the Role of Tax Insurance*, 25 VA. TAX REV. 339 (2005) (discussing tax insurance in context of characteristics of tax code); Jeffrey D. Mamorsky & Terry L. Moore, *Greenberg Traurig LLP, Fiduciary Audit Insurance: Risk Management for Post-Enron ERISA Compliance*, GT ALERT, June 2002, at 4-5, available at [http://www.gtlaw.com/pub/alerts/2002/mamorskyj\\_06a.pdf](http://www.gtlaw.com/pub/alerts/2002/mamorskyj_06a.pdf) (explaining the terms of an audit as a condition to insurance eligibility).



changes would need to occur. Rather than an issuer engaging an auditor whose liability risks are backed by E&O insurance or self-insurance, issuers buy insurance directly from an insurer. The insurance policy covers a given set of financial statements in exchange for a premium, which the insurer sets, in part, based on a preliminary audit of the issuer using an auditor that the insurer hires. A final audit is performed before the policy is issued, and coverage is established for those financial statements. If losses occur, the insurer pays covered losses in accordance with the policy's limits of liability. Benefits of this structure include removing the inherent conflict of interest that arises when issuers hire and pay auditors to give opinions on their financial statements.

In addition to these changes to structural features, the proposed FSI regime calls for issuers to disclose publicly the premiums they are charged and the amount of related coverage they obtain, including any details as to deductibles and exclusions. This disclosure is designed to provide public information concerning financial statement reliability. Investors and analysts would be able to calculate statistically valid comparisons of relative financial statement integrity among issuers. Thus in addition to eliminating the conflict of interest embedded in the traditional audit function, new transparency arises that is lacking in the current regime, in which auditors issue identical three-paragraph opinions for the financial statements of enterprises having vastly different, and individually unique, accounting circumstances.

## *2. Advantages*

Beyond these attractions of FSI compared to traditional practice, FSI has implications for insurance analysis that reveal additional advantages. FSI could potentially eliminate moral hazard. FSI moves auditors into the liability background. Auditors become insurer employees and are subject to supervision, compensation, and termination. Auditors no longer face any insurance-based decisions that are prone to creating moral hazard. FSI also essentially eliminates the traditional concerns of adverse selection, because it is an entirely different product compared to traditional categories of insurance such as professional liability insurance, casualty, or property insurance. Rather, among insurance products,

FSI is akin to title insurance, an otherwise *sui generis* insurance line.

Title insurance is coverage concerning risks of defects in legal title to real property.<sup>179</sup> Home sellers represent ownership of title to buyers and, when transferring their interest, provide buyers with title insurance policies supporting the representation. If the seller breaches the representation, the insurer defends the buyer's claim of title against third parties and pays the buyer's damages arising from the third party's successful assertion against the buyer's title.<sup>180</sup> Title insurance has a retroactive character to the extent that it covers matters arising before the policy issuance date.<sup>181</sup>

Analogously, FSI insures a particular year's financial statements, with coverage extending to discoveries made in future periods. FSI covers accounting irregularities reflected in financial statements of a prior period. FSI and title insurance both solve a problem of incomplete information: with title insurance, the quality of a seller's title, and with FSI, the quality of a company's financial statements. In contrast, E&O insurance is less about incomplete information than about behavioral and performance risks. The costs of adverse selection can be considerable in underwriting E&O insurance, but the cost essentially disappears under FSI.

As to monitoring, FSI contributes superior results compared to E&O insurance—and a different form of monitoring compared to SIPs. Unlike most insurance lines, including E&O insurance, a substantial portion of premiums received on title insurance policies is used to fund investigation rather than payouts, administrative costs, and profits.<sup>182</sup> Title insurers engage, and FSI insurers would engage, in risk assessment using particularized investigations concerning the specific attributes of an insured matter: property and zoning records for title insurance and specific financial statements for FSI.<sup>183</sup>

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179. See JAMES L. GOSDIN, TITLE INSURANCE: A COMPREHENSIVE OVERVIEW 1 (2d ed. 2000).

180. See generally *id.*

181. See generally *id.* (noting additionally that title insurance can also include post-policy matters).

182. See *id.* (noting that “a substantial part of title insurance cost generally [is] allocated to search, evaluation/examination, or clearing underwriting objections,” and that for title insurance, losses and legal costs range as low as 3 percent to 7 percent of total operating income).

183. *Id.* at 2.

As a result, FSI amounts to a bundling of the monitoring and risk distribution functions by insurers. Of course, SIPs likewise bundle the two, although they bundle them inward within the audit firm or network instead of outward to the insurer. In contrast, as noted, E&O insurance separates the two functions. Consequently, E&O insurance may not produce optimal insurer investigation.

FSI provides monitoring incentives on insurers that differ from those insurers face when underwriting E&O insurance. E&O policies provide general coverage for a broad range of activities, including all audit engagements plus tax and other consulting services. The same is essentially true for the SIPs that the large auditing firms use. In contrast, each FSI is tailored to a particular audit engagement with an associated risk, premium, and coverage. Audit effectiveness and auditor performance bear directly on financial statement and reporting quality. Under FSI, auditor review and opinions are *imminent* monitoring functions—they are the essence of the concept.

As noted, SIPs and FSI thus both bundle monitoring and risk distribution, but into different locations. With SIPs, the monitoring and risk functions are bundled within the audit firm (bundled in), whereas with FSI the functions are bundled out to the insurer (bundled out). Which is better is a function of which bundling more nearly optimizes being least costly and most effective. This is an empirical question for which no data exists, of course. An analytical case could be made to favor one or the other, but such an assessment is likely to produce a draw. That is, for the audit function, the idea of bundling may likely be superior to separation, but there is no *a priori* reason to conclude that the two are better bundled in or bundled out.

Assuming a draw on the relative merits of bundling in or bundling out, a case still may be made to favor one or the other for separate reasons. The conservatism of SIPs is appealing—it is the status quo and requires no changes, political or otherwise. FSI is appealing because it: (1) severs the longstanding conflict of interest that bedevils the audit function when issuers pay those who opine on their financial statements, and (2) creates the unprecedented production of a financial statement reliability index.

FSI could produce another advantage by using option markets as functional reinsurance. Investors would write and sell put options

to FSI insurers respecting stock of covered companies.<sup>184</sup> Put options would give insurers the right to sell covered stock to investors during a stated period upon the occurrence of stated events at a stated exercise price. Duration and triggering events would be coextensive with the FSI policy period and triggering events. Investors would sell the put options for a price less than the price of general options on the same stock, that is, those whose exercise is not conditional on audit failure, and that price would essentially represent a reinsurance premium from the insurer's viewpoint. Upon a triggering event, the stock price likely would fall below the exercise price, enticing the insurer to exercise the option and thereby establishing functional re-insurance. Investors writing numerous put options on a large number of stocks enable designing a diversified portfolio of FSI put options.

Another appealing factor is that the installation of the insurance industry into the forefront of the financial reporting system significantly increases the number of competitors in this marketplace. With SIPs, there are only four firms capable of auditing the vast majority of public enterprises. This poses considerable systemic risk should any audit failure threaten the viability of any one of them, which, in turn, creates significant moral hazard among auditors who may behave as if their firms are too big to fail. FSI has comparative appeal because dozens of insurers are capable of underwriting this risk.

This conclusion need not rule out the possibility of sustaining SIPs, however. FSI and SIPs both could be used—they are not mutually exclusive. Audit firms could continue operating SIPs but also embark on an FSI regime by holding out their SIPs among those FSI insurers competing for issuer audit insurance work. So, for example, Procter & Gamble could hire Chubb Insurance to write FSI for it, and Chubb could in turn hire Deloitte's auditing arm to provide the investigation. Alternatively, Procter & Gamble could hire Deloitte's SIP affiliate to write FSI and have it, in turn, engage Deloitte's auditing arm to provide the assurance.<sup>185</sup>

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184. See Ronen, *supra* note 51, at 54.

185. Inviting auditing firms to use their SIP affiliates to underwrite FSI raises a question concerning whether this would mean that the firms thus engage in "the business of insurance." If so, state insurance regulations could apply to limit the efficacy of this alternative. On the other hand, a similar question could be raised concerning firms' existing

Financial statement insurance can provide a mechanism to establish the functional equivalent of a damages cap for audit failure. The cap does not directly apply to auditors, of course, for although they may face contractual and other liability for transgressions to their insurer employers, they face no liability to investors. The cap is established through the policy terms reached between issuers and insurers. The cap would be disclosed to public capital markets *ex ante* and enable investors to make capital allocation decisions accordingly. Decisions would be based on measurable resources available in the event of audit failure and the transparent financial statement reliability index. To this extent, FSI furnishes support for quotidian cases of audit failure, but perhaps not catastrophic cases. Insurance-based securitization can address the latter problem.

#### *B. Insurance-based Securitization (IBS)*

Insurance-based securitization is a novel innovation that would distribute risk of audit failure through capital markets and specifically addresses concerns about catastrophic risks. Securitization refers to the practice of packaging some underlying set of economic attributes, usually cash flows and related risks, into securities. It is a decades-old practice that began when mortgage lenders pooled loans that they had written into grantor trusts, which then issued securities to the public backed by cash flows on those loans and were subject to borrower default risk.

A proliferation of pooled assets ensued, encompassing automobile and boat loans, credit card receivables, and projected cash flows from computer leases and popular musical recording contracts. In credit card deals, for example, a bank generates credit card receivables and faces related consumer default risk while tying up its cash. A securitization transfers the latter burdens by selling the receivables to a grantor trust or other special purpose entity (SPE) for cash supplied by investors. Investors, in turn, enjoy a return on investment in accordance with that default risk—which, for portions

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SIP programs and, in both SIPs and FSI, good arguments suggest that the auditing firm's role should not be considered to be the business of insurance within the meaning of those regulations.

of the capital markets, increases financial diversification. By isolating the assets in the SPE, moreover, investors look solely to the credit risk of the pool, not to that of the originating bank.

The basic insight underlying asset-backed securities motivates insurance-based securitization (IBS), although the two involve different sides of the balance sheet. Whereas asset-backed securitization involves the transfer of assets to an SPE, insurance-based securitization essentially involves the transfer of liabilities to an SPE. That is, the SPE attracts investors who are willing to take a risk that designated insured risks will materialize. This reduces or eliminates the principal they are owed, in exchange for a relatively high interest rate to compensate for that risk.

Since the mid-1990s, insurance-based securitization has become increasingly used by insurers—and several non-insurance businesses—to protect against exposure to catastrophic risks for which traditional insurance, or reinsurance, is either unavailable or comparatively expensive. Following this innovation, auditing firms concerned about the catastrophic risk that a massive audit failure could wreak, such as the dissolution of one of the four remaining firms, should find insurance-based securitization attractive.

### *1. The Market*

In the mid-1990s, following the natural catastrophes of Hurricane Andrew and the Northridge, California earthquake, insurance capacity to cover catastrophic risks contracted significantly.<sup>186</sup> This led innovators to adapt securitization to fill the gap.<sup>187</sup> Resulting

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186. In August 1992, Hurricane Andrew struck south of Miami, Florida, resulting in property damage of some \$30 billion, of which half was insured. Insurers were riveted, with eleven firms bankrupted. In January 1994, an earthquake rocked northwest of Los Angeles in the Northridge area of the San Fernando Valley, also producing about \$30 billion in damages, of which nearly half was insured. Earthquake insurance availability declined dramatically as a result. U.S. GEN. ACCOUNTING OFFICE, CATASTROPHE INSURANCE RISKS: THE ROLE OF RISK-LINKED SECURITIES AND FACTORS AFFECTING THEIR USE 11 (Sept. 2002) (citing report by Swiss Reinsurance Company for 2000) [hereinafter, GAO, CATASTROPHE INSURANCE RISKS].

187. Innovators include insurers as well as non-insurance businesses. Nothing about IBS limits its creation to insurers or reinsurers. *See id.* at 18 n.25 (“A noninsurance business that has catastrophe exposure can also sponsor catastrophe bonds through a similar entity, a special purpose vehicle.”). Indeed, as noted below, at least three IBS transactions have been closed by non-insurance enterprises.

products are sometimes collectively called “risk-linked securities.” The most common of these are called catastrophe bonds, nicknamed *cat bonds*,<sup>188</sup> because the risks they address have historically been called catastrophe risks or super catastrophic risks. These bonds are for low-probability, high-magnitude events, commonly illustrated by natural disasters like hurricanes, earthquakes, and tornadoes, but also including man-made events such as terrorist attacks and financial calamities.<sup>189</sup>

In a basic “cat bond” deal structure, an investment bank or insurance company creates an SPE. The SPE is usually located offshore, mainly to avoid adverse U.S. income tax consequences. The SPE issues bonds in a private placement to qualified institutional investors. The bonds usually carry a floating interest rate with a significant spread above the London Interbank Offered Rate (LIBOR), the rate that large international banks charge each other for sizable loans.

Cash flows into the SPE from three sources: insurance premiums from the insurer or reinsurer, the principal investment of investors, and investment income on its funds. The latter are usually fixed-rate returns which are then swapped with a credit-worthy counterpart who pays LIBOR-based floating rates for payment to investors. Cash flows out of the SPE in the form of periodic interest to investors, along with a return of principal at the end of its term.

During the term, the SPE holds funds in trust and invests them in designated classes of securities, usually U.S. government bonds or other high-grade securities. If the catastrophe does not occur, the SPE returns principal to the investors and terminates its existence; but if the catastrophe occurs, principal that otherwise would be paid to investors is instead paid to the sponsor. It is conceptually—if not

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188. The Chicago Board of Trade (CBOT) experimented with catastrophe options in the late 1990s, the first systematic effort to market risk-linked securities. Introduced in 1995, the contracts covered insurers’ risk exposure based on various regional indexes. CBOT ceased offering catastrophe options in 1999 due to weak demand for the products. *See id.* at 18.

189. Just as E&O and other insurance markets are cyclical, *supra* text accompanying notes 56-63, catastrophe reinsurance markets are cyclical, too. *See* GAO, CATASTROPHE INSURANCE RISKS, *supra* note 186, at 14. In addition, occurrences in one catastrophic context, such as hurricanes, can lead to contractions in other catastrophe markets. *See* Kenneth A. Froot & Paul G. J. O’Connell, *The Pricing of U.S. Catastrophe Reinsurance*, in *THE FINANCING OF CATASTROPHE RISK* 155-60 (Kenneth A. Froot ed., 1999).

mechanically or technically—akin to the risk of corporate insolvency that investors in traditional corporate bonds face.

The IBS market is young and thin, but has steadily expanded. The first IBS transaction closed in 1995 and involved \$84 million of coverage; in 1998, 18 deals were closed, involving a total of \$2.5 billion;<sup>190</sup> from 1999 through 2004, some 50 additional transactions were closed, most by insurers, averaging about \$100 million each.<sup>191</sup> In 1999, Oriental Land Company became the first non-insurer to issue a catastrophe bond;<sup>192</sup> in 2002, the Hollywood-based movie company Vivendi International closed an IBS transaction with coverage of up to \$175 million for losses arising from earthquakes in Southern California;<sup>193</sup> and in 2005, a group of oil companies issued \$405 million in IBS in three tranches to cover global risks of liability arising from oil-related business activity.<sup>194</sup> Although most estimates indicate that the IBS market is not inconsiderable,<sup>195</sup> it remains a small share of the overall reinsurance market—less than half of a percent, according to one estimate.<sup>196</sup>

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190. See Tamar Frankel & Joseph W. LaPlume, *Securitizing Insurance Risks*, 19 ANN. REV. BANKING L. 203, 225 (2000) (citing Alex Maurice, *NAIC Poised To Adopt Securitization Models*, NAT'L UNDERWRITER, PROP. & CASUALTY/RISK & BENEFITS MGMT. ED., July 12, 1999, at S28); see also *Investors Guar. Fund, Ltd. v. Morgan Stanley & Co.*, 50 U.S.P.Q.2d (BNA) 1523 (S.D.N.Y. 1998) (discussing early history of IBS market); ROBERT H. JERRY, II, UNDERSTANDING INSURANCE LAW 1062 (3d ed. 2002) (noting that, through 2000, some \$4 billion in insurance-based securities were issued).

191. See MMC SEC., THE GROWING APPETITE FOR CATASTROPHIC RISK: THE CATASTROPHIC BOND MARKET AT YEAR-END 2004, at 32-35 (2005).

192. See Frankel & LaPlume, *supra* note 190, at 225 (citing J. David Cummins, *The Insurance Link to Securities*, RISK MGMT., Aug. 1, 1999, at 17).

193. See MMC SEC., THE GROWING APPETITE FOR CATASTROPHIC RISK, *supra* note 191, at 34.

194. See MMC SEC., THE CATASTROPHE BOND MARKET AT YEAR-END 2006: RIPPLES INTO WAVES, at 34 (2007) (listing transaction by Avalon Re Ltd. vehicle sponsored by Oil Casualty Insurance Ltd.).

195. For an estimate that seems very high compared to others, see Martha G. Bannerman, *Avoiding and Resolving Reinsurance Coverage Disputes: A Proactive Approach*, in PLI REINSURANCE VOLUME 173, 203-04 (PLI 1998) (putting the IBS market in 1998 at \$200 billion).

196. See GAO, CATASTROPHE INSURANCE RISKS, *supra* note 186, at 17 (discussing estimates provided by Swiss Re and Goldman Sachs, which claim some \$12 billion worth of IBS were issued from 1996 to 2002 through about 70 transactions). For perspective, the size of the U.S. capital markets in 2002 approximated \$31 trillion. *Id.* For further perspective, at that time, approximately \$2 trillion in asset-backed securities were outstanding. *Id.* at 19 n.26.



## 2. Structuring Challenges

Despite steady growth in the IBS market, several complexities associated with many of the transactions—especially those initiated by insurers—help to explain why it will take time for the market to fully blossom. Although all these complexities have been overcome for insurers wishing to sponsor deals, albeit slowly, they are essentially either non-existent for auditing firms and their SIP affiliates, or have been sufficiently plowed in previous transactions so that the road is substantially paved for auditing firms to close IBS transactions. It is especially helpful that Oriental Land Company, Vivendi International, and the oil industry, all non-insurers, successfully led the way for other companies and industries to follow. Consider each of the hurdles, how the market has met them so far, and how much easier it would be for auditing firms to follow suit.

First, as a preliminary matter, transaction costs can be high. These include the costs of securities underwriting, legal advice, accounting support, risk evaluation, rating agency assessments, and communicating information to investors. These costs accompany any securities offering, of course, but can be higher for IBS transactions than for traditional corporate bond or equity offerings, and even higher compared to conventional asset-backed securitizations. For auditing firms, however, the real question involves comparing the costs of IBS to the costs associated with retaining the catastrophic risk through self-insurance programs, or laying off portions through reinsurance arrangements. To the extent that the claimed inability or expense of doing either is exorbitant, the costs of arranging an IBS deal should make it cost-effective.<sup>197</sup>

Second, taxation matters. To be cost-effective, the SPE must enjoy “pass-through” tax treatment.<sup>198</sup> That is, if the SPE were taxed on its income from premiums received and from investments, and investors were likewise taxed on their investment income, the double tax would render many SPE transactions non-cost-effective. At present, transactions using SPEs based in the United States

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197. *Id.* at 4. Obviously, the comparison is between transaction costs like these plus interest costs, compared to reinsurance and self-insurance costs, as noted *supra* text accompanying notes 129-34.

198. GAO, CATASTROPHE INSURANCE RISKS, *supra* note 186, at 27.

result in such double taxation. True, the bonds could be offered only to tax-exempt investors, but that is only a partial solution. A better solution is to locate the SPE outside the United States and have no other connections with it to avoid U.S. entity-level income taxes.<sup>199</sup> Many jurisdictions offer such pass-through treatment, including Bermuda and the Cayman Islands, and most IBS SPEs are located in those places.<sup>200</sup> This should present no problem to auditing firms; they can simply locate an SPE in the same off-shore jurisdiction in which their SIP affiliates are located.

Third, U.S. GAAP imposes special accounting rules for SPEs. The principal ones are the independent capital investment requirements. These require an SPE's outside investor to control a majority of the equity and own at least 3 percent of the total capital in order to permit the assets and liabilities of sponsored SPEs to be removed from the sponsor's balance sheet. These requirements can easily be met and probably do not matter to auditing firms, in any event, because they do not publish public financial statements, and any internal financial statements—or those supplied to third parties—can provide relevant disclosure to explain the arrangement.

Fourth, insurers are subject to specialized accounting and capital rules that regulate the circumstances under which obtaining reinsurance generates credits for their own risk profile.<sup>201</sup> If they cannot be sure that transferring risk to an SPE will entitle them to such credits, the transactions are less appealing. This concern will not apply to auditors or their SIP affiliates because they are not subject to such regulation. It nevertheless is worth describing, as it

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199. The National Association of Insurance Commissioners (NAIC) has lobbied to pass legislation that would offer tax approaches to IBS akin to those enacted for Real Estate Mortgage Investment Conduits (REMICs) and Financial Asset Securitization Investment Trusts (FASITs). *See id.*

200. *See id.* at 26.

201. *See id.* at 22-23. The GAO explains:

In receiving "credit" for reinsurance, an insurance company may count the payments owed it from the reinsurance company on claims it has paid as an asset or as a deduction from liability. In doing so, a company can increase earnings reported on its financial statement and lower the amount of capital it needs to meet risk-based capital requirements established by regulators. The ability to record an asset or to take a deduction from gross liability for reinsurance is consequent upon the transfer of risk and can strongly affect an insurance company's financial condition.

*Id.*

is implicated and addressed in existing IBS transactions by the approach to determining whether a catastrophe occurs, which can vary. This variability can make audit firm IBS transactions more attractive.

Determining whether a catastrophe occurs for an IBS transaction essentially entails two specifications: what triggers a principal loss and by what formula the amount is determined. For this purpose, it is common and useful to contrast indemnity with non-indemnity coverage. Under indemnity coverage, an insurer or reinsurer pays claims based on those actually incurred—say, actual damages caused by an earthquake—whereas under non-indemnity coverage, the insurer or reinsurer pays claims based on the occurrence or non-occurrence of a particular event that is not necessarily related to actual incurred claims—say, an earthquake registering more than 7 on the Richter scale. Cat bond deals can be designed either way.

In reinsurance practice, *insurers* generally prefer indemnity policies, as they precisely cover losses actually incurred. *Re-insurers*, however, prefer non-indemnity policies to the extent that they face risks of poor underwriting decisions or claims management by insurers—forms of moral hazard.<sup>202</sup> Non-indemnity approaches can neutralize moral hazard. They tie principal repayment not to actual claims, which may be infected by poor underwriting or by poor claims settlement procedures, but to objective external indicia of loss, such as a massive earthquake.<sup>203</sup> The accounting treatment for the two approaches differs under specialized accounting regulations applicable to insurance companies. The indemnity-based approach enables achieving so-called “underwriting accounting treatment,” meaning the insurer has ceded its exposure and gets credit as reinsurance—another reason that insurers generally prefer it.<sup>204</sup>

That accounting treatment is more difficult to achieve using non-indemnity-based approaches. Under these approaches, the ceding insurer is exposed to basis risk—the risk of a difference between payments received from the reinsurance coverage and actual losses.

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202. For catastrophe bond investors, oversight capability may also be limited, leading them to favor non-indemnity models, too. *See id.* at 18 (noting that cat bonds have generally been non-indemnity-based to limit moral hazard). This implication is discussed further below.

203. Any of various objective tools can be invoked, including “industry loss indexes, parametric measures, and models of claims payments.” *Id.* at 7.

204. *Id.* at 23.

This approach can go either way, with more or less principal received compared to losses actually incurred. To achieve underwriting accounting treatment for non-indemnity transfers, the insurer must design the model or method used to determine the trigger and amount so that the result bears a sufficiently close nexus to its associated actual claims in order to justify treating it as ceded (low basis risk).

Although these problems have caused cat bond market participants to struggle, they are essentially nonexistent for auditing firms. Their SIP affiliates are not subject to the same regulations or accounting rules as insurers and reinsurers. From an accounting viewpoint, they need not worry about whether indemnity or non-indemnity methods are superior.<sup>205</sup> They, and investors, may have preferences as between the alternative models, but that should make the vehicle more appealing rather than less. In particular, experimentation and variation using the indemnity or non-indemnity approaches can be pursued to address various forms of moral hazard.<sup>206</sup>

Fifth, investor appetites are obviously crucial to creating any IBS transaction or market, including those for auditing firms.<sup>207</sup> Investor appetites for IBS remain emergent rather than strong, for several reasons. As noted, information costs can be high due to lack of familiarity. True, the potential loss of principal in an IBS transaction can be conceptually analogized to the risk of loss on corporate bonds arising from corporate insolvency, but investors have well-developed analytical tools for assessing that risk based on capital structure, leverage, cash flow coverage ratios, and other traditional

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205. Auditing firms may prefer non-indemnity approaches to the extent that applicable documentation would not be subject to discovery in related litigation, whereas indemnity agreements likely would be subject to discovery under rules permitting the discovery of insurance policies. *See* FED. R. CIV. P. 26(b).

206. One might wonder whether applicable insurance accounting could be improved to better capture the risk-transfer functions that securitization provides. To the extent that non-indemnity approaches achieve risk reduction, accounting should reflect this, even if the ability to measure or model basis risk is limited.

207. Nothing in law prevents investors, including mutual funds or other fiduciaries, from investing in cat bonds for their own account or the account of beneficiaries. *See* GAO, CATASTROPHE INSURANCE RISKS, *supra* note 186, at 29 (“[The GAO] explored the potential for individual investors to purchase shares in mutual funds that purchase catastrophe bonds for inclusion ... in a mixed asset fund. We ... confirmed with the SEC that [applicable] rules and regulations do not preclude mutual funds from purchasing catastrophe bonds.”).

tools. It is more difficult for even the seasoned, sophisticated investor to assess the probability and magnitude of catastrophic risks, whether they are hurricanes or mega-audit failures.

For IBS to appeal to investors, they must be capable of evaluating such risk in probability and magnitude, establishing the necessary return, and assessing how that risk-return relationship can contribute to investment portfolio diversification. Although some investors evidently have developed this capability and invested in IBS, additional resources are needed. At present, two highly specialized professional groups are available to contribute expert assessments and translate related knowledge.

The first are risk-modeling firms, which IBS sponsors invariably retain to provide specialized risk evaluation appraisals. Three major catastrophe-modeling firms have long served traditional reinsurers in assessing catastrophic risk.<sup>208</sup> They have helped to develop the IBS market by contributing analyses for individual catastrophe bond offerings. These firms command considerable expertise, computing capability and statistical modeling tools. Staffed with impressively educated professionals—many of whom hold doctoral degrees in relevant fields—they use massive databases on past catastrophes and related variables, such as population densities or construction techniques, to provide state-of-the-art risk assessments.<sup>209</sup>

The second knowledge source is rating agencies, which invariably are retained to rate catastrophe bonds. Three major rating agencies have long served the bond markets in assessing investment risk: Fitch, Moody's, and Standard & Poor's. For IBS, they incorporate the analyses provided by the risk modelers, and then extend or refine them and express the results in terms of investment risk. Rating agency analyses vary, but generally assess probability of loss and magnitude.<sup>210</sup> Catastrophe bonds have mostly been rated non-investment grade, although some have been rated investment grade

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208. These firms are Applied Insurance Research Worldwide, Risk Management Solutions, and EQECAT.

209. Although risk-modeling firms are often used in IBS transactions, auditors' insurance brokers possess all related information and expertise and easily could provide requisite analysis without need for enlisting these specialty firms.

210. Formulas may examine expected loss or frequency of loss. See GAO, CATASTROPHE INSURANCE RISKS, *supra* note 186, at 21 & n.31.

and some have been structured using multiple tranches, with the senior tranche rated investment grade and the junior tranches rated below that.<sup>211</sup>

Catastrophe bonds have been offered exclusively as private placements rather than public offerings.<sup>212</sup> Investors have been a relatively small group of sophisticated institutions. Some of these investors include mutual funds, however, so individual investors have enjoyed an opportunity to participate indirectly in these vehicles.<sup>213</sup> Mutual fund managers, in particular, have expressed appreciation for the diversification contribution that catastrophe bonds can make to a portfolio.<sup>214</sup>

### *3. Design Requirements*

Apart from the foregoing challenges to developing the market and IBS structure, two additional design features are critical to making an IBS transaction work and also require promoting investor understanding. First, the SPE must be bankruptcy-remote, meaning it would not be consolidated with the sponsor's estate in the event of the latter's bankruptcy.<sup>215</sup> Investors would remain entitled to the contractual cash flows independent of the sponsor's financial position, subject only to the designated catastrophic risks.

In asset-backed securitizations, such consolidation risk is addressed mainly by assuring that the initial transfer of assets is a "true sale" rather than a secured lending. That way, the sponsor's creditors cannot claim any right to the transferred assets. In a dispute, the investors would fight with the sponsor's creditors over claims to those assets. IBS deals are easier because the sponsor transfers no assets at the outset. Rather, an IBS sponsor's creditors could at most claim some right to contractual payment obligations

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211. Investors should not rely upon rating agencies when making investment decisions. Still, the rating agencies can contribute potentially useful information to investor decision-making processes.

212. See GAO, CATASTROPHE INSURANCE RISKS, *supra* note 186, at 18.

213. *Id.* at 29.

214. *Id.* at 5.

215. Protected Cell Acts, adopted in 1999 by Illinois and Rhode Island and endorsed by the NAIC, provide guidance that allows insurers to create "protected cells" within existing organizational structures to achieve bankruptcy-remoteness. 215 ILL. COMP. STAT. ANN. 5/179(A)-25(a) (West 2007); R.I. GEN. LAWS § 27-64-6(a) (2007).

that the sponsor has to the SPE, essentially premiums. This risk is addressed by contractual provisions stating that, if the sponsor fails to pay premiums, then the coverage terminates and all principal is retained by the SPE for investors.

Premiums could cease in two different scenarios. First, they could cease because of sponsor insolvency after a covered loss occurs. In that case, the coverage is triggered and the funds are released pursuant to the contract. No fight with sponsor creditors occurs. Alternatively, premiums could cease because of insolvency arising for other reasons. In that case, the coverage is not triggered and the SPE would seek to retain the funds for payment to investors. This scenario can create competition with the sponsor's other creditors. Accordingly, ex ante assurance of bankruptcy remoteness remains important in IBS transactions.<sup>216</sup>

This point leads to a second requisite design feature for effective IBS deals and related investor understanding. In asset-backed securitizations, investor principal upon closing is transferred to the sponsor in exchange for assets. In IBS, reflecting the characteristic of an insurance arrangement, investor principal upon closing is held in the SPE and invested. So in the former, the SPE is essentially passive, holding the assets and servicing them, with the servicing usually outsourced by contract back to the sponsor. For IBS, the SPE is more active; it holds assets, invests them, manages receipt of premiums, and evaluates and settles claims arising under the coverage. This requires attention to the SPE's identity and management.

In particular, the SPE must be managed by experts possessing appropriate investment and management skill. Those managers must follow management and investment principles that assure the SPE's safety and soundness. As examples, they must assure that bond proceeds are invested prudently, assure that premiums are

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216. For asset-backed securitizations sponsored by banks and other commercial enterprises, the usual bankruptcy law is the U.S. Bankruptcy Code, but, for IBS sponsors and perhaps their SPEs, state bankruptcy law governs in accordance with state insurance regulations. See 11 U.S.C. § 109(b)(2) (2006) (stating that a "domestic insurance company" is not eligible to be a debtor under the U.S. Bankruptcy Code, although not defining "domestic insurance company"); *In re Estate of Medicare HMO*, 998 F.2d 436, 445 (7th Cir. 1993) ("The essential attribute of an insurance company under Illinois law, and the attribute prompting deference to state regulation, is the assumption [by the company in question] of a third party's risk for a premium.").

paid from the sponsor when due, and assure that swap payments of the swap counterparty are paid when due.<sup>217</sup> Assuring these traits and performance of these duties is principally a market problem; investors must scrutinize the manager and the management contract and avoid investing absent sufficient assurance of safety and soundness.<sup>218</sup>

#### *4. Illustration and Assessment*

Consider for illustration a simple example of an IBS auditing transaction sponsored by one of the four large auditing firms, say Deloitte. Deloitte's SIP affiliate creates a bankruptcy-remote SPE based in Bermuda. The deal provides insurance to the Deloitte affiliate for the ensuing twelve months covering specified audit-related events occurring during that period. Investors contribute \$250 million of the principal amount in exchange for a floating interest rate of LIBOR plus 7 percent.

Investor risk of loss is either indemnity-based or non-indemnity-based. If indemnity-based, it could provide that investors lose principal dollar-for-dollar if, during those twelve months, Deloitte settles or is adjudged liable in a single lawsuit alleging audit failure in which settlement or damages exceed \$500 million. If non-indemnity-based, principal reductions could be determined by reference to any of various objective indicators outside the firm's direct control. For example, if total settlements by or judgments against public auditing firms in the United States exceed \$2 billion during that twelve-month period, then investors would release dollar-for-dollar in excess of that up to the total \$250 million principal invested.<sup>219</sup> In either case, an independent agent must be

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217. See Frankel & LaPlume, *supra* note 190, at 204.

218. SPE management also can be a regulatory problem to the extent that state insurance regulation may apply to the SPE. This probably is not a problem in general, but is not free from doubt. See *id.* at 209-10. For insurers, at least, a Model Act drafted by the National Association of Insurance Commissioners (NAIC) ordains the Special Purpose Reinsurance Vehicle (SPRV). The Model Act expressly provides that associated bonds are not insurance contracts, yet allows that sponsoring insurers can create the SPRVs using corporate subsidiaries that are engaged in the "business of insurance." Additional issues in structuring securitization transactions, whether asset-backed or insurance-based, include avoiding triggering the Investment Company Act and complying with other federal securities and commodities laws. See *id.* at 208-20.

219. As the example suggests, the indemnity approach reposes some discretion in the



appointed to verify that a triggering event has occurred, akin to the provision in standard insurance agreements providing that an insured cannot agree to settle a claim without the insurer's assent.

Proceeds from the securities issuance are deposited into a collateral trust account and invested in U.S. government guaranteed securities or highly rated commercial paper, and the SPE enters into a suitable interest-rate swap with a credit-worthy counterparty. The securities are offered only to qualified institutional buyers as defined in SEC Rule 144A.<sup>220</sup> The bonds are rated, based in part on a risk analysis of a catastrophe-modeling firm and in part on rating agencies' own investment risk assessment models.<sup>221</sup>

Catastrophic risks are peculiar in that their frequency is low but their magnitude is huge. The consequence of this peculiarity for insurers is that the cost of reinsurance can be significantly higher than for other pools. For some coverage, this can mean that reinsurers simply lack sufficient capital to meet aggregate risks. An example concerns the risk of floods in certain coastal environments, and explains why the U.S. government developed government-backed flood insurance programs. In such contexts, insurance securitization can be particularly appealing. It vastly expands the private capital available to meet aggregate risks beyond the limits of reinsurers into the vastly greater limits of the capital markets themselves.

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auditing firm and can create skewed incentives in settlement negotiations or litigation strategies that the non-indemnity method more readily can avoid. As the example also suggests, these and many other contractual terms require specification on a scale akin to terms contained in manuscript and reinsurance policies. The details are omitted here in the interest of introducing the IBS concept for catastrophic audit failure risk, but not fully delineating it.

220. Private Resales of Securities to Institutions, 17 C.F.R. § 230.144A(q)(1) (2007).

221. Compare this illustration with the actual transaction in Redwood Capital I, Ltd., sponsored by Lehman Re, a reinsurance company. GAO, CATASTROPHE INSURANCE RISKS, *supra* note 186, at 21-22. It provided insurance for twelve months covering specified earthquake losses to property in California. Investors were exposed to potential loss of principal of \$160 million. The bonds bore a floating interest rate of LIBOR +5.5 percent and LIBOR +7 percent. Investor risk of loss was non-indemnity based. Any principal reductions were to be determined by reference to the Property Claim Services (PCS) index, a recognized industry indicator of insured property for catastrophic losses. The SPE provided reinsurance coverage for California earthquake risk for triggering events causing industry losses ranging from \$22.5 billion to \$31.5 billion as PCS reports estimated for the period. Moody's rated the bond Ba2 (non-investment grade).

For auditing, to the extent that it is true that audit firms, their SIP affiliates, or reinsurers lack sufficient capital resources to meet catastrophic risks, it is appealing to consider devices to transfer and distribute that risk to the broader base of the capital markets. This adds an additional layer of insurance on top of primary insurance, self-insurance, and reinsurance and taps not just insurance markets, but capital markets, too. This expands pooling and distribution of risk and increases diversification compared to traditional insurance.<sup>222</sup> Adding IBS to address catastrophic risks of audit failure also should reduce the volatility in insurance markets that auditors have faced for decades, and that is an important basis for the insurance-based arguments in favor of establishing ex ante damages caps on auditor liability for audit failure.

Risks of adverse selection essentially disappear because any given auditing cat bond issue is based on the risks facing a single auditing firm, even though it is composed of many members in the network. Risks of moral hazard are addressed in several ways. First, the IBS layer is designed for the catastrophic event, not the quotidian case. External insurance and SIPs cover the main risks. As in the preceding illustration, IBS for auditing transactions sets the effective coverage as a designated dollar amount, say, \$250 million, in excess of an underlying amount covered by other insurance, including self-insurance, such as \$500 million. Second, the indemnity or non-indemnity features relating to the payout trigger and amounts can be tailored accordingly. Finally, there should remain sufficient risk independence and risk variability to enable the product to function effectively as insurance.<sup>223</sup> Of course, some moral hazard will remain even after taking account of these tools.<sup>224</sup>

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222. IBS expands capacity beyond that available using E&O or SIPs, although not necessarily compared to using FSI. As noted earlier, the risks that FSI insures can be hedged using option markets. See Ronen, *supra* note 51, at 54; *supra* note 184 and accompanying text.

223. Catastrophe bonds covering natural catastrophic events such as earthquakes and floods usually tend to satisfy the condition of statistical independence. See Frankel & LaPlume, *supra* note 190, at 205. Auditing bonds relating to insurance covering audit failure should satisfy the condition as well. So long as there is no correlation—or the correlation is not strong—between substantive business and economic risks and the risk of audit failure, then securitized bonds should offer investment diversification.

224. As noted, FSI reduces moral hazard almost to the vanishing point when accompanied by the hedging strategy that uses options that apply to the stock of a specific audit client and can be priced accordingly. See Ronen, *supra* note 51, at 54, 56-57; see also *supra* Part III.A.2.

For insurers or auditors, funding IBS bond interest and distributing loss risk to investors is functionally equivalent to the cost they would incur if they chose to distribute the risk using traditional reinsurance policies. If IBS can attract investors at interest rates in the range of, say, LIBOR plus 7 percent, as they have in the general catastrophe bond market, then this will be attractive so long as actual or functional reinsurance costs are greater than that.

The interest rate demanded on auditing cat bonds of the various firms reflects the relative degree of risk each firm faces. This introduces the numerous advantages of capital market discipline. First, because audit failure losses are paid, in part, by capital market investors, capital market monitoring of auditing firm performance appears. This amounts to a sort of re-bundling of the risk monitoring and risk distribution functions. The capital markets as a whole effectively self-insure.

Second, investors will require auditing firms to furnish more information than they presently do concerning loss exposure. Note, however, that the required information is not the auditors' assets or net worth or other information provided in financial statements, but rather the firms' historical loss risk experience—such as lawsuits filed and settled or regulatory investigations conducted and resolved. Auditors may be willing to share some information despite their traditional unwillingness to disclose publicly complete financial information. After all, these transactions would be private placements, thus limiting *public* disclosure, and the required disclosure would relate to risks of catastrophic loss without requiring the complete financial statements that firms consider to be proprietary.

Third, this would redefine the relationship between auditing firms and capital market investors. At present, capital market investors may too often treat auditing firms as insurers of financial reporting, despite limited auditor ability to perform that function and limited resources to support it. When investors buy auditing firm cat bonds, they have an additional direct interest in reducing the frequency and magnitude of audit failure. In addition to increased monitoring of audit firm performance, this could induce

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In contrast, an IBS transaction is a strategy applicable to all of an issuing audit firm's clients and would be priced on the basis of that entire book of business.

monitoring and control over plaintiffs' lawyers to deter pursuing excessive damages claims against auditors, which is an important adjunct of the insurance-based arguments favoring damages caps for auditors.

Securitizing audit failure risk could also contribute to curbing the problem of pocket shifting prevalent in securities fraud class actions today. This occurs when an issuer suffering market price drops due to financial misstatement pays one class of shareholders at the expense of another class, depending on fortuities of the timing of stock trades.<sup>225</sup> With IBS for auditing, at least for federal securities class actions against auditors for audit failure, the pocket shifting may persist but an additional cash flow stream enters. In this cash flow stream, funds flow out of one pocket and back into that same pocket.<sup>226</sup> True, significant transaction and agency costs remain, especially in lawyers' fees. But the current critique of pocket shifting worries about how the shift is from one pocket of shareholders to a different pocket of shareholders. With IBS for auditing, the pocket, through self-insurance, stays in substantially the same position—the net of transaction and agency costs.

In addition, an IBS transaction is relatively simple for an auditing firm to complete compared to the political and structural challenges necessary either to establish caps on damages or implement novel reforms such as adopting a regime of financial statement insurance. True, some political resistance may appear, but it likely can be overcome. For example, the Reinsurance Association of America views IBS as a direct competitor; thus, it has emphasized in lobbying efforts that the reinsurance industry has abundant capacity to address these risks, and that IBS should be seen at most as a supplement, not an alternative, to reinsurance.<sup>227</sup>

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225. See Coffee, *supra* note 66, at 1557-58.

226. Suppose that a mutual fund (Fund) buys common stock of a large industrial corporation (Issuer), which is, in turn, audited by a large auditing firm (Firm). Suppose Fund also buys one-year Firm IBS. If no audit failure occurs by Firm at Issuer during that year, Fund enjoys its return on Issuer's stock, uninfected by audit failure, plus a high bond interest return and return of principal on the Firm IBS. But if an audit failure does occur during that year, Fund suffers a reduced return on its Issuer stock and principal on the bonds, if, and only if, that same amount is used to fund reimbursement to it of its losses on Issuer stock. It is far from a perfect hedge, but it reduces the naked risk of owning Issuer stock without any other financial instrument related to the quality of its audits.

227. See GAO, CATASTROPHE INSURANCE RISKS, *supra* note 186, at 28, 30.

On the other side, the Bond Market Association (BMA) is enthusiastic about IBS; it discounts concerns about why investors may not find IBS attractive and urges increasing their appeal through more favorable federal income tax treatment.<sup>228</sup> Auditing firms that find IBS enticing will enjoy a similar reception: the BMA will welcome them, but the RAA and the reinsurers of the firms' SIP affiliates may demur.<sup>229</sup>

Finally, simply adding IBS to the policy discussion may contribute value. At present, proponents of damages caps have incentives, when in doubt, to interpret information in ways that overstate the stakes. The leading example is the assertion that the prevalence of self-insurance is due to the unavailability or expense of external insurance, a claim that the foregoing analysis suggests may be overstated. Notably, auditing firms have a comparative advantage in these debates as they and their insurers and insurance brokers command all the related information on loss histories and risk evaluation and hold most of it confidential. Using this information in the political arena to campaign for liability caps creates incentives to overstate risks. In contrast, using such information in the marketplace to sell cat bonds creates incentives to understate risks. Simply by adding IBS as a serious policy option, the two effects may offset one another as market incentives meet political ones.

#### CONCLUSION

Policy debate over capping auditor damages in securities litigation, dating to the 1970s, implicates the perennial issue concerning the relative expense or limited availability to auditors of external insurance. As evidence, proponents cite the contraction of E&O markets for auditing insurance and the rise of auditing firm self-insurance programs. Analysis of this insurance-based argument suggests that it is overstated in that self-insurance is better at promoting audit effectiveness, and financial statement insurance

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228. *See id.* at 31.

229. Also appealing about IBS for auditing firms, moreover, is how deals can be structured to fit into the existing insurance matrix. Bonds would be issued to cover losses that exceed insurance capacity. So insurers would not lose any underwriting business. Furthermore, note that cat bonds do not attract new lawsuits against auditors for the same reason—they only provide coverage for catastrophic losses.

would be better yet. The legitimate target in the debate is the threat of catastrophic risks, mega cases that would destroy a firm and jeopardize the auditing industry. That concern might be addressed by caps, but this has been a political and policy thicket for nearly forty years.

The concern and analysis entice asking: what else besides caps might be used? After all, the problem is not *sui generis* and caps are not the only solution. Catastrophic risks with limited or expensive insurance or reinsurance arise from natural phenomena like hurricanes, earthquakes, floods, and tornadoes. Some such events—like Hurricane Andrew and the Northridge Earthquake—rivet insurers and yield very hard insurance markets. In response to those two events, in particular, insurers and other businesses turned to the capital markets and invented insurance-based securitization as an alternative or supplement to reinsurance. This innovation can be adapted easily to the auditing context. Firms likely would be better off—and their contributions to financial reporting more effective—by pursuing catastrophe bond securitizations rather than continuing the campaign to secure caps on damages that they face for audit failure.