Intermediaries Revisited: Is Efficient Certification Consistent with Profit Maximization?
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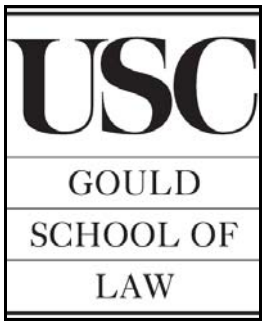

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Intermediaries Revisited: Is Efficient Certification Consistent with Profit Maximization?

***Forthcoming,* Journal of Corporation Law**

Jonathan M. Barnett*

Private certification mechanisms are a key component of the regulatory infrastructure in the financial sector and other commercial settings. It is generally assumed that certification intermediaries have profit-based incentives to deliver accurate information to the certified market. This view overlooks an inherent defect in the incentive structure of certification intermediaries: entry barriers both support and undermine the consistent supply of accurate information to the certified market. Mature certification markets converge on a handful of providers protected by switching costs, product opacity and reputational noise. Those entry barriers induce incumbents both to preserve reputational capital by making investments to maintain informational accuracy and to save costs by periodically reducing those investments. Regulatory interventions to improve certifier performance are prone to overestimate the market's demand for certification accuracy or eliminate the "rent cushion" that supports certifiers' incentives to invest in informational quality. In lieu of regulatory intervention, certification entities historically have adopted nonprofit, mutual and other "constrained" organizational forms that reduce certifiers' incentives and opportunities to shirk. These arguments are illustrated through case studies of certifiers' organizational practices in the financial market, where certifiers have widely abandoned constrained forms, and "ethical consumption" markets, where the most successful certifiers have widely adopted constrained forms.

Intermediaries are the linchpin in any market economy characterized by enormous volumes of transactions conducted among anonymous participants that have limited capacities to evaluate directly each other's products and services. Without gatekeepers[1] to supply reliable evaluation and monitoring services, efficient trade would often be distorted, curtailed or blocked. The magnitude and longevity of the most prominent private certification entities are impressive.[2] Consider some notable examples: Underwriters' Laboratories (founded in 1894), the country's leading product safety certification firm, has developed more than 1,300 safety standards and, in 2009, tested almost 90,000 products and authorized use of its "UL" mark on 20 billion items from over 66,000 manufacturers[3]; Standard & Poor's and Moody's (founded, respectively, in 1860 and 1909)[4], the world's leading bond rating agencies, rate hundreds of thousands of securities each year and exert influence over Fortune 500 corporations and even entire countries; and Dun & Bradstreet, the country's leading provider of business credit information (founded in 1841[5]), maintains trade payment information on 190 million

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1 Scholars sometimes distinguish between two types of gatekeepers: (i) entities that certify as to the quality of a certified product, service or entity, and (ii) entities that both perform a certification function and can restrict access to the market. I refer to the former (and broader) category, including second-order certification entities that accredit other certifier entities. Unless otherwise specified, throughout I use the terms "gatekeeper", "certifier" and "intermediary" interchangeably. Note that this broader definition does not extend so far as to include standard-setting bodies that set a product standard but do not either certify compliance with the standard or accredit entities that certify compliance with the standard.

2 As this sentence implies, this Article addresses *private* certification entities. In the U.S., this is the prevalent mechanism for certifying product quality, the notable exceptions being the food, ethical drug and air transport industries. Other industries often operate under mixed regimes comprising both private and public certification mechanisms.

3 UNDERWRITERS LABORATORIES, INC., *"*UL at a Glance", available at http://www.ul.com/global/documents/secured/councils/ULOverview.pdf, and *"*About UL*"*, avail. at http://www.ul.com/global/eng/pages/corporate/aboutul (last visited June 21, 2011).

4 *See* Richard Sylla, *An Historical Primer on the Business of Credit Rating*, in RATINGS, RATING AGENCIES AND THE GLOBAL FINANCIAL SYSTEM 24-25 (eds. Richard M. Levich et al. 2002). In the case of S&P, 1860 refers to the date on which Henry Varnum Poor published the *History of Railroads and Canals in the United States*, which provided information on the financial condition of U.S. railroad companies. Some scholars may prefer the later date of 1916, when Poor's Publishing Company began issuing bond ratings. In 1941, Poor merged with Standard Statistics Bureau (founded in 1922) to become Standard & Poor's Corp., which was acquired in 1966 by The McGraw-Hill Companies, its current parent.

5 1841 refers to the date on which Lewis Tappan founded The Mercantile Agency, the progenitor of Dun & Bradstreet, which was formed in 1933 through the merger of The Mercantile Agency and its

companies and influences millions of transactions every day throughout the world. Without exaggeration, few consumers or enterprises do business without relying directly or indirectly on the information collected and evaluated by these intermediaries.

With the exception of the credit rating agencies[6], legal scholars have devoted little attention to the actual operation of certification markets and, in theoretical discussions in the law-and-economics literature, usually assert that reputational pressures drive repeat-player certifiers to provide a nearly infallible solution to informational asymmetries in certified markets.[7] But even casual scrutiny of real-world certification markets finds substantial departures from this optimistic view. Even the most established certifiers (or a close relative, accreditors) have been alleged repeatedly to engage in self-dealing, laxity, collusion and other deviations from perfect rectitude.[8] This discrepancy between theory and practice is most pronounced in the financial markets—ironically, a market that has been widely touted by legal and economic scholars as a paragon of informational efficiency due in part to the scrutiny of third-party intermediaries.[9] In the 2008 financial crisis, the credit rating agencies failed to assess properly the financial condition of certain bond issuers and structured finance instruments[10]; in the 2001 Enron scandal, the credit rating agencies lagged behind the market in reflecting Enron's insolvent condition while

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competitor, R.G. Dun & Company. *See* Rowena Olegario, *Credit Reporting Agencies: A Historical Perspective*, in CREDIT REPORTING SYSTEMS AND THE INTERNATIONAL ECONOMY (ed. J. Miller 2003).

6 Scholarly commentary on the credit rating agencies is well developed. For leading contributions, see *infra* notes __.

7 For a review of the existing literature, see *infra* Part I.A and note [22] and accompanying text.

8 Examples include: Better Business Bureau certification, see David Segal, *But Who Will Grade the Grader?*, N.Y. TIMES, Feb. 26, 2011; the Motion Picture Association of America's content ratings, see *The Ratings Game: Asymmetry in Classification* (Working Paper 2010); third-party certification in the international agricultural and food supply chain, see Friederike Albersmeier et al., *The reliability of third-party certification in the food chain: From checklists to risk-oriented auditing*, 20 FOOD CONTROL 927 (2009); third-party certification of social responsibility standards pertaining to environmental and labor codes of conduct, see Michael J. Hiscox et al., *Evaluating the Impact of SA 8000 Certification* (Working Paper 2008); e-commerce privacy assurance services, see Benjamin Edelman, *Adverse Selection in Online "Trust" Certifications,* PROCEEDINGS OF THE ACM (2009), available at http://www.benedelman.org/publications /advsel-trust.pdf; accreditation bodies in the higher education sector, see Eric Kelderman, *American Bar Association Takes Heat from Advisory Panel on Accreditation,* CHRONICLE OF HIGHER EDUC., June 9, 2011; and accreditation in the childcare market, see Mo Xiao, *Is Quality Certification Effective? Evidence from the Childcare Market* (Working Paper Oct. 2005). For concerns over certification quality in the financial markets, see *infra* note 31 and accompanying text.

9 For contributions in this vein, *see infra* note 22.

10 *See* Jonathan Katz, Emanuel Salinas & Constatinos Stephanou, *Credit Rating Agencies,* CRISIS RESPONSE: PUBLIC POLICY FOR THE PRIVATE SECTOR (World Bank Group 2009).

a leading accounting firm, Arthur Andersen, and a respected law firm, Vinson & Elkins, failed to stop Enron's fraudulent use of off-balance-sheet vehicles[11]; in 2002, prestigious accountants, lawyers and other intermediaries failed to stop fraudulent disclosure in connection with bond issuances by WorldCom, a telecommunications firm that had inflated its earnings by $11 billion[12] (and promptly thereafter made the then-largest bankruptcy filing in U.S. history)[13]; in 1991, PriceWaterhouseCoopers and Ernst & Young were implicated in the multi-billion dollar fraud perpetrated by the Bank of Credit and Commerce International, at one time the seventh-largest bank in the world by assets[14]; and, in the early 1990s, several leading national law firms and accounting firms settled suits alleging that they aided the multi-billion dollar frauds perpetrated in the "Savings and Loans Crisis".[15] The list goes on much further.[16]

These "surprising" intermediary failures occur with such regularity that each incident is really not much of a surprise. To the contrary: the true puzzle is why is failure[17] a regular feature of certification markets and why do certification markets thrive

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[11] *See* Matthew J. Barrett, *Enron and Andersen – What Went Wrong and Why Similar Audit Failures Could Happen Again,* in ENRON: CORPORATE FIASCOS AND THEIR IMPLICATIONS 155-168 (eds. Nancy B. Rapaport & Bala G. Dharan 2004). On the role played by various law firms in the Enron scandal, see R.T. McNamar, *Lawyers as Corporate Monitors,* in AFTER ENRON: LESSONS FOR PUBLIC POLICY 176-189 (ed. William A. Niskanen 2005).

[12] *See* Shawn Young, *MCI to State Fraud was $11 Billion,* WALL ST. J., Mar. 12, 2004, at A3.

[13] *See* Luisa Beltran, *WorldCom files largest bankruptcy ever,* CNNMoney, July 22, 2002, available at http://money.cnn.com/2002/07/19/news/worldcom_bankruptcy/.

[14] THE BCCI AFFAIR: A REPORT TO THE COMMITTEE ON FOREIGN RELATIONS, UNITED STATES SENATE, 102D CONG., 2D SESSION, SENATE PRINT 102-140.

[15] *See* JERRY W. MARKHAM, A FINANCIAL HISTORY OF THE UNITED STATES: FROM THE AGE OF DERIVATIVES INTO THE NEW MILLENNIUM (1970-2001) (vol. III) 171-72 (2002); Howell E. Jackson, *Reflections on Kaye, Scholer: Enlisting Lawyers to Improve the Regulation of Financial Institutions,* 66 S. CAL. L. REV. 1019, 1023-1024 (1992).

[16] For the canonical historical source on failures by banks and other financial intermediaries , see CHARLES P. KINDLEBERGER & ROBERT ALIBER, MANIAS, PANICS & CRASHES: A HISTORY OF FINANCIAL CRISES (5th ed. 2005).

[17] As used at this stage in the analysis, the terms, "intermediary failure", as well as the related terms, "intermediary malfeasance" and "intermediary fraud", refer either to failure to provide complete disclosure of all nontrivial transaction-relevant information or affirmatively providing nontrivially misleading or false disclosure of transaction-relevant information. This definition approximates the concept of "materiality" in the securities laws and regulations and the concept of "wrongdoing" as used in much of the academic literature on capital markets regulation. As will be discussed subsequently, however, this definition is overbroad since, on a cost-benefit basis, perfectly accurate evaluation would never be the desired social objective. That is: some positive level of "wrongdoing" or "fraud" is consistent with efficiency in a real-

and expand even in the face of such failure. In this Article, I advance a theory of intermediary behavior that anticipates that controlled forms of intermediary failure will occur with regularity even in the most successful certification markets. This holds true even (and, remarkably, *especially*) in the case of the most well-established intermediaries. The inherent fallibility of any dominant certifier rests on a defining characteristic of certification markets. Any successful intermediary is protected by an entry barrier that induces it both to act diligently in order to protect its stream of reputational rents against competitive threats and to exercise its market power by relaxing investments in certification quality. That entry barrier derives from two sources: (i) on the supply side, the time lag required for any entrant to accumulate reputational capital in order to pose a competitive threat; and (ii) on the demand side, the switching costs that users[18] would incur to migrate to a competing intermediary. Entry costs on the supply side and switching costs on the demand side have a crucial implication: users of any established certification instrument do not have a credible threat of immediate termination in every case of intermediary failure. A dominant intermediary will therefore "shade" on quality just up to the point at which users still prefer its degraded instrument relative to "taking a chance" on any competing provider, evaluating quality directly, or exiting the market. This is not to say that certifiers are free to make zero effort: unconstrained slack would exceed users' tolerance and invite competitive entry, direct evaluation, or market exit. However, so long as switching costs are positive, reputation effects will fail to deter intermediary opportunism to some substantial extent. At best, the certification market can provide a partial solution to informational asymmetries in the certified market.

This qualified understanding of intermediary markets yields qualified policy implications that move beyond the traditional dichotomy between simple opposition to

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world environment characterized by positive enforcement and other transaction costs. *See infra* note [111] and accompanying text.

[18] Throughout I use the term "users" rather than consumers. This is more precise for two reasons: (i) both buyers and sellers in a certified market "use" a certification instrument (and, depending on the market, either buyers or sellers might be the party that pays for the certification)—the former uses it as a proxy for quality inspection while the latter uses it as a proxy for quality assurance; and (ii) in institutional or business-to-business interactions, the buy side of the transaction is populated by intermediate users rather than end-users. Where needed, I refer specifically to buyers, sellers or other market participants in particular contexts. Note further that "users" can also refer to regulators, who widely use certification instruments as a proxy for direct evaluation of compliance with regulatory requirements. For examples, *see infra* note 41.

and support for aggressive state intervention in informationally opaque markets. The standard positive theory of intermediary behavior yields the normative proposition that regulatory interventions in intermediated markets are superfluous at best and distortionary at worst in light of existing incentives to act diligently. That intuition has driven widespread academic skepticism of mandatory disclosure laws and other regulatory interventions designed to alleviate informational asymmetries in the capital markets and other settings. Recent turmoil in the capital markets has put those views under substantial stress (with a surprisingly meager response from law-and-economics scholars[19]). But the apparent discrepancy between theory and practice does not support a simple reaffirmation of standard regulatory tools or, in the extreme but not atypical case, state provision of certification functions in order to improve gatekeeping quality. Given certifiers' reputation-driven incentive structure and regulators' severe informational constraints, none of these options is a sure recipe for improving certifier performance and can easily make things worse. As anticipated by theory and demonstrated by experience, expanding certifier liability or relaxing entry barriers into certification markets can reduce—sometimes dramatically—incumbent certifiers' incentives to invest in informational accuracy. A reasonably well-functioning certification market is a fragile mechanism: regulating it aggressively to achieve marginal gains in certification accuracy can easily kill it.

Any intervention into a certification market must therefore balance the risk of future regulatory failure against current market failures. Consistent with this principle, I examine an alternative institutional strategy that exploits organizational structures to reduce certifier shirking at a low to zero risk of regulatory error. This approach is not hypothetical: certifiers have historically sought to commit against opportunistic action by adopting nonprofit, mutual and partnership forms of organization that limit the opportunities and incentives for managers and other controlling parties to extract value from locked-in users. These organizational forms—which I group under the rubric of "constrained" forms—are used by most leading certification entities in consumer and

[19] For exceptions, see Jonathan R. Macey, *The Demise of the Reputational Model in Capital Markets: The Problem of the "Last Period Parasites",* SYRACUSE L. REV. (2010) [hereinafter Macey, *Reputational Model*]; and, with respect to the Enron scandal, see Jonathan R. Macey, *Efficient Capital Markets, Corporate Disclosure, and Enron*, 89 CORNELL L. REV. 394 (2003) [hereinafter Macey, *Efficient Capital Markets*].

industrial goods markets, historically by law and accounting intermediaries in professional services markets, and recently by intermediaries in certifying the "ethical" production of food and other consumer goods. The years preceding the recent financial crisis were characterized by an underdiscussed organizational transformation[20]: virtually all leading certifiers in the financial markets abandoned these constrained forms for corporate and other forms of organization that place few limitations on the distribution of profits to investors or compensation to managers. This single observation does not support mandating that certifiers operate under nonprofit and other constrained forms of organization; however, those forms appear to be associated with a lower rate of certifier failure, which may or may not be offset by the countervailing efficiencies associated with less constrained forms. In a policy calculus that places a special premium on preserving any existing certification mechanism or has limited confidence in the market's ability to make efficient organizational choices, regulators may mandate or privilege the use of constrained forms that limit opportunism risk or, more modestly, expand the menu of organizational choices without favoring any of them.

Organization is as follows. In Part I, I review the intermediary thesis and the mixed body of empirical support. In Part II, I review the economic characteristics of certification markets together with illustrative evidence. In Part III, I describe the certification paradox. In Part IV, I argue that the certification paradox and associated informational constraints cast doubt on traditional regulatory tools to improve certifier performance. In Part V, I discuss the use of organizational forms to limit certifier opportunism, together with evidence from financial and social certification markets.

I. Cracks in the Reputational Infrastructure

In this Part, I review the standard intermediary thesis and the related body of empirical evidence. That evidence does not track standard expectations that intermediaries consistently detect and deter transactional malfeasance. Mixed empirics turn out to track theory, where the latter is carefully understood: a closer look at economic models of reputational intermediation identifies various circumstances where certifiers will fail to deter malfeasance in certified markets.

[20] For existing discussion of this point, see *infra* note [137] and accompanying text.

A. The Simple Intermediary Thesis: Theory and Evidence

With few but growing exceptions, legal scholars that use economically-informed approaches have generally depicted the reputational intermediary as a trustworthy player who moderates informational asymmetries that would otherwise distort or prevent efficient exchange.[21] This characterization has been applied extensively in capital markets scholarship to attribute reputational functions to lawyers[22], auditors[23], underwriters[24], and stock exchanges.[25] Without these intermediaries, transacting parties may suffer from a "lemons problem". Nobel Prize winner George Akerlof[26] first described this problem. Suppose two sellers, *A* and *B:* the former wishes to sell a high-quality used car at a price that reflects its high quality while the latter deviously intends to sell a low-quality used car at the same price. Suppose further that buyers are unable to distinguish between the relative qualities of each seller's inventory and must rely solely on the sellers' claims. Based on some belief as to the distribution of quality across the total pool of cars of the same make, model and year, the buyer will not be willing to pay more than a price that reflects an average-quality car within that pool. If that is the case,

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[21] A series of articles published in the mid-1980s by Profs. Gilson & Kraakman popularized this approach in the legal literature. *See* Ronald Gilson, *Value Creation by Business Lawyers: Legal Skills and Asset Pricing*, 94 YALE L. J. 239, 290-91 (1984) [hereinafter Gilson, *Value Creation*] (arguing that lawyers act as "reputational intermediaries" and that an effective reputational intermediary will emit a credible quality signal because it has rational incentives to maintain a trustworthy reputation in order to attract further business); Reinier H. Kraakman, *Corporate Liability Strategies and the Costs of Legal Controls*, 93 YALE L. J. 857, 891 (1984) (stating that "incorruptible" intermediaries will deter offenses that are unreachable through enterprise-level or managerial sanctions); Ronald Gilson & Reinier H. Kraakman, *The Mechanisms of Market Efficiency*, 70 VA. L. REV. 549, 613-21 (1984) [hereinafter Gilson & Kraakman, *Market Efficiency*] (stating that intermediaries such as investment banks use their reputational capital to facilitate efficient transactions). In a roughly contemporaneous article, Prof. Kraakman restated the intermediary thesis but observed theoretical and practical instances where gatekeepers assist or ignore client malfeasance. *See* Reinier H. Kraakman, *Gatekeepers: The Anatomy of a Third-Party Enforcement Strategy*, 2 J. L. ECON. & ORG. 53 (1986) [hereinafter Kraakman, *Gatekeepers*]. In later work, Profs. Gilson & Kraakman have recognized some infirmities in the reputational intermediary thesis. *See* Ronald Gilson & Rainier H. Kraakman, *The Mechanisms of Market Efficiency Twenty Years Later: The Hindsight Bias*, 28 J. CORP. L. 715 (2003).

[22] *See* Gilson, *Value Creation*, *supra* note __, at 290-91.

[23] *See* Victor P. Goldberg, *Accountable Accountants: Is Third-Party Liability Necessary?*, 17 J. LEGAL STUD. 295, 312 (1988) [hereinafter Goldberg, *Accountable Accountants*].

[24] *See* Gilson & Kraakman, *Market Efficiency*, *supra* note __, at 613-21.

[25] *See* Paul Mahoney, *Public and Private Rule Making in Securities*, in AFTER ENRON: LESSONS FOR PUBLIC POLICY 111, 118-20 (ed. William A. Niskanen 2005).

[26] *See* George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q. J. ECON. 488 (1970).

then sellers of all above-average-quality cars exit the market (since the maximum available price will not compensate them for the cost of maintaining a car at that quality level), which induces sellers of the next-lowest tier of cars to exit the market, and so on. The result: only the lowest-quality cars—the "lemons"—remain and the market collapses.

The reputational intermediary now enters the scene to solve the lemons problem. This capacity derives from its repeat-player status: an established intermediary has known incentives to preserve its reputational capital by acting diligently and honestly and can therefore provide a credible proxy on behalf of a seller that cannot adequately commit to any assertion of quality by recourse to reputation, contract or some combination thereof. Now the market revives: buyers receive credible information and efficient transacting moves forward.

Expansive estimation of the evaluation capacity of reputational intermediaries generates a restrained policy program that departs substantially from the extensive regulation to which a wide variety of markets are currently subjected in order to cure informational obstacles to efficient trade. To the extent that intermediaries have profit incentives to remove those obstacles and are subject to competitive pressures to act diligently in doing so, there is a reduced necessity for state-imposed sanctions to deter transactional malfeasance in the secondary certification market or the primary certified market. In an idealized environment characterized by zero monitoring and transaction costs, those conventional forms of regulatory intervention do nothing but generate deadweight losses. Even absent regulatory intervention, repeat players would rationally refrain from cheating and the residual pool of one-shot players would be unable to make a sale without the imprimatur of a recognized intermediary. This view has driven scholarly commentary that has cast doubt on, or even advocated dismantling, some well-established features of the regulatory apparatus in the U.S. capital markets, including in particular the disclosure and even the anti-fraud rules set forth in the securities laws and regulations.[27] Following this reasoning, any claim that an intermediary has engaged in

[27] For a leading articulation of this view, see FRANK H. EASTERBROOK & DANIEL R. FISCHEL, THE ECONOMIC STRUCTURE OF CORPORATE LAW 276-314 (1996), who ultimately support the disclosure regime on limited grounds. For other examples by leading scholars, see Goldberg, *Accountable Accountants*, *supra* note __, at 312 (arguing that auditors have adequate market-based incentives to act diligently insofar

or facilitated malfeasance in the certified market is inherently dubious: such action would be irrational for any repeat-player certifier who would not risk a long-term stream of reputational gains to facilitate a one-time swindle involving a single client. This is not mere academic theorizing: absent evidence of actual knowledge of the alleged fraud, several federal courts have dismissed "aiding and abetting" claims (brought under the Securities Act) against outside auditors on precisely this ground.[28]

The logic of these arguments is compelling. But theory runs into challenges when applied to the actual world of market practice. The intermediary thesis relies on the impeccable reliability of the repeat-play certifier. As I have described elsewhere, a review of relevant empirical evidence provides mixed support for that thesis.[29] Indeterminate or adverse results have been reached with respect to the informational value of standard certification instruments, including virtually every instrument commonly used in securities issuances and financing, acquisition and other high-stakes

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as failure to do so results in a reputational penalty); Mahoney, *supra* note __, at 110-11, 118-20 (arguing that mandatory disclosure provisions of the federal securities acts could be safely eliminated because competitive pressures would compel exchanges to select socially optimal disclosure rules, as evidenced by pre-1933 self-regulation by exchanges); A. C. Pritchard, *Markets as Monitors: A Proposal to Replace Class Actions with Exchanges as Securities Fraud Enforcers,* 85 VA. L. REV. 925, 983-1000 (1999) (arguing that regulating fraud and malfeasance in securities markets through class action litigation can be substituted by more efficient regulation by stock exchanges, who are driven by reputational constraints to invest in policing efforts); Roberta Romano, *Empowering Investors: A Market Approach to Securities Regulation*, 107 YALE L. J. (1998) (arguing that securities issuers should be free to choose any legal regime of their choosing (even a regime that did not penalize fraud) given that market incentives will compel issuers to select regimes that align with investors' interests).

[28] *See* DiLeo v. Ernst & Young, 901 F.2d 624, 629 (7th Cir. 1990); *Barker v. Henderson, Franklin, Starnes & Holt*, 797 F.2d 490, 497 (7th Cir. 1986). Other courts have taken a similar approach, dismissing such claims on the ground that the audit fee was too small to justify the auditor acting dishonestly for the client's benefit (absent evidence to show knowledge on the part of the auditor). *See* Robert A. Prentice, *The Case of the Irrational Auditor: A Behavioral Insight into Securities Fraud Litigation*, 95 NW. U. L. REV. 133, 135-39 (2000) [hereinafter Prentice, *Irrational Auditor*].

[29] *See* Jonathan M. Barnett, *Certification Drag: The Opinion Puzzle and Other Transactional Curiosities*, J. CORP. L. 102-06 (2006). The most compelling support for the certification thesis is found in some markets for collectors' items, where certification appears to tracks pricing and quality differences as expected. *See* Bradley S. Wimmer and Brian Chesum, *An Empirical Examination of Quality Certification in a "Lemons Market",* 41 ECON. INQUIRY 279 (2003) (finding price and/or quality differences between certified and uncertified thoroughbred racehorses); S. Dewan & Vernon Ning Hsu, *Adverse Selection in Reputation-Based Electronic Markets: Evidence from Online Stamp Auctions* (Working Paper 2005) (same, with respect to stamps); Ginger Zhe Jin & Andrew Kato, *Price, Quality and Reputation: Evidence from an Online Experiment*, RAND J. ECON. (2006) (same, with respect to baseball cards); Ginger Zhe Jin et al., *That's News to Me! Information Revelation in Professional Certification Markets* (Working Paper 2006 (same, with respect to baseball cards); Michael Dewally & Louis Ederington, *A Comparison of Reputation, Certification, Warranties and Disclosure as Remedies for Information Asymmetries: Lessons from the On-line Comic Book Market* (Working Paper 2002) (same, with respect to comic books).

business transactions[30], as listed in the Table below. Remarkably, empirical studies cannot confirm whether these seals of approval supply sufficient informational value to warrant the resources diverted to generate these instruments—which amount to several billions of dollars of transfer payments in the case of the credit rating industry alone.[31] That empirical indeterminacy would not surprise sophisticated investors and other Wall Street participants, who typically dismiss these instruments as a repetition of what the market already knows, the unreliable statements of a conflicted third party, or the expressions of unsophisticated or misinformed observers.[32]

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[30] For a review of this evidence, see Barnett, *supra* note __. Other scholars have observed the informational infirmities of some of these instruments. *See* Theodore Eisenberg & Jonathan Macey, *Was Arthur Andersen Different? An Empirical Examination of Major Accounting Firm Audits of Large Clients*, 1 J. EMPIRICAL LEG. STUD. 263 (2004) (audit reports); Coffee, *Gatekeeper Failure, supra* note __, at 23-25 (stock recommendations); Lucian Arye Bebchuk & Marcel Kahan, *Fairness Opinions: How Fair Are They and What Can Be Done About It?*, 1989 DUKE L. J. 27 (1989) (fairness opinions); Robert A. Prentice, *The Inevitability of a Strong SEC*, 91 CORNELL L. REV. 775, 793-94 (2005) [hereinafter Prentice, *Strong SEC*] (mutual funds) and 795-96 (exchanges); Macey, *Reputational Model*, at 7-10 (credit ratings and exchange listings); Frank Partnoy, *The Paradox of Credit Ratings*, in RATINGS, RATING AGENCIES AND THE GLOBAL FINANCIAL SYSTEM 65-84 (Richard M. Levich et al. eds. 2002) (credit ratings).

[31] For 2010, Moody's reported revenues of $1.4B for its credit rating operations. Source: http://ir.moodys.com/annuals.cfm. Revenue figures are not available for S&P, which is a division of McGraw Hill. Given that it has almost equivalent market share as Moody's, it is fair to assume that S&P's revenue figures are roughly comparable. That assumption yields an estimate of almost $3 billion in revenues for the two leading credit rating agencies.

[32] Statement made on basis of author's personal experience as a corporate lawyer. The financial press abounds with similar observations.

Table I: Key Certification Instruments in Financial Markets

Instrument	**Certifier**	**Certified Entity/Transaction**
Bond rating	Rating agency	Debt issuer
Audited financials	Audit firm	Public corporation
Underwriting services	Underwriter	Equity or debt issuer
Directors' approval	Board of directors	Acquisition or other major transaction
Fairness opinion	Investment bank	Acquisition transaction
Closing opinion	Law firm	Enforceability of contractual terms
Listing	Stock exchange	Equity issuer
Stock recommendations	"Sell-side" stock analysts[33]	Equity issuer

B. **Towards a Complex Intermediary Thesis**

The uneasy empirical case for the informational value of reputational intermediaries recommends revisiting the standard understanding of intermediary behavior. Closer scrutiny of the economic signaling theories that lie behind the conventional intermediary thesis uncovers some important qualifications that have been elided in much of the law and economics literature that has applied it. These qualifications cast doubt on the ability of reputational effects to yield efficient outcomes in certification markets. Adopting a nuanced understanding of the reputational intermediary can reasonably account for the indeterminacies yielded by empirical inquiry and, as I will subsequently explore, provide a firmer, albeit far more complex, basis for designing policies to improve certifier performance.

The reputational intermediary thesis is an application of a more general economic theory of signaling that extends beyond the lemon's problem. Signaling logic is straightforward: rational actors will take costly (and otherwise wasteful) actions in order to signal attributes that cannot be credibly communicated directly to counterparties. But a signaling mechanism is not a fail-safe solution and may even exacerbate matters. In one of the seminal papers that launched the field, Nobel Prize-winning economist

[33] This refers to analysts employed by a broker-dealer that is in the business of selling securities to institutional and retail investors.

Michael Spence did not describe signaling as a *necessarily* efficient action. In particular, he emphasized circumstances where introducing signaling technologies may compel high-quality parties to undertake socially excessive signaling investments.[34] Consistent with Spence's nuanced approach, economists who have modeled certification markets—again, a subset of the total universe of signaling mechanisms—have identified a variety of inefficient outcomes: certifiers will strategically withhold information in order to extract rents from buyers, sellers or both[35] or a certified entity's managers will strategically withhold information from the certifier to extract rents from the principal.[36]

Most fundamentally, it is vital to recognize that *the lemons problem can migrate from the certified market to the certification market.* This is true so long as the quality of a certification product is not immediately transparent. If transacting parties cannot distinguish among the quality of competing certifiers, then lower-quality certifiers will mimic the signal provided by higher-quality certifiers, who will have reduced incentives to maintain signaling quality, and the certification market will ultimately contract and fail. Just as information asymmetries in the certified market require recourse to the evaluation services provided by certification intermediaries, so too informational asymmetries in the certification market demand recourse to evaluation services provided by higher-order intermediaries. Successfully designing a well-functioning certification market that overcomes these higher-order informational asymmetries at a reasonable transaction cost—a predicate condition for alleviating first-order informational

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[34] *See* Michael S. Spence, *Job Market Signaling*, 87 Q. J. ECON. 355 (1973). This observation is fundamental: it means that, even in the case of a certification product that is perfectly accurate, it is inherently ambiguous whether the use of that product adds information that enables efficient transactions or fails to deliver incremental information to the market and simply diverts rents to certification entities. The economic literature following Spence has identified yet other inefficiencies. For overviews, see John G. Riley, *Silver Signals: Twenty-Five Years of Evaluation and Signaling*, 39 J. ECON. LIT. 432 (2001); Joseph E. Stiglitz, *Information and the Change in the Paradigm in Economics*, 92 AMER. ECON. REV. 460 (2002).

[35] *See* Luigi Alberto Franzoni, *Imperfect competition in certification markets*, in ORGANIZED INTERESTS AND SELF-REGULATION: AN ECONOMIC APPROACH (Bernardo Bortolotti & Gianluca Fiorentini eds. 1999); Gian Luigi Albano & Alessandro Lizzeri, *Strategic Certification and Provision of Quality*, 42 INT'L ECON. REV. 267 (2001); Alessandro Lizzeri, *Information revelation and certifiers*, 30 RAND J. ECON. 214 (1999).

[36] *See* Nina Walton, *Gatekeepers and CEO Reputation* (USC Center in Law, Economics & Organization, Research Paper No. C09-10) (2010).

asymmetries in the underlying certified market—is an exercise of considerable complexity that can easily fail.

Consistent with (but without making any reference to) these theoretical complexities, a growing number of legal scholars have observed a discrepancy between the tranquil world of good-faith transacting anticipated by the intermediary thesis and the turbulent world of bad-faith transacting as reflected by observed market outcomes. These scholars have identified circumstances where certifiers (more commonly referred to as "gatekeepers" in these discussions) do not alleviate or even promote informational asymmetries in financial and other markets. Some of the most notable deficiencies include: (1) certifiers' inherently limited ability to monitor the actions of all of its individual employees, who *do* have rational incentives to endanger the firm's reputational capital for the sake of private gain, (2) conflicts of interest due to client pressures to "go easy" (pressures that are inherent in any case where the certification product is paid for by the certified entity) and/or an interest in obtaining income streams on non-certification work from the same client; (3) lax investor demand for rigorous evaluation during boom markets; and (4) pressures to satisfy constituencies that may favor long-term pricing stability over short-term accuracy.[37] To this I add my own prior contribution, which identifies a combination of agency-cost and adverse-selection effects that can perpetuate the usage of non-cost-justified certification instruments that perversely inflate transaction costs.[38] Contrary to standard assumptions, there do exist plausible circumstances where a repeat-player intermediary will—and does—engage in behavior that would otherwise appear to "irrationally" endanger its accumulated stock of reputational capital.

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[37] For more complete discussions of these factors, see JOHN C. COFFEE, JR., GATEKEEPERS (2004); Prentice, *Strong SEC, supra* note __; John C. Coffee, Jr., *Gatekeeper Failure and Reform: The Challenge of Fashioning Relevant Reforms*, 84 B.U. L. REV. 301 (2004) [henceforth Coffee, *Gatekeeper Failure*]; Macey, *Efficient Capital Markets, supra* note __; Macey, *Reputational Model, supra* note __; John C. Coffee, Jr., "*It's About the Gatekeepers, Stupid",* 57 BUS. LAW. 1403 (2002); Lawrence Cunningham, *Beyond Liability: Rewarding Effective Gatekeepers,* 92 MINN. L. REV. (2007). For applications of some of these factors to the credit rating agencies, see Paul Lasell Bonewitz, *Implications of Reputation Economics on Regulatory Reform of the Credit Rating Agency*, 1 WILLIAM & MARY BUS. L. REV. 391 (2010). These practically oriented contributions are preceded by a theoretical analysis of intermediary failure in the legal literature, see Stephen S. Choi, *Market Lessons for Gatekeepers*, 92 NW. U. L. REV. 916 (1998) [hereinafter Choi, *Market Lessons*], who emphasizes the indeterminacy of gatekeeper performance given a number of factors, including the level of evaluation accuracy, the amount of certification capacity, the mix of different quality producers in the market, and the cost differential between low-quality and high-quality production.

[38] *See* Barnett, *supra* note __.

These descriptions of the circumstances under which intermediaries will relax evaluation and monitoring efforts are usually couched in customized terms specific to a particular financial market, scandal or even entity. Most importantly, existing discussions of localized certification failures—most notably, the extensive discussion of the role played by the credit rating agencies in the Enron scandal and recent financial crisis—do not situate these pathologies within the larger context of the economics and empirics of certification markets in general.[39] In the next two Parts, I carry out that task: I review the basic economic features of certification markets, as illustrated by evidence from various settings, and then propose an argument that anticipates in general why certifiers will consistently shirk even in the most feasibly successful certification markets. This account is not intended to be a comprehensive or exclusive theory of intermediary failure, which can arise due to a multiplicity of other factors in any particular market; rather, it is intended to focus attention on a single, primary and largely overlooked source of intermediary failure in certification markets that is impervious to, and can even increase as a function of, market maturity and sophistication. This proposition therefore applies most naturally to reputation-rich intermediaries that operate in markets populated by sophisticated parties—precisely the environment in which conventional arguments anticipate that certifiers' incentives to maintain evaluation quality would be strongest.

II. Economics of Certification Markets

It will now be useful to describe some of the fundamental economic characteristics of certification markets. These characteristics drive toward a single implication: mature certification markets reward reputation-rich incumbents with high entry barriers and strong market power. This theoretical expectation tracks the typically concentrated structure of mature certification markets, as illustrated by a representative list of leading private certification entities.

[39] For a limited exception, see Harold Furchtgott-Roth, Robert W. Hahn & Anne Layne-Farrar, *Regulating the Raters: The Law and Economics of Rating Firms,* J. COMPETITION L. & ECON. (2011) (comparing the performance of television ratings and credit ratings firms).

A. Certification Goods

Economic analysis distinguishes between three types of goods: (i) search goods, whose quality can be determined prior to consumption (e.g., a piece of clothing); (ii) experience goods, whose quality is only revealed after consumption (e.g., a dining experience); and (iii) credence goods, whose quality is not ascertainable before or after consumption (e.g., car repair). A certification instrument is a hybrid species that exhibits the characteristics of both experience and credence goods. Its quality is indeterminable prior to purchase; hence, it is clearly not a search good. With respect to some attributes, its quality is determinable some time after purchase; hence, it is like an experience good. With respect to yet other attributes, its quality is never determinable; hence, it is also like a credence good. To illustrate, consider a financial report delivered by an independent auditor on behalf of a company. Some of the auditor's quality will be revealed immediately upon scrutiny of the report—which may give some indication of diligence or expertise to a reasonably sophisticated reader—and some additional information may be revealed incompletely over time through some combination of revealed accounting irregularities and the absence of such irregularities. However, any such revelation will be inherently incomplete: alternative causal explanations complicate inferring either low quality from observed irregularities or high quality from the absence of any such irregularities and the sheer complexity of accounting rules may complicate quality evaluation for even the most sophisticated audience.

B. Supply-Side Entry Barriers

The delayed and incomplete revelation of the quality of a certification instrument has two crucial implications. First, much of the value of a certification instrument is a function of the certifier's reputational capital as reflected by its track record in evaluating and monitoring other companies. Users can employ that reputational capital as a proxy by which to reduce the costs that they would otherwise incur to evaluate quality directly in the associated certified market. This single feature accounts for the widespread use of certification instruments in informationally opaque markets, both by users who participate in those markets (for example, retail investors who rely on Moody's credit ratings to evaluate corporate bonds) and, what is perhaps not sufficiently appreciated,

regulators who supervise those markets (for example, federal education regulators who rely on private accreditation bodies to evaluate colleges and universities).[40] But securing users' (and regulators') confidence through the accumulation of a substantial stock of reputational capital is inherently costly and time-consuming. That gives rise to the second implication: any entrant into the certification market faces a second-order credibility barrier comparable to the first-order credibility barrier faced by the transacting parties to whom the certifier proposes to lend its reputational capital.

This informational asymmetry requires that the intermediary initially price its services close to cost or even below cost, effectively paying initial clients for the opportunity to establish a record of gatekeeping strength on the basis of which it will attract future clients. In order to undertake entry on this below-cost basis, any potential entrant into a certification market must anticipate that it can recover its initial costs in the event the market adopts its certification instrument. Expected cost recovery therefore relies on an expected barrier against easy entry in the event of success. Fortuitously, the inherent time-lag in accruing reputational capital provides a natural barrier to entry into certification markets. This obstacle allows incumbents to demand a premium that

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[40] *See* Matthew W. Finkin, *The Unfolding Tendency in the Federal Relationship to Private Accreditation in Higher Education*, 57 L. & CONTEMP. PROBS. 89, 92-93 (1994). Commentators often argue that the leading credit rating agencies have a uniquely protected market position due to the incorporation of their ratings into the governing regulatory infrastructure. *See* Partnoy, *supra* note __; Macey, *Reputational Model*, supra note __. As the education example suggests, regulators in many other areas rely on a private certifying or accrediting body (and, usually, only one or a few such certifiers) to verify compliance with regulatory requirements. For example, (i) the Department of Health and Human Services recognizes accreditation of a health care institution by a recognized private accrediting body as compliance with Medicare's "Conditions of Participation" (a condition for receipt of Medicare reimbursement), *see* Kinney, *supra* note __, at 57, and many states rely on accreditation by the leading private accrediting body as an indicator of compliance with state licensing requirements for health care facilities, *see id.*, at 58; (ii) the Occupational Safety & Health Administration (OSHA) relies on ratings issued by "nationally recognized testing laboratories" in order to confirm compliance with certain safety regulations, *see infra* notes __ and accompanying text; (iii) the U.S. Department of Agriculture (USDA) relies on seed designations issued by a single organization, the Association of Official Seed Certifying Agencies, *see* J.C. HACKLEMAN & W.O. SCOTT, A HISTORY OF SEED CERTIFICATION IN THE UNITED STATES AND CANADA (1990); and (iv) state and municipal building and construction codes often require compliance with American Gas Association standards for gas-based appliances, see ROSS E. CHEIT, SETTING SAFETY STANDARDS (1990). Other examples abound. The ubiquity of the phenomenon is instructive: like users, regulators reduce search costs by using certifier investigation as a proxy for quality and, in order to maximize search cost-savings, rely on a single certifier or limited class of recognized certifiers (and, it might be added: like managers, regulators reduce expected reputational losses for adverse outcomes by relying on the evaluation decisions of outside third parties).

rewards them for the initial outlay required to accrue reputational capital and the ongoing outlays required to maintain it.

C. **Demand-Side Entry Barriers**

These supply-side frictions are matched by demand-side frictions that cause distortion away from the textbook model of perfect competition. This derives from the fact that users of certification products, who can include both sellers and buyers in the associated certified market, anticipate switching costs in migrating to an alternative certifier. Given the experience-good and credence-good characteristics described above, those costs must be incurred prior to learning the quality of the alternative instrument. Those switching costs can be substantial and include: (i) for buyer and seller, costs incurred to evaluate the quality of an alternative certifier, (ii) for buyer, costs incurred to learn how to interpret an alternative certification product; and (iii) for seller, costs incurred to learn how to collect, store and deliver information to an alternative certifier (including costs associated with the delivery of sensitive information). Buy-side and sell-side switching costs are mutually reinforcing: as market analysts observe in the business credit reporting market (dominated by Dun & Bradstreet), firms have weak incentives to incur the cost of submitting information to any new reporting agency if they expect that all counterparties will only search for data on the incumbent's platform.[41] Finally, any certifier switch imposes an expected cost of unknown magnitude given the possibility that an alternative provider of unknown quality is less diligent or less competent relative to the existing provider.[42] Any such adverse outcome may then impose losses on the buyer in the form of quality shortfalls (that is, actual quality deviates from expected

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[41] *See* MFI Stock Review, Magic Diligence.com, Oct. 7, 2009, available at http://www.magicdiligence.com/articles/dun-bradstreet-DNB-2010-10-07 (last visited May 9, 2011). For broader discussion of this and other switching costs in the credit rating market, see LANGOHR & LANGOHR, *supra* note __, at 408.

[42] It has been observed that uncertainty over the quality of any new law firm can discourage clients from switching law firms, which confers some market power on the latter. *See* Gilson, *The Devolution of the Legal Profession*, *supra* note __, at 899. Prof. Gilson argues that this entry barrier shelters existing lawyers and allows them to exercise a gatekeeping function with respect to client's demands. That is, however, only half the point: as I emphasize throughout, that entry barrier also enables the law firm to shirk with respect to the client.

quality) or on the seller in the form of reputational injury or other costs (for example, lost future business as a result of quality shortfalls that were unknown to the seller[43]).

If we consider a user's incentives at the managerial (rather than the idealized entity) level, the switching costs are magnified still further. Managers of an entity that uses a dominant certification instrument have weak individual incentives to abandon it to the extent that use of the instrument insulates managers from reputational liability for adverse outcomes as a result of actions undertaken on the basis of a widely-recognized certification instrument. To illustrate by example: from the self-interested perspective of the board of a corporation involved in an acquisition transaction, a fairness opinion delivered from a prestigious financial advisor provides insurance against future reputational exposure (and legal liability) in the event the market subsequently renders an adverse judgment on the transaction. Use of an alternative and untested certifier (let's say, a new entrant into the top-tier investment banking market) erodes that private insurance function with little expected private gain to the board. Hence, the board may self-interestedly choose not to switch even if doing so would be in shareholders' or the entity's best collective interest (let's say, because the new entrant offers a superior analytical methodology that offers a higher level of certification accuracy). Identical logic may apply to regulators' adherence to an entrenched certification instrument: private self-interest may block publicly-interested adoptions of an alternative instrument by which to evaluate an underlying quality variable. The end-result in both cases is rational inertia in certification markets.

D. **Preliminary Evidence**

Demand-side and supply-side entry barriers imply certification markets with high concentration levels and low turnover rates. As illustrated in the Table below by some of the most prominent certifiers in the U.S. market[44], this is a commonly observed state of

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[43] These losses may sometimes take the form of compensation owing to disappointed consumers. *See, e.g., State of Louisiana v. Joint Commission on Accreditation of Hospitals, Inc.,* 470 So.2d 169 (La. Ct. App. 1985) (involving claim by a state hospital that, as a result of negligent accreditation services by the defendant, hospital patients had suffered injuries for which the state had been obligated to pay).

[44] The Table provides a representative but not a comprehensive list of private certifiers in the U.S. market. For a larger list, see NATIONAL INSTITUTE OF STANDARDS & TECHNOLOGY SPECIAL PUBLICATION 903, 2001 EDITION, DIRECTORY OF U.S. PRIVATE SECTOR PRODUCT CERTIFICATION PROGRAMS (ed. Charles

affairs: mature certification markets are often dominated by four or fewer providers—often labeled in each market as the "Big Three" or "Big Four"—that have been in existence for several decades or even more than a century. Long-lived duopolies and even monopolies are not uncommon. Where a certification market is populated by a large number of certifiers without any dominant market share, this indicates two possible stages of development: (i) an immature certification market that has not yet converged on a few recognized providers [45] or (ii) a mature certification market populated by multiple certifiers that act on a regional or market-specific basis under the umbrella of a single national agency (as in the case of the American Lumber Standards Committee, the Association of Official Seed Certifying Agencies or the Council for Higher Education Accreditation). Those umbrella organizations are sometimes in turn accredited by a national or international quasi-governmental authority, such as the American National Standards Institute, a nonprofit organization that promulgates or approves standards for product certification bodies in conformity with standards set forth by the International Standardization Organization. This multi-layer nested structure is consistent with theoretical expectations: informational asymmetries at the level of the certification market raise the specter of a second-order "lemons" market that must be addressed by interpolating another layer in the certification hierarchy, which raises the risk of another *n*-order lemons problem, which requires interpolating another layer . . . and so on. As will be shown subsequently, this nested structure is used in the most robust certification mechanisms.[46] Absent the natural cap imposed by cost-benefit considerations, the most reliable certification market would consist of an infinite ladder of higher-order certification mechanisms to restrain opportunism by the immediately preceding certification entity.

W. Hyer 2001); however, it is dated and uses a definition of certification that is both underinclusive (for example, it omits accounting firms and credit ratings firms) and overinclusive (for example, it includes small commercial testing laboratories that play no role in the standard-setting process). For a smaller list of rating firms that covers some aspects not covered here, see Furchtgott-Roth et al., *supra* note __.

[45] *See* Blair et al., *supra* note __, at 4 (noting proliferation of smaller firms in newer assurance markets that are emerging outside the traditional financial assurance market).

[46] *See infra* Part III.B.

Table II: Representative U.S. Certification Markets[47]

Certification Market	Leading Providers (Year Est.)	Entity Type
FINANCIAL MARKETS		
Bond ratings	**Standard & Poor's (1860)**	Corporation
	Moody's (1909)	Corporation
	Fitch (1913)	Corporation
Business credit reporting	Dun & Bradstreet (1841)	Corporation
Consumer credit reporting	**Experian** (1970)	Corporation
	Equifax (1899)	Corporation
	TransUnion (1969)	Corporation
Financial audits (large public corporations)	Ernst & Young (1903)	LLP
	Deloitte & Touche (1880)	LLP
	PWC (1865)	LLP
	KPMG (1870)	LLP
PRODUCT SAFETY & QUALITY; INDUSTRIAL PROCESSES; MARITIME		
Product certification	American National Standards Institute (1918)	Nonprofit
Electrical appliances; other products and processes[48]	**Underwriters' Laboratories** (1894)	Nonprofit
	Intertek (1885)	Corporation
Consumer products and services[49]	Better Business Bureau (1912)	Nonprofit
	Consumers Union (1936)	Nonprofit
	J.D. Power & Associates (1968)	Corporation
Gas appliances	AGA Laboratories (1918)	Nonprofit
Water treatment and related products	NSF International (1944)	Nonprofit
	IAPMO R&T (1936)	Nonprofit
	Water Quality Association (1949)	Nonprofit
Ship vessels (seaworthiness)	**Det Norske Veritas** (1864)	Foundation[51]
	Lloyd's Register (1876)	Nonprofit
	American Bureau of Shipping (1862)	Nonprofit
	Nippon Kaiji Kyokai (1899)[50]	Nonprofit

[47] Except as otherwise indicated, all information obtained through the website for each organization. Year established was determined based on the oldest antecedent organization engaged in substantially the same line of business. Scholarly or trade press sources (as noted in footnotes below) were used to identify leading certifiers in each market. Where more than one leading provider is listed, firms are marked in bold if they have substantially larger market shares.

[48] The extent of UL's dominance can vary in any particular market. Generally, however, it can take a stronger and weaker form, respectively: (i) it dominates certification and standard-setting services; or (ii) it monopolizes standard-setting but faces competition in certification services. *See* Cheit, *supra* note __.

[49] Listed providers are merely representative. Smaller providers may operate in specific markets.

[50] These four societies account for more than 70% of the world's registered shipping fleet, as measured in tonnage terms as of 2006. Other entities tend to be far smaller, are confined to national

Certification Market	**Leading Providers (Year Est.)**	**Entity Type**
MEDIA; AGRICULTURE/LUMBER; AUTOMOTIVE PARTS		
Television Viewership	Nielsen Media Research (1936)	Corporation
Radio Listenership	Arbitron (1949)	Corporation
Seed certification	Association of Official Seed Certifying Agencies (1919); state crop improvement agencies usually certify compliance with standard[52]	Nonprofit
Lumber	American Lumber Standards Committee (1924); accredits five regional lumber grading agencies.[53]	Nonprofit
Automotive Parts	Certified Automotive Parts Association (1987)	Nonprofit
EDUCATION; HEALTHCARE		
Nonprofit universities	Council for Higher Education Accreditation (1996)[54]	Nonprofit
Colleges and universities (rankings)	U.S. News & World Report – "America's Best Colleges" (1983)	Corporation
College applicants	**Educational Testing Services** ("SAT") ACT, Inc.	Nonprofit Nonprofit
Child day care centers	Natl. Assoc. for Education of Young Children (1926) [55]	Nonprofit
Hospitals and healthcare facilities[56]	**The Joint Commission** (1951) Healthcare Facilities Accreditation Program (1945) Det Norske Veritas Healthcare (2008)	Nonprofit Nonprofit Subsidiary of foundation

classification markets and associated with lower standards. *See* NICOLAI LAGONI, THE LIABILITY OF CLASSIFICATION SOCIETIES 37 (20 07).

[51] The Norwegian foundation (or *stiftelse*) is a trust entity that manages funds entrusted to it irrevocably for a particular charitable or other purpose and pursuant to the entity's constituent documents. Like a U.S. nonprofit entity, it has no owners and therefore cannot raise outside capital by issuing equity.

[52] *See* Miller B. McDonald, *Seed Certification in the United States* (Working Paper).

[53] These include: Western Wood Products Assoc.; West Coast Lumber Inspection Bureau; Southern Forest Products Assoc.; Southern Pine Inspection Bureau; and California Redwood Inspection Service.

[54] The Council, formed through the merger of other organizations, recognizes seven regional accreditors, which are viewed as providing the highest accreditation standard. National accreditors generally accredit for-profit and vocational institutions and are viewed as providing a lower accreditation standard. *See* Adam Aasen, *Battle rages on accreditation*, FLORIDA TIMES-UNION, Nov. 12, 2008.

[55] On market share, see Xiao, *supra* note __.

[56] For information on market leaders, see Diana Meldi et al., *The Big Three: A Side by Side Matrix Comparing Hospital Accrediting Agencies*, Synergy, Jan./Feb. 2009, avail. at http://www.dnvaccreditation.com/pr/dnv/document/Comparing_Accreditation_Programs_Synergy_.pdf.

Certification Market	Leading Providers (Year Est.)	Entity Type
DIAMONDS; COLLECTORS' MARKETS		
Polished diamonds	**Gemological Institute of America** (1931)[57]	Nonprofit
	American Gemological Society (1934)	Nonprofit
	European Gemological Laboratory (1974)	Corporation
Baseball cards	**Professional Sports Authority** (1991)	Corporation
	Beckett Grading Service (1999) [58]	Corporation
Comic books	Comic Guaranty (2000)[59]	LLC
Coins	Professional Coin Grading Service (1986)	Corporation
	Numismatics Guaranty Corporation (1987)	Corporation
ETHICAL MARKETS		
Kosher food	Orthodox Union (1898)[60]	Nonprofit
Sustainable forestry (Wood-derived products)	**Programme for Endorsement of Forest Certification** (1999)[61]	Nonprofit
	Forest Stewardship Council (1993)[62]	Nonprofit
	Sustainable Forestry Initiative (1994)	Nonprofit
Fair trade	Fair Labelling Organization International (1997)	Nonprofit
Dolphin-Friendly fishing	Earth Institute (1982)	Nonprofit
"Green" construction	U.S. Green Building Council (1994)	Nonprofit

Consistent with standard economic logic, it might be thought that the risk of certifier opportunism would be reduced in certification markets characterized by intense competition among a large number of certifiers, who would be under pressure to maintain

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[57] GIA represents roughly two-thirds of the *graded* polished diamond market (which in the aggregate represents 80% of the total global market). GIA and five additional entities graded 99.7% of all certificated polished diamonds. *See* Ken Gassman, *Diamond Grading Labs: Different Strokes for Different Folks,* idexmagazine, July 14, 2008, avail. at http://www.idexonline.com/portal_FullMazalUbracha.asp?id=30649 (based on sample of 12 million diamonds, representing 80% of the global diamond trade). Certification agencies other than GIA are viewed as less rigorous. Interview with Diamond Wholesaler, July 28, 2011.

[58] On market share, see Jamal & Sunder, *supra* note __.

[59] Constitutes 95% of the market, based on eBay listings as of Jan. 2007.

[60] The Orthodox Union certifies roughly 75% of the packaged kosher food in U.S. supermarkets. The next-three largest certifiers certify approximately 15% of the national market. *See* Shayna M. Sigman, *Kosher Without Law: The Role of Nonlegal Sanctions in Overcoming Fraud Within the Kosher Food Industry*, 31 FL. ST. UNIV. L. REV. 509, 526-27 (2004).

[61] PEFC is an umbrella organization that supervises 35 national certification organizations. It covers approximately two-thirds of the global certified forest area.

[62] FSC accredits certifiers to certify compliance with its standards. *See supra* note __.

certification effort in order to preserve market share. Precisely the opposite, however, appears to be the case: a large number of providers imposes search costs on users that would erode the cost savings enjoyed by using a certification proxy for product quality or, as discussed subsequently, reduce the "rent cushion" that induces robust effort in certification accuracy. A recurrent complaint in immature certification markets is an excessive number of certification standards or entities, resulting in consumer confusion, certifier laxity, or compliance burdens for certified entities.[63] By contrast, the most well-developed certification markets converge on a stable and small number of providers. Since the early 20th century, there have never been more than five general-purpose credit ratings firms (currently there are three)[64] and, for at least the past 50 years, there has been no entry (excluding mergers among existing participants) into the small club of "Big N" accounting firms for large publicly-traded companies.[65] Remarkably, since the Enron scandal (and the dissolution of its auditor, Arthur Andersen) in 2001 and other reporting scandals of the early 2000s, there have been no new entries into the public accounting market (which is now overwhelmingly dominated by only four firms and, in some industry segments, even fewer[66]) and, since the financial crisis commencing in 2008, there has been no meaningful entry into the bond ratings market despite widespread criticism of incumbents' performance. Invitations to entry into lucrative markets—in

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[63] These concerns have arisen with respect to unstable or multiple standards for certifying organic produce, *see infra* note __; coffee, *see* Margaret Cho, *Marks of Rectitude*, FORDHAM L. REV. 2319, 2341-46 (2010); coins and stamps, see Ken Lawrence, *A Dissenting Expert Opinion on Graded Certificates*, July 2007, available at http://www.virtualstampclub.com/grading_kl.html ; and vegetarian food labels, see Jeanne Yacoubou, *Vegetarian Certifications on Food Labels: Why Do They Mean?*, 25 VEGETARIAN J. 17 (May 1, 2006); and art authentication, see "Authentication and Authenticity", available at http://www.artfake.net/ art_authentication.html.

[64] *See* Lawrence J. White, *The Credit Rating Industry: An Industrial Organizational Analysis*, in LEVICH ET AL., *supra* note __, at 45. U.S. market share is as follows: S&P – 40%; Moody's – 40%; Fitch – 20%. *S*ource: *http://www.forbes.com/2007/08/13/credit-rating-crisis-oxford_0814oxfordanalytica.html.*

[65] *See* Andrew McClennan & In-Uck Park, *The Market for Liars: Reputation and Auditor Honesty*, J. ECON. LIT. (2004) (noting that all current "Big N" accounting firms are descended from firms that expanded nationally in the early 20th century, which have since merged among themselves to consolidate into the "Big Four" and expanded globally and nationally).

[66] Remarkably, in certain industries, even some of the "Big Four" auditors lack sufficient competency and experience and clients must choose among only three or even two auditors. *See* Lawrence Cunningham, *Too Big to Fail: Moral Hazard in Auditing and the Need to Restructure the Industry Before It Unravels*, 106 COLUM. L. REV. 1698, 1709 n.50 (2006) [hereinafter Cunningham, *Too Big to Fail*].

2010, Moody's enjoyed revenues of $577 million and a profit margin of 26.95%—appear to be declined by (or beyond the reach of) all potential entrants. Consistent with theoretical expectations, high switching costs and entry costs appear to discourage competitive threats to existing incumbents.

III. The Certification Paradox

The inherent barriers to entry into, and the resulting market power of incumbents in, certification markets generate both efficiency gains and losses from a social point of view. A reputation-based entry barrier (and the resulting premium accrued by the dominant certifier) generates efficiency gains because, without it, potential entrants would have insufficient incentives to make the initial investments to accumulate reputational capital and incumbent intermediaries would have reduced incentives to maintain the value of accumulated reputational capital by sustaining investments in certification strength. But an entry barrier generates efficiency losses insofar as it shields incumbents from competitive threats, which may induce an incumbent to relax its vigilance and earn short-term gains by harvesting the cost-savings earned through reduced evaluation efforts. The interaction of these two effects—investing effort to preserve reputational capital or reducing efforts to "harvest" that capital—determines the quality of any certifier's evaluation and monitoring services at any time.

Let's consider whether it is plausible to believe that entry barriers induce a certifier to slack and thereby endanger its reputational stock. It might be objected—as the credit rating agencies have repeatedly asserted[67]—that even a dominant certifier would never relax its evaluation and monitoring efforts. Doing so would endanger the certifier's reputational assets, and associated income stream, by inviting entry by competitors who would provide unblemished certification products to the incumbent's clients. A one-time shirking gain could not justify risking an entire stock of reputational capital. This argument reiterates the stylized game-theoretic model of indefinite repeat-play behavior: assuming a sufficiently low discount rate, long-term reputational incentives and the associated expected profit stream make one-time shirking or other

[67] *See* CREDIT RATING AGENCIES AND THE FINANCIAL CRISIS BEFORE THE HOUSE COMMITTEE ON OVERSIGHT AND GOVT. REFORM, 111TH CONG. 41 (2008).

malfeasance a losing proposition on a net expected value basis.[68] Shirking therefore never occurs except as a result of miscalculation or other error. But this cogent logic does not track either the mixed results reached by empirical researchers or, more anecdotally, the observed mixed performance of prominent intermediaries in those same markets. These discrepancies mean either that intermediaries do not conform to the rational model or that the rational model is incomplete. Existing critiques of the academic consensus in favor of market self-correction tend to elect the former alternative, discarding or substantially modifying the rational-choice framework to reflect psychological biases that distort decisionmaking.[69] That approach suffers from the objection that any claimed bias is selected on an *ad hoc* basis, relies primarily on experimental evidence, does not plausibly apply to sophisticated entities, or lacks generality of application. I will argue for the latter alternative: with a single change to assumptions, a rational choice model anticipates certifier failure as a recurrent outcome even in an indefinite repeat-play environment.

To start, let's suppose that intermediary failure to deter fraudulent or otherwise improper actions in the certified markets is a decreasing function of the intermediary's investments in evaluation and monitoring activities. That is: each marginal dollar investment in certification activities yields some marginal improvement in certification quality; conversely, each marginal dollar withdrawn from certification activities yields some marginal decline in certification quality. Any certifier can select from a range of more and less intensive levels of effort—reflecting greater and lesser costs, respectively—in order to detect and monitor the degree of compliance by certified firms with the relevant quality standard, both at the moment of product release and, in the case of some products, for an ongoing period following product release (as in the case of a financial instrument that must be periodically re-rated). For example, Underwriters' Laboratories ("UL"), the leading product safety certifier in the U.S. market, sometimes

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[68] For leading applications of this rationale to the reputation context, see Benjamin Klein & Keith B. Leffler, *The Role of Market Forces in Assuring Contractual Performance*, 89 J. POL. ECON. 615 (1981); Carl Shapiro, *Premiums for High Quality Products as Returns to Reputation*, 98 Q. J. ECON. 659 (1983).

[69] *See, e.g.*, Prentice, *Strong SEC, supra* note __, at 786, 797-98, 813-16; Prentice, *Irrational Auditor, supra* note __, at 139-81; Donald C. Langevoort, *Organized Illusions: A Behavioral Theory of Why Corporations Mislead Stock Investors (and Cause Other Social Harms)*, 146 U. PA. L. REV. 101, 115 (1997).

uses a decentralized system that requires that certified firms undertake their own testing in order to demonstrate to UL compliance with the relevant standard and subjects those firms to periodic inspection of their testing procedures by UL staff.[70] This inspection procedure reflects an intermediate choice between the lowest level of effort (self-certification by manufacturers and no testing by UL or company staff and no inspection by UL staff) and the highest level of effort (continuous direct testing and monitoring by UL staff). Truste, the leading but widely-criticized provider of "privacy assurance" services in the e-commerce market, elects a lower level of certification effort: it evaluates the stated privacy policies of a certified website but fails to evaluate actual compliance with those policies and allegedly takes limited efforts to investigate complaints of any site's noncompliance. Reduced effort diminishes the informational content of the certifier's imprimatur.[71]

Any incumbent certifier will weigh the immediate cost-savings from relaxing evaluation effort against the discounted stream of expected future losses in the form of lost reputational stock and diminished future income in the event the certifier's shirking is subsequently observed. The critical observation is that the reputational penalty for observed underperformance will not always be immediate and permanent ejection from the market; rather, the size of the penalty will fluctuate as a continuous function of the switching costs borne by users in the certified market. *So long as switching costs are positive, intermediary malfeasance or other forms of underperformance will not always trigger reputational penalties that compel irrevocable exit from the market.*[72] Put

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[70] For a description, see *Midwest Plastic Fabricators, Inc. v. Underwriters Labs., Inc.,* 906 F.2d 1568, 1569-70 (Fed. Cir. 1990); Siemens AG, "The Secrets of UL" (2009), at p.14, available at https://www.automation.siemens.com/cd-static/material/info/e20001-a820-p305-v2-7600.pdf.

[71] *See* Edelman, *supra* note __.

[72] I am aware of one previous contribution that explicitly takes into account the complication caused by positive switching costs to the reputational intermediary thesis. *See* Gary Biglaiser & James W. Friedman, *Middlemen as guarantors of quality,* 12 INT'L. J. IND. ORG. 509, 530 (1994) (exploring how the incentives of a "middleman" to abandon a producer client decline as the cost of replacing the producer's good with a substitute increases). My thesis differs from this argument insofar as it considers the switching costs borne by certified market participants in moving to an alternative certifier. For related arguments in the reputation literature more generally, see Joseph Stiglitz, *Imperfect Information in the Product Market,* in HANDBOOK OF INDUSTRIAL ORGANIZATION Vol. 1 (eds. Richard Schmalansee & Robert Willig 1989) (observing that rational reputation building requires that a consumer will rationally terminate its relationship with a firm that sells the consumer a low-quality good); Johannes Horner, *Reputation and Competition,* 92 AMER. ECON. REV. 644 (2002) (showing that, in the case of a producer with a history of high quality product delivery, whether or not consumers terminate a relationship with that producer as

differently: users' tolerance of certifier shirking is endogenous to users' next-best certification or other transactional alternative. If switching costs are low (for example, it is not costly to evaluate product quality directly or it is not costly to adopt an alternative certification instrument), then the reputational penalty will approach the discontinuous function used in stylized game-theoretic models of perfectly faithful repeat players. But if those costs are high (for example, it is exorbitantly costly to evaluate product quality directly or to adopt an alternative certification instrument), then the reputational penalty will be milder. In the latter case, transacting parties in the certified market will rationally tolerate some shirking by the dominant certifier in order to avoid the larger cost associated with migrating to an alternative certifier, evaluating quality directly or abandoning the market altogether.[73] So long as the costs borne by users as a result of certifier shirking by the incumbent do not exceed the switching costs that would be incurred by moving to an alternative certifier of unknown quality (or undertaking evaluation directly), users will rationally decline to impose a draconian reputational penalty that would terminate the relationship. Users' tolerance will increase further to the extent any perceived case of certifier shirking is fairly attributable to a one-time evaluation mistake, a good-faith failure to predict future events in a complex environment, or misinformation supplied by the certified entity's management.[74]

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soon as it delivers a low quality product depends on consumers' "patience", which is in turn a function of competing producers' customer bases, which serve as a proxy for product quality). In a brief suggestion, Prof. Kraakman contemplated the possibility that an underwriter that had successfully serviced numerous clients may then decide to "milk its reputation". *See* Kraakman, *Gatekeepers*, *supra* note __, at 97-98.

[73] It might be objected that users could simply pay an additional amount to the certifier in order to induce it not to shirk—or put differently, that the certifier will increase price rather than decrease quality (that is, costs) in order to increase profits. That is only true, however, assuming that users and certifiers can adequately contract over all elements of the certifier's performance in order to identify what behavior would constitute "shirking" beyond a certain quality threshold. My analysis assumes that some combination of specification costs borne by both parties at the time of contracting, observation costs borne by the user during performance (including the difficulty in distinguishing between shirking and mere mistake), and/or verification costs borne by any adjudicative agent in the event of dispute are sufficiently high so as to make any such contract infeasible. These assumptions are consistent with the limited observability and verifiability of the quality of certification instruments (consistent with their status as mixed experience/credence goods), which inherently limits the transactional possibilities that can be implemented through some combination of contract and reputation. By contrast, it is *not* costly to contract over price; hence, incomplete contracting environments promote certifiers to exploit user lock-in through quality, the non-contractible variable. For a related observation, see Farrell & Klemperer, *supra* note __, at 2.2 (noting that firms can exploit locked-in users by reducing quality rather than increasing price).

[74] On the latter possibility, see Walton, *supra* note __.

Switching costs on the demand side, coupled with entry lag on the supply side, as compounded by the ambiguous signal transmitted by perceived cases of certifier shirking, erode confidence in reputational intermediaries' ability to entirely or even substantially cure informational asymmetries in certified markets. Positive switching costs for users and entry barriers for competitors imply that users of a certification product do not always wield a credible threat of irrevocable termination, which in turn means that intermediaries *do* have rational incentives to relax investments in evaluation quality.[75] If users are slow to switch, and competitors are slow to enter, then incumbent certifiers may be substantially protected against loss of market share over even fairly substantial deviations from some historical baseline of certification effort. Hence, the otherwise puzzling persistence of intermediary "failure" even in the most well-developed certification markets is not at all surprising. Demand-side and supply-side frictions invite any incumbent to reduce effort so as to extract value from users that is precisely equal to users' anticipated switching costs. Intermediary shirking results in some substantial incidence of fraud and other forms of malfeasance in the certified market, which in turn raises the intermediary's expected reputational and other penalties for perceived failure but immediately saves on monitoring, diligence and other costs. To be clear, this does not mean that dominant certifiers will drastically reduce efforts: doing so would impose costs on the transacting population that exceed anticipated switching costs, thereby inviting migration to competitors, reversion to direct evaluation or market exit. But it *does* mean that dominant gatekeepers will make controlled reductions in effort upon

[75] It might be reasonably argued that, even if users do not wield a credible termination threat ex post, forward-looking users will anticipate certifier opportunism and decline to adopt the auditor's services ex ante. This is correct: to induce adoption of its instrument, a certifier must compensate non-myopic users ex ante by low initial pricing or high initial quality, which then compensates for subsequent losses due to reductions in quality or increases in price in the future. This is consistent with a general "bargain/ripoff" sequence anticipated in the economic literature on switching costs, which anticipates that users who suffer from ex post switching costs will be compensated by reduced prices ex ante, resulting in no efficiency loss (ignoring adverse distributional effects on later-adopting users if providers cannot discriminate among existing and new users). The same holds true if a firm seeks to exploit locked-in users by reducing quality in lieu of increasing prices. *See* Joseph Farrell & Paul Klemperer, *Coordination and Lock-In: Competition with Switching Costs and Network Effects* (Working Paper 2006). This yields an important implication: namely, certifiers have incentives to commit against future opportunism in order to maximize adoption of their instrument at a minimum user discount. As I will discuss subsequently, certifiers attempt to do so through the adoption of organizational forms that constrain their future incentives to relax quality. *See infra* Part V.

achieving some level of market dominance. Doing otherwise would be strictly implausible: profit-seeking entities would be leaving money on the table.

We can now draw a thoroughly *un*conventional picture of the certification intermediary that is consistent with both a rational-choice model of certification behavior and mixed empirical evidence on the performance of certifiers. If entrants cannot immediately replicate an incumbent's reputational capital and users cannot costlessly migrate to an alternative certifier (or, as must be true by necessity, revert to direct evaluation or exit the market), then controlled underperformance by even the most well-established intermediaries is fully expected. This muted punishment for certifier shirking is compounded by the limited observability of certifier effort and the ambiguous signal transmitted by even observed cases of apparent certifier shirking. The standard view states that reputational intermediaries will not risk forfeiting a large stock of reputational capital to secure the gains from a one-shot fraudulent action. But that ignores the fact that the *users* of dominant certification instruments will not forfeit a large stock of learning investments specific to an existing certification technology, incur learning costs specific to any new certification technology, and incur additional losses of an unknown magnitude, by terminating an intermediary over a single case or even multiple cases of controlled shirking. Intermediaries anticipate users' forgiving response and reduce evaluation efforts accordingly, which in turn weakens the deterrent effects of certification mechanisms on malfeasance by transacting parties in the certified market. The same incentive structure that drives established intermediaries to act in a reasonably diligent and trustworthy manner as a general matter over time (and therefore play some appreciable function in remedying informational asymmetries in the certified market) drives intermediaries to periodically underinvest in certification effort. Far from an exceptional event, controlled forms of intermediary failure are a virtual certainty in any successful—or more precisely, the most successful *feasible*—certification market.

IV. A Regulatory Conundrum

If the standard intermediary thesis has a substantially limited scope of application, then it is worthwhile reexamining the associated normative presumption against

aggressive state regulation to improve gatekeeping markets.[76] Contrary to a fairly well-settled consensus in the law and economics literature generally and capital markets scholarship in particular, there appears to be a renewed justification for substantive legal requirements in order to supplement incomplete reputational incentives in the second-order certification market and, by implication, in the first-order certified markets. That intuition is familiar to policymakers: as discussed below, every major case of gatekeeper failure in the capital markets since the Great Depression has triggered aggressive legislative and regulatory intervention. Regulatory interventions to improve gatekeeping quality in the capital markets and other settings have taken two primary forms: (i) increasing certifiers' conduct requirements and liability exposure; and (ii) increasing the ease of entry into certification markets. But the persistence of gatekeeper failure over that same period at least equally implies that these interventions have had little deterrent effect. I will argue that that the latter implication is the more likely possibility. Both the logic of the certification paradox, and the informational limitations faced by legislators, courts and regulators that must select some socially desirable level of "reasonable" certifier effort, imply that traditional forms of state intervention can easily have no or even perverse deterrent effects on certifier performance and, as a result, on the information available in the certified market.[77]

A. **Regulatory Risk I: Too Much Information**

Expanding certifier liability to plug apparent shortfalls in reputational incentives is a mainstay of securities regulation: (i) in response to the 1929 stock market crash, the Securities Act of 1933 imposed duties on underwriters, directors, accountants and other

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[76] For another contribution that emphasizes the fallibility of reputational constraints (but on other grounds) and urges reconsidering the academic consensus against securities regulation, see Prentice, *Strong SEC, supra* note __, at 779-80. In contrast to my argument, however, Prof. Prentice argues for a largely unqualified policy program of aggressively regulating the capital markets in order to eliminate fraudulent behavior. As I argue subsequently, this traditional position ignores the diminishing marginal returns, and even potentially perverse results, of aggressive regulation of certification markets.

[77] In the following discussion, I do not discuss the most extreme form of regulatory intervention into certification markets: namely, displacement of those markets by state monopolization. This is both because (i) outside the food, drug and air transport markets, this is not generally a politically feasible option and (ii) it suffers from some well-known deficiencies that afflict all forms of state intervention by informationally constrained regulators in certification markets. That is: the same informational constraints that limit the efficacy of top-down regulatory interventions into private certification markets casts doubt on state monopolization of those markets. *See infra* note __.

advisors to detect and prevent misrepresentations in the public issuance of securities[78]; (ii) in response to accounting scandals in the late 1960s and 1970s, culminating in the bankruptcy of the Penn Central Railroad, Congress created the Federal Accounting Standards Board (FASB) to provide further supervision of the accounting profession[79]; (iii) in response to Enron and other scandals in the late 1990s, the Sarbanes-Oxley Act of 2002 instructed the SEC to further regulate auditors and other gatekeepers and, under Section 404 of the Act, imposed onerous control and monitoring requirements on public firms, which in turn required the services of outside accountants and other advisors to comply with those requirements[80]; and (iv) in response to the most recent financial crisis, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 subjects credit rating agencies to private causes of action for reckless or knowing failure to conduct a reasonable investigation of an issuer's financial condition.[81] Every expansion of gatekeeper liability imposes three important costs: (i) incremental out-of-pocket compliance costs, (ii) incremental expected litigation-related losses given the positive likelihood of false prosecution, opportunistic plaintiffs' suits and judicial error, and (iii) incremental costs in the form of transactional distortions induced by increased liability exposure. There is no assurance that those costs—which can reach exorbitant levels—result in net gains to users: regulatory intervention may fail to increase information flow into the market at all or may increase information flow but still fail to yield a net social gain taking into account the costs required to generate that information.

The reason for these perverse outcomes has been well-developed in law-and-economics critiques of securities regulation and it carries considerable force in the

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78 This refers to Section 11 of the Act. *See* 48 Stat. 74, 82, *codified at* 15 U.S.C. § 77k (1982), which requires that underwriters and other advisors undertake a reasonable investigation in connection with some or all of the documentation provided to investors in the case of a registered public offering. Those advisors may also be liable under "aider and abettor" liability under Section 10(b) of the Securities Exchange Act. However, court decisions have prevented private suits based on this theory, which greatly diminishes the liability threat. *See Central Bank of Denver v. First Interstate Bank of Denver*, 511 U.S. 164 (1994) (holding that there is no private cause of action for "aider and abettor" liability under Section 10(b) of the Securities Exchange Act), which the Court reaffirmed in *Stoneridge Investment Partners LLC v. Scientific-Atlanta*, 552 U.S. 148 (2008).

79 SENATE ENRON REPORT, *supra* note __, at 17.

80 For a full discussion, see BRUCE F. DRAVIS, THE ROLE OF INDEPENDENT DIRECTORS AFTER SARBANES-OXLEY Ch. 6 (2007).

81 DODD-FRANK WALL STREET REFORM AND CONSUMER PROTECTION ACT, Pub. L. No. 111-203, § 932(a), 124 Stat. 1376, 1879 (2010). .

certification context. Expanding certifier liability will be socially inefficient in any market where intermediaries are already providing the highest level of certification quality—or put differently, the lowest likelihood of certification failure—for which users are willing to pay.[82] This assertion rests on an uncontroversial proposition that is overlooked in popular and even some recent legal scholarly commentary, which simply assumes that all measures should be employed to eliminate gatekeeping error (and, as a result, transactional malfeasance) in the capital markets. Assuming positive investigation and monitoring costs, however, the optimal level of gatekeeper underperformance is almost certainly *not* zero; at some point, requiring increased certification effort imposes marginal social costs that are not matched by marginal social benefits. This breakeven point is accelerated to the extent that users place a low value on incremental certification accuracy (more likely in the case of lower-value goods)[83] or can substitute toward direct evaluation of product quality at a lower cost (more likely in the case of high user sophistication). Very simply: it is extremely unlikely that mandating perfect or even near-perfect certification accuracy is socially efficient.

If the certifier cannot pass on the incremental regulatory costs to users for one or both of these reasons, then its total expected return is reduced. Faced with this predicament, the certifier faces two choices depending on the elasticity of user demand

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82 For similar observations, see Choi, *Market Lessons, supra* note __, at 947.

83 It might be thought that users will never sufficiently value the additional information demanded by regulators since they would have demanded it independently prior to any government intervention. That would be true if users' revealed preferences always track users' actual preferences. But that will not be the case in markets where the information provided by a certifier is nonexcludable (e.g., the rating issued on a bond), which will induce any individual user to underdemand the amount of information it truly prefers. In that case, government intervention can resolve collective underprovision by the private market of a public good. This is perhaps the strongest argument in favor of mandatory disclosure laws in the securities markets and other product markets where securities-related information is nonexcludable. *See* William H. Beaver, *The Nature of Mandated Disclosure*, in RICHARD A. POSNER & KENNETH E. SCOTT, ECONOMICS OF CORPORATION LAW AND SECURITIES REGULATION 320-21 (1980). Note, however, that there are at least two market remedies to elicit some evaluation effort despite the public-good qualities of securities-related information. First, the market often addresses the free-rider problem by deriving demand from sellers rather than buyers—an imperfect solution because it creates a conflict of interest on the part of the certifier. Second, in any market where the value of information depreciates rapidly, it is often technologically feasible to restrict the flow of information to non-paying third parties until it has become stale or no longer provides any competitive advantage. Where that is the case, then the intermediary can provide the information to subscribing buyers, in which case the conflict of interest problem disappears. The existence of these market-based remedies qualifies, but does not eliminate, the case for state intervention to cure underprovision effects as a result of public good characteristics.

for its evaluation service. First, it can limit its evaluation service to the highest-valuing users who are willing to pay for the inflated informational bundle required by law. That action has two effects: (i) it imposes deadweight losses by diverting resources to the generation of unwanted information (assuming even highest-valuing users do not sufficiently value the additional information mandated by law), which is certainly an adverse outcome, and (ii) it reduces the size of the certified market—most likely, by eliminating the lowest-quality portion of the market that finds it most costly to meet the elevated certification threshold[84], which may or may not be an adverse outcome. Second, if the number of highest-valuing users willing to pay for the mandated informational bundle is insufficient to cover the certifier's costs, then the certifier will exit the market and deploy resources to an alternative use.[85] This action eliminates the private certification market entirely, which is almost certainly an adverse outcome.

Market exit is not an artifact of theoretical argument. Substantial increases in certifier liability in the financial markets have prompted certifier firms to drastically reduce activities in the regulated area. The following episodes illustrate this outcome.

- **1972:** The SEC targeted prestigious law firms that had issued opinion letters relating to the "sham" sale of a corporate subsidiary in connection with which the seller issued financial statements that were later deemed to be materially inaccurate.[86] Following the SEC's action, it apparently became standard practice in corporate law firms to subject opinion letters to internal review procedures, which would seem to improve gatekeeping strength; however, it also became standard practice to burden opinion letters with disclaimers and qualifications that constrain attorney liability, which diminishes gatekeeping strength.[87] As a result, the letter's informational

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84 For similar views, see Kraakman, *Gatekeepers, supra* note __, at 77.

85 Other commentators have recognized that excessive liability can result in the withdrawal of gatekeeper services in the financial markets context. *See* Kraakman, *Gatekeepers, supra* note __, at 94; Coffee, *Gatekeeper Failure, supra* note __, at 60-61.

86 See *Securities & Exchange Cmm'n v. National Student Marketing Corporation et al*., 402 F.Supp. 641 (D.D.C. 1975). The court held that the lawyers had a duty to delay the merger (by withholding the required legal opinion) when they learned that shareholders were being provided with false and misleading information.

87 *See* James J. Fuld, *Lawyers' Standards and Responsibilities in Rendering Opinions*, 33 BUS. LAW. 1295, 1307 (1978); John P. Freeman, *Current Trends in Legal Opinion Liability*, 1989 COLUM. BUS. L. REV. 235, 242.

content fell considerably.[88] This implies that law firms were unable to pass on to clients the costs of increased liability for alleged opinion inaccuracies and then reduced those costs by limiting the scope of the opinion.

- **2002**: The Sarbanes-Oxley Act requires that accounting firms register with the Public Company Accounting Oversight Board (PCAOB) in order to audit public companies and increased those firms' exposure to liability for involvement in issuer misstatements and other malfeasance. As a result, liability insurance premia increased and many smaller auditing firms elected not to register with the PCAOB, thereby exiting the public accounting market.[89] The result: increased legal liability may have reduced competition for public accounting clients, resulting in fewer pressures on existing audit firms to maintain quality standards. Whether the sum of legal and reputational liability (and resulting deterrent effect) borne by those firms is negative or positive relative to the *status quo ante* is undetermined.

- **2003**: The New York State Attorney General's office, led by Eliot Spitzer, entered into a global settlement with Wall Street firms implicated in allegedly misleading stock analyst ratings being issued for clients of the firms' investment banking divisions. The settlement sought to reduce conflicts of interest by limiting banks' ability to fund research with investment banking fees. As a result, investment banks reduced their investment in "sell-side" ratings that were previously available to retail investors and top analysts sought employment with investment boutiques that cater to sophisticated investors.[90] Whether the resulting reduction in information available to retail investors represents a net social gain is again undetermined.

- **2010**: The Dodd-Frank Act repealed the exemption enjoyed by rating agencies with respect to liability under the Securities Act for "experts" who consent to the use of their opinions in the prospectus for a publicly issued security.[91] As a result, Moody's

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88 *See* Barnett, *supra* note __.

89 *See* Alan Reynolds, *Political Responses to the Enron Scandal*, in AFTER ENRON: LESSONS FOR PUBLIC POLICY 30 (ed. William A. Niskanen 2005).

90 *See* Reynolds, *supra* note __, at 37-40.

91 DODD-FRANK WALL STREET REFORM AND CONSUMER PROTECTION ACT, Pub. L. No. 111-203, § 932(a), 124 Stat. 1376, 1879 (2010) (creating private cause of action against a "NRSRO"-designated rating

> and S&P refused to allow bond issuers to use their ratings in offering documentation, which temporarily halted offerings of asset-backed securities that must include credit ratings in offering documents under SEC regulations.[92] Given this predicament, the SEC waived the requirement that asset-backed issuers include credit ratings in the offering document[93] and relaxed the circumstances under which rating agencies could be held liable for issuers' inclusion of the ratings in offering documents.[94]

Each of these episodes exhibits a common pattern. Regulators expand certifier liability to increase the amount of information in the market; certifiers respond by drastically curtailing certification activities, which may reduce the total amount of information available to market participants. That outcome implies that users in the certification market are unwilling to pay for the state-imposed increment in informational accuracy; unable to pass on the costs to a sufficient number of users, the certifier is compelled to curtail participation or withdraw in order to maintain existing profits or simply avoid insolvency. Avoiding that outcome is precisely the reason mentioned by the House of Lords in a decision in which it rejected imposing a duty of care on an allegedly negligent certifier (known as a "classification society") in the maritime industry. Writing for the majority, Lord Steyn argued: "If such a duty is recognized, there is a risk that classification societies might be unwilling from time to time to survey the very vessels which more urgently require independent examination."[95] It is precisely the ominous threat of gatekeeper exit that motivates what is often the final sequence in the repeating pattern of gatekeeper regulation: the state attempts to restore participation by limiting gatekeeper liability, whether explicitly through damages caps, outright

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agency where it has "knowingly or recklessly failed . . . to conduct a reasonable investigation of [a] rated security").

92 *See* Law360, *Dodd-Frank: Rating Agencies and the ABS Market*, Jan. 24, 2011, available at http://www.bingham.com/Media.aspx?MediaID=12358.

93 For the SEC action, see Ford Motor Credit Company, LLC, SEC No-Action Letter (July 22, 2010), which was extended indefinitely by Ford Motor Credit Company, LLC, SEC No-Action Letter (Nov. 23, 2010).

94 SECURITIES ACT RULES, SEC COMPLIANCE & DISCLOSURE INTERPRETATIONS: NEW QUESTION 233,04, NEW QUESTION 233.05, NEW QUESTION 233.06, NEW QUESTION 233.07, NEW QUESTION 233.8 (July 27, 2010) (identifying circumstances where the rating agency's consent is not required in order to include their ratings in the offering documentation).

95 *Marc Rich & Co. AG v. Bishop Rock Marine Co. Ltd. (The Nicholas H)*. [1996] 1 A.C. 211, 241.

immunity or selectively deferred prosecution (as accorded to KMPG in 2005 despite alleged participation in illegal tax shelters), or implicitly through procedural burdens being placed on plaintiffs (as implemented by the Private Securities Litigation Reform Act of 1995).[96] The result is the familiar "flip-flop" pattern that has marked top-down approaches to improve gatekeeper performance through prescriptive regulation.

B. **Regulatory Risk II: Too Much Competition**

Even scholars that are dubious of the wisdom of increasing gatekeeper liability tend to welcome reforms that alleviate high concentration levels in certification markets[97], which would appear to be an uncontroversial application of competitive discipline to elicit improved performance. This view drives the regulatory initiatives pursued by both the Credit Rating Agency Reform Act of 2006[98] and the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010[99], which seek to undermine the rating agencies' market power by reducing the extensive use of their ratings in the securities, banking and financial regulatory apparatus. The underlying logic is simple: undermining the agencies' position as the presumptive industry standard-setters will erode their protected position, expand competition and improve incentives to deliver high-quality performance. But it is entirely possible that these reforms might degrade the agencies' performance even further.[100] The reason derives from a core paradoxical feature of certification markets: certifiers' incentives to accumulate reputational capital by maintaining evaluation quality depend on being able to charge an above-market

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96 PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995, PUB. L. 104-67, 109 Stat. 373. The final sequence in this regulatory pattern sometimes takes the alternative path of government provision: as state-imposed liability inflates the costs of certifiers beyond the level that users are willing to bear, certifiers rationally exit and the state must enter in order to provide the withdrawn service. The result is a certification monopoly that is not subject to *any* form of legal liability, which may in turn push the amount of information below the level provided by the market prior to effective nationalization.

97 *See, e.g.*, TESTIMONY OF STEVEN L. SCHWARCZ BEFORE THE UNITED STATES SENATE COMMITTEE ON GOVERNMENTAL AFFAIRS, Mar. 20, 2002, at 173. For arguments that rating agencies' performance would be improved by multiplying providers, see Macey, *Efficient Markets*, *supra* note __, at 421-22; Macey, *Reputational Model*, *supra* note __; Claire A. Hill, *Regulating the Rating Agencies*, 82 Wash. U. L. Q. 43, 45 (2004).

98 Pub. L. No. 109-291, 120 Stat. 1327.

99 *See supra* note __.

100 For a similar view with respect to the rating agencies, see Bonewitz, *supra* note __, at 405-06, 422-23.

premium, which in turn depends on barriers to entry that prevent price from converging to marginal cost.[101] Any reduction in market concentration exerts competitive pressures on incumbent certifiers, which limits incumbents' ability to demand above-market premia, which depresses incumbents' incentives to make the investments required to sustain certification strength. This is particularly true in certification markets for new products (including financial instruments): assuming that developing a new certification instrument is costly but observing and imitating it is not, a protected market is a required predicate to induce incurrence of the fixed costs required to develop that instrument.[102]

The certification paradox therefore implies a somewhat counterintuitive normative proposition: the cushion provided by supracompetitive rents must be preserved to some extent in order to induce intermediaries to maintain costly investments in evaluation quality (including the development of new certification instruments) that can be amortized over a stream of premia from future clients.[103] This complication implies a high risk of regulatory error: to pass a social cost-benefit test, any state-engineered reduction of entry barriers must improve competitive pressures to maintain evaluation quality without unduly eroding the rent cushion required to reward and sustain those same efforts. The informational basis for navigating that tradeoff is essentially nil, in which case regulators are effectively operating by chance.

Current attempts—widely applauded in the press and other popular venues—to restrain the market power of dominant certifiers in the ratings market recall previous

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101 This feature is hardly unique to certification markets: any market that relies on rewarding vendors for investments in accumulating reputational capital through delivering high-quality goods must price those goods above the competitive price; otherwise there are no positive profits to induce vendors to forego short-term shirking gains over long-term reputational gains. For the leading expression of this insight in the employment context, see Carl Shapiro & Joseph Stiglitz, *Equilibrium Unemployment as a Worker Discipline Device,* 74 AMER. ECON. REV. 433 (1984), and, more generally, see Klein & Leffler, *supra* note __.

102 Consistent with this intuition, UL, the product certification entity, apparently invests fewer resources in research in markets where it faces competition from smaller labs that can free-ride on its costly efforts to develop a new standard. *See* Cheit, *supra* note __, at 108-09.

103 This assertion applies a broader proposition: perfectly competitive markets drive price to marginal cost but, as a result, reduces providers' incentives to protect margins by maintaining high quality. Positive pricing effects are offset by negative quality effects; as a result, there is an ambiguous and possibly "nonmonotonic" relationship between market competitiveness and product quality. For economic models that formalize this intuition, see Rachel Kranton, *Competition and the incentive to produce high quality,* 70 Economica 385 (2003), and, in a more nuanced treatment, see Heski Bar-Isaac, *Imperfect information and reputational commitment,* 80 ECON. LETTERS 167 (2005).

excursions along this regulatory path in other industries serviced by a small number of certifiers (or a large number of certifiers governed by a collective association). Throughout the 1970s and 1980s, federal antitrust agencies (and civil plaintiffs) launched suits against professional licensing organizations in the legal, accounting, medical specialty and engineering professions that enforced limitations on advertising, price competition and client solicitation.[104] In 1988, the Occupational Safety & Health Administration (OSHA) implemented regulations to accredit multiple nationally recognized testing laboratories in order to facilitate entry into the product safety certification market, which had been (and is still) dominated by the long-standing incumbent, Underwriters' Laboratories.[105] It is not clear that these interventions yielded expected improvements in quality or expansions in output as a result of increased competitive pressure. Even the opposite outcome is plausible: the certification paradox implies that increasing competitive threats to incumbent certifiers may induce those firms to reduce evaluation investments given the increased availability of alternative providers, the declining expected longevity of market dominance and, as a result, the declining expected value of accumulated reputational capital. It is certainly true that the pricing or other conduct limitations enforced by licensing organizations in professional certification markets moved price away from competitive levels; but that short-term pricing distortion may be consistent with the purpose of sustaining long-term incentives to maintain reputational quality. Anecdotally, no one would argue that audit quality in the public accounting market has improved since federal regulators compelled the industry to lift

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104 *See* Goldfarb v. Virginia State Bar, 421 U.S. 773 (1975) (holding that minimum fee schedule enforced by state bar association was illegal restraint of trade); National Society of Prof. Engineers, 435 U.S. 679 (1978) (holding that professional engineers' association's ban on competitive bidding was illegal restraint of trade). Following these decisions, the Federal Trade Commission was particularly active in pursuing professional organizations' rules that limited competition in advertising or pricing. *See, e.g.*, Massachusetts Board of Registration in Optometry, 110 F.T.C. 549 (1988) (holding that private licensing board may not prohibit truthful advertising of discounts or truthful advertising that contains "sensational" or flamboyant" testimonials); Wyoming State Board of Registration in Podiatry, 107 F.T.C. 19 (1986) (prohibiting limitations on advertising); Rhode Island Board of Accountancy, 5 Trade Reg. Rep. (CCH) § 22.308 (1986) (prohibiting limitations on client solicitation); Louisiana State Bd. of Dentistry, 106 F.T.C. 65(1985) (prohibiting limitations on advertising).

105 *See* Mark R. Barron, *Creating Consumer Confidence or Confusion: The Role of Product Certification Marks in the Market Today*, 11 MARQUETTE INTELLECTUAL PROPERTY LAW REVIEW 414, 422-23 (2007), *citing* 29 C.F.R. § 1910.393 (2005). On the dominance of Underwriters Laboratories and some moderate competitive threats since OSHA's action, see Brett Nelson, *Under Fire,* Forbes.com, June 21, 2004, available at http://www.forbes.com/forbes/2004/0621/103_print.html.

limitations on advertising and bidding for audits starting in the early 1970s.[106] To the contrary: echoing observations often made in the legal market, commentators often argue that the opposite outcome has prevailed as accounting firms have reportedly shifted their focus from maintaining long-term reputational integrity to maximizing short-term profits.[107]

This counterintuitive relationship is consistent with preliminary empirical evidence in some markets: certification quality appears to decline as competitiveness increases in vigor. A recent study finds that the predictive accuracy of Moody's and S&P's ratings, as well as the correlation between incumbents' ratings and market-implied yields, appears to have declined in the 1990s in industries where Fitch, a third competitor, made significant inroads.[108] This finding is consistent with observations by participants in less developed foreign ratings markets, where excessive competition among a large number of agencies is alleged to induce "rating shopping" by issuers and a race to the bottom among competing providers.[109] Outside the financial markets, a recent study found that auto emissions testing firms in more competitive markets exhibit higher pass rates for polluting vehicles relative to firms in less competitive markets, suggesting that increased competition elicits lower certifier investments in evaluation accuracy.[110] These otherwise curious results are consistent with theoretical expectations. Without the assured cushion of long-term reputational rents, competing certifiers have reduced incentives to maintain the high effort demanded by professional integrity and rationally adopt the "cut-throat" tactics of a short-term player.

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106 On the FTC's successful efforts to pressure professional accounting organizations to lift those bans, see Cunningham, *Too Big to Fail*, *supra* note __, at 1712-13.

107 *See* S.A. Zeff, *How the Accounting Profession Got Where It Is Today: Part I*, 17 ACCOUNTING HORIZON 189 (2003).

108 *See* Bo Becker & Todd Milbourn, *Reputation and competition: Evidence from the credit rating agency market* (Working Paper 2008).

109 *See* Atmadip Ray, *Too many rating agencies destructive for industry*, THE ECONOMIC TIMES, June 13, 2011, available at http://articles.economictimes.indiatimes.com/2011-06-13/news/29653175_1_rating-agencies-rating-shopping-rating-shopping (quoting rating agency executive that number of rating agencies in Indian market is excessive and results in "ratings shopping" by certified firms).

110 *See* Victor Manuel Bennett, Lamar Pierce & Jason Snyder, *Driven to Cheat: Competition and the Unethical Firm* (Working Paper 2011) (using sample consisting of 4,560,300 emissions tests from 3,257 firms and measuring competitiveness by number of firms located within a certain degree of geographical proximity). The authors attribute this result to the absence of any vigilant counterparty in the emissions market to discipline certifier opportunism (state auditing of emissions testers is light).

C. **Summary**

To be clear, I am not rejecting the possibility that traditional regulatory interventions to improve certifier performance have no merit and can never result in a net social gain. My assertion is more nuanced: absent complete information, any regulatory intervention must contemplate that regulatory intervention may aggravate rather than alleviate any existing market failure. Increases in gatekeeping liability can misestimate market demand for certification accuracy and trigger costs the market refuses to bear. Lowering entry costs into the gatekeeping market may erode the rent cushion that elicits investment in evaluation effort. Given these risks, controlled reductions in effort by dominant intermediaries—pejoratively labeled "shirking", "underperformance" or "failure" (imperfect terms I have used throughout for lack of a good substitute)—may even be an efficient outcome in real-world certification markets characterized by high contracting costs borne by users and high information costs borne by regulators.[111] Where parties cannot adequately contract over quality and regulators cannot adequately specify quality, an implicit license for dominant certifiers to shirk may be the least-cost mechanism for delivering the highest *feasible* level of certification quality over time. Even if the market's self-corrective capacities are far more limited than has been commonly assumed, the risk of regulatory failure may be so great that this existing market "failure" is the best-available state of affairs.

V. Organizational Form: Regulation by Proxy

The line of argument has now reached a Panglossian juncture: that is, observed cases of intermediary failure may not always be a failure necessitating regulatory intervention taking into account real-world transaction and information costs. This prudential approach is not a mere academic fantasy; rather, it is consistent with over a century's worth of common-law treatment of certifiers. Most U.S. courts have not welcomed plaintiffs' attempts to impose liability on certifiers, either by asserting various

[111] I am aware of one other publication that explicitly treats fraud as an inherent aspect of market activity under repeat-play competitive conditions with positive evaluation costs. *See* Michael R. Darby & Edi Karni, *Free Competition and the Optimal Amount of Fraud,* 16 J. L. & ECON. 67 (1973). That paper derives fraud from the buyer's inability to evaluate the quality of a credence good in the primary goods or services market (e.g., car repair), whereas I derive fraud (or malfeasance generally) from barriers to entry in the secondary certification market.

tort claims or seeking to override the contractual limitations on liability that are often demanded by certifier entities.[112] English courts, which have been especially inhospitable[113], virtually celebrate the absence of liability. In a case involving alleged negligence by a marine classification society (a certifier of vessel seaworthiness), the House of Lords proudly observed: "In England no classification society, engaged by owners to perform a survey, has ever been held liable to cargo-owners on the ground of a careless conduct of any survey"[114]—and then proceeded to issue a certifier-friendly decision consistent with that tradition. This hands-off approach has been upheld by U.S. courts that almost always shield credit rating agencies from defamation and other tort liability claims on First Amendment grounds.[115] Even after passage of the Dodd-Frank Act of 2010 (which sought to eliminate the SEC's historical exemption of the credit rating agencies from liability under the securities laws), the Second Circuit has

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[112] For a review of this small body of law, see VICTOR P. GOLDBERG, FRAMING CONTRACT LAW: AN ECONOMIC PERSPECTIVE 245-76 (2006), *originally published* as Victor P. Goldberg, *A Reexamination of* Glanzer v. Shepard: *Surveyors on the Tort-Contract Boundary*, 2 THEORETICAL INQUIRES IN LAW 476 (2002). For a review of the related body of law concerning the tort liability of accreditation agencies to third-party consumers, see Peter Schuck, *Tort Liability to Those Injured by Negligent Accreditation Decisions*, 57 L. & CONTEMP. PROBS. 185 (1994), who concludes that the "risk of tort liability for accreditors appears to be very low", *see id.*, at 185. The leading New York case on certifier liability, *Glanzer v. Shepard*, 135 N.E. 275 (N.Y. 1922), imposes a "duty toward buyers" that is hospitable to third-party claims against certifiers who make measurement or other errors. In New York and elsewhere, however, courts have usually protected certifiers from liability, either due to contractual disclaimers or on factual grounds. *See* GOLDBERG, *supra* note __, at 255-70.

[113] *See* BELSON, *supra* note __, at 68-69. Consistent with this tendency, English courts tended to reject libel claims brought against credit reporting agencies in the early 20th century. *See* London Association for Protection of Trade v. Greenlands Ltd. ([1916] 2 A.C. 15; [1916-17] All E.R. Rep. 452 HL (House of Lords, 30 Jan. 1916). At the time, these decisions were considered to be virtual preconditions to preserving a private trade credit reporting services. *See* C. MCNEIL GREIG, THE GROWTH OF CREDIT INFORMATION: A HISTORY OF UPAT-INFOLINK PLC 131-33 (1992).

[114] Marc Rich & Co. AG v. Bishop Rock Marine Co. Ltd. (The Nicholas H). [1996] 1 A.C. 211, 241.

[115] *See, e.g.*, Compuware Corp. v. Moody's Investors Services, 499 F.3d 520, 526 (6th Cir. 2007) (holding that, under First Amendment case law, actual malice is predicate standard for imposing liability on rating agency for non-verifiable statements). A recent ruling in the Southern District of New York contests the presumption that credit ratings are always subject to First Amendment protection. *See* Abu Dhabi Commercial Bank v. Morgan Stanley & Co. (S.D.N.Y. Sept. 2, 2009) (stating that rating agencies are only entitled to First Amendment protections when the ratings "are considered matters of public concern" and specifically excluding cases where ratings are distributed to a select group of investors). Note, however, that this ruling does not apply in any case where the rating agency discloses its rating to the public at large.

aggressively maintained this approach in dismissing a claim filed against the credit rating agencies under the Securities Act of 1933.[116]

If that non-interventionist approach were upheld without qualification, then the identified deficiencies in the standard form of the intermediary thesis would be a matter of pure academic interest. Even taking those deficiencies into account, this positive argument would simply supply a different ground—the risk of regulatory error—for the standard normative position that has recommended minimal state intervention to improve performance in gatekeeping markets. In this Part, I show that, even if this minimalist position against most forms of state intervention were adopted, the identified deficiencies in the intermediary thesis *still* matter in two important respects. First, as a positive matter, these deficiencies anticipate that certifiers will take steps in order to commit to users against acting opportunistically and thereby limit the discount demanded by users ex ante to protect against that risk. This theoretical expectation is soundly confirmed: across a variety of markets and periods, certifiers exhibit a consistent preference for organizational forms that limit managers' ability to act opportunistically toward locked-in users. This anomalous organizational pattern provides perhaps the strongest support for the inherent fallibility of certification intermediaries—for otherwise, there would be little reason for certifiers to adopt organizational forms that constrain their ability to extract profits by which to attract investors and award compensation by which to attract the most talented personnel. Second, as a normative matter, these organizational choices imply a role for nuanced state intervention in order to improve certifier performance through the provision—non-mandatory, encouraged or mandatory depending on a variety of factors—of organizational forms at a limited to even zero risk of regulatory error. Preliminary evidence based on organizational strategies in the financial certification and "ethical" certification markets illustrate these arguments.

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[116] *See, e.g., In re Lehman Brothers Mortgage-Backed Securities Litigation, Wyoming State Treasurer et al. v. Moody's Investor Service et al.* (2d Cir. May 11, 2011). The court held that Moody's, Standard & Poor's, and Fitch cannot be held liable as "underwriters" under Section 11 or as "control persons" under Section 15 of the Securities Act of 1933 in connection with their ratings of mortgage-backed securities, although it left open the possibility that rating agencies might be liable as "experts" under Section 11 of the Act given changes provided for by the Dodd-Frank Act.

A. Constrained Organizational Forms: A Partial Remedy for Certifier Opportunism

An institutional constant runs across certification markets: nonprofit, mutual and cooperative forms represent, and continue to represent, the leading organizational preference in private certification markets.[117] With a few exceptions (notably, the rating agencies, the credit reporting agencies and some of the agencies in collectors' markets), this is true of the selected set of certifying entities listed in *Table I.* Nonprofit certifiers often adopt further measures in order to commit to certification quality, including procedural devices to avoid conflict of interest, to maximize participation by affected constituencies, and to minimize exposure to antitrust liability for collusive action.[118] For example: Consumers Union, the nonprofit publisher of *Consumer Reports*, refuses to accept advertising or free samples from manufacturers; the leading product certification entity, Underwriters' Laboratories ("UL"), is governed by a board of 18 trustees, none of whom may have any affiliation with any manufacturer or other entity whose products are certified by UL; and Det Norske Veritas, a leading ship classification entity (that is, an entity that certifies vessel seaworthiness), is a Norwegian foundation governed by a board of directors and council consisting mostly of members appointed by external organizations and representatives of customers, employees and other stakeholders.[119] This is not to say that for-profit entities never supply reliable certification services—some of UL's competitors (including its European rivals Intertek, SGS and Bureau Veritas, which have a stronger presence outside the U.S.) appear to operate successfully on that basis and, in 2007, even UL announced its intention to form a for-profit testing subsidiary in order to support its expansion plans.[120] Rather, I am simply observing that dominant

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[117] On the prevalence of nonprofit entities in private certification sectors, see Jonathan T. Howe & Leland J. Badger, *The Antitrust Challenge to Non-Profit Certification Organizations: Conflicts of Interest and a Practical Rule of Reason Approach to Certification Programs as Industry-Wide Builders of Competition and Efficiency*, 60 WASH. U. L. Q. 357, 362 (1982).

[118] *See* Howe & Badger, *supra* note __, at 365-66.

[119] *See* DNV, "About Us-Governing Bodies", available at http://www.dnv.com/moreondnv/profile/governing_bodies/dnvcouncil.asp (last visited June 24, 2011).

[120] *See* Press Release, "UL announces intent to establish for-profit subsidiary", Aug. 28, 2007, avail. at http://news.thomasnet.com/companystory/UL-announces-intent-to-establish-for-profit-subsidiary-531377. Interestingly, UL has previously skirted the boundary between for-profit and nonprofit enterprise. In 1943, it lost its tax-exempt status by judicial decision on the ground that testing the safety of electrical products for commercial enterprises was a "regular business of a kind ordinarily carried on for profit", see

providers in certification markets tend to operate under a nonprofit or some other constrained form of organization. That is an unusual organizational preference relative to most other areas of modern economic activity, which are dominated by unconstrained forms of organization such as the stock corporation or, more recently, the limited liability corporation.

In this Section, I set forth a simple explanation for the consistent preference for constrained forms of organization among certifier entities. Compared to for-profit forms of organization that impose no or fewer constraints on the liquidity of ownership interests and the size of managerial compensation, constrained forms (for simplicity, equated at this stage in the discussion with nonprofit organizations) reduce the shirking behavior identified by the certification paradox as an inherent feature of mature certification markets. Certifiers have an incentive to adopt this constrained form of organization in order to commit to users who would otherwise demand a discount to reflect anticipated future opportunism. To understand why this may be an effective commitment strategy, let's compare the incentives of a for-profit and nonprofit certifier. The for-profit entity will avoid opportunistic behavior—that is, behavior that imposes losses on users in the certified market—only to the extent that such behavior is expected to generate long-term reputational and related costs in excess of short-term gains. A nonprofit entity has positive but weaker incentives to act opportunistically. The reason derives from the defining legal characteristics of a nonprofit entity: (i) it cannot distribute profits to managers, members or any other "controlling" party, and (ii) managerial compensation (which could otherwise be used to evade the nondistribution constraint) is limited by a "reasonableness" standard. [121] This bolstered nondistribution constraint means that a nonprofit's managers have reduced incentives to act opportunistically in order to generate

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Underwriters' Laboratories, Inc. v. Commissioner, 135 F.2d 371 (10th Cir. 1943). The decision was later overturned by legislation and UL regained its federal tax-exempt status. *See* Cheit, *supra* note __.

[121] *See* BRUCE R. HOPKINS, THE LAW OF TAX-EXEMPT ORGANIZATIONS §§ 1.1(a), at 5, § 20.1, at 561 (9th ed. 2007). Precisely, U.S. federal tax laws require that none of a nonprofit organization's net earnings "inure" directly or indirectly to the benefit of any "individual or other person who has a close relationship with the organization" or "is in a position to exercise a significant degree of control over it." *Id.* ch. 20, at 560.

profits for distribution to themselves, members or outside controlling parties in the form of cash or stock dividends.[122]

The nondistribution constraint has been used to account for the predominance of nonprofit forms in various markets where a supplier faces difficulty in committing to provide a certain level of quality to its customers. The logic is straightforward: organizational law substitutes for (or complements) imperfect commitments available through contract or reputation.[123] This principle can be illustrated in the case of charitable organizations. Given that a donor has limited ability to monitor the use of her donations, a nonprofit organization can provide greater assurance, relative to a for-profit stock corporation, that it will use donations for the donor's intended purposes rather than being diverted for managers' self-interested purposes.[124] The nondistribution constraint imposed by law—and enforceable (albeit imperfectly) by the Internal Revenue Service and state attorneys general[125]—enables the nonprofit entity to make a credible commitment to any prospective donor. By analogy, the nondistribution constraint enables the certifier to represent that, even in the event of market dominance, the certifier's managers will have reduced opportunities to shirk given the constraints imposed by organizational law. In the stylized case where the nondistribution constraint is perfectly enforced, the entity's managers have no incentive to capture the surplus available as a result of users' costs in switching to an alternative provider. The same logic exerts descriptive force even in more realistic scenarios where the nondistribution constraint is imperfectly enforced. So long as the managers of a nonprofit entity have fewer opportunities to extract value from users relative to the managers of a conventional

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122 For the leading sources of this argument, see HENRY HANSMANN, THE OWNERSHIP OF ENTERPRISE (1986); Henry Hansmann, *The Role of Nonprofit Enterprise*, 89 YALE L. J. 835 (1980). For an application of this type of argument in the consumer credit industry, see Ryan Bubb & Alex Kaufman, *Consumer Biases and Firm Ownership* (Working Paper 2009) (arguing that nonprofit or mutually owned entities in the credit market have reduced incentives to exploit consumer biases in accumulation of credit).

123 *See* Hansmann, *supra* note __.

124 *See* HANSMANN, *supra* note __, at 229-30; Fama & Jensen, *supra* note __, at 115.

125 There is recent evidence that enforcement is at least nontrivial: in 2011, the IRS announced that it had revoked the tax exemptions of 275,000 nonprofit organizations (mostly organizations with revenues of less than $25,000), shrinking the national tax-exempt nonprofit sector by 17 percent. *See* Stephanie Strom, *I.R.S. Ends Exemptions for 275,000 Nonprofits*, N.Y. TIMES, June 8, 2011.

for-profit entity, the former can commit to engage in a lower level of opportunistic behavior by reference to the governing organizational form.

In a world of imperfect commitment technologies, the nondistribution constraint reduces the opportunism risk that may otherwise distort the efficient provision of certification services. Organizational instruments fill in the shortfalls in reputational and contractual mechanisms by which to ameliorate the second-order lemons problem that can impede efficient growth of a certification market. This logic appears to animate an otherwise curious distinction in English common law on certifier liability. In a 1908 case, the House of Lords had ruled that a libel claim could be brought against a trade credit reporting agency that had erroneously evaluated the plaintiff's financial condition, resulting in lost business.[126] In a 1916 case, however, the House of Lords appeared to reach precisely the opposite ruling, holding that a libel claim could *not* be brought against a credit reporting agency that made an erroneous report with respect to the plaintiff's financial condition. To reconcile its decisions, the House of Lords relied on the defendant agency's argument that, as a "mutual body not trading for profit", it was entitled to circulate trade credit information among its members (that is, subscribers) without fear of a libel claim, so long as the information remained confidential and was distributed "without malice".[127] The House of Lords reasoned that the defendant in the 1908 decision had operated on a for-profit basis and was therefore not entitled to any such generous treatment, thereby leaving the existing precedent untouched. This seems like an arbitrary distinction designed to reach a desired outcome without violating rules of precedent. But translated into the terms of the certification paradox, it is a well-grounded distinction: given the deterrent force exercised over the certifier's behavior by the mutual form of organization, the court could forego the regulatory risk attendant to imposing crude forms of legal liability that could overstate the socially desirable level of certification accuracy and unwittingly drive certifiers out of the market entirely.

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126 *Macintosh v. Dun* [1908] A.C. 390 (Privy Council).

127 *London Association for Protection of Trade v. Greenlands Ltd*. ([1916]) 2 A.C. 15; [1916-17] All E.R. Rep. 452 HL). For discussion, see Greig, *supra* note __, at 131-33.

B. Constrained Entities in Financial Certification Markets

The partial remedy for certifier opportunism supplied by constrained organizational forms has been widely adopted by the intermediaries that supply certification services to the financial markets. Some of these constrained forms—mostly, mutual entities and general partnerships—operate under profit-maximization constraints that are more relaxed relative to a nonprofit entity but still represent a meaningful difference as compared to a stock corporation.[128] From the 18th century through the early 1970s, the mutual form was the predominant choice of the intermediaries that supplied and operated the transactional infrastructure of the U.S. financial markets: life, health and property insurers, open-end mutual funds, mutual savings banks, credit unions, and savings and loan associations.[129] Remarkably, core credit and insurance functions of the financial markets—markets otherwise characterized by unconstrained profit-seeking—were implemented by private entities subject to constraints on the ability of managers and other controlling parties to extract profits through cash and stock distributions. As shown in the Table below, with the exception of the credit reporting agencies, this preference for constrained organization historically has characterized the final intermediary type that

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[128] Unlike a nonprofit, the mutual and the general partnership can distribute cash dividends to its members: in the case of the mutual, based on the member's use of the mutual's services and, in the case of the partnership, based on an agreed-upon formula. Like a nonprofit, however, neither entity can raise external capital by issuing equity (a mutual can only raise funds through retained earnings or debt securities unattractively subordinated to policyholders' claims) and neither entity's members can freely sell or transfer interests to third parties; moreover, a mutual usually pledges to deliver services at cost while a general partnership's members operate under the specter of unlimited personal liability. None of these impediments exist in the case of the standard corporate form. Note further that, as a functional matter, there is little difference between a general partnership and a nonprofit entity in the typical case where the partnership operates under a relatively small scale. Given the sums at stake, the nonprofit statute's limitation on a manager's ability to extract "reasonable" compensation from operating surplus has little incremental effect.

[129] *See* Robert E. Wright, *Thinking beyond the public company*, MCKINSEY QUARTERLY, Sept. 2010; Robert E. Wright, *Governance and the Success of U.S. Community Banks, 1790-2010: Mutual Savings Banks, Local Community Banks, and the Merchants (National) Bank of New Bedford, Massachusetts* (Working Paper 2011). For related observations, see Henry Hansmann, *The Economic Role of Commercial Nonprofits: The Evolution of the U.S. Savings Bank Industry*, in THE ECONOMICS OF NONPROFIT ENTERPRISES (ed. Richard Steinberg 2004); Henry Hansmann, *The Organization of Insurance Companies: Mutual versus Stock*, 1 J. L. ECON. & ORG. 125 (1985). I am not suggesting that banks and insurance companies serve a certification function (although banks did once do so implicitly by supplying bills or exchange and other negotiable instruments in the absence of a reliable government-issued currency); this is simply intended to provide a broader sense of the organizational tendencies that predominated historically in the financial markets.

supports exchange in the financial markets: the circulation of information through certification intermediaries.

Table III: Organizational Choices of Certifiers in the Financial Markets

Entity	**Predominant Historical Organizational Choices**	**Predominant Recent Organizational Choices**	**Period of Change**
Credit reporting agencies	Corporation	Corporation	N/a
Trade credit reporting agencies	Corporation; Mutual[130]	Corporation	N/a
Accounting firms	General partnership[131]	Limited liability partnership	1990s
"Bulge Bracket" investment banks (underwriters)	General partnership[132]	Corporation	1990s
Stock exchanges	Mutual; nonprofit[133]	Corporation	2000s
Law firms	General partnership[134]	Limited liability partnership	2000s

In the wake of the recent financial crisis, some commentators have drawn attention to the dramatic change in the organizational forms used by key intermediaries in

130 In the United States, business credit reporting agencies have generally been organized using the corporate form. However, starting in the late 18th century, English creditors formed "trade protection societies" on a cooperative nonprofit basis to share information on the creditworthiness of potential counterparties. *See* Olegario, *supra* note __, at 32-33; GREIG, *supra* note __, at 11-20.

131 *See* Royston Greenwood & Laura Empson, *The Professional Partnership: Relic or Exemplary Form of Governance*, 24 ORG. STUDIES 909 (2003).

132 *See* CHARLES R. GEISST, ENCYCLOPEDIA OF AMERICAN BUSINESS HISTORY, VOL. 2, at p228.

133 *See* David Reiffen & Michel Robe, *Demutualization and customer protection at self-regulatory financial exchanges*, 31 J. FUTURES MARKETS 126 (2011). Exchanges s also exerted an indirect organizational effect by prohibiting membership to any entity organized as a stock corporation. As a result, leading investment banks and brokerage firms on Wall Street were organized as partnerships. The New York Stock Exchange lifted the prohibition in 1970. *See* Alan D. Morrison & William J. Wilhelm, Jr., *The Demise of Investment Banking Partnerships: Theory and Evidence* (Working Paper 2004).

134 On the use of general partnership forms by law firms and accounting firms, see Greenwood & Empson, *supra* note __.

the financial markets starting in the early 1990s.[135] As shown in the Table above, the historical predominance of constrained forms among financial certifiers has been displaced by the conventional stock corporation or, in the case of professional advisors, the limited liability partnership. In the late 1990s and early 2000s, following the lead set in the 1980s by the thrift banking industry[136] and in the 1990s by the life and property-liability insurance industry[137], the final bastion of constrained organization in the financial markets yielded to this trend. During the space of little more than a decade, stock exchanges, underwriters, public accounting firms and national law firms largely abandoned a centuries-old' commitment to constrained forms of organization in favor of corporate forms or the hybrid option represented by limited liability partnerships.[138]

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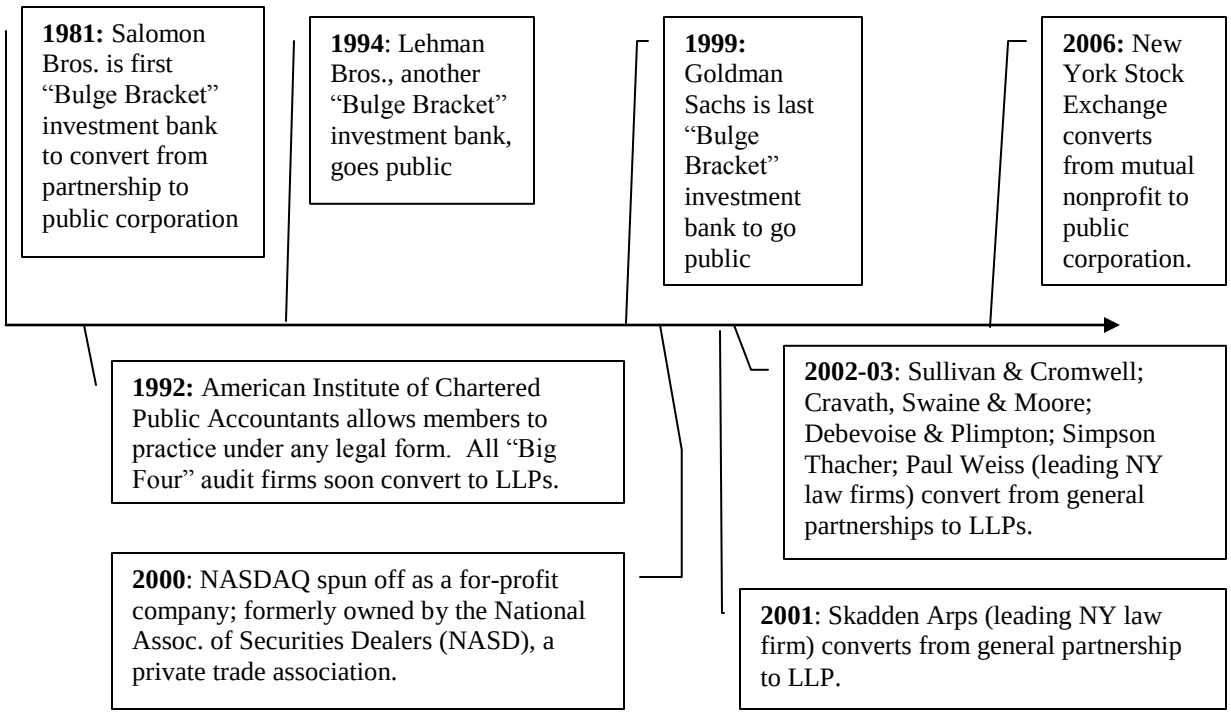
135 *See* Wright, *supra* note __; Macey, *Reputational Model, supra* note __, at 24; s*ee also* RIBSTEIN, THE UNCORPORATION, *supra* note __, at 207 (suggesting that reckless investment decisions by investment banks prior to the financial crisis would not have been tolerated by partnerships owned by their employees).

136 In 1973, state mutual S&Ls were almost $3 billion greater in assets than state stock S&Ls; by 1977, stock associations were over $11 billion greater, and, as of 1981, national stock S&Ls represented only 17% of the total S&L population (including state mutuals, federal mutuals and stock associations). *See* O'Hara, *supra* note __, at 327.

137 See Krupa S. Viswanathan & J. David Cummins, *Ownership Structure Changes in the Insurance Industry: An Analysis of Demutualization*, 70 J. RISK & INSURANCE 401 (2003).

138 On the demutualization of financial exchanges, see Reiffen & Robe, *supra* note __; Roberta S. Karmel, *Turning Seats into Shares: Causes and Implications of Demutualization of Stock and Futures Exchanges*, 53 HASTINGS L. J. 368 (2001); on the adoption of public company forms by investment banks, see Alan D. Morrison & William J. Wilhelm, *The Demise of Investment Banking Partnerships: Theory and Evidence*, 63 J. FIN. 311 (2008); on the adoption of corporate forms by brokerages and underwriters, see Fama & Jensen, *supra* note __, at 107.

Figure I: Wall Street's Organizational Transformation (1981-2006)[139]



The extension of stock corporate forms to financial intermediaries would appear to be a welcome change following basic economic logic: increasing the liquidity of ownership interests increases access to capital, thereby enhancing economies of scale, reducing managerial agency costs by enabling shareholder monitoring, and enhancing productive and innovative efficiencies by exposing firm managers to market discipline. While this argument has considerable merits (and, as noted below, some empirical

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[139] Not to scale. Sources as follows. On the AICPA rule change and consequent changes in state law, see AMERICAN INSTITUTE OF CPAS, DIGEST OF STATE ISSUES FOR THE CPA ACCOUNTING PROFESSION (2011), available at http://www.aicpa.org/Advocacy/State/DownloadableDocuments/Digest_of_State_Issues_2011.pdf. On the adoption of the LLP form by accounting firms, see FRANK B. CROSS & ROGER LEROY MILLER, THE LEGAL ENVIRONMENT OF BUSINESS 432 (2008). On the adoption of the LLP form by law firms, see Jonathan D. Glater, *Fearing Liability, Law Firms Change Partnership Status,* N.Y. TIMES, Jan. 10, 2003; Scott Baker & Kimberly D. Krawiec, *The Economics of Limited Liability: An Empirical Study of New York Law Firms,* 2005 U. ILL. L. REV. 1; Kimberly D. Krawiec, *Organizational Form as Status and Signal,* 40 WAKE FOREST L. REV. 977 (2005); Robert Hillman, *Organizational Choices of Professional Services Firms: An Empirical Study,* BUSINESS LAWYER (2003). On the NYSE's conversion, see David Weidner, *Public trading, publicly traded,* MarketWatch, Mar. 8, 2006, available at http://www.marketwatch.com/story/nyse-goes-from-public-institution-to-public-ownership.

foundation in banking and insurance markets that have experienced comparable changes in organizational form[140]), there are important reasons for caution that derive from the peculiar features of certification markets and the critical role played by certification markets in supporting the transactional infrastructure for a broader set of certified markets. In particular, the consistent historical use of constrained forms by key intermediaries in the financial markets over such a long period of time suggests an efficiency advantage in making use of these structures for certification purposes.

The historical use of the general partnership form by accounting firms, law firms and investment banks—the triumvirate of certifiers that accompany high-stakes corporate transactions—can illustrate this intuition. To elicit a premium for its accumulated stock of reputational capital, a certifier will rationally incur costs—in the case of all non-corporate forms, a higher cost of capital and tighter restraints on managerial compensation—that allow it to commit against shirking actions and thereby encourage users to make learning investments in the certifier's products. The use of the general partnership form conveys this commitment in two respects: (i) by making each partner jointly and severally liable for the actions of all other partners; and (ii) by limiting a partner's ability to withdraw his capital or other investment from the partnership or to transfer his ownership interest or governance rights to a third party.[141] These disabling features—expanding personal liability and constraining liquidity—have an enabling effect: it permits the partnership to credibly commit to clients that each partner has strong incentives to evaluate and monitor and thereby, respectively, filter out and deter partners who may otherwise underperform.[142] By implication, removing those disabling features

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140 *See infra* notes __ and accompanying text.

141 Under the Revised Uniform Partnership Act (adopted by most states), partners may not transfer their ownership interest in the partnership or their right to manage the partnership, although they may transfer their economic rights (i.e., rights to distributions). *See* REVISED UNIFORM PARTNERSHIP ACT §§ 25; 502. Subject to contractual modification, a partner can "cash out" his or her interest in the partnership by exercising its right to unilaterally dissolve the partnership or compel the other partners to buy out his or her interest. *See id.* §§ 38, 42.

142 The monitoring value of the partnership form is well known. For leading sources, see Armen Alchian & Harold Demsetz, *Production, Information Costs, and Economic Organization,* 62 AM. ECON. REV. 777 (1972); Eugene F. Fama & Michael C. Jensen, *Separation of ownership and control,* 26 J. L. & ECON. 301, 316 (1983). On efficiency of the partnership form as an incentive structure in the case of investment banks, see Carolin D. Schellhorn, *The Ownership Structure of Investment Banks: A Case for Private Partnerships,* 1 ACAD. BANKING STUD. J. 109 (2011) (arguing that private partnerships in investment banking reduced agency costs and opportunistic behavior).

undermines the intermediary's ability to credibly signal its non-opportunistic intent; as a result, the certifier's opportunism incentives increase as it adopts limited-liability protections or abandons the partnership form of organization.

Collectively these signaling effects suggest that the adoption of the general partnership form and other constrained forms among reputational intermediaries is neither accidental nor cosmetic. Rather, it may be closely connected with the tradition of professionalism—often equated with foregoing short-term monetary gains for long-term reputational credibility—that has historically been associated with the legal[143] and accounting professions.[144] This possibility implies that the recent abandonment of constrained forms by intermediaries in the financial markets may interfere with those intermediaries' ability to reliably implement a certification function—an intuition that is consistent with widespread (if somewhat casual) observations of the decline of professionalism in the legal and accounting professions. In particular, the adoption of organizational forms that impose weaker constraints on profit maximization may place managers within an incentive structure that induces shirking or other adverse behavior to extract value from users. In the insurance sector, evidence suggests that investor-owned corporate entities tend to exhibit higher volatility relative to peer firms organized on a mutual basis[145]; in the banking sector, stock-organized S&Ls experienced significantly higher failure rates (as much as two times as great) during the 1980s' S&L crisis relative to mutual-organized S&Ls.[146] More anecdotally, a similar pattern can be observed in the

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143 On the tradition of professionalism in legal practice, see Ronald J. Gilson, *The Devolution of the Legal Profession: A Demand Side Perspective,* 49 MD. L. REV. 869, 887 (1990).

144 On the reputational function played by unlimited liability in the evolution of the audit profession, see L.aurence Van Lent, *The economics of an audit form: the benefits of partnership governance,* 31 BRIT. ACCOUNTING REV. 225, 240 (1999).

145 Demutualized property-liability insurers exhibit greater variability in loss ratios (*see* Joan Lamm-Tennant & Laura T. Starks, *Stock versus Mutual Ownership Structures: The Risk Implications,* 66 J. Bus. 29 (1993)) and mutual insurance companies have a 10% higher capital-to-liabilities ratio relative to stock insurance companies (*see* Scott E. Harrington & Greg Niehaus, *Capital Structure Decisions in the Insurance Industry: Stocks versus Mutuals,* 21 J. Fin. Res. 145 (2002)). For a review of the empirical literature, see Viswanathan & Cummings, *supra* note __, at 416-17, 424.

146 *See* HANSMANN, *supra* note __, at 256-58. *See also* O'Hara, *supra* note __, at 327-28 (using data for the late 1970s and finding that savings and loan institutions organized as mutuals engaged in lower levels of high-risk behavior relative to savings and loan institutions organized as stock corporations); Lawrence R. Cordell et al., *Corporate ownership and thrift crisis, 36* J. L. & Econ. 719 (1993) (examining a sample of conversions in the banking industry during 1980s and finding that demutualization increases industry risk due to risky leveraged strategies used by the stock-organized thrift industry); Benjamin C.

most recent financial crisis: while stock insurance companies such as AIG effectively went insolvent during the recent financial crisis and required government bailouts on the order of tens of billions of dollars, mutual insurance companies experienced stable or even rising book values during the same period.[147] But there is another side of the coin: some evidence suggests that stock insurance companies dominate mutual insurance companies as a matter of productive efficiency, implying a tradeoff between solvency on the one hand and productivity and innovation efficiencies on the other hand.[148] While the question is far from resolved, these historical trends at least suggest that further inquiry is warranted as to whether use of the corporate form has induced higher rates of failure in the financial certification market.

C. Constrained Entities in Social Certification Markets

While constrained entities have declined in popularity as an organizational option among certifiers in the financial markets, constrained entities have pioneered the use of certification instruments in order to implement environmental and other "ethical" standards in certain food[149], wood-based consumer products, apparel and construction markets.[150] Entities that seek to provide products or services in conformity with these ethical standards suffer from a double informational asymmetry: manufacturers or retailers claim compliance with a given ethical standard of production or distribution, but consumers have little reason to believe either the veracity of those claims or the reliability

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Esty, *Organizational form and risk taking in the savings and loan industry*, 44 J. Fin. Econ. 25 (1997) (finding that demutualization of S&Ls is associated with increased investment in risky assets and higher profit variability).

147 *See* John E. Girouard, *A Financial Bunker for Scary Times*, Forbes.com, Feb. 10, 2009.

148 *See* Orhemjamts Erhemjamts & J. Tyler Leverty, *The Demise of the Mutual Organizational Form: An Investigation of the Life Insurance Industry* (Working Paper 2007). Similar arguments are made with respect to the banking industry. *See infra* note __.

149 Note that the use of nonprofit forms of organization by certification bodies in the agricultural and food industry is hardly novel. U.S. agriculture has benefited from the work of tens of certification bodies (in particular, the Association of Official Seed Certifying Agencies ("AOSCA")), in conjunction with the U.S. Department of Agriculture (which relies on AOSCA designations), in fostering the development of and trade in pure seed varieties starting in the early 20th century. *See* J.C. HACKLEMAN & W.O. SCOTT, A HISTORY OF SEED CERTIFICATION IN THE UNITED STATES AND CANADA 24-25 (1990).

150 On the development of ethical standards, and associated certification mechanisms, in these markets, see MICHAEL E. CONROY, BRANDED! HOW THE CERTIFICATION REVOLUTION IS TRANSFORMING GLOBAL CORPORATIONS (2007); Cho, *supra* note __, at 2312-16.

of the standard purportedly used to make such claims. The penetration of privately administered certification standards into some of these ethical markets is impressive and often provides a functional substitute for state-supplied regulation that is either absent or ineffective. I will focus on two salient examples: The "Dolphin Safe" standard administered by the Earth Island Institute; and the sustainable logging standards administered by the Forest Stewardship Council (FSC) and the Programme for Endorsement of Forest Certification (PEFC).[151]

Environmental activists have long protested against harms caused to dolphins by certain fishing practices common in the tuna industry. Due to a variety of factors, environmental regulations have been ineffective in halting the practice; in response, activists have sought to influence consumer behavior in wealthy target markets in order to achieve the same objective. This has required development of a certification mechanism that enables interested consumers to distinguish reliably between compliant and non-compliant producers and retailers. The results have been impressive: over 90% of the world's canned tuna suppliers are pledged to comply with the "Dolphin Safe" standard administered by the Earth Island Institute.[152] The result: the number of dolphins killed as a result of tuna fishing has reportedly declined from tens of thousands per year to several hundred per year.[153] A similar tactic has been employed to address deforestation. Several certification organizations are now in operation in the U.S. and worldwide that issue certificates, or accredit entities that issue certificates, showing compliance with certain environmental standards by logging companies and manufacturers and retailers of paper and other wood-based consumer goods.[154] To take one example: through a network of national nonprofit affiliates that set standards in over

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151 Other examples are listed in Table I under "Ethical Certification Markets".

152 *See* CONROY, *supra* note __, AT 43-46; for further information, see http://www.earthisland.org/immp. This campaign has been facilitated by the fact that the vast majority of tuna sold in Western markets is canned and distributed by three companies (StarKist, Bumblebee, and Chicken of the Sea).

153 *See* CONROY, *supra* note __, at 45.

154 Major entities are: the American Tree Farm System; the Canadian Standards Association; the Forest Stewardship Council; the Programme for the Endorsement of Forest Certification (the largest certifier by global land area); and the Sustainable Forestry Initiative. *See* DOVETAIL PARTNERS, INC., KATHRYN FERNHOLZ ET AL., FOREST CERTIFICATION: A STATUS REPORT (Mar. 23, 2010), avail. at http://www.dovetailinc.org/files/DovetailCertReport0310b.pdf

80 countries, the FSC issues certificates to logging companies that comply with self-imposed constraints on exploitation rates and other "sustainability" practices and, in the case of furniture and paper manufacturers and retailers, require that those entities demonstrate a "chain of custody" showing that all participants in the supply chain have complied with these practices. By year-end 2010, certified forests reportedly constituted 9% of all the world's forests, most of which have been certified by the two leading certifiers, FSC and PEFC.

Both the Dolphin Safe mark administered by the Earth Institute and the marks administered by FSC, PEFC and other forest certification organizations have something in common: these are trademarks administered by a nonprofit organization, which grants the right to use its trademark to companies that meet certain standards and agree to be subject to auditing and other verification procedures.[155] Consistent with this Article's thesis, it is no accident that constrained entities have achieved rapid success in eliciting compliance with environmental standards by manufacturers and retailers. The certification mechanism solves a commitment problem: the manufacturer cannot credibly attest to compliance with environmental standards and consumers have no cost-effective means by which to verify either compliance with the standard or whether the standard sets a reasonable ethical threshold. Commitment failure invites entry by certification entrepreneurs who have either an ideological or profit-based incentive to incur the costs of developing and administering a standard, which is then adopted by firms that seek to capture the price premium that will be paid by intermediate users or end-users who sufficiently value the environmentally sensitive features verified by the certification entity. The certification paradox implies that an ideological (that is, non-profit-motivated) entity has an inherent advantage over a profit-motivated entity: the former can make a stronger credible commitment against shirking once the standard has become established and the certifier's position is protected by high switching costs.[156] Only the

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[155] While the FSC is nonprofit, it accredits a combination of nonprofit and for-profit providers to certify compliance with FSC's standards. *See* CONROY, *supra* note __, at 65-66; TOLLEFSON ET AL., *supra* note __, at 32-35, 235-36.

[156] On the role of cultural norms in curing information asymmetries concerning output quality, see Michael Krashinsky, *Transaction Costs and a Theory of the Nonprofit Organization,* in THE ECONOMICS OF NONPROFIT ORGANIZATION (ed. Susan Rose-Ackerman 1986).

ideological entity can credibly commit that it will "leave money on the table" and decline to shirk.

This advantage appears to be illustrated by organizational outcomes in ethical certification markets, which are populated exclusively by nonprofit associations in which non-governmental activist organizations play a substantial to dominant role in setting standards, accrediting entities that certify compliance with the standard, and, in some cases, carrying out certification activities. This is nicely illustrated by the comparative failure of the Sustainable Forestry Initiative (SFI), a forestry certification program sponsored principally by American forestry companies, to achieve legitimacy as a credible mark[157], which in turn induced SFI to convert to a nonprofit organization that is governed jointly by industry, academic and conservation representatives.[158] In doing so, SFI imperfectly imitates the highly elaborated structure of the FSC, which reportedly implements the most demanding environmental standards and, as shown in the Table below, is subject to a vertical sequence of organizational constraints that provide redundant levels of assurance against certifier opportunism. The international parent organization operates on a nonprofit basis; it approves the development of locally customized standards by national FSC organizations, which also operate on a nonprofit basis; the national organization accredits for-profit and nonprofit third-party certifiers, who supply fee-based certification services to logging and other companies in the wood-related sector and, subject to regular audits and inspections, are then entitled to use the FSC trademark. Even further assurance is provided by the fact that the FSC parent organization operates subject to requirements set forth by the International Social and Environmental Accreditation and Labelling Alliance (ISEAL), a super-certifier of entities that certify compliance with social and environmental standards in global markets,[159] and

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157 *See* PRESS RELEASE, INDEPENDENT STUDY JUST RELEASED: INDUSTRY SFI PROGRAMS FALLS FAR SHORT OF INDEPENDENT FSC CERTIFICATION PROGRAM, Oct. 16, 2001, available at http://credibleforestcertification.org/fileadmin/materials/old_growth/dont_buy_sfi/news/press_sfi/Industry_SFI_Falls_Short.pdf.

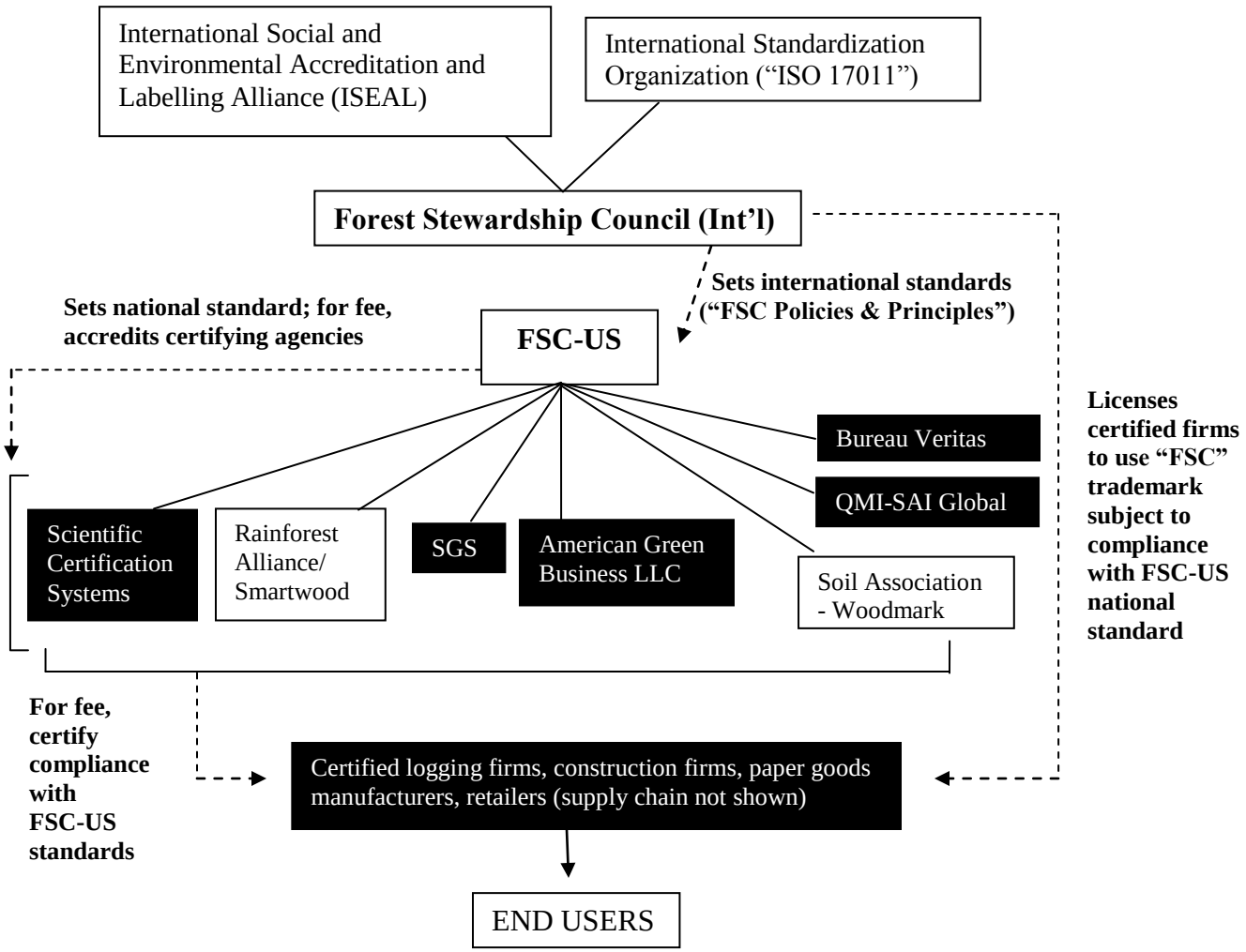
158 *See* R. NEIL SAMPSON, THE SUSTAINABLE FORESTRY INITIATIVE PROGRAM: SEVEN YEARS OF SUSTAINABLE FORESTRY (2004), available at http://www.sampsongroup.com/Papers/WFC%20Article.pdf.

159 *See* ISEAL Alliance, ISEAL Code of Good Practice for Setting Social and Environmental Standards (public version 4 2006), available at http://www.fairtrade.net/fileadmin/user_upload/content/POO5_ISEAL_Code_PD4_Jan_06.pdf.

"ISO 17011", a standard set by the International Standardization Organization for bodies that accredit product certification organizations.[160]

This highly nested structure yields a robust trademark that the target pool of end-users can reliably use as a low-cost signal of environmental conformity. Consistent with theoretical expectations, a reliable certification solution to informational asymmetries in the first-order products market necessitates substantial investments to mitigate informational asymmetries in the second-order and *n*-order certification markets.

Figure II: Nested Structure of a Robust Certification Mechanism (FSC-US)[161]



[160] INTERNATIONAL ORGANIZATION FOR STANDARDIZATION, ISO/IEC 17011:2004; ISO/IEC Guide 65.

[161] Filled boxes indicate for-profit entities; all other entities are nonprofit. All information from website of FSC-US, see http://www.fscus.org/, and other sources cited in preceding text.

D. Implications: Organizational Degradation or Evolution?

The commitment dilemma that characterizes certification markets can explain why these markets have historically preferred constrained organizational forms. The reason is by now familiar: unconstrained forms increase exposure to intermediary shirking in certification markets that have successfully converged upon use of a single or few dominant providers and therefore impose switching costs on existing users, which in turn induces certifiers to extract value from users by relaxing evaluation and monitoring efforts. If constrained forms are associated with reduced certifier opportunism, then it would appear to follow that regulators can improve certifier performance by mandating or encouraging the use of constrained forms over all alternatives.[162] Interestingly, until recently, trademark authorities in the United Kingdom implicitly pursued this approach by denying registration of a certification mark—a type of trademark that attests to the quality of a third party's product or service—by any entity that was not run on a nonprofit basis.[163] The same approach tracks long-standing prohibitions against lawyers or accountants organizing as a corporation (a prohibition, which, as noted previously, almost all states relaxed in the 1990s in order to allow lawyers and accountants to practice in entities formed as limited liability partnerships).[164] Perhaps the most extensive case of organizational regulation is found in the history of federal and state banking regulations,

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[162] For suggestions to this effect in other contexts, see Schellhorn, *supra* note __ (suggesting that policymakers should consider mandating or favoring the use of general partnership forms by investment banks in order to restrain opportunistic behavior); Bubb & Kaufman, *supra* note __ (suggesting that mutual forms should be mandated or favored for credit-granting institutions given a lower propensity to exploit naïve consumers' propensity to overaccumulate debt, as compared to for-profit corporations)

[163] *See* JEFFREY BELSON, SPECIAL REPORT: CERTIFICATION MARKS 33 (2002), citing TRADE MARK REGISTRY WORK MANUAL, CHAP. 12, CERTIFICATION MARKETS, June 1996, p.9. Both U.S. and U.K. law preclude the holder of a certification mark from engaging in trade in the goods or services being certified. *See* TMA 1994, Sched. 2, para. 4 (U.K. law) and LANHAM ACT 1946, §§ 14, 15 U.S.C. 1064 (U.S. law). The Lanham Act imposes other requirements, including most notably, a nondiscrimination requirement that the mark holder must certify the goods of any entity that is in compliance with the standards represented by the market. *See* LANHAM ACT 1946 § 14(e). The Lanham Act's requirements are not entirely effective, however, because a certifier can protect its mark as a non-certification mark and thereby escape these limitations. Consistent with this observation, a National Institute of Standards and Technology report finds that certification organizations tend not to register their marks as certification marks. *See* Breitenburg, *supra* note __.

[164] With respect to lawyers, see *supra* note __. With respect to accountants, see *supra* note __.

which included numerous provisions mandating the use of nonprofit or mutual forms for decades running from the 1930s through the mid-1970s and early 1980s.[165]

Clearly there is no shortage of instruments by which to mandate or facilitate the use of constrained forms for certification services—if that were selected as the desired policy objective over all competing considerations. At a minimum, any organizational approach to limit certifier opportunism demands that the state maintain a diverse supply of organizational forms from which certifiers can select in order to commit to some extent against future opportunism.[166] Whether the state should go further and mandate or, more gently, favor the use of constrained forms—and, as a result, influence the incentive structure under which certifiers operate—imposes substantially higher informational demands and therefore increases the risk of regulatory error. In particular, three countervailing factors cloud (but do not reject) any clear efficiency ground for mandating or even favoring the use of constrained forms in certification markets. These include: (i) efficiency gains—most notably, productivity and innovation efficiencies—potentially available as a result of corporations' increased access to capital; (ii) users' ability to substitute toward alternative bonding or insurance instruments for resolving information asymmetries at comparable (or, at least, non-exorbitant) cost; and, most critically, (iii) the possibility that competitive pressures will yield organizational selections that are either consistent with the social interest or more likely to approximate

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165 From 1933 until 1975, the Home Owners Loan Act required that all federally chartered savings and loans institutions be organized as mutual entities and, until 1974, limited or prohibited conversions to state-charted stock institutions. *See* Cordell et al., *supra* note __, at 722-23. From 1934 through the present, the federal government has exempted credit unions from the federal income tax, provided the credit union is organized on a nonprofit basis, has no capital stock, and operates for mutual purposes. From 1935-80, the federal government favored mutually organized savings banks by exempting them from limits on interest rates that could be paid on consumer deposits (unlike investor-owned banks) and, from 1913 until at least 1962, granted them preferential federal tax treatment. *See* Hansmann, *supra* note __, at 257-58.

166 Recent action in the insurance industry illustrates how the state can provide innovative organizational forms that facilitate market-based approaches to limit opportunistic action. Following the wave of demutualizations in the insurance industry, some states have recognized a novel organizational form, the mutual holding company ("MHC"), which retains mutual ownership (and thereby, enjoys the restrained opportunism risk associated with constrained forms) but enables the mutual entity to raise external capital subject to certain limitations (and thereby, enjoys the reduced cost of capital associated with less constrained forms). Starting in 1995 with Iowa, 32 states and the District of Columbia have enacted legislation allowing mutual insurance companies to opt for partial demutualization through adoption of the MHC form. *See* PETER M. MADSEN, THE CO-DIFFUSION OF ORGANIZATIONAL AND POLICY INNOVATIONS: THE SPREAD OF A NEW ORGANIZATIONAL FORM AND ITS SUPPORTING LEGISLATION IN THE UNITED STATES INSURANCE INDUSTRY (DISSERTATION, UNIV. CALIF., BERKELEY 2006).

the social interest relative to any imperfect organizational regime promoted by informationally constrained regulators. These complicating factors raise a rich set of issues that cannot be fully addressed within the scope of this Article and are presented primarily for purposes of outlining future avenues in the analysis of certification markets.

1. Efficiency Effects

The popularity of the stock corporation is not accidental: relative to all alternatives, it can fund operations at the lowest cost of capital through an unconstrained range of compensation types and a limited liability shield. Nostalgia expressed by some recent commentators for the post-Depression period of intensive U.S. banking and credit regulation ending in the early 1980s—which, as noted above, included requirements mandating or favoring the use of mutual entities—overlooks the fact that that same period exhibited socially costly tendencies toward underinvestment in innovation, productivity and scale.[167] It is possible that the productivity and innovation gains resulting from the adoption of corporate forms in the banking, insurance, and certification sectors of the financial markets *starting* in the early 1980s have been so great as to outweigh losses in the form of increased intermediary opportunism. Consistent with this possibility, the demise of mutually organized trade credit reporting societies in the United Kingdom in favor of corporate forms (starting in the 1950s) is attributed to the increased capital costs required to fund modern computerized databases[168] and the same explanation has been proposed for the wave of demutualizations in the U.S. insurance industry in the 1980s and 1990s.[169] From a broad "macro" perspective, even the most dramatic failures in the certification segments of the financial markets may simply represent an efficient evolution away from constrained forms in a market environment that demands greater access to capital in order to fund extremely complex and large-scale operations. Even if it is true that organizational constraints, and associated

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[167] For an argument to this effect with respect to the S&L industry, see O'Hara, *supra* note __, at 330-31; for similar observations with respect to the banking industry more generally, see Shepherd, *supra* note __, at 354-58 (noting that heavily regulated banking industry sacrificed efficiency and innovation for the sake of stability).

[168] *See* GREIG, *supra* note __, at Foreword; 17.

[169] *See* Viswanathan & Cummins, *supra* note __.

professionalism norms, may limit certifier opportunism, it does not necessarily follow that limiting opportunism represents a policy goal that trumps all countervailing efficiencies promoted by the adoption of corporate forms.

2. Substitution Effects

To be sure, the evolution of dominant organizational forms may come at a stiff social price: namely, the limited ability of "corporatized" advisors to provide a meaningful certification function in associated transactions markets, which may suffer especially large losses in the short term. Those short-term losses may be especially onerous if users do not anticipate the degradation of certification quality attendant to the abandonment of constrained forms, in which case certifications will be mispriced by the market until the release and internalization of information that corrects any such false understanding. Hence, it may be the case that lawyers and other traditional financial certifiers will no longer—or, as some would assert, no longer do[170]—provide a meaningful certification role while continuing to play other important roles in facilitating efficient transactions. The functional transformation of any certification entity will in turn prompt transacting parties, or certification entrepreneurs, to construct alternative mechanisms by which to ameliorate, or insure against, the restored set of information asymmetries. This substitution effect is precisely what happened in the real estate market. It was once standard practice for attorneys to issue "title opinions" (that is, an opinion stating that there were no known defects in the title being transferred) in the closing of a real estate transaction. Title opinions have now been displaced by title insurance products, which are superior both in terms of the title provider's inspection capacity and the financial backing that supports title insurers' policies.[171] Today title opinions are rarely issued in real estate transfer transactions in the U.S. (outside state jurisdictions where the bar has

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170 For views to this effect (but for reasons different than those proposed here), see Macey, *Reputational Model, supra* note __; Prentice, *Strong SEC, supra* note __.

171 *See* Benito Arrunada, *A Transaction-Cost View of Title Insurance and its Role in Different Legal Systems*, published in THE GENEVA PAPERS OF RISK & INSURANCE, Vol. 27, No. 4, pp. 582-601 (Oct. 2002) [hereinafter Arrunada, *Title Insurance*].

successfully lobbied for its mandatory use), which the market has discarded in favor of the apparently superior mechanism of title insurance.[172]

3. Learning Effects

Whether or not regulators should elect to promote constrained organizational forms—or, for that matter, any particular type of organizational form—in certification markets ultimately depends on our confidence in the ability of users and certifiers to converge on organizational forms that are consistent with the social interest in supplying an efficient information flow to the associated transactions market. Most precisely: this depends on the level of confidence in the market's ability to "learn" the most efficient organizational form relative to regulators' ability to achieve that same objective, in each case in response to changes in technological and economic circumstances. It might be assumed that the market will always have an advantage over regulators—constrained by limited information and vulnerable to industry capture—in selecting efficient organizational forms. But there is an important circumstance that supplies an exception to that rule. Assume a certification market that operates under a collectively efficient organizational convention—that is, a norm but not a law—against operating as a corporation. Given that convention, it may be privately efficient for a single firm to convert to a corporation in order to attract outside capital at the lowest cost, offer the most attractive compensation packages to the highest-value talent, and thereby secure market share from its rivals. By anticipation, all of the firm's rivals will be compelled to adopt the corporate form—even if it would be collectively inefficient to do so because that organizational change will increase opportunism costs without any commensurate increase in productivity gains. That scenario presents a strong case for mandating the use of constrained organizational forms in order to preclude the involuntary unraveling of a collectively beneficial organizational convention. That rationale might account for the fact that professional associations in the legal and accounting fields have historically prohibited their members from practicing in any form other than a general partnership

172 *See id.*

and, as is currently the case in most jurisdictions (which now allow limited liability partnerships[173]), continue to prohibit members from practicing as a corporation.

Conclusion

The standard view of the reputational intermediary is mistaken--or, more gently, substantially overdetermined. As a matter of theory and empirics, the world is far more complex: transactional settings where the reputational intermediary fails to alleviate informational asymmetries are an inherent element of the most sophisticated and mature certification markets. This predicament derives from the certification paradox: the entry-protected conditions that induce dominant certifiers to incur the costs of accumulating and maintaining reputational capital are the *same* conditions that invite intermediary shirking that places that capital at risk. But the inherency of intermediary failure does not necessarily endorse aggressive interventions to improve intermediary performance. Regulatory action to influence certifier conduct or expand competitive threats may overestimate users' demand for informational accuracy or unduly erode the "rent cushion" that enables certifiers to recoup investments in accruing reputational capital, in each case discouraging rather than encouraging certification efforts. Regulatory design must trade off these countervailing effects to elicit efficient (and inherently incomplete) investments in certification quality. As theory anticipates and history confirms, that is a difficult task with a high risk of producing a net social loss relative to the status quo—up to and including market demise. At a far lower risk of regulatory error, certification markets have historically adopted an alternative organizational strategy that uses nonprofit, mutual and other non-corporate forms in order to institute incentive structures that constrain certifier opportunism. Remarkably, certification entities in the financial markets abandoned those firms on an almost wholesale basis in the years preceding the recent financial crisis. Whether that historical preference for constrained forms of organization among certification entities should be mandated, encouraged or facilitated—or left entirely for the market to decide—in order to mitigate certification failures in the financial markets and other settings remains an open question for future analysis.

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[173] *See supra* note __.