

Intermediaries Revisited: Is Efficient Certification Consistent with Profit Maximization?

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I. INTRODUCTION

Intermediaries are the linchpin in any market economy characterized by enormous volumes of transactions conducted among anonymous participants that have limited capacities to directly evaluate each other's products and services. Without gatekeepers¹ 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 1300 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 companies and influences millions of transactions every day throughout the world.

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 United States, this is a primary mechanism for certifying product and services quality, either in lieu of, or as a complement to, public certification efforts. See generally Margaret M. Blair et al., *The New Role for Assurance Services in Global Commerce*, 33 J. CORP. L. 325 (2008) (discussing how "private-sector compliance and enforcement infrastructure" is replacing "public and legal regulatory infrastructure in global commerce"); Yesim Yilmaz, *Private Regulation: A Real Alternative for Regulatory Reform*, CATO POLICY ANALYSIS NO. 303, Apr. 20, 1998, available at <http://www.cato.org/pubs/pas/pa-303.pdf> (noting the extensive role of private certification agencies as an alternative regulatory tool); ROSS E. CHEIT, SETTING SAFETY STANDARDS 5, 31 (1990) (observing that the vast majority of industry safety standards are generated by private institutions and noting markets that operate under public and private safety standards). For examples of industries that operate under mixed regimes comprising both private and public certification mechanisms, see *infra* note 44.

3. See *UL at a Glance*, UNDERWRITERS LABORATORIES, INC., <http://www.ul.com/global/documents/secured/councils/ULOverview.pdf> (last visited Mar. 30, 2012) (providing information about services provided by UL); see also *About UL*, UNDERWRITERS LABORATORIES, INC., <http://www.ul.com/global/eng/pages/corporate/aboutul> (last visited Mar. 30, 2012) (same).

4. In the case of Standard & Poor's, 1860 refers to the date on which Henry Varnum Poor published *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 the McGraw-Hill Companies, its current parent, acquired in 1966. See Richard Sylla, *A Historical Primer on the Business of Credit Rating*, in RATINGS, RATING AGENCIES AND THE GLOBAL FINANCIAL SYSTEM 19, 24–25 (Richard M. Levich et al. eds., 2002).

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 competitor, R.G. Dun & Company. See Rowena Olegario, *Credit Reporting Agencies: A Historical Perspective*, in CREDIT REPORTING SYSTEMS AND THE INTERNATIONAL ECONOMY 115 (Margaret J. Miller ed., 2003).

Without exaggeration, few consumers or enterprises do business without relying directly or indirectly on the information the intermediaries collect and evaluate.

Outside the case of the credit rating agencies, legal scholars have devoted little attention to the actual operation of certification markets⁶ 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 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 legal and economic scholars have widely touted as a paragon of informational efficiency due in part to the scrutiny of third-party intermediaries.⁹ In the recent financial crisis, credit rating agencies failed to properly assess the financial condition of certain bond issuers and structured finance instruments;¹⁰ in the 2001 Enron scandal, credit rating agencies lagged behind the market in reflecting Enron's insolvent condition while 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

6. For an exception, see Blair et al., *supra* note 2.

7. For a review of the existing literature, see *infra* Part II.A, note 25, and accompanying text.

8. See, e.g., David Segal, *But Who Will Grade the Grader?*, N.Y. TIMES, Feb. 26, 2011, <http://www.nytimes.com/2011/02/27/your-money/27haggler.html?pagewanted=all> (identifying problems with Better Business Bureau certification); Olav Sorenson & David M. Waguespack, *The Ratings Game: Asymmetry in Classification*, 28 ORG. SCI. 541 (2011) (identifying problems with the Motion Picture Association of America's content ratings); 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) (identifying problems with third-party certification in the international agricultural and food supply chain); Michael J. Hiscox et al., *Evaluating the Impact of SA 8000 Certification* (2008) (unpublished manuscript), available at <http://www.hbs.edu/research/pdf/08-097.pdf> (identifying problems with third-party certification of social responsibility standards pertaining to environment and labor codes of conduct); Benjamin Edelman, *Adverse Selection in Online "Trust" Certifications*, PROCEEDINGS OF THE ACM (2009), available at <http://www.benedelman.org/publications/advsel-trust.pdf> (identifying problems with e-commerce privacy assurance services); Eric Kelderman, *American Bar Association Takes Heat from Advisory Panel on Accreditation*, CHRON. OF HIGHER EDUC. (June 9, 2011), <http://www.chronicle.com/article/American-Bar-Association-Takes/127869> (identifying problems with accreditation bodies in the higher education sector); Mo Xiao, *Is Quality Certification Effective? Evidence from the Childcare Market*, 28 INT'L J. INDUS. ORG. 708 (2010) (identifying problems with accreditation in the childcare market).

9. For contributions in this vein, see *infra* note 25.

10. See generally Jonathan Katz et al., *Credit Rating Agencies: No Easy Regulatory Solutions*, CRISIS RESPONSE: PUBLIC POLICY FOR THE PRIVATE SECTOR, Oct. 2009, available at <http://rru.worldbank.org/documents/crisisresponse/Note8.pdf> (stating that flawed credit rating processes were a key contributor to the financial crisis).

11. See generally 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, 155–68 (Nancy B. Rapaport & Bala G. Dharan eds., 2004) (discussing how “Andersen’s audits of Enron failed to uncover the pervasive accounting fraud at the company”). 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 171, 176–89 (William A. Niskanen ed., 2005).

inflated its earnings by \$11 billion¹² (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 intermediary failure¹⁷ is a regular feature of certification markets and why certification markets thrive 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

12. See Shawn Young, *MCI to State Fraud was \$11 Billion*, WALL ST. J., Mar. 12, 2004, at A3 (discussing MCI revealing its accounting fraud).

13. See Luisa Beltran, *WorldCom Files Largest Bankruptcy Ever*, CNNMONEY (July 22, 2002), http://money.cnn.com/2002/07/19/news/worldcom_bankruptcy/ (discussing the details of the WorldCom bankruptcy filing).

14. See JOHN KERRY & HANK BROWN, *THE BCCI AFFAIR: A REPORT TO THE COMMITTEE ON FOREIGN RELATIONS* 240–77 (S. Print 102-140 1992) (describing PriceWaterhouseCoopers and Ernst & Young’s role in the BCCI’s external audits).

15. See JERRY W. MARKHAM, *A FINANCIAL HISTORY OF THE UNITED STATES: FROM THE AGE OF DERIVATIVES INTO THE NEW MILLENNIUM* (1970–2001) 171–72 (2002) (providing examples of the Office of Thrift Supervision’s enforcement actions against several large law and accounting firms); Howell E. Jackson, *Reflections on Kaye, Scholer: Enlisting Lawyers to Improve the Regulation of Financial Institutions*, 66 S. CAL. L. REV. 1019, 1023–24 (1993) (addressing the allegedly widespread misconduct among professional advisers to financial intermediaries).

16. For the canonical 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 “fraud” as used in much of the academic literature on capital markets regulation. For the governing definition of “materiality” as a legal matter, see *TSC Indus., Inc. v. Northway Inc.*, 426 U.S. 438 (1976) (defining information as “material” for purposes of the securities laws if there exists a “substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of information made available”). For a conceptual discussion of the possible meanings of “fraud” under the securities laws, see Samuel W. Buell, *What Is Securities Fraud?*, 61 DUKE L.J. 511, 522–24 (2011). As will be discussed subsequently, however, this definition of “intermediary failure” is overbroad since, on a cost-benefit basis, perfectly accurate evaluation would never be the desired social objective. See *infra* note 107 and accompanying text.

order to pose a competitive threat; and (ii) on the demand side, the switching costs that users¹⁸ 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 where 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 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.¹⁹ 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.²⁰ Recent turmoil in the capital markets has put those views under substantial stress (with a surprisingly meager response from law and economics scholars).²¹ The apparent discrepancy between theory and practice, however, 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—certifiers’ incentives to invest in informational accuracy.²² A reasonably well-functioning certification market is a fragile mechanism; regulating it aggressively to achieve marginal gains in certification

18. Throughout this Article, I use the term “users” rather than consumers. This is more precise for two reasons. First, 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. Second, 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.

19. See *infra* note 31 and accompanying text.

20. See *id.*

21. For exceptions, see Jonathan R. Macey, *The Demise of the Reputational Model in Capital Markets: The Problem of the “Last Period Parasites”*, 60 SYRACUSE L. REV. 427, 429–30 (2010) [hereinafter Macey, *Reputational Model*]. With respect to the Enron scandal, see generally Jonathan R. Macey, *Efficient Capital Markets, Corporate Disclosure, and Enron*, 89 CORNELL L. REV. 394 (2004) [hereinafter Macey, *Efficient Capital Markets*] (describing the relationship between Enron, corporate governance, and corporate disclosure).

22. See *infra* notes 77–89 and accompanying text.

accuracy can easily kill it.

Any intervention into a certification market must 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 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.²³ The years preceding the recent financial crisis were characterized by a striking organizational transformation: 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.²⁴ 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 emphasizes 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.

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

II. 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.

23. See *infra* Table II; Part VI.A–C.

24. See *infra* notes 136–40 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.²⁵ This characterization has been applied extensively in capital markets scholarship to attribute reputational functions to lawyers,²⁶ auditors,²⁷ underwriters,²⁸ and stock exchanges.²⁹ Without these intermediaries, transacting parties may suffer from a “lemons problem.” Nobel Prize winner George Akerlof first described this problem.³⁰ 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, 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.

25. 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 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, 54 (1986) [hereinafter Kraakman, *Gatekeepers*] (stating that “some gatekeepers may be ineffectual or costly enforcement agents under any legal regime”). In later work, Profs. Gilson & Kraakman have recognized some infirmities in the reputational intermediary thesis. See, e.g., Ronald Gilson & Reinier H. Kraakman, *The Mechanisms of Market Efficiency Twenty Years Later: The Hindsight Bias*, 28 J. CORP. L. 715 (2003) (“[W]e are now experiencing the early stages of a quite different framework for evaluating the efficiency of the stock market . . .”).

26. See Gilson, *Value Creation*, *supra* note 25, at 290–91.

27. See Victor P. Goldberg, *Accountable Accountants: Is Third-Party Liability Necessary?*, 17 J. LEGAL STUD. 295, 312 (1988) [hereinafter Goldberg, *Accountable Accountants*] (“The good accountant can charge a high price to clients because they can use the accountant’s good name to sell their securities at a premium or to borrow at lower interest rates.”).

28. See Gilson & Kraakman, *Market Efficiency*, *supra* note 25, at 613–21 (stating that underwriters “serve as distributors for the issuer, providing the sales force and facilities necessary to sell the securities to the public”).

29. See Paul Mahoney, *Public and Private Rule Making in Securities*, in AFTER ENRON: LESSONS FOR PUBLIC POLICY 111, 118–20 (William A. Niskanen ed., 2005) (stating that “stock exchanges played [the] role” as the “principal regulators of disclosure, accountability, and governance standards for publicly traded firms”).

30. See George A. Akerlof, *The Market for “Lemons”: Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488 (1970).

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 because buyers receive credible information and efficient transacting moves forward.

Expansive estimation of the evaluation capacity of reputational intermediaries recommends 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 ideal 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.³¹ Following this reasoning, any claim that an intermediary has engaged in 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.³²

31. 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 27, at 312 (arguing that auditors have adequate market-based incentives to act diligently insofar as failure to do so results in a reputational penalty); Mahoney, *supra* note 29, 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, which are driven by reputational constraints to invest in policing efforts); Roberta Romano, *Empowering Investors: A Market Approach to Securities Regulation*, 107 YALE L.J. 2359 (1998) (arguing that securities issuers should be free to choose any legal regime of their choosing—even a regime that does not penalize fraud—given that market incentives will compel issuers to select regimes that align with investors’ interests).

32. 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

The logic of these arguments is compelling. But this 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.³³ 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 business transactions,³⁴ 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.³⁵ 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

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*].

33. See Jonathan M. Barnett, *Certification Drag: The Opinion Puzzle and Other Transactional Curiosities*, 33 J. CORP. L. 95, 102–06 (2006) (“[E]mpirical attempts to validate the thesis in real-world settings surprisingly often reach mixed and occasionally even contrary results.”). The most compelling support for the certification thesis is found in some markets for collectors’ items, where certification appears to track pricing and quality differences as expected. See Bradley S. Wimmer & 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); Sanjeev Dewan & Vernon Ning Hsu, *Adverse Selection in Reputation-Based Electronic Markets: Evidence from Online Stamp Auctions*, 52 J. INDUS. ECON. 497 (2004) (same, with respect to stamps); Ginger Zhe Jin & Andrew Kato, *Price, Quality and Reputation: Evidence from an Online Experiment*, 37 RAND J. ECON. 983 (2006) (same, with respect to baseball cards); Ginger Zhe Jin et al., *That’s News to Me! Information Revelation in Professional Certification Markets* (Nat’l Bureau of Econ. Research, Working Paper No. 12390, 2006), available at <http://www.fieldexperiments.com/uploads/120WP.pdf> (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* (Nov. 2002) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=351261 (same, with respect to comic books).

34. For a review of this evidence, see Barnett, *supra* note 33. Other scholars have observed the informational infirmities of some of these instruments. See e.g., Theodore Eisenberg & Jonathan Macey, *Was Arthur Andersen Different? An Empirical Examination of Major Accounting Firm Audits of Large Clients*, 1 J. EMPIRICAL LEGAL STUD. 263 (2004) (discussing audit reports); Coffee, *Gatekeeper Failure*, *infra* note 41, at 23–25 (discussing 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) (discussing fairness opinions); Robert A. Prentice, *The Inevitability of a Strong SEC*, 91 CORNELL L. REV. 775, 793–94 (2005) [hereinafter Prentice, *Strong SEC*] (discussing mutual funds), 795–96 (discussing exchanges); Macey, *Reputational Model*, *supra* note 21, at 7–10 (discussing credit ratings and exchange listings); Frank Partnoy, *The Paradox of Credit Ratings*, in RATINGS, RATING AGENCIES AND THE GLOBAL FINANCIAL SYSTEM 65 (Richard M. Levich et al. eds., 2002) (discussing credit ratings).

35. For 2010, Moody’s reported revenues of \$1.4 billion for its credit rating operations. *Proxies and Annual Reports*, MOODY’S CORP., <http://ir.moody.com/annuals.cfm> (last visited Mar. 30, 2012). Revenue figures are not available for Standard & Poor’s, which is a division of McGraw Hill. Given that it has almost equivalent market share as Moody’s, it is fair to assume that Standard & Poor’s revenue figures are roughly comparable. That assumption yields an estimate of almost \$3 billion in revenues for the two leading credit rating agencies. *Id.*

already knows, the unreliable statements of a conflicted third party, or the expressions of unsophisticated or misinformed observers.³⁶

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	Major transactions
Listing	Stock exchange	Equity issuer
Stock recommendations	"Sell-side" stock analysts ³⁷	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 overlooked 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 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 lemons 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

36. Statement made on the basis of the author's personal experience as a corporate lawyer. The financial press reports similar views. See, e.g., Janey Morrissey, *A Corporate Sleuth Tries the Corporate Rating Field*, N.Y. TIMES, Feb. 26, 2011, at BU1 ("Wall Street types tend to look askance at credit ratings no matter who is providing them."); Michael Sivy, *Why Europe's Downgrades Matter*, TIME MONEYLAND, Dec. 19, 2011, <http://moneyland.time.com/2011/12/19/why-europes-downgrades-matter/> (stating that "[c]redit-rating agencies have long had a reputation for locking the barn door after the horse is gone" and noting examples where credit rating agencies lag in "identifying imminent defaults and bankruptcies").

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

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 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.³⁸ 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,³⁹ or a certified entity's managers will strategically withhold information from the certifier to extract rents from the principal.⁴⁰

Most fundamentally, it is vital to recognize that the lemons problem can migrate from the certified market to the certification market. This circumstance 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 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

38. See Michael S. Spence, *Job Market Signaling*, 87 Q.J. ECON. 355, 361–68 (1973) (describing how signaling can affect the job market). 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. 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).

39. See Luigi Alberto Franzoni, *Imperfect Competition in Certification Markets*, in ORGANIZED INTERESTS AND SELF-REGULATION: AN ECONOMIC APPROACH 158 (Bernardo Bortolotti & Gianluca Fiorentini eds., 1999) (exploring the role of organized interests in shaping collective action and in the emergence of self regulation); Gian Luigi Albano & Alessandro Lizzeri, *Strategic Certification and Provision of Quality*, 42 INT'L ECON. REV. 267 (2001) (“studying the effect of the presence of a certification intermediary in an environment where information asymmetries are particularly severe”); Alessandro Lizzeri, *Information Revelation and Certifiers*, 30 RAND J. ECON. 214 (1999) (analyzing “strategic manipulation of information by . . . certification intermediaries”).

40. See Nina Walton, *Gatekeepers and CEO Reputation* (USC Center in Law, Econ. & Org., Research Paper No. C09-10, 2010), available at <http://law.bepress.com/usclwps/lewps/art95/>.

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," such as 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.⁴¹ Additionally, a combination of agency-cost and adverse-selection effects can perpetuate the usage of non-cost-justified certification instruments that perversely inflate transaction costs.⁴² Contrary to standard assumptions, there are 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.

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.⁴³ In the next two Parts, I undertake this task. I review the basic economic features of certification markets, as illustrated by evidence from various settings, and identify a mechanism that drives certifiers consistently to 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

41. For more complete discussions of these factors, see JOHN C. COFFEE, JR., *GATEKEEPERS* (2004); Prentice, *Strong SEC*, *supra* note 34 (arguing in part that "the short-term self-interest of actors in the securities markets subverts the reputational constraint"); John C. Coffee, Jr., *Gatekeeper Failure and Reform: The Challenge of Fashioning Relevant Reforms*, 84 B.U. L. REV. 301 (2004) [hereinafter Coffee, *Gatekeeper Failure*] (analyzing the failure of gatekeepers from 2000–02); Macey, *Efficient Capital Markets*, *supra* note 21 (analyzing corporate monitoring mechanisms in light of the Enron collapse); Macey, *Reputational Model*, *supra* note 21 (analyzing the economic model for investments in reputational capital); John C. Coffee, Jr., "It's About the Gatekeepers, Stupid", 57 BUS. LAW. 1403 (2002) (examining how gatekeepers allowed management to engage in fraud); Lawrence Cunningham, *Beyond Liability: Rewarding Effective Gatekeepers*, 92 MINN. L. REV. 323 (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 WM. & MARY BUS. L. REV. 391 (2010). These practically oriented contributions are preceded by a theoretical analysis of intermediary failure in the legal literature which 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. See Stephen S. Choi, *Market Lessons for Gatekeepers*, 92 NW. U. L. REV. 916 (1998) [hereinafter Choi, *Market Lessons*].

42. See Barnett, *supra* note 33.

43. For a limited exception, see Harold Furchtgott-Roth et al., *Regulating the Raters: The Law and Economics of Rating Firms*, 3 J. COMPETITION L. & ECON. 49 (2011) (comparing the performance of television ratings and credit ratings firms).

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.

III. ECONOMICS OF CERTIFICATION MARKETS

It is now 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.

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 sometime 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 an independent auditor delivered 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 combination of revealed accounting irregularities and the absence of such irregularities may reveal some additional information over time. 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, by regulators who supervise those markets.⁴⁴ 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 rewards them for the initial outlay required to accrue reputational capital and the ongoing outlays required to maintain it.

C. Demand-Side Entry Barriers

Demand side frictions that cause distortion away from the textbook model of perfect competition match these supply-side frictions. This derives from the fact that users of certification products, who can include both sellers and buyers in the associated certified

44. Commentators often assert 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, e.g., Partnoy, *supra* note 34 (discussing the impact of ratings in the regulatory system); Macey, *Reputational Model*, *supra* note 21 (same). But the credit ratings market is not a special case; 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) federal education regulators rely on private accreditation bodies to evaluate colleges and universities, see Matthew W. Finkin, *The Unfolding Tendency in the Federal Relationship to Private Accreditation in Higher Education*, 57 LAW & CONTEMP. PROBS. 89, 92–93 (1994); (ii) 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 Eleanor DeArman Kinney, *Private Accreditation as a Substitute for Direct Government Regulation in Public Health Insurance Programs: When is it Appropriate?*, 57 LAW & CONTEMP. PROBS. 47, 57 (1994), 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; (iii) 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* note 75 and accompanying text; (iv) 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 (v) 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). The ubiquity of the phenomenon is instructive: like users, regulators use certifier investigation as a proxy for quality, to reduce search costs, and, to maximize search cost-savings, rely on a single certifier or limited class of recognized certifiers. Also, like managers, regulators rely on the evaluation decisions of outside third parties to reduce expected reputational losses for adverse outcomes.

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),⁴⁵ 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.⁴⁶ 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.⁴⁷ Any such adverse outcome may then impose losses on the buyer in the form of quality shortfalls—that is, actual quality deviates from expected 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.⁴⁸

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. For 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—

45. See *MFI Stock Review: Dun & Bradstreet (DIVB)*, MAGIC DILIGENCE.COM (Oct. 7, 2009), <http://www.magicdiligence.com/articles/dun-bradstreet-DNB-2010-10-07> (describing Dun & Bradstreet's impact and domination throughout the market).

46. For broader discussion of this and other switching costs in the credit rating market, see HERWIG LANGOHR & PATRICIA LANGOHR, *THE RATING AGENCIES AND THEIR CREDIT RATINGS: WHAT THEY ARE, HOW THEY WORK, AND WHY THEY ARE RELEVANT* 408 (2009).

47. 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 Ronald J. Gilson, *The Devolution of the Legal Profession: A Demand Side Perspective*, 49 MD. L. REV. 869, 899 (1990) [hereinafter Gilson, *The Devolution of the Legal Profession*]. Prof. Gilson argues that this entry barrier shelters existing lawyers and allows them to exercise a gatekeeping function with respect to client's demands. See *id.* 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.

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

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 Appendix,⁴⁹ this is a commonly observed state of affairs: mature certification markets are 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. A large number of certifiers without any dominant market share indicates two possible stages of development: (i) an immature certification market that has not yet converged on a few recognized providers;⁵⁰ 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).⁵¹ 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.⁵² 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 this Article will demonstrate subsequently, the most robust certification mechanisms use the nested structure.⁵³ 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

49. The Appendix provides a representative but not a comprehensive list of private certifiers in the U.S. market. For a larger list, see NAT'L INST. OF STANDARDS & TECH., DIRECTORY OF U.S. PRIVATE SECTOR PRODUCT CERTIFICATION PROGRAMS (Charles W. Hyer ed., 2001), available at http://gsi.nist.gov/global/docs/pubs/NISTSP_903.pdf. However, the list 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 43, at 84.

50. See Blair et al., *supra* note 2, at 329 (noting proliferation of smaller firms in newer assurance markets that are emerging outside the traditional financial assurance market).

51. For information on these certifiers, see *Summary*, AM. LUMBER STANDARD COMM., INC., http://www.alsc.org/geninfo_summary_mod.htm (last visited Mar. 30, 2012); *About AOSCA*, AOSCA, <http://www.aosca.org/about.html> (last visited Mar. 30, 2012); COUNCIL FOR HIGHER EDUC., RECOGNIZING ACCREDITING ORGANIZATIONS (2012), available at http://www.chesa.org/pdf/CHEA_USDE_AllAccred.pdf.

52. See *ANSI Accredited Programs*, ANSI, http://www.ansi.org/about_ansi/accredited_programs/overview.aspx?menuid=1 (last visited Mar. 30, 2012).

53. See *infra* Part VI.C (describing the structure of a robust certification mechanism).

opportunism by the immediately preceding certification entity.

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 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.⁵⁴ 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 three⁵⁵—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.⁵⁶ 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 only four firms and, in some industry segments, even fewer, now overwhelmingly dominate.⁵⁷ Also, 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 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.

54. These concerns have arisen with respect to unstable or multiple standards for certifying a number of products. See Margaret Cho, *Marks of Rectitude*, 77 *FORDHAM L. REV.* 2311, 2341–46 (2010) (discussing coffee); Ken Lawrence, *A Dissenting Expert Opinion on Graded Certificates*, *VIRTUAL STAMP CLUB* (July 2007), http://www.virtualstampclub.com/grading_kl.html (discussing coins and stamps); Jeanne Yacoubou, *Vegetarian Certifications on Food Labels: What Do They Mean?*, *VEGETARIAN J.* (May 1, 2006), available at <http://www.vrg.org/journal/vj2006issue3/vj2006issue3labels.htm> (discussing vegetarian food labels); *Authentication and Authenticity*, *ARTFAKE.NET*, http://www.artfake.net/art_authentication.html (last visited Mar. 30, 2012) (discussing art authentication).

55. See Lawrence J. White, *The Credit Rating Industry: An Industrial Organizational Analysis*, in *RATINGS, RATING AGENCIES AND THE GLOBAL FINANCIAL SYSTEM* 45 (Richard M. Levich et al. eds., 2002).

56. See Andrew McLennan & In-Uck Park, *The Market for Liars: Reputation and Auditor Honesty* (ISER Discussion Paper No. 587, 2004), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=422701 (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).

57. 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*] (discussing industries such as petroleum and coal, communications, and fabricated metals, in which only two firms audit 70% of the assets).

IV. 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 on the cost savings earned by reducing evaluation efforts. The interaction of these two effects 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 asserted⁵⁸—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 malfeasance a losing proposition on a net expected value basis.⁵⁹ 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 decision-making.⁶⁰ 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.

58. See Lin Bai, *On Regulating Conflicts of Interest in the Credit Rating Industry*, 13 N.Y.U. J. LEGIS. & PUB. POL'Y 253, 265 (2010).

59. 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).

60. See, e.g., Prentice, *Strong SEC*, *supra* note 34, at 786, 797–98, 813–16 (noting that discretion, short term greed, and decision making biases cause auditors to act irrationally); 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) (noting that managers trade credibility for competitive edge and often have imperfect information with which to make decisions).

To start, 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. In other words, 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—to detect and monitor certified firms' degree of compliance 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 uses a decentralized system that requires that certified firms undertake their own testing in order to demonstrate compliance with the relevant UL standard, and subjects those firms to periodic inspection of their testing procedures by UL staff.⁶¹ This inspection procedure reflects an intermediate choice between the lowest level of effort—manufacturers' self-certification and no UL staff testing or inspection—and the highest level of effort—continuous direct testing and monitoring by UL staff. Truste, the leading but criticized provider of "privacy assurance" services in the e-commerce market, reportedly 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.⁶²

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 that users bear 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.⁶³ Put

61. For a description, see *Midwest Plastic Fabricators, Inc. v. Underwriters Labs., Inc.*, 906 F.2d 1568, 1569–70 (Fed. Cir. 1990); SIEMENS, THE SECRETS OF UL 14 (2009), available at <https://www.automation.siemens.com/cd-static/material/info/e20001-a820-p305-v2-7600.pdf>.

62. See Edelman, *supra* note 8.

63. 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. INDUS. 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). This Article's 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 1 HANDBOOK OF INDUSTRIAL ORGANIZATION 771 (Richard Schmalensee & Robert Willig eds., 1989), who observes that reputation building requires a consumer to rationally terminate its relationship with a firm that sells the consumer a low-quality good. See also Johannes Horner, *Reputation and Competition*, 92 AM. 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 soon as it delivers a low-quality product depends on consumers' "patience," which is in turn a function of competing producers' customer bases,

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 a dominant certifier to avoid the larger cost associated with migrating to an alternative certifier, evaluating quality directly, or abandoning the market altogether.⁶⁴ 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.⁶⁵

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.⁶⁶ If

which serve as a proxy for product quality). 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 25, at 97–98.

64. 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 at the time of contracting, both parties bear some combination of specification costs, the user bears observation costs during performance—including the difficulty in distinguishing between shirking and mere mistake—and/or any adjudicative agent bears verification costs 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 drive certifiers to exploit user lock-in through quality, the non-contractible variable. For a related observation, see Farrell & Klemperer, *infra* note 66, at 2.2, noting that firms can exploit locked-in users by reducing quality rather than increasing price.

65. On the latter possibility, see Walton, *supra* note 40.

66. It might be 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 certifier's services *ex ante*. This intuition drives the "bargain/ripoff" sequence theorized in the economic literature on switching costs: users who suffer from *ex post* switching costs are compensated by reduced prices—or increased quality—*ex ante*. See Joseph Farrell & Paul Klemperer, *Coordination and Lock-In: Competition with Switching Costs and Network*

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 significant 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 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 *unconventional* 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 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.

Effects, in 3 HANDBOOK OF INDUSTRIAL ORGANIZATION 1967 (Richard Schmalensee & Robert Willig eds., 1989). 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 initial 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. *Infra* Part VI.

V. A REGULATORY CONUNDRUM

If the standard intermediary thesis has a substantially limited scope of application, then it is worthwhile to reexamine the associated normative presumption against aggressive state regulation to improve gatekeeping markets.⁶⁷ Contrary to a fairly well-settled consensus in 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, major cases of gatekeeper failure in the capital markets since the Great Depression trigger 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 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.⁶⁸

A. Regulatory Risk I: Too Much Information

Expanding certifier liability to plug apparent shortfalls in reputational incentives is a mainstay of securities regulation. In response to the 1929 stock market crash, the Securities Act of 1933 imposed duties on underwriters, directors, accountants, and other advisors to detect and prevent misrepresentations in the public issuance of securities.⁶⁹ In response to accounting scandals in the late 1960s and 1970s, culminating in the

67. For another contribution that emphasizes the fallibility of reputational constraints—on other grounds—and urges reconsidering the academic consensus against securities regulation, see Prentice, *Strong SEC*, *supra* note 34, 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.

68. In the following discussion, I do not discuss the most extreme form of regulatory intervention into certification markets: namely, state monopolization that displaces those markets. This is principally because it suffers from the same informational constraints that limit the efficacy of top-down regulatory interventions into private certification markets, as discussed below.

69. This refers to Section 11 of the Act. Securities Act of 1933 § 11, 15 U.S.C. § 77k (2006) (requiring 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). Advisors may also be liable as an "aider and abettor" under Section 10(b) of the Securities Exchange Act of 1934. Securities Exchange Act of 1934 § 10(b), 15 U.S.C. § 78j (2006). However, court decisions have prevented private suits based on this theory, which greatly diminishes the liability threat. See *Cent. Bank of Denver v. First Interstate Bank of Denver*, 511 U.S. 164, 191 (1994) (holding there is no private cause of action for "aider and abettor" liability under Section 10(b) of the Securities Exchange Act). The Court reaffirmed this holding in *Stoneridge Inv. Partners LLC v. Scientific-Atlanta*, 552 U.S. 148, 167 (2008).

bankruptcy of the Penn Central Railroad, Congress created the Federal Accounting Standards Board (FASB) to provide further supervision of the accounting profession.⁷⁰ 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.⁷¹ Finally, in response to the most recent financial crisis, the Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd–Frank Act) 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.⁷² Every expansion of gatekeeper liability imposes three important costs: (i) out-of-pocket compliance costs; (ii) expected litigation-related losses given the positive likelihood of false prosecution, opportunistic plaintiffs’ suits, and judicial error; and (iii) 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 certification context.⁷³ 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.⁷⁴ This assertion rests on an uncontroversial proposition that is overlooked in popular 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 goods⁷⁵—or can substitute toward direct evaluation of product quality at a

70. See Alex J. Pollock, *Has the FASB Outlived its Usefulness?*, AM. ENTER. INST. (Jan. 18, 2007), <http://www.aei.org/article/economics/financial-services/has-the-fasb-outlived-its-usefulness/>.

71. For a full discussion, see BRUCE F. DRAVIS, *THE ROLE OF INDEPENDENT DIRECTORS AFTER SARBANES–OXLEY* 125–46 (2007).

72. Dodd–Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111–203, § 932(a), 124 Stat. 1376, 1878 (2010).

73. See *supra* note 31 and accompanying text.

74. For similar observations, see Choi, *Market Lessons*, *supra* note 41, at 947.

75. 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 certifier provides information that 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 the private market’s collective underprovision 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 *ECONOMICS OF CORPORATION LAW AND SECURITIES REGULATION* 317, 320–21

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 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 production of unwanted information (assuming even the 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 by eliminating the lowest-quality portion of the market that finds it most costly to meet the elevated certification threshold,⁷⁶ 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.⁷⁷ 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.⁷⁸ Following the

(1980). Note, however, that there are at least three 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. Consistent with this assertion, the rating agencies shifted in the 1970s from seeking funding through fees from subscribers to fees from issuers, in part due to the advent of low-cost photocopying. See White, *supra* note 55, at 47 (describing the pattern of changing rate structures in the ratings industry). 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. Third, in markets where informationally deprived parties are concentrated and well-endowed, then those parties sometimes exhibit the capacity to self-organize collectively in order to share information on counterparty creditworthiness. See Kevin Cowan & Jose De Gregorio, *Credit Information and Market Performance: The Case of Chile*, in CREDIT REPORTING SYSTEMS AND THE INTERNATIONAL ECONOMY 163, 167–69 (Margaret J. Miller ed., 2003) (describing information-sharing arrangements in Chile among large department stores and a private credit bureau established by the national chamber of commerce and entrepreneurs). 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.

76. For similar views, see Kraakman, *Gatekeepers*, *supra* note 25, at 77.

77. Other commentators have recognized that excessive liability can result in the withdrawal of gatekeeper services in the financial markets context. See *id.* at 94; Coffee, *Gatekeeper Failure*, *supra* note 41, at 348.

78. See *Sec. & Exch. Comm'n v. Nat'l Student Mktg. Corp.*, 402 F. Supp. 641 (D.C.D.C. 1975) (holding the defendant 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).

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.⁷⁹ As a result, the letter's informational content fell considerably.⁸⁰ 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.⁸¹ 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.⁸² 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.⁸³ The settlement sought to reduce conflicts of interest by limiting banks' ability to fund research with investment banking fees.⁸⁴ 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.⁸⁵ Whether the resulting reduction in the quantity of information available to retail investors, set off against any increase in the quality of information, represents a net social gain is again undetermined.

2010: The Dodd–Frank Act repealed the rating agencies' exemption 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.⁸⁶ As a result, Moody's and Standard &

79. 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 (1989).

80. Barnett, *supra* note 33.

81. On the registration requirement, see Sarbanes–Oxley Act of 2002, Pub. L. 107-204, § 102, 116 Stat. 745, 753 (2002). On accountants' increased liability exposure, see Jerry Wegman, *Impact of the Sarbanes–Oxley Act on Accountant Liability*, 10 J. LEGAL, ETHICAL & REG. ISSUES 1 (2007).

82. See Alan Reynolds, *Political Responses to the Enron Scandal*, in AFTER ENRON: LESSONS FOR PUBLIC POLICY 18, 30 (William A. Niskanen ed., 2005).

83. See Stephen Labaton, *Wall Street Settlement: The Overview; 10 Wall Street Firms Reach Settlement in Analyst Inquiry*, N.Y. TIMES, Apr. 29, 2003, <http://www.nytimes.com/2003/04/29/business/wall-street-settlement-overview-10-wall-st-firms-reach-settlement-analyst.html?pagewanted=all&src=pm>.

84. See *id.*

85. See Reynolds, *supra* note 82, at 36–40.

86. Dodd–Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 932(a), 124 Stat. 1376, 1884 (2010) (creating a private cause of action against a "NRSRO"-designated rating agency where it has "knowingly or recklessly failed . . . to conduct a reasonable investigation of [a] rated security").

Poor's 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.⁸⁷ Given this predicament, the SEC waived the requirement that asset-backed issuers include credit ratings in the offering document⁸⁸ and relaxed the circumstances under which rating agencies could be held liable for issuers' inclusion of the ratings in offering documents.⁸⁹

Each of these episodes exhibit 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. The House of Lords mentioned precisely that reason when it rejected imposing a duty of care on an allegedly negligent certifier—known as a “classification society”—in the maritime industry.⁹⁰ 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.”⁹¹ It is the ominous threat of gatekeeper exit that motivates what is often the final sequence in the repeating pattern of gatekeeper regulation: the state limits gatekeepers liability, whether explicitly through damages caps, outright 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—in an attempt to restore participation.⁹² The result is the familiar “flip-flop” pattern that has marked top-down approaches to improve gatekeeper performance through prescriptive regulation.

87. *Dodd-Frank: Rating Agencies and the ABS Market*, LAW360 (Jan. 24, 2011), <http://www.bingham.com/Media.aspx?MediaID=12358>.

88. For the SEC action, see Letter from Katherine Hsu, SEC Senior Special Counsel, to Ford Motor Credit Co. LLC (Nov. 23, 2010), available at <http://www.sec.gov/divisions/corpfin/cf-noaction/2010/ford072210-1120.htm>.

89. *Securities Act Rules: Questions and Answers of General Applicability*, SEC.GOV, at Questions 233.04–233.08, <http://www.sec.gov/divisions/corpfin/guidance/securitiesactrules-interps.htm> (last visited Mar. 30, 2012).

90. *Marc Rich & Co. AG v. Bishop Rock Marine Co. (The Nicholas H)* [1995] 3 All E.R. 307 at 311.

91. *See id.*

92. Private Securities Litigation Reform Act of 1995, Pub. L. No. 104-67, 109 Stat. 737 (1995). 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.

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,⁹³ 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 2006⁹⁴ and the Dodd–Frank Act,⁹⁵ which reduce the use of rating agencies’ ratings in the securities, banking, and financial regulatory apparatus in an attempt to limit the rating agencies’ market power. 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.⁹⁶ The reason derives from a paradoxical feature of certification markets. Certifiers’ incentives to accumulate reputational capital by maintaining evaluation quality depend on being able to charge an above-market premium, which in turn depends on barriers to entry that prevent price from converging to marginal cost.⁹⁷ Any reduction in market concentration exerts competitive pressures on incumbent certifiers, which limits incumbents’ ability to demand above-market premia, depressing incumbents’ incentives to make the investments required to sustain certification strength.⁹⁸

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.⁹⁹ This complication implies a high

93. See, e.g., *Rating the Raters: Enron and the Credit Rating Agencies: Hearing Before the S. Comm. on Govt. Affairs*, 107th Cong. 173 (2002) (testimony of Steven L. Schwarcz, Professor of Law, Duke University). For arguments that rating agencies’ performance would be improved by multiplying providers, see Macey, *Efficient Capital Markets*, *supra* note 21, at 421–22 (noting that “regulators should devise strategies to encourage more market competition”); Macey, *Reputational Model*, *supra* note 21, at 434–35 (stating that “over time we observed and marked an undeniable diminution in quality of service,” due to over-concentration); Claire A. Hill, *Regulating the Rating Agencies*, 82 WASH. U. L.Q. 43, 45 (2004) (stating that “regulatory reform should do what it can to encourage a less concentrated market structure”).

94. Credit Rating Agency Reform Act of 2006, Pub. L. No. 109-291, 120 Stat. 1327 (2006).

95. See *supra* note 72 and accompanying text.

96. For a similar view with respect to the rating agencies, see Bonewitz, *supra* note 41, at 405–06, 422–23.

97. 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. See Klein & Leffler, *supra* note 59. For the leading expression of this insight in the employment context, see Carl Shapiro & Joseph Stiglitz, *Equilibrium Unemployment as a Worker Discipline Device*, 74 AM. ECON. REV. 433 (1984).

98. Consistent with this proposition, 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 44, at 108–09.

99. This assertion applies a broader proposition: perfectly competitive markets drive price to marginal cost but, as a result, reduce 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

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 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.¹⁰⁰ 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, UL.¹⁰¹ It is not clear that these interventions yielded expected improvements in quality or expansions in output. 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 short-term pricing distortions may be consistent with the purpose of sustaining long-term incentives to maintain reputational quality. Anecdotal, no one would argue that audit quality in the public accounting market has improved since federal regulators compelled the industry to lift limitations on advertising and bidding for audits starting in the early 1970s.¹⁰² To the contrary, echoing observations often made in the legal market,

“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, 388 (2003); Heski Bar-Isaac, *Imperfect Information and Reputational Commitment*, 80 *ECON. LETTERS* 167, 171 (2005).

100. See *Goldfarb v. Va. State Bar*, 421 U.S. 773, 793 (1975) (holding the minimum fee schedule enforced by state bar association was illegal restraint of trade); *Nat'l Soc'y of Prof'l Eng'rs vs. United States*, 435 U.S. 679, 681 (1978) (holding 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., *In re Mass. Bd. of Registration in Optometry*, 110 F.T.C. 549, 596 (1988) (holding a private licensing board may not prohibit truthful advertising of discounts or truthful advertising that contains “sensational” or flamboyant testimonials); *In re Wyo. State Bd. of Registration in Podiatry*, 107 F.T.C. 19, 23 (1986) (prohibiting limitations on advertising); *R.I. Bd. of Accountancy*, 107 F.T.C. 293 (1986); *In re La. State Bd. of Dentistry*, 106 F.T.C. 65, 71 (1985) (prohibiting limitations on advertising).

101. See Mark R. Barron, *Creating Consumer Confidence or Confusion: The Role of Product Certification Marks in the Market Today*, 11 *MARQ. INTELL. PROP. L. REV.* 414, 422–23 (2007) (citing 29 C.F.R. § 1910.393 (2005)). On the dominance of UL and some moderate competitive threats since OSHA's action, see Brett Nelson, *Under Fire*, *FORBES* (June 21, 2004), http://www.forbes.com/forbes/2004/0621/103_print.html.

102. On the FTC's successful efforts to pressure professional accounting organizations to lift those bans,

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.¹⁰³

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 Standard & Poor'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.¹⁰⁴ This finding is consistent with observations by participants in less developed foreign ratings markets, where excessive competition among a large number of agencies reportedly induces "rating shopping" by issuers and a race to the bottom among competing providers.¹⁰⁵ 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.¹⁰⁶ 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.

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 it 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 barriers 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

see Cunningham, *Too Big to Fail*, *supra* note 57, at 1712–13.

103. See Stephen A. Zeff, *How the Accounting Profession Got Where It Is Today: Part I*, 17 ACCT. HORIZONS 189 (2003).

104. See Bo Becker & Todd Milbourn, *How did increased competition affect credit ratings?* (Harv. Bus. Sch., Working Paper No. 09-051, 2010), available at <http://www.hbs.edu/research/pdf/09-051.pdf>.

105. See Atmadip Ray, *Too many rating agencies destructive for industry*, ECON. TIMES, June 13, 2011, http://articles.economicstimes.indiatimes.com/2011-06-13/news/29653175_1_rating-agencies-rating-shopping-rating-shopping (quoting a rating agency executive stating that the number of rating agencies in Indian markets is excessive and results in "ratings shopping" by certified firms).

106. See Victor Manuel Bennett et al., *Driven to Cheat: Competition and the Unethical Firm* (Apr. 2011) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1833517 (using sample consisting of 4,560,300 emissions tests from 3257 firms and measuring competitiveness by the 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). *Id.*

high information costs borne by regulators.¹⁰⁷ 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.

VI. ORGANIZATIONAL FORM: REGULATION BY PROXY

The line of argument has now reached a Panglossian juncture. 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 tort claims or seeking to override the contractual limitations on liability that are often demanded by certifier entities.¹⁰⁸ English courts, which have exhibited similar tendencies,¹⁰⁹ 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,"¹¹⁰ and then proceeded to issue a certifier-friendly decision consistent with that tradition.¹¹¹ U.S. courts have upheld this hands-off approach, almost always shielding credit rating agencies from defamation and other tort liability claims on First Amendment

107. 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 article 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.

108. 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 INQUIRIES 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 LAW & CONTEMP. PROBS. 185, 187 (1994). Schuck concludes that the "risk of tort liability for accreditors appears to be very low." *Id.* The leading New York case on certifier liability imposes a "duty toward buyers" that is hospitable to third-party claims against certifiers who make measurement or other errors. *Glanzer v. Shepard*, 135 N.E. 275, 275 (N.Y. 1922). 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*, at 255–70.

109. English courts tended to reject libel claims brought against credit reporting agencies in the early 20th century. See *London Ass'n for Protection of Trade v. Greenlands Ltd.* [1916] 2 A.C. 15 (rejecting liability against a credit reporting agency). At the time, these decisions were considered to be virtual preconditions to preserving a private market for trade credit reporting services. See C. MCNEIL GREIG, *THE GROWTH OF CREDIT INFORMATION: A HISTORY OF UPAT-INFOLINK PLC* 131–33 (1992).

110. *Marc Rich & Co. AG v. Bishop Rock Marine Co. (The Nicholas H)* [1995] 3 All E.R. 307.

111. See *id.*

grounds.¹¹² Even after Congress passed the Dodd–Frank Act—which sought to eliminate the SEC’s historical exemption of the credit rating agencies from liability under the securities law—the Second Circuit aggressively maintained this approach in dismissing a claim filed against the credit rating agencies under the Securities Act of 1933.¹¹³

If courts upheld that non-interventionist approach without qualification, then the identified deficiencies in the standard form of the intermediary thesis would remain 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 recommended minimal state intervention to improve performance in gatekeeping markets. In this Part, I show that even if courts adopted this minimalist position against most forms of state intervention, 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 to commit tiousers against acting opportunistically and thereby limit the discount users demand ex ante to protect against that risk. This theoretical expectation is soundly confirmed by historical and contemporary experience. As discussed below, 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—otherwise, certifiers would possess little incentive 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 illustrates these arguments.

112. See, e.g., *Compuware Corp. v. Moody’s Investors Servs.*, 499 F.3d 520, 526 (6th Cir. 2007) (holding, under First Amendment case law, that actual malice is the predicate standard for imposing liability on rating agencies for non-verifiable statements). A recent ruling in the Southern District of New York contests the presumption that credit ratings always fall under First Amendment protection. See *Abu Dhabi Commercial Bank v. Morgan Stanley & Co.*, 651 F. Supp. 2d 155, 175 (S.D.N.Y. 2009) (stating that rating agencies only qualify for First Amendment protections when the ratings “are considered matters of public concern” and specifically excluding cases where the ratings agencies only distribute the ratings 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.

113. See, e.g., *In re Lehman Brothers Mortgage-Backed Sec. Litig.*, 650 F.3d 167 (2d Cir. 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 certain provisions of the Dodd–Frank Act. See *id.*

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.¹¹⁴ With a few exceptions—notably, the rating agencies, the credit reporting agencies, and some of the agencies in collectors' markets—this holds true for the selected set of certifying entities listed in the Appendix. Nonprofit certifiers often adopt further measures, including procedural devices to avoid conflicts of interest, in order to commit to certification quality, to maximize participation by affected constituencies, and to minimize exposure to antitrust liability for collusive action.¹¹⁵ For example: Consumers Union, the nonprofit publisher of *Consumer Reports*, refuses to accept advertising or free samples from manufacturers,¹¹⁶ 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.¹¹⁷ This is not to say that for-profit entities never supply reliable certification services. Some of UL's competitors—in particular, its major rivals in the European market—appear to operate successfully on that basis, and in 2007, even UL announced its intention to form a for-profit testing subsidiary that would support its expansion plans.¹¹⁸ Rather, I am simply observing that dominant providers in certification markets tend to operate under a nonprofit or some other constrained form of organization. They hold an unusual organizational preference relative to most other areas of modern economic activity, where unconstrained forms of organization such as the stock corporation or, more recently, the limited liability corporation, dominate.

In this Part, I set forth a simple explanation for certifiers' consistent preference for constrained forms of organization. Compared to for-profit organizational forms that impose either fewer or zero constraints on the liquidity of ownership interests and the size of managerial compensation, constrained forms¹¹⁹ reduce the shirking behavior identified by the certification paradox as an inherent feature of mature certification markets.

114. 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).

115. See *id.* at 365–66.

116. See *Consumer Reports No Commercial Use Policy*, CONSUMERREPORTS, <http://www.consumerreports.org/cro/aboutus/adviolation/read-the-policy/index.htm> (last visited Mar. 1, 2012).

117. See *DNV Council*, DNV.COM, http://www.dnv.com/moreondnv/profile/governing_bodies/dnvcouncil.asp (last visited Mar. 30, 2012) (claiming that the council structure exists so that no single group possesses decisive control).

118. See *UL Plans For-Profit Testing, Certification Subsidiary*, IHS, <http://www.ihs.com/news/ul-for-profit.htm> (last visited Mar. 30, 2012). Interestingly, UL previously skirted the boundary between for-profit and nonprofit enterprise. In 1943, UL lost its tax-exempt status by judicial decision on the ground that testing the safety of electrical products for commercial enterprises constituted “regular business of a kind ordinarily carried on for profit.” See *Underwriters' Labs., Inc. v. Comm'r*, 135 F.2d 371 (10th Cir. 1943) (holding UL engaged in commercial, not charitable, business). Legislation later overturned this decision and UL regained its federal tax-exempt status. See CHEIT, *supra* note 44, at 12 n.33.

119. For simplicity, “constrained forms” are equated at this stage in the discussion with nonprofit organizations.

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 their anticipated future opportunism. To understand why this could constitute an effective commitment strategy, 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 it expects such behavior 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.¹²⁰ This bolstered nondistribution constraint means that a nonprofit’s managers have reduced incentives to act opportunistically in order to generate profits for distribution to themselves, members, or outside controlling parties in the form of cash or stock dividends.¹²¹

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.¹²² 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.¹²³ The nondistribution constraint imposed by law—and enforceable (albeit imperfectly) by the Internal Revenue Service and state attorneys general¹²⁴—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

120. See BRUCE R. HOPKINS, *THE LAW OF TAX-EXEMPT ORGANIZATIONS* 5, 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.* at 560.

121. For the leading sources of this argument, see HENRY HANSMANN, *THE OWNERSHIP OF ENTERPRISE* (1996); Henry B. 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* (N.Y.U. Ctr. for Law, Econ. & Org., Working Paper No. 11-35, 2011), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1945852 (arguing that nonprofit or mutually owned entities in the credit market have reduced incentives to exploit consumer biases in accumulation of credit).

122. See Hansmann, *supra* note 121, at 841–45.

123. See HANSMANN, *supra* note 121, at 229–30; Fama & Jensen, *infra* note 143, at 318.

124. 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%. See Stephanie Strom, *I.R.S. Ends Exemptions for 275,000 Nonprofits*, *N.Y. TIMES*, June 8, 2011, at B3.

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 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 1908, the House of Lords 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.¹²⁵ In 1916, 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.¹²⁶ 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 therefore had not been entitled to such generous treatment, leaving the existing precedent untouched.¹²⁸ 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.

B. Constrained Entities in Financial Certification Markets

Intermediaries that supply certification services to the financial markets have widely adopted constrained organizational forms as a partial remedy for certifier opportunism. 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.¹²⁹ From the 18th century through the early 1970s, the mutual form was the

125. *Macintosh v. Dun* [1908] 12 A.C. 146 (Privy Council).

126. *London Ass'n for Protection of Trade v. Greenlands Ltd.* [1916] 2 A.C. 15.

127. *See id.* For discussion, see GREIG, *supra* note 109, at 131–33. A modern English court invoked this same logic in exempting a classification society—an entity that certifies a vessel's seaworthiness—from duty of care liability on the ground that imposing liability would be "unjust" in the case of a nonprofit organization. *Marc Rich & Co. AG v. Bishop Rock Marine Co. (The Nicholas H)* [1995] 3 All E.R. 307.

128. *London Ass'n for Protection of Trade v. Greenlands Ltd.* [1916] 2 A.C. 15.

129. Unlike a nonprofit, the mutual and the general partnership can distribute cash dividends to its

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.¹³⁰ Remarkably, private entities subject to constraints on the ability of managers and other controlling parties to extract profits through cash and stock distributions implemented core credit and insurance functions of the financial markets. As shown in Table II, with the exception of the credit reporting agencies, this preference for constrained organization historically has characterized the final intermediary type that supports exchange in the financial markets: certification intermediaries.

members: the mutual, based on the member's use of the mutual's services, and the general 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.

130. See Robert E. Wright, *Thinking Beyond the Public Company*, MCKINSEY QUARTERLY (Sept. 2010), http://www.mckinseyquarterly.com/Thinking_beyond_the_public_company_2665 [hereinafter Wright, *Thinking Beyond the Public Company*] (discussing mutual and partnership structures); 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*, BUS. & ECON. HISTORY ON-LINE (2011), available at <http://www.thebhc.org/publications/BEHonline/2011/wright.pdf> (regarding the effectiveness of the mutual structures in banks). 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 65 (Richard Steinberg ed., 2004); Henry Hansmann, *The Organization of Insurance Companies: Mutual versus Stock*, 1 J.L. ECON. & ORG. 125 (1985). Overall, banks and insurance companies do not serve a certification function, although banks did once do so implicitly by supplying bills of 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 historically predominated in the financial markets.

Table II: 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 ¹³¹	Corporation	N/A
Accounting firms	General partnership ¹³²	Limited liability partnership	1990s
"Bulge Bracket" investment banks	General partnership ¹³³	Corporation	1990s
Stock exchanges	Mutual; nonprofit ¹³⁴	Corporation	2000s
Law firms	General partnership ¹³⁵	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 the financial markets starting in the early 1990s.¹³⁶ As shown in Table II, the conventional stock corporation or, in the case of professional advisors, the limited liability partnership, has eroded the historical predominance of constrained forms among financial certifiers. In the late 1990s and early 2000s, following the lead set in the 1980s by the thrift banking

131. 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 5, at 115–22; GREIG, *supra* note 109, at 11–20.

132. See Royston Greenwood & Laura Empson, *The Professional Partnership: Relic or Exemplary Form of Governance*, 24 ORG. STUD. 909, 911 (2003) (explaining that regulatory measures historically ensured that accounting firms functioned as partnerships).

133. See CHARLES R. GEISST, *ENCYCLOPEDIA OF AMERICAN BUSINESS HISTORY* 228 (2006) (showing that after Goldman Sachs went public in 1999, there were no more significant private banks that existed as partnerships).

134. See David Reiffen & Michel Robe, *Demutualization and Customer Protection at Self-Regulatory Financial Exchanges*, 31 J. FUTURES MARKETS 126, 127 (2011) (asserting that most of the world's major financial markets have converted from mutual, nonprofit organizations to corporations over the past decade). Exchanges 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 operated as partnerships. The New York Stock Exchange lifted the prohibition in 1970. Alan D. Morrison & William J. Wilhelm, Jr., *The Demise of Investment Banking Partnerships: Theory and Evidence*, 63 J. FIN. 311, 311 (2008).

135. On the use of general partnership forms by law firms and accounting firms, see Greenwood & Empson, *supra* note 132.

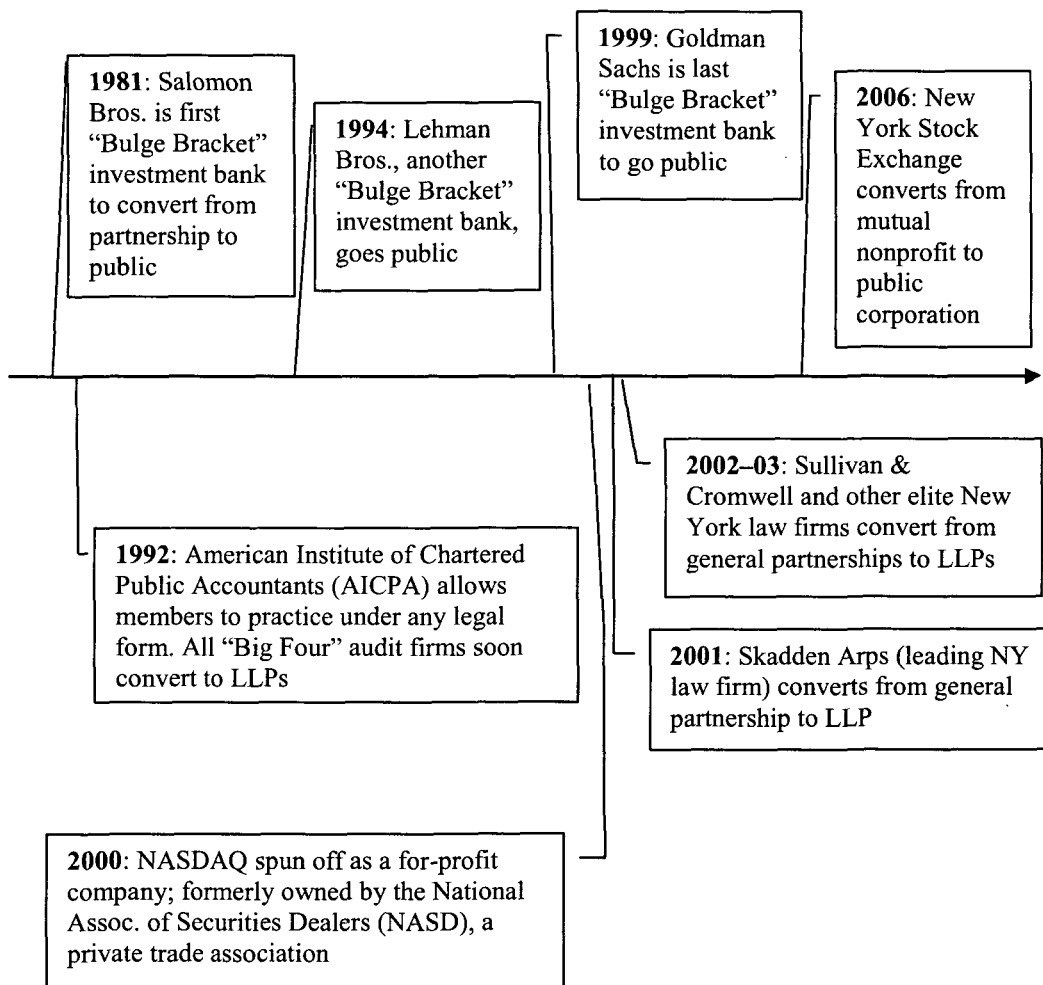
136. See Wright, *Thinking Beyond the Public Company*, *supra* note 130, at 1–3; Macey, *Reputational Model*, *supra* note 21, at 24; see also LARRY E. RIBSTEIN, *THE RISE OF THE UNCORPORATION* 207 (2010) (suggesting that reckless investment decisions by investment banks prior to the financial crisis would not have been tolerated by partnerships owned by their employees).

industry¹³⁷ and in the 1990s by the life and property-liability insurance industry,¹³⁸ 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.¹³⁹

137. 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 Maureen O'Hara, *Property Rights and the Financial Firm*, 24 J.L. & ECON. 317, 327 (1981).

138. See Krupa S. Viswanathan & J. David Cummins, *Ownership Structure Changes in the Insurance Industry: An Analysis of Demutualization*, 70 J. RISK & INS. 401, 407–10 (2003).

139. On the demutualization of financial exchanges, see Reiffen & Robe, *supra* note 134; Roberta S. Karmel, *Turning Seats into Shares: Causes and Implications of Demutualization of Stock and Futures Exchanges*, 53 HASTINGS L.J. 368, 368–70 (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, 311–12 (2008). On the adoption of corporate forms by brokerages and underwriters, see Fama & Jensen, *infra* note 143, at 301–02.

Figure I: Wall Street's Organizational Transformation (1981–2006)¹⁴⁰

140. Not to scale. On the AICPA rule change and consequent changes in state law, see AM. INST. OF CPAS, DIGEST OF STATE ISSUES FOR THE CPA ACCOUNTING PROFESSION 12 (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, at C2; Scott Baker & Kimberly D. Krawiec, *The Economics of Limited Liability: An Empirical Study of New York Law Firms*, 2005 U. ILL. L. REV. 107, 108–12 (2005); Kimberly D. Krawiec, *Organizational Form as Status and Signal*, 40 WAKE FOREST L. REV. 977, 977–79 (2005); Robert Hillman, *Organizational Choices of Professional Services Firms: An Empirical Study*, 58 BUS. LAW. 1387, 1393–95 (2003). On the NYSE’s conversion, see David Weidner, *Public Trading, Publicly Traded*, MARKETWATCH (Mar. 8, 2006, 11:06 AM), <http://www.marketwatch.com/story/nyse-goes-from-public-institution-to-public-ownership>.

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 merit—and, as noted below, some empirical foundation in insurance markets that have experienced comparable changes in organizational form¹⁴¹—there are important reasons for caution given 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, key financial market intermediaries' consistent historical use of constrained forms over such a long period of time suggests an efficiency advantage in using 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.¹⁴² 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.¹⁴³ By implication, removing those disabling features 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

141. See *infra* note 149 and accompanying text.

142. 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 (1997). Subject to contractual modification, a partner can “cash out” his or her interest in the partnership by exercising his right to unilaterally dissolve the partnership or compel the other partners to buy out his interest. See *id.* §§ 38, 42.

143. 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 the 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).

professionalism—often equated with foregoing short-term monetary gains for long-term reputational credibility—that has historically been associated with the legal¹⁴⁴ and accounting professions.¹⁴⁵ 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;¹⁴⁶ 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.¹⁴⁷ More anecdotally, a similar pattern can be observed in the 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.¹⁴⁸ However, 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.¹⁴⁹ 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.

144. On the tradition of professionalism in legal practice, see Gilson, *The Devolution of the Legal Profession*, *supra* note 47, at 887.

145. On the reputational function played by unlimited liability in the evolution of the audit profession, see Laurence Van Lent, *The Economics of an Audit Firm: the Benefits of Partnership Governance*, 31 BRIT. ACCT. REV. 225, 240 (1999).

146. 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, 34 (1993). 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. SERV. RES. 145 (2002). For a review of the empirical literature, see Viswanathan & Cummins, *supra* note 138, at 416–17, 424.

147. See HANSMANN, *supra* note 121, at 256–58. See also O'Hara, *supra* note 137, at 327–28 (using data from 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, 721 (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. Esty, *Organizational Form and Risk Taking in the Savings and Loan Industry*, 44 J. FIN. ECON. 25, 51–52 (1997) (finding that demutualization of S&Ls is associated with increased investment in risky assets and higher profit variability).

148. See John E. Girouard, *A Financial Bunker for Scary Times*, FORBES (Feb. 10, 2009), http://www.forbes.com/2009/02/10/mutual-life-insurance-financial-adviser-network_0210_financial_planning.html (discussing Mutual Whole Life insurance and its comeback).

149. See Orhemjamts Erhemjamts & J. Tyler Leverty, *The Demise of the Mutual Organizational Form: An Investigation of the Life Insurance Industry*, 42 J. MONEY, CREDIT & BANKING 1011 (2010).

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,¹⁵⁰ wood-based consumer products, apparel, and construction markets.¹⁵¹ 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 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).¹⁵²

Environmental activists have long protested against harms caused to dolphins by certain fishing practices common in the tuna industry.¹⁵³ To complement environmental regulations that target this practice, activists have sought to influence consumer behavior in wealthy target markets in order to achieve the same objective.¹⁵⁴ 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: according to the Earth Island Institute, over 90% of the world’s canned tuna market is now restricted to products that comply with the “Dolphin Safe” standard administered by the Institute.¹⁵⁵ As a 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.¹⁵⁶ A similar tactic has been employed to address deforestation. Several certification organizations are now in operation in the United States and worldwide that issue certificates, or accredit entities that issue certificates, showing compliance with certain environmental standards by logging companies and

150. 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 conjunction with the U.S. Department of Agriculture, in fostering the development of and trade in pure seed varieties starting in the early 20th century; a particular example is the Association of Official Seed Certifying Agencies (AOSCA), whose designations are relied upon by the U.S. Department of Agriculture. See HACKLEMAN & SCOTT, *supra* note 44, at 24–25.

151. 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 54, at 2312–16.

152. Other examples are listed in the Appendix under “Ethical Certification Markets.”

153. See Lorraine Mitchell, *Dolphin-Safe Tuna Labeling*, in *ECONOMICS OF FOOD LABELING* 22 (2001), available at <http://www.ers.usda.gov/publications/aer793/aer793f.pdf>.

154. See *id.*

155. *Questions and Answers About Earth Island Institute’s Dolphin Safe Tuna Program*, EARTH ISLAND INST. (Jan. 2007), <http://www.earthisland.org/imp/QandAdolphinSafe.html>.

156. CONROY, *supra* note 151, at 45.

manufacturers and retailers of paper and other wood-based consumer goods.¹⁵⁷ For example, through a network of national nonprofit affiliates that set standards in over 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.¹⁵⁸ By year-end 2010, certified forests reportedly constituted nine percent of all the world’s forests, most of which have been certified by the two leading certifiers, FSC and PEFC.¹⁵⁹

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.¹⁶⁰ 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 firms then adopt to 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, nonprofit-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.¹⁶¹ Only the 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

157. 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. KATHRYN FERNHOLZ ET AL., DOVETAIL PARTNERS, INC., FOREST CERTIFICATION: A STATUS REPORT 8 (2010), available at <http://www.dovetailinc.org/files/DovetailCertReport0310b.pdf>.

158. See CONROY, *supra* note 151, at 79.

159. See *id.* For a book-length discussion of forest certification initiatives, see CHRIS TOLLEFSON ET AL., SETTING THE STANDARD: CERTIFICATION, GOVERNANCE, AND THE FOREST STEWARDSHIP COUNCIL (2008).

160. 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 151, at 65–66; TOLLEFSON ET AL., *supra* note 159, at 32–35, 235–36.

161. 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 114 (Susan Rose-Ackerman ed., 1986).

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,¹⁶² which in turn induced SFI to convert to a nonprofit organization that is governed jointly by industry, academic, and conservation representatives.¹⁶³ 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 Figure II 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. This certification function is bolstered further 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,¹⁶⁴ and only accredits certification bodies that comply with "ISO 17011," a standard set by the International Standardization Organization for entities like FSC that accredit product certification organizations.¹⁶⁵ 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.

162. Press Release, American Lands Alliance et al., 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_SF_Falls_Short.pdf.

163. R. Neil Sampson, *The Sustainable Forestry Initiative Program: Seven Years of Sustainable Forestry*, SAMPSON GROUP (Mar. 18, 2004), <http://www.sampsongroup.com/Papers/WFC%20Article.pdf>.

164. See generally ISEAL ALLIANCE, ISEAL CODE OF GOOD PRACTICE FOR SETTING SOCIAL AND ENVIRONMENTAL STANDARDS (2006), *available at* http://responsiblemining.net/pubs/ISEAL_Code_Jan06.pdf (stating that a super-certifier verifies compliance).

165. See FSC Accreditation Program, FSC, <http://www.fsc.org/accreditation.html> (last visited Mar. 30, 2012).

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.¹⁶⁷ 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.¹⁶⁸ The same approach tracks long-standing U.S. prohibitions against lawyers or accountants organizing as a corporation—a prohibition that almost all states relaxed in the 1990s in order to allow lawyers and accountants to practice in entities formed as limited liability partnerships.¹⁶⁹ Perhaps the most extensive case of organizational regulation is found in the history of federal and state banking regulations, which included numerous provisions mandating or favoring the use of nonprofit or mutual forms for decades running from the 1930s through the mid-1970s and early 1980s.¹⁷⁰

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

167. For suggestions to this effect in other contexts, see Schellhorn, *supra* note 143 (suggesting that policymakers should consider mandating or favoring that investment banks use general partnership forms in order to restrain opportunistic behavior); Bubb & Kaufman, *supra* note 121 (suggesting that policymakers should mandate or favor mutual forms for credit-granting institutions given a lower propensity to exploit naïve consumers’ propensity to over-accumulate debt, as compared to for-profit corporations).

168. See JEFFREY BELSON, SPECIAL REPORT: CERTIFICATION MARKS 33 (2002) (citing INTELLECTUAL PROPERTY DEP’T., TRADE MARK REGISTRY WORK MANUAL 19 (1996)). Both U.S. and U.K. law preclude the holder of a certification mark from engaging in trade in the certified goods or services. See Trade Marks Act, 1994, c.26, § 2 (U.K.); Lanham Act of 1946 § 14, 15 U.S.C. § 1064 (2006). 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 relevant standard. See Lanham Act § 14(3), 15 U.S.C. § 1064(3).

169. For example, prior to 1994, New York law required that law firms operate as general partnerships. See Baker & Krawiec, *supra* note 140, at 110. For fuller discussion of the loosening of organizational requirements in the legal market, see RIBSTEIN, *supra* note 136, at 127–28. With respect to accountants, see Steven R. Muzatko, *An Empirical Investigation of IPO Underpricing and the Change to the LLP Organization of Audit Firms*, 23 AUDITING 53, 53–54 (2004).

170. From 1933 until 1975, the Home Owners Loan Act required that all federally chartered savings and loans institutions be mutual entities and, until 1974, limited or prohibited conversions to state-chartered stock institutions. Cordell et al., *supra* note 147, at 722–23. From 1934 through the present, the federal government has exempted credit unions from the federal income tax, provided the credit union operates on a nonprofit basis, has no capital stock, and operates for mutual purposes. See *Credit Union Tax Exemption*, NAT’L ASSOC. OF FED. CREDIT UNIONS, <http://app3.vocusgr.com/WebPublish/Controller.aspx?SiteName=nafcu&Definition=ViewIssue&IssueID=6874>. 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 121, at 257–58.

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.¹⁷¹ 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 factors 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 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 points of inquiry 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.¹⁷² 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

171. 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 Innovation: The Spread of a New Organizational Form and Its Supporting Legislation in the U.S. Insurance Industry* (2006) (unpublished Ph.D dissertation, U.C. Berkeley), available at <http://gradworks.umi.com/32/54/3254308.html>.

172. For an argument to this effect with respect to the S&L industry, see O'Hara, *supra* note 137, at 330–31. For similar observations with respect to the banking industry more generally, see William G. Shepherd, *The Banking Industry*, in *THE STRUCTURE OF AMERICAN INDUSTRY* 334, 354–58 (Walter Adams ed., 5th ed. 1977) (noting that heavily regulated banking industry sacrificed efficiency and innovation for the sake of stability).

outweigh losses in the form of increased intermediary opportunism. Scholars have argued that increased capital costs account for the demise of mutually organized trade credit reporting societies in the United Kingdom starting in the 1950s¹⁷³ and the wave of demutualizations in the United States in the 1980s and 1990s.¹⁷⁴ 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 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 that, as a result, may suffer especially large short-term losses. 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—provide a meaningful certification role while continuing to play other important roles in facilitating efficient transactions.¹⁷⁵ 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.¹⁷⁶ 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.¹⁷⁷ Today real estate transfer transactions are rarely accompanied by title opinions, which the market has discarded in favor of the apparently superior mechanism of title insurance.¹⁷⁸

173. See GREIG, *supra* note 109, at 17.

174. See Viswanathan & Cummins, *supra* note 138.

175. For views to this effect (but for reasons different than those proposed here), see Macey, *Reputational Model*, *supra* note 21; Prentice, *Strong SEC*, *supra* note 34.

176. See Benito Arrunada, *A Transaction-Cost View of Title Insurance and its Role in Different Legal Systems* 27 GENEVA PAPERS OF RISK & INSURANCE, 582, 582–84 (2002) [hereinafter Arrunada, *Title Insurance*].

177. See *id.*

178. *Id.*

3. Learning Effects

Whether 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. 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. However, there is an important circumstance that provides 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 (although, as noted previously, limited liability partnerships are now generally permitted).¹⁷⁹

VII. 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. However, 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

179. See *supra* note 169.

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 forms 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.

Appendix: Representative U.S. Certification Markets¹⁸⁰

Certification Market	Leading Providers (Year Est.)	Entity Type ¹
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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	Underwriter's Laboratories (1894) ¹⁸¹	Nonprofit
	Intertek (1885)	Corporation
Consumer products and services ¹⁸²	Better Business Bureau (1912)	Nonprofit
	Consumers Union (1936)	Nonprofit
	J.D. Power & Associates (1968)	Corporation
Gas appliances	AGA Laboratories (1918)	Nonprofit

180. Except as otherwise indicated, all information was 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.

181. The extent of UL's dominance can vary in any particular market. Generally, however, it can take a stronger and weaker form, respectively if: (i) it dominates certification and standard-setting services; or (ii) it monopolizes standard-setting but faces competition in certification services. *See* CHEIT, *supra* note 44.

182. Listed providers are merely representative. Smaller providers may operate in specific markets.

Certification Market	Leading Providers (Year Est.)	Entity Type
Water treatment and related products	NSF International (1944)	Nonprofit
	IAPMO R&T (1936)	Nonprofit
	Water Quality Association (1949)	Nonprofit
Ship vessels ¹⁸³ (seaworthiness)	Det Norske Veritas (1864)	Foundation ¹⁸⁴
	Lloyd's Register (1876)	Nonprofit
	American Bureau of Shipping (1862)	Nonprofit
	Nippon Kaiji Kyokai (1899)	Nonprofit

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 (AOSCA) (1919) ¹⁸⁵	Nonprofit
Lumber	American Lumber Standards Committee (1924) ¹⁸⁶	Nonprofit
Automotive parts	Certified Automotive Parts Association (1987)	Nonprofit

183. These four societies account for more than 70% of the world's registered shipping fleet, as measured in tonnage terms as of 2006. NICOLAI LAGONI, *THE LIABILITY OF CLASSIFICATION SOCIETIES* 37 (2007). Other entities tend to be far smaller, confined to national classification markets, and associated with lower standards.

184. The Norwegian foundation (or stiftelse) is a trust entity that holds property 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 is subject to some type of non-distribution constraint. However, since 1991, Det Norske Veritas has not enjoyed tax-exempt status under Norwegian law. See Ole Gjems-Onstad, *The Legal Framework and Taxation of Scandinavian Non-Profit Organizations*, 7 *VOLUNTAS* 195, 197, 204–08 (1996).

185. State crop improvement agencies usually certify compliance with the AOSCA standard. See Miller B. McDonald, *Seed Certification in the United States* (unpublished manuscript), available at http://seedbiology.osu.edu/HCS630_files/April%2010/Seed%20Certification%20USA,%20text.pdf.

186. The American Lumber Standards Committee accredits third-party grading agencies for conformity to the grading rules set forth by seven regional "grade rules writing organizations." See AM. LUMBER STANDARDS COMM., INC., *LUMBER PROGRAM—ACCREDITED AGENCY LIST*, available at http://www.alsc.org/greenbook%20collection/LumberProgram_facsimile.pdf; *Grade Rules Writing Organizations*, AM. LUMBER STANDARD COMM., INC., http://www.alsc.org/untreated_graderuleorg_mod.htm (last visited Mar. 30, 2012).

Certification Market	Leading Providers (Year Est.)	Entity Type
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EDUCATION; HEALTHCARE

Nonprofit Universities	Council for Higher Education Accreditation (1996) ¹⁸⁷	Nonprofit
Colleges and Universities (rankings)	U.S. News & World Report – “America’s Best Colleges” (1983)	Corporation
College applicants	Educational Testing Services (SAT)	Nonprofit
	ACT, Inc.	Nonprofit
Child day care centers	Nat’l Assoc. for Education of Young Children (1926) ¹⁸⁸	Nonprofit
Hospitals and healthcare facilities ¹⁸⁹	The Joint Commission (1951)	Nonprofit
	Healthcare Facilities Accreditation Program (1945)	Nonprofit
	Det Norske Veritas Healthcare (2008)	Subsidiary of foundation

DIAMONDS; COLLECTORS’ MARKETS

Polished diamonds	Gemological Institute of America (1931) ¹⁹⁰	Nonprofit
	American Gemological Society (1934)	Nonprofit
	European Gemological Laboratory (1974)	Corporation
Baseball cards	Professional Sports Authority (1991)	Corporation

187. The Council, formed through the merger of other organizations, recognizes six regional accreditors, which are viewed as providing the highest accreditation standard. See *Regional Accrediting Organizations 2011–2012*, COUNCIL FOR HIGHER EDUC. ACCREDITATION, <http://www.chea.org/Directories/regional.asp> (last visited Mar. 30, 2012). 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*, *College Money*, FLORIDA TIMES-UNION, Nov. 12, 2008, at A1.

188. On market share, see Xiao, *supra* note 8.

189. For information on market leaders, see Diane Meldi et al., *The Big Three: A Side by Side Matrix Comparing Hospital Accrediting Agencies*, SYNERGY, Jan./Feb. 2009, at 12, available at http://www.hfap.org/mediacenter/NAMSS%20Synergy%20JanFeb09_Accreditation%20Grid.pdf.

190. GIA represents roughly two-thirds of the graded polished diamond market. See Ken Gassman, *Diamond Grading Labs: Different Strokes for Different Folks*, IDEXMAGAZINE, July 14, 2008, available at http://www.idexonline.com/portal_FullMazalUbracha.asp?id=30649 (analyzing the diamond certification process based on sample of 12 million diamonds). Certification agencies other than GIA are viewed in the market as less rigorous. Interview with Diamond Wholesaler, in Tel Aviv, Israel (July 28, 2011).

Certification Market	Leading Providers (Year Est.)	Entity Type
	Beckett Grading Service (1999) ¹⁹¹	Corporation
Comic books	Comic Guaranty (2000) ¹⁹²	LLC
Coins	Professional Coin Grading Service (1986)	Corporation
	Numismatics Guaranty Corporation (1987)	Corporation

ETHICAL MARKETS

Kosher food	Orthodox Union (1898) ¹⁹³	Nonprofit
Sustainable forestry (wood-derived products)	Programme for Endorsement of Forest Certification (1999) ¹⁹⁴	Nonprofit
	Forest Stewardship Council (1993) ¹⁹⁵	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

191. On market share, see Karim Jamal & Shyam Sunder, Regulation, Competition and Independence in a Certification Society: Financial Reports vs. Baseball Cards (June 11, 2007) (unpublished manuscript), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=912703.

192. Comic Guaranty constitutes 95% of the market, based on eBay listings as of January 2007. See *Comparing the comic book slabbers/graders (CGC/PGX/ACE): eBay Guides*, EBAY (Apr. 6, 2012), <http://reviews.ebay.com/Comparing-the-comic-book-slabbers-graders-CGC-PGX-ACE?uqid=10000000002677480>.

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

194. Programme for Endorsement of Forest Certification (PEFC) is an umbrella organization that supervises 35 national certification organizations. It states that "two-thirds of all certified forests globally are certified by PEFC." See *Facts & Figures*, PEFC, <http://pefc.org/index.php/about-pefc/who-we-are/facts-a-figures> (last visited Mar. 30, 2012).

195. The Forest Stewardship Council accredits certifiers to certify compliance with its standards. See *FSC Accreditation Program*, FSC, <http://www.fsc.org/accreditation.html> (last visited Mar. 30, 2012). The FSC and the Sustainable Forestry Initiative are the two leading forest certification organizations in the United States. See *Forest Certification And Its Implications for America's National Forests: Questions and Answers*, U.S. FOREST SERV. (Apr. 3, 2008), <http://www.fs.fed.us/projects/forestcertification/qas.pdf>.
