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AUDITING THE AUDITORS: ANTITRUST CONCERNS IN THE LARGE COMPANY AUDIT MARKET

CHRISTOPHER C. MCKINNON*

The market for audit services is highly concentrated. Four large accounting firms dominate the industry, auditing 78% of all public companies and 99% of public company revenues. These firms audit virtually all of America's largest corporations; 99% of the Fortune 500 retain one of these four firms for audit services. This extreme concentration in only four firms has raised serious antitrust concerns. This Note investigates those concerns by examining how the large audit market developed and by analyzing certain regulatory proposals aimed at lessening industry concentration.

Auditors have been criticized recently due to their failure to discover flaws in the financial sector prior to the 2008 financial crisis. Such critiques are misplaced. While the audit industry is highly concentrated indeed, the calls for reform are unnecessary and unwise at this time. The audit industry as a whole has been deconcentrating since the Sarbanes-Oxley Act was implemented in 2002, and there is no evidence of any anticompetitive behavior in the market. Further, each of the most intelligible proposals is deficient for one reason or another, as this Note will explain.

 J.D. Candidate and Lawrence Lederman Fellow in Law & Economics, 2015, New York University School of Law; B.A., 2012, Business Economics, University of California, Santa Barbara. Awarded the 2015 Flora S. and Jacob L. Newman Prize for most outstanding note by the *NYU Journal of Law & Business*. Thank you to Professor Daniel Rubinfeld for sparking my interest in this topic and for his guidance and insight throughout the development of this Note. I would also like to thank Lawrence Lederman in addition to the faculty and fellow members of the Lederman Fellowship Program for helping me shape this project. Finally, I am especially grateful to the 2014–2015 Board of Editors of the *NYU Journal of Law & Business* for tirelessly preparing this piece for publication. All opinions and errors are my own.

INTRODUCTION

Federal securities laws require all publically traded companies to circulate audited financial statements to investors.[1] Corporations must retain certified public accounting (CPA) firms to conduct these audits, and there are no other legal substitutes.[2] This gives accounting firms a legally mandated monopoly over audit services.

Audits are required by law to assure that a company's financial records have been formed in accordance with generally accepted accounting principles.[3] The investing public then relies on these verified financial statements in making in-

1. *See* DAVID M. D'AGOSTINO, PUBLIC ACCOUNTING FIRMS: MANDATED STUDY ON CONSOLIDATION AND COMPETITION 7 (Gov't Accountability Office ed., 2003); *see also* Securities Exchange Act of 1934, 15 U.S.C. §§ 78(m), 78o(d) (2012) (requiring audited financial statement disclosure on SEC Forms 10-K, 10-Q, and 8-K).

2. *See* Joseph Gerakos & Chad Syverson, *Competition in the Audit Market: Policy Implications* 1 (Univ. of Chi. Booth Sch. of Bus., Working Paper No. 13-63, 2013); *see also* 15 U.S.C. §§ 78(m), 78o(d).

3. *See* D'AGOSTINO, *supra* note 1, at 7.

vestment decisions.[4] Thus, accountants play an important public watchdog role in the capital markets arena.

The investing public's confidence in the fairness of financial statements is critical to the efficient operation of U.S. capital markets.[5] An audit firm's public responsibility demands that accountants maintain total independence from clients at all times.[6] However, accounting firms are hired directly by the companies they audit, thus there is an inherent conflict of interest between maintaining independence and doing right by their clients.

Because of their vitally important duty to the investing public, auditors are regularly scrutinized when corporate frauds go undetected and are only discovered *ex post*. Recent concerns over concentration in the audit industry "[w]ere exacerbated by the financial crisis of 2007–09 when bank audits were seen to fail to give warning of imminent collapse . . . . The role of auditors in the crisis is naturally of most interest to this inquiry."[7] Because auditors must opine as to the company's going concern, in addition to verifying its financial data, the public instinctively blamed them for not giving investors any forewarning of the impending financial collapse. Furthermore, only four large accounting firms audit virtually all of America's largest financial institutions,[8] so the blame was narrowly focused on them.

The largest accounting firms (the Big 4) are Ernst & Young, Deloitte Touche Tohmatsu, PricewaterhouseCoopers, and KPMG. In 2002, they audited over 99% of U.S. public company revenues.[9] Together, they generated annual revenues in excess of $110 billion (an amount greater than the Gross Domestic Product of 150 countries) and employed over

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4. Walter Doralt et al., *Auditor Independence at the Crossroads–Regulation and Incentives*, 13 EUR. BUS. L. REV. 89, 90 (2012).

5. *See* ORICE M. WILLIAMS ET AL., AUDITS OF PUBLIC COMPANIES: CONTINUED CONCENTRATION IN AUDIT MARKET FOR LARGE PUBLIC COMPANIES DOES NOT CALL FOR IMMEDIATE ACTION 1 (Gov't Accountability Office ed., 2008); *see also* D'AGOSTINO, *supra* note 1, at 7.

6. *See* Bernard Ascher, *The Audit Industry: World's Weakest Oligopoly* 37 (Am. Antitrust Inst., Working Paper No. 08-03, 2008).

7. ECON. AFFAIRS COMM., HOUSE OF LORDS, ch. 6, ¶ 138, *available at* http://www.publications.parliament.uk/pa/ld201011/ldselect/ldeconaf/119/11909.htm.

8. D'AGOSTINO, *supra* note 1, at 118–23.

9. *Id.* at 1–2.

690,000 professional employees (although there are only 2.5 million accountants worldwide) in 2012.[10] Currently, BDO Seidman is the fifth largest firm, earning $6 billion in global revenue in 2012.[11]

I.
Antitrust Law Enforcement

A. *Audit Market Analysis*

Under the U.S. Department of Justice (DOJ) Merger Guidelines, the Antitrust Division would likely challenge any proposed merger between the already highly concentrated Big 4. The Guidelines state, "Mergers that cause a significant increase in concentration and result in highly concentrated markets are presumed to be likely to enhance market power."[12] Market and monopoly power are terms of art in antitrust law. Professors Krattenmaker, Lande, and Salop explain that the two terms are "not separate and distinct concepts but should be understood to refer to the same phenomenon—the ability to price above the competitive level."[13]

Exercising market power "requires that the firm or firms involved (collectively) face a relatively inelastic demand curve for a product at competitive prices. Only then could it be profitable for firms to raise price by reducing output."[14] If a firm prices its good highly in an industry where users have elastic demand, consumers will simply substitute the highly priced good with various other goods. The aggregate demand for audits is inelastic, however. Because all public companies are required to use a certified public accounting firm to audit and attest to their financial information, there are no legal substitutes for companies to employ instead of CPA firms.[15]

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10. *The 2012 Big Four Firms Performance Analysis*, Big4.com, at 4, 19 (Jan. 2013), http://www.big4.com/wp-content/uploads/2013/01/The-2012-Big-Four-Firms-Performance-Analysis.pdf; *see also* Ascher, *supra* note 6, at 10.

11. *Networks by Fee Income*, AccountancyAge.com (Jan. 2013), http://www.accountancyage.com/digital_assets/6839/All_int_charts_2013_v2.pdf.

12. U.S. Dep't of Justice & the Fed. Trade Comm'n, Horizontal Merger Guidelines 3 (2010).

13. Thomas G. Krattenmaker, Robert H. Lande & Steven C. Salop, *Monopoly Power and Market Power in Antitrust Law*, 76 Geo. L.J. 241, 263 (1967).

14. Daniel L. Rubinfeld, *Market Definition with Differentiated Products: The Post/Nabisco Cereal Merger*, 68 Antitrust L.J. 163, 165 (2000).

15. *See* 15 U.S.C. §§ 78(m), 78o(d).

The audit market is beholden to a "tight oligopoly," meaning only four firms control over 60% of the market share and other firms face significant barriers to entry.[16] Particular client-sectors are even more concentrated than the overall audit market, which likewise raises industry-specific concerns over competition. In some sectors, only one or two audit firms dominate the entire industry. These sectors "tend to heavily favor particular auditors; as either a cause or a consequence, these firms develop a depth of industry-specific expertise unmatched by rivals, and the preference for a particular auditor is reinforced."[17] For example, "PricewaterhouseCoopers dominates audits of global pharmaceutical companies; Ernst & Young has more software, hardware, and telecom clients; KPMG is the only auditor in Germany; and Deloitte audits many large [U.S.]-listed Chinese companies."[18] More importantly, in key industries "that affect our financial and economic health, such as the financial industry, more than 80 percent are dominated by just two of the Big Four."[19] Some of these extraordinarily concentrated commercial and financial sectors include the following:

(1) Security and Commodity Brokers where two Big 4 firms audit 94.1% of assets;
(2) Non-Depository Institutions where two Big 4 firms audit 87.9% of assets;
(3) Business Services where two Big 4 firms audit 73.7% of assets; and
(4) Depository Institutions where two Big 4 firms audit 70.8% of assets.[20]

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16. D'Agostino, *supra* note 1, at 16.

17. Directorate for Fin. & Enter. Affairs Competition Comm., Roundtable on Competition and Regulation in Auditing and Related Professions 5, ¶ 12 (Fed. Trade Comm. ed., 2009).

18. Francine McKenna, *What Would Happen If the Big Four Became the Big Three*, U. Chi. Booth Sch. Bus. Mag. (2013), *available at* http://www.chicagobooth.edu/capideas/magazine/winter-2013/what-would-happen-if-the-big-four-became-the-big-three?cat=business&src=Magazine.

19. Faith Bautista et al., Transition from a Monopolistic Big Four to a Competitive Big Twenty-Five 3–4 (2012).

20. D'Agostino, *supra* note 1, at 116–23. Some might argue that these uniquely concentrated financial sectors represent a relevant antitrust submarket for authorities to review in addition to the entire audit market and large company audits.

The recent economic crisis of 2008 made the highly concentrated nature of these financial sectors, and the audit market in general, a natural recipient of criticism. As the market segmentation above illustrates, the market for audit services is dual-tiered: (1) the Big 4 compete among themselves in the market for the world's largest corporations, and (2) the Big 4 compete with all other auditors for all other companies.[21] The antitrust concerns in the *U.S. large public company audit market* are the focus of this Note. Large companies are hereinafter defined as those having annual revenues in excess of $1 billion—of which there are approximately 1,500 in the United States.[22]

The segmented nature of the audit market is best illustrated by examining the variation among the Big 4's market share of clients of different sizes:

(1) 22% of companies with revenues less than $100 million retain the Big 4;
(2) 71% of companies with revenues between $100–500 million retain the Big 4;
(3) 92% of companies with revenues between $500 million–1 billion retain the Big 4; and
(4) 98% of companies with revenues greater than $1 billion retain the Big 4.[23]

As a means to more readily identify highly concentrated markets, antitrust regulators oftentimes calculate the Herfindahl-Hirschman Index (HHI) of market concentration.[24] Based on the DOJ's experience, the DOJ classifies markets as highly concentrated if the HHI exceeds 2,500.[25] As of 2006, the HHI for the overall public company audit market was approximately 2,300.[26] The 2008 Government Report calculated HHIs as they pertain to audit clients of differing sizes:

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21. *See* Ascher, *supra* note 6, at 12; *see also* D'Agostino, *supra* note 1, at 46.

22. *See* Williams et al., *supra* note 5, at 4.

23. The Government Accountability Office—under the direction of Congress—compiled these figures in their 2008 Government Report. *See* Williams et al., *supra* note 5, at 19.

24. "The HHI is calculated by summing the squares of the individual firms' market shares, and thus gives proportionately greater weight to the larger market shares." U.S. Dep't of Justice & the Fed. Trade Comm'n, *supra* note 12, at 18.

25. Williams et al., *supra* note 5, at 19.

26. *Id.* at 86.

(1) 800 for companies with revenues less than $100 million;
(2) 1,750 for companies with revenues between $100–500 million;
(3) 2,300 for companies with revenues between $500 million–1 billion; and
(4) 2,566 for companies with revenues greater than $1 billion.[27]

Moreover, the 2008 Government Report simulated the resulting HHIs in each client-category in the case of another Big 4 *merger*, and another Big 4 *failure*. This information is significant because "[i]n evaluating market concentration, the Agencies consider both the post-merger level of market concentration and the change in concentration resulting from a merger."[28] Regarding another potential Big 4 merger, the estimated HHI for companies with greater than $1 billion in revenue rose to 3,500.[29] Regarding another potential Big 4 exit, the estimated HHI for large public companies rose to 3,300.[30]

High concentration in the audit market is not a recent development, however.[31] The largest accounting firms have dominated the audit industry since the early-1970s, when eight firms provided a disproportionately large share of audit services.[32] Until 1989, those eight firms audited 98% of public company revenues and 82% of public companies by number.[33] Since then, there have been four distinct eras within which the Big 8 has morphed into the Big 4:

(1) 1973–1989: there were 8 large auditors;
(2) 1990–1998: two mergers left 6 large auditors;

27. *Id.* at 20.
28. *Id.* at 18.
29. *Id.* at 81.
30. *Id.* A Big 4 *merger* affects the market more so than a Big 4 *exit* because in a merger the firm's clients all belong to the singular conglomerate firm—by operation of law—whereas in an exit the dissolving firm's clients are likely to disperse, somewhat evenly, among the remaining Big 3 firms.
31. In fact, the gap between the largest firms and the next tier has actually grown since 1988. *See* D'AGOSTINO, *supra* note 1, at 47 (revealing that the differences in revenue, staff size, and client base between the largest auditors and the next tier have increased from 1988 to 2002).
32. Abigail Allen, Karthik Ramanna & Sugata Roychowdhury, *The Auditing Oligopoly and Lobbying on Accounting Standards* 8 (Harvard Bus. Sch., Working Paper No. 13-054, 2013).
33. *See id.*

(3) 1999–2002: one merger left 5 large auditors; and
(4) 2003–Present: one dissolution left 4 large auditors.[34]

B. *Defining the Relevant Market*

To determine whether a firm or group of firms is exerting market power, antitrust authorities must first identify the relevant market under review. The appropriate market for antitrust purposes is defined as the "group of products [or services] and a geographic area that is no bigger than necessary," which is known as the "smallest market principle."[35] The region at issue here is the United States, as the DOJ has authority over businesses—domestic and foreign—whose services or products affect Americans.[36] The relevant services at issue here are the audits of America's largest public corporations.[37]

The proper scope of the relevant market is a key issue in many antitrust cases. In *New York v. Kraft General Foods, Inc.*, a core portion of the litigation revolved around the appropriate market for the proposed merger between two large cereal manufacturers. New York argued for a narrow submarket of "adult" cereals, as opposed to the entire cereal market as argued by the merging entities.[38] Although such distinctions within a larger market have been asserted in the past (though not for cereal), the court ruled that the relevant cross-price elasticities did not warrant such market segmentation in that case.[39] Cross-price elasticity measures the change in quantity demanded of one good in response to another good's change in price. When the cross-price elasticity of demand is positive, the two products are substitutes, which indicates that the

34. *Id.* at 8.

35. Daniel L. Rubinfeld, *Econometric Issues in Antitrust Analysis*, 166 J. INSTITUTIONAL & THEORETICAL ECON. 63 (2010).

36. *See* U.S. DEP'T OF JUSTICE, U.S. GOV'T ENFORCEMENT AGAINST FOREIGN EXPORT RESTRAINTS, ANNEX. 5-A, *i, *available at* http://www.justice.gov/atr/icpac/5a.pdf.

37. Though the focus here is restrained to the United States, the Big 4 operate worldwide, and tend to be just as concentrated in other developed nations as America. D'AGOSTINO, *supra* note 1, at 16; *see also* Bernard Ascher & Albert A. Foer, *Financial Reform and the Big 4 Audit Firms* 3 (Am. Antitrust Inst., Working Paper No. 10-01, 2010). North and South America collectively represent only about 40% of the Big 4's global revenue. *The 2012 Big Four Firms Performance Analysis*, *supra* note 10.

38. Rubinfeld, *supra* note 14, at 166.

39. *Id.* at 168.

goods could be considered to be within the same market.[40] The mere fact that, say, "80 percent of the average adult's cereal consumption is of Adult cereals and 70 percent of the average child's consumption is of Kid cereals" does not necessarily imply the existence of two distinct markets.[41] Because it is "quite possible that a significant number of consumers view Adult and Kid cereals to be sufficiently substitutable on the margin for switching by consumers of all ages," average consumption rates are not determinative.[42] The defense's economic expert, Professor Rubinfeld, found "relatively high cross-price elasticities between specific Adult cereals and Kid cereals."[43] Relying on this information, the court held the appropriate market definition included all cereals, and not the narrower adult-only cereal submarket argued for by the State.[44]

Not only is the aggregate demand for audits inelastic—because CPA firms are the only legal providers[45]—but also the aggregate demand for large company audits is relatively inelastic. To illustrate, when audit fees rose steeply between 2000–2006, the Big 4 increased prices much faster than non-Big 4 firms,[46] and still very few companies switched auditors. During that period, the median audit fee increase for small companies (with revenues less than $100 million) rose by $110,000, while the median fee increase for large companies (with revenues greater than $1 billion) rose by $3,156,000.[47] Large companies switched auditors 102 times between 2003–2007, but 93% of those changes involved companies merely switching from one Big 4 firm to another; only 7 companies switched from a Big 4 firm to a mid-sized firm.[48] This is consistent with a high cross-price elasticity between Big 4 [and

40. *See* Gregory J. Werden, *Demand Elasticities in Antitrust Analysis*, 66 ANTITRUST L.J. 363, 398 (1998).

41. Rubinfeld, *supra* note 14, at 168.

42. *Id.*

43. *Id.*

44. *See id.* at 169.

45. *See* Securities Exchange Act of 1934, 15 U.S.C. §§ 78(m), 78o(d) (2012).

46. *See* H. Leon Chan et al., *Audit Fee Patterns of Big Four and Non-Big Four Firms: A Study of the Potential Effects of Auditing Standard 5*, CPA J. 32, 36 (2012).

47. WILLIAMS ET AL., *supra* note 5, at 28.

48. *See id.* at 24.

other] audits, and an inelastic demand for Big 4 audits in the aggregate. While cross-price elasticity is a useful indicator of the proper market, own-price elasticity—measuring the change in quantity demanded of a good in response to a change in that good's price—is "the most direct approach to market definition."[49] The low incidence of client departures despite a sharp increase in Big 4 audit fees indicates that the aggregate demand for Big 4 audits has low own-price elasticity, i.e., relatively inelastic demand. In the past, the DOJ has similarly narrowed the relevant market when evaluating the audit industry.[50]

II.
Nature of the Audit Oligopoly

High concentration in certain industries can be beneficial to producers and consumers alike.[51] However, observers cannot readily see either the benefits of firms growing larger or the barriers to entry in the audit industry.[52] Professor Benston is one of those observers; he asserts that entry into the accounting industry is largely unconstrained by legal barriers.[53] He notes that CPA licensure provides a limited role for restricting access to newcomers.[54] Because accounting firms require minimal capital investments aside from education, Benston concludes, "[P]ublic accounting poses almost no barriers to entry and relatively few costs of entry."[55] Benston construes "barriers" too narrowly, however. While barriers are "low in terms of offering basic audit services, [they are] impenetrable when it comes to offering audit services to global multinational companies."[56]

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49. Rubinfeld, *supra* note 35, at 64.

50. In 1998, the DOJ successfully prevented a merger between Ernst & Young and KPMG by framing the market as those auditors servicing Fortune 1,000 companies, rather than the entire audit market. U.S. Dep't of Justice, Appendix B: Antitrust Division Merger Challenges (1998); *see also infra* note 120.

51. *See* Williams et al., *supra* note 5, at 17.

52. *See* Bautista et al., *supra* note 19, at 4.

53. *See* George Benston, *The Market for Public Accounting Services: Demand, Supply and Regulation*, 4 J. Acct. & Pub. Pol'y 43, 46 (1985).

54. *See id.* at 47.

55. *Id.*

56. McKenna, *supra* note 18.

The 2008 Government Report compiled a list of fourteen U.S. industries that are considered "tight oligopolies" like the audit market, but that list is dominated by manufacturing-oriented industries.[57] There appears to be no similarly situated professional service industries that approach the level of concentration in public auditing.[58] In manufacturing sectors, economies of scale are clearly advantageous, whereas the benefits to growing larger as a professional service firm are less apparent.

Many observers think there is no greater reason for high concentration in the audit market than in any other professional service industry.[59] Accountancy firms "are not a natural monopoly, just as the legal profession is not a natural monopoly," some argue.[60] In the legal market, for example, more than 100 firms successfully compete for the business of the Fortune 500.[61]

However, a careful review of other professions reveals that some are indeed as highly concentrated as accounting. For example, the top five investment firms held 95% of the market for U.S. Mergers & Acquisitions (M&A) activity during 2012; those firms (predictably) are Goldman Sachs, JPMorgan, Bank of America Merrill Lynch, Morgan Stanley, and Barclays.[62] The top 10 firms held 155.1% of the market for M&A deals.[63] The sum is higher than 100% due to multiple investment banks working on a particular transaction.[64] Furthermore, one study of global concentration ratios ranked numerous professional service industries rather highly:

(1) Investment Banking and Brokerage ranks No. 2, with a four-firm ratio of 66.20;

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57. *See* D'Agostino, *supra* note 1, at 24.

58. *See id.*; *see also* Williams et al., *supra* note 5, at 17.

59. *See* Bautista et al., *supra* note 19, at 4.

60. *Id.* at 4.

61. Len Canty et al., Preventing Another Greece or Iceland: Time for Truly Independent Audits by a Multitude of Firms n.1 (2012).

62. Press Release, Dealogic, Global M&A Review: First Nine Months 2012, at 8 (Sept. 24, 2012), *available at* http://www.institutionalinvestorchina.com/arfy/uploads/soft/121001/32320_0855209731.pdf.

63. *See id.*

64. In large-scale M&A deals, the buyer and seller oftentimes employ their own financial advisors, which can result in two top firms working on a particular M&A transaction. Hence, the combined market share for the top ten firms exceeds 100%.

(2) Accounting Services ranks No. 20, with a four-firm ratio of 28.60;
(3) Advertising ranks No. 31, with a four-firm ratio of 20.90;
(4) Public Relations Agencies ranks No. 47, with a four-firm ratio of 13.15; and
(5) Management Consultants ranks No. 53, with a four-firm ratio of 9.20.[65]

The study ranked concentration based on worldwide industry revenues.[66] "Accounting Services" appears to be only somewhat concentrated on the global scale, ranking near the top, but nevertheless alongside many other professional services.

Notwithstanding other professional industries being just as concentrated as the audit market, numerous barriers exist to restrict new entrants. London School of Economics Professor Power says, "There is an element of concentration which may have to do with natural forces of economies of scale." A U.K. government report states that the audit market consolidated for a multitude of reasons:

> [T]he internationalisation of business; the scale of investment and capital required in an audit firm; economies of scale in audit; a semi-captive market; non-interventionist competition authorities; the perception that big is best; the reputational assurance of using Big Four auditors; and the fall of Arthur Andersen.[67]

A. *Barriers to Entry*

In addition to computing market share and HHI figures, the DOJ assesses whether the entry of others would be timely and sufficient in order to deter anticompetitive acts.[68] "The prospect of entry into the relevant market will alleviate concerns about adverse competitive effects . . . ."[69] Hypothetically,

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65. Charles L. Vehorn et al., *Global Industry Concentration*, 2 J. INTERDISC. BUS. STUD. 9–10 (2013).

66. *Id.* at 4, 7.

67. ECON. AFFAIRS COMM., HOUSE OF LORDS, *supra* note 7, ch. 2, ¶ 18.

68. *See* U.S. DEP'T OF JUSTICE & THE FED. TRADE COMM'N, *supra* note 12, at 28.

69. *Id.*

if smaller audit firms could readily audit multinational corporations, large auditors would be deterred from engaging in anticompetitive practices because their smaller counterparts could easily steal clients away. But, today there are prohibitively high barriers to entering the large audit market.

1. *Staff and Resource Constraints*

Accountancy firms must employ a large number of staff to complete the audits of the world's largest corporations.[70] In addition to the sheer size of the Big 4's staff, firm location is also important. The size and geographic dispersion of corporate clients, starting in the 1960s, forced accounting firms to scale themselves accordingly.[71] The largest firms aggressively expanded overseas beginning in the late-1960s to serve an increasingly global client base.[72] Mergers became the quickest way to fill gaps in geographic coverage to satisfy the audit needs of auditors' clients.[73]

Moreover, capital constraints pose hurdles to smaller firms aspiring to hire additional employees, expand geographically, or upgrade technologically in order to attract larger clients.[74] Raising capital is difficult for them due to the partnership structure of CPA firms, which limits outside investment and ownership.[75] By raising additional capital, larger firms create economies of scale by spreading infrastructure and modernization costs across a broader capital base.[76] These firms continue to efficiently invest substantial sums in staff training and development.[77]

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70. It is not uncommon for the audit of a multinational company to require hundreds of employees, which most mid-sized audit firms cannot commit to a single client. *See* WILLIAMS ET AL., *supra* note 5, at 37; *see also* D'AGOSTINO, *supra* note 1, at 46.

71. *See* Stephen A. Zeff, *How the U.S. Accounting Profession Got Where It Is Today: Part II*, 17 ACCT. HORIZONS 267, 270 (2003).

72. *See id.*

73. Big 4 representatives now state that globalization was the driving force behind their merger decisions in the 1980s, because "merging was a practical alternative to trying to build the business through internal growth." D'AGOSTINO, *supra* note 1, at 15.

74. *See* Allen, Ramanna & Roychowdhury, *supra* note 32, at 8.

75. D'AGOSTINO, *supra* note 1, at 6.

76. *See id.* at 4.

77. *See id.*

Furthermore, two of the greatest barriers to entering the large audit market today were unintended consequences of firm consolidation: industry recommendations and litigation exposure.

2. *Industry Recommendations*

Most public corporations surveyed said that expectations of shareholders, banks, lenders, and underwriters that aid the company in raising capital were of great importance in their unwillingness to retain non-Big 4 auditors.[78] These capital market participants consistently recommend the Big 4 for a multitude of reasons: (1) the Big 4 provide higher quality audits, (2) their reputations are well-established, and (3) they have deeper pockets.

First, Professor DeAngelo found that firm size provides a reliable proxy for audit quality.[79] The larger the auditor, by number of clients, the less incentive the auditor has to behave opportunistically.[80] According to her paper, accountancy firms specialize in different, but uniform, quality levels.[81] If terminated by the client, the firm loses out on a "client-specific quasi-rent stream" of future revenues.[82] With a greater number of clients, there is a greater flow of revenues into the firm, thus there is less incentive to cheat in order to retain any single client.[83] Therefore, DeAngelo concludes, consumers rationally use auditor size as a surrogate for audit quality.[84] Greater confidence in a company's audited financial statements means that investors will be less likely to underprice the stock as a means to protect themselves from inaccurate reports or corporate frauds that might otherwise go undetected.

Second, the longstanding and prosperous reputations of the Big 4 dwarf smaller firms that might attempt to retain multinational clients. There are greater costs imposed on bankers,

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78. WILLIAMS ET AL., *supra* note 5, at 21.

79. *See* Linda Elizabeth DeAngelo, *Auditor Size and Audit Quality*, 3 J. ACCT. & ECON. 184, 184 (1981).

80. *See id.*

81. *See id.* at 187.

82. *See id.* at 188.

83. *See id.* at 189.

84. *See id.* at 187; *see also* Benston, *supra* note 53, at 54 (explaining that larger accounting firms have more to lose in a lawsuit, which incentivizes them to be more careful when conducting audits).

lenders, and companies when investigating whether smaller auditors could accomplish a particular company's audit. It is simpler and cheaper, in this respect, to recommend a Big 4 auditor, whose skill and expertise are well known by market participants.[85]

Lastly, capital market participants want auditors with sufficient financial resources to withstand adverse litigation. This is important to banks and insurers who can get stuck paying a greater share of the litigation costs if a company's auditor goes bankrupt. Larger audit firms, thus, offer clients and others an added layer of insurance.[86]

Due to this increased level of insurance, investors respond by valuing a company that uses a Big 4 auditor higher than an equivalent company that retains a non-Big 4 auditor.[87] Changing from a non-Big 4 to a Big 4 auditor on the whole is viewed neutrally or positively by the stock market, whereas changing from a Big 4 to non-Big 4 firm is generally viewed negatively.[88]

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85. *See* Benston, *supra* note 53, at 50; *see also* D'AGOSTINO, *supra* note 1, at 49.

86. *See* Benston, *supra* note 53, at 73.

87. Earnings reports confirmed by Big 4 auditors also receive stronger stock price reactions than non-Big 4 firms. S.H. Teoh & T.J. Wong, *Perceived Auditor Quality and the Earnings Response Coefficient*, 68 ACCT. REV. 346, 346 (1993).

88. These stock price differentials are less significant with well-established corporations and auditors, however. ROSS D. FUERMAN, DIFFERENTIATING BETWEEN ARTHUR ANDERSEN AND THE SURVIVING BIG FOUR ON THE BASIS OF AUDITOR QUALITY: AN EMPIRICAL INVESTIGATION OF THE DECISION TO CRIMINALLY PROSECUTE ARTHUR ANDERSEN 13–14 (2005). For example, Grant Thornton (No. 6 ranked CPA firm) attempted to rebut the general presumption that switching from a Big 4 to a non-Big 4 auditor would decrease a company's stock price. The firm commissioned a study by Professor Whisenant, who reviewed the stock prices of 244 public companies (big and small) that switched to Grant Thornton from a Big 4 auditor between 2002–2006. The results revealed that switching from a Big 4 auditor to Grant Thornton had "no statistically significant" effect on stock price. Scott Whisenant, *An Analysis of the Information Content of Auditor Change Announcements: Grant Thornton LLP Engagements*, 1 INVESTOR PERCEPTIONS OF AUDIT FIRM PARITY, GRANT THORNTON COMMENTARY SERIES 24 (2006). That study considered only public companies with stable reputations that switched auditors after they had gone public years earlier and investor trust in them had been established. Further, the study only consisted of companies that switched from a Big 4 auditor to the CPA firm ranked sixth. Surely, the results would be different if more company switches involving smaller accounting firms and younger companies were included in a similar study.

Market participants often expect successful companies to use one of the Big 4—especially at the initial public offering (IPO) stage—given both the important assurance role auditors play and the unique insurance value they add. Investors generally rely on financial statements as a starting point in investment decisions when a company approaches an IPO. Because there are great informational asymmetries at the IPO stage, there is a strong demand for information to help the public establish prospective equity values.[89] Undergoing an IPO with a non-Big 4 auditor can raise a specter of doubt about the validity of the company's financial statements.[90]

Professor Willenborg notes that auditor selection serves as a form of "informational signaling" and "insurance signaling."[91] Informational signaling reflects the greater audit quality Big 4 firms provide, as established by Professor DeAngelo.[92] Larger accounting firms also provide increased insurance coverage to investors in the event of securities litigation, Willenborg notes.[93] The auditor provides those reading financial statements with an added form of insurance—the value of which increases with the size of the accounting firm.[94] Using a non-Big 4 auditor provides investors with lower potential recovery, which they rationally respond to by underpricing as a means to protect themselves.[95] Numerous studies reveal an inverse relationship between auditor size and the incidence and severity of stock underpricing, particularly at the IPO stage.[96] Some believe this might be explained solely by informational signaling regarding larger accounting firms' higher audit quality.[97]

Willenborg conducted a comparative analysis on stock prices to determine whether it was solely audit quality that drove stocks to be underpriced more frequently with non-Big

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89. *See* Michael Willenborg, *Empirical Analysis of the Economic Demand for Auditing in the Initial Public Offerings Market*, 37 J. ACCT. RES. 225, 225 (1999).

90. Ascher, *supra* note 6, at 23.

91. *See* Willenborg, *supra* note 89, at 225.

92. *See* DeAngelo, *supra* note 79, at 187.

93. *See* Willenborg, *supra* note 89, at 227.

94. *See* DeAngelo, *supra* note 79, at 187.

95. *See id.*

96. *See* Randolph P. Beatty, *Auditor Reputation and the Pricing of Initial Public Offerings*, 64 ACCT. REV. 693, 708 (1989).

97. *See* Willenborg, *supra* note 89, at 226.

4 auditors.[98] To do so, he examined the stock prices among startups that underwent IPOs while still in their developmental stages.[99] A startup has virtually no revenues or audit-intensive assets that can reveal the true value of the company, so audit quality becomes less important than the risk of company survival, increasing the value investors place on insurance.[100] The results revealed an inverse relationship between auditor size and stock underpricing among developmental stage IPO companies.[101] Information-based demand is likely to be dominated by the insurance demand for auditing services among startups at the IPO stage.[102] Therefore, Willenborg concludes, *insurance signaling* is a significant factor driving the underpricing differential between using a Big 4 and non-Big 4 auditor.[103]

3. *Litigation Exposure*

The added insurance value accounting firms provide is not without cost, however. Litigation risk to accounting firms poses the most serious impediment to entering the large audit market: "The biggest threat facing audit firms today is that a single megaclaim or several such civil claims in succession could destroy an audit firm."[104] Because it is an auditor's duty to uncover fraud and inaccuracies, accounting firms face the risk of potentially ruinous class action litigation when corporate frauds are revealed *ex post*. As a result, the audit industry has a history of multimillion-dollar class action judgments.[105]

Exacerbating this problem, Big 4 firms are unable to obtain liability insurance. Currently, each Big 4 firm is entirely self-insured.[106] Non-Big 4 firms require traditional insurance coverage because they are unable to spread litigation costs across a large enough capital base to make self-insurance feasi-

98. *See id.* at 228.
99. *See id.* at 227.
100. *See id.* at 226.
101. *See id.* at 228.
102. *See id.* at 237.
103. *See id.*
104. McKenna, *supra* note 18.
105. 10 settlements and judgments since 1992 have exceeded $185 million. *Top 10 Auditor Liability Settlements*, CPATrendline.com (Apr. 15, 2008), https://cpatrendlines.com/2008/04/15/top-10-auditor-liability-settlements/.
106. *See* Ascher, *supra* note 6, at 6, 31.

ble.[107] Moreover, insurance companies charge higher premia and cap payouts more stringently as auditors take on larger corporate clients, which insurers regard as "risky."[108] This exponentially high-cost and thin insurance coverage that comes along with auditing large clients discourages many non-Big 4 firms from retaining large corporate clients in the first place.[109]

Paradoxically, lawsuits present the greatest threat to the Big 4's survival while at the same time erecting the highest barriers to smaller firms aspiring to enter the large audit market.[110] Moreover, even if a considerable number of mid-sized accounting firms desired to compete with the Big 4 by merging into one conglomerate firm—thereby overcoming the barriers each of them faces individually—they would not effectively compete.[111] The 2008 Government Report simulated a merger between the five largest accounting firms outside of the Big 4, and in the best-case scenario—assuming efficiencies consistent with the Big 4—the conglomerate firm achieved only an 11.2% market share, which is considerably less than the smallest Big 4 firm.[112]

When reviewing an industry, the DOJ "examine[s] the timeliness, likelihood, and sufficiency of the entry efforts an entrant might practically employ."[113] The 2008 Government Report's simulated merger reveals that accounting firms will likely continue to face prohibitively high barriers to entry, which are not likely to be overcome through strategic mergers.

III.
Effects of Industry Concentration

A. *Lack of Auditor Choice*

The most apparent effect high concentration in the audit market has yielded is the lack of choice available to large com-

107. *See id.* at 31.

108. Lawrence A. Cunningham, *Too Big to Fail: Moral Hazard in Auditing and the Need to Restructure the Industry Before It Unravels* 26, 31 (Bos. Coll. Law Sch., Working Paper No. 108, 2006); *see also* D'Agostino, *supra* note 1, at 6.

109. *See* D'Agostino, *supra* note 1, at 45, 49.

110. *See* Ascher, *supra* note 6, at 32.

111. *See* D'Agostino, *supra* note 1, at 51.

112. *Id.*

113. U.S. Dep't of Justice & the Fed. Trade Comm'n, *supra* note 12, at 28.

panies when selecting an auditor.[114] Regardless of whether the Big 4 currently have the ability to exercise market power, the limited choice of auditors—and the potential for even fewer options in the near future—raises concerns.[115]

For many multinational corporations, the Big 4 are the only auditors with the requisite staff size, resources, and reputations that their shareholders and other market participants require in an auditor.[116] For these companies, there are only four firms to choose from. Another factor driving corporate concern over the lack of auditors is the possibility that another accounting firm could exit the market voluntarily through merger or involuntarily through adverse litigation. If the number of large CPA firms were to suddenly drop to three, many companies would not be provided with sufficient options to obtain audit attestation services in a timely manner. Industry experts warn that "[t]he industry as currently structured could easily unravel."[117]

The "Department of Justice would not likely allow exit by merger of any of the remaining large audit firms."[118] In 1997, the last successful large accounting firm merger created the Big 4 firm PricewaterhouseCoopers.[119] Another proposed merger announced later that same year failed between Ernst & Young and KPMG.[120] The DOJ evaluated both mergers on antitrust grounds.[121] The DOJ raised concerns that the proposed Ernst & Young/KPMG merger would adversely affect competition by reducing the already limited number of firms providing audit services to Fortune 1,000 companies.[122] The next year, in 1998, Ernst & Young and KPMG removed their merger request, citing antitrust concerns in the United States and Europe.[123]

Because exit-by-merger is highly unlikely given the current level of concentration, litigation poses the greatest threat

114. *See* D'Agostino, *supra* note 1, at 15.
115. *See* Williams et al., *supra* note 5, at 32.
116. *See* D'Agostino, *supra* note 1, at 27.
117. Cunningham, *supra* note 108, at 10.
118. *Id.* at 20.
119. *See* D'Agostino, *supra* note 1, at 12.
120. *See id.*
121. *See id.*
122. *See* U.S. Dep't of Justice, *supra* note 50.
123. *See* Ascher, *supra* note 6, at 12.

to the preservation of at least four large auditors. A study conducted by Professor Cunningham set out to identify the likelihood and timeframe within which we could expect to see another large auditor suffer ruinous litigation.[124] Professor Cunningham calculated the monetary viability threshold, which measures "how big a legal judgment, fine, or settlement (or a combination of) would have to be to cause an audit-firm failure."[125] He reported that threshold to be between $452 million and $2.15 billion for American syndicates.[126] That threshold range seems reasonable, as Professor Peterson of the University of Chicago Law School—and former inside counsel to Arthur Andersen—also calculated "the breakup threshold for any one of the Big Four firms" to be as low as $675 million in "the litigious Americas region."[127] The highest disclosed settlement awards paid by large auditors are as follows:

(1) $456 million by KPMG in 2005 (tax shelters);
(2) $400 million by Ernst & Young in 1992 (savings and loan failures);
(3) $335 million by Ernst & Young in 1999 (Cendant failure);
(4) $312 million by Deloitte in 1994 (savings and loan failures); and
(5) $298.5 million by Ernst & Young in 2007 (Cendant failure).[128]

One publically disclosed settlement breached Cunningham's viability threshold, and many more have come dangerously close; however, it seems that payment did very little to threaten the existence of the firm. The viability threshold of the Big 4 may be closer to Professor Peterson's estimate of $675 million or the upper bound of Cunningham's estimate of $2.15 billion.[129]

B. *Regulatory Inaction*

Regulators could cause the exit of another large auditor by bringing criminal charges against the firm. Private citizens

124. *See* Cunningham, *supra* note 108, at 10.
125. McKenna, *supra* note 18.
126. Cunningham, *supra* note 108, at 13.
127. McKenna, *supra* note 18.
128. *Top 10 Auditor Liability Settlements*, *supra* note 105.
129. Cunningham, *supra* note 108, at 13; McKenna, *supra* note 18.

suing in class action lawsuits have no qualms about shutting down another Big 4 firm if it means a greater payout for them. Regulators, on the other hand, are well aware of the implications a criminal indictment brings, which often deters such high-profile criminal litigation. Allowing another large audit firm to fail would produce "acute industry concentration" that would restrict an already severely limited pool of auditors.[130]

In 2002, Arthur Andersen (then-Big 5 auditor) was criminally indicted on obstruction of justice charges stemming from their role in the Enron fraud, namely, document shredding.[131] The successful indictment led to an unprecedented "mass exodus" of the firm's partners, staff, and clients.[132] The firm was dissolved later that year.[133] "The government gave the corporation a death sentence and the corporation died," says Professor Podgor.[134] After Arthur Andersen's prosecution, "no one wants to be blamed for causing another firm to collapse."[135] Many scholars have critiqued regulators for indicting Arthur Andersen due to the catastrophic effects it had on the market.[136] Further criticism arose in 2005 when the Supreme Court overturned Andersen's conviction, although by then the damage was already done.[137]

In the wake of such criticism, Professor Fuerman conducted a thorough analysis of the Andersen prosecution.[138] He hypothesized that the criminal prosecution of a large auditor would not be in the public interest *unless* the defendant performed significantly lower quality audits than its peer firms.[139] Fuerman's analysis[140] confirms what other scholars

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130. *See* Cunningham, *supra* note 108, at 5.

131. D'Agostino, *supra* note 1, at 43 n.42.

132. Williams et al., *supra* note 5, at 9.

133. *See* Linda Greenhouse, *Justices Unanimously Overturn Conviction of Arthur Andersen*, N.Y. Times (May 31, 2005), http://www.nytimes.com/2005/05/31/business/31wire-andersen.html?pagewanted=print&_r=0.

134. *Id.*

135. Bernard Ascher & Albert A. Foer, *Financial Reform and the Big 4 Audit Firms* 5 (Am. Antitrust Inst., Working Paper No. 10-01, 2010).

136. *See id.*

137. *See* Greenhouse, *supra* note 133.

138. Fuerman, *supra* note 88.

139. *See id.* at 22.

140. Utilizing a custom "auditor-risk index"—assigning numerical values to the number of lawsuits brought against the firm (by the government and the public) and the aggregate amount of disclosed settlements/judgments—

have presupposed: Andersen was "a deeply troubled organization and a substantially lower quality auditor" in the years leading up to its prosecution.[141] He concludes that the decision to prosecute the firm may have been beneficial to the market after all, due to the removal of the lowest quality auditor.[142]

It would be unwise to prosecute the lowest rated Big 4 firm today. Current problems stemming from industry concentration surely outweigh any concern over reduced audit quality. The collapse of another Big 4 firm would "throw the global financial system into chaos," and would "cause paralysis in the financial markets."[143] Clients of the exiting firm would be left struggling to find another auditor to sign off on their accounts in a timely fashion.[144]

Regulators' reluctance is justified. The forced exit of a Big 4 firm would result in substantial losses to company consumer surplus—the value a corporation places on its purchased audit services in excess of the fees paid.[145] Professors Gerakos and Syverson of the University of Chicago Booth School of Business conservatively estimate that losses would amount to $1.6–2.3 billion in the exit year alone.[146] The authors note that similar losses could be forfeited for years into the future as well.[147]

Several recent cases indicate that some prosecutors have, in fact, been exercising their discretion not to criminally prosecute Big 4 firms.[148] For example, in the early 2000s KPMG was engaged in a fraudulent tax shelter scheme that saved clients approximately $2.5 billion in taxes.[149] The firm admitted to advising clients to invest in fraudulent tax structures, and

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Fuerman found that Arthur Andersen had an objectively lower quality rating than its peer Big 5 firms. *Id.* at 2, 11–16.

141. *Id.* at 16.

142. *See id.* at 22.

143. Ascher, *supra* note 6, at 32.

144. *See* Cunningham, *supra* note 108, at 10.

145. *See* Gerakos & Syverson, *supra* note 2, at 4.

146. The authors estimate that consumer surplus would drop between $1.2 and 1.8 billion upon another large firm's exit. In addition, audit fees would likely increase by $300,000–500,000 per year due to depressed industry competition. For reference, total audit fees paid by public companies in 2010 totaled $11 billion. *Id.*

147. *See id.* at 24.

148. *See id.* at 2 n.2.

149. *See id.* at 2.

paid a fine a $456 million, the largest in the industry's history.[150] The DOJ prosecuted individual employees for their wrongdoing rather than criminally indict the firm, which "could have triggered a collapse."[151]

More recently, during the 2008 financial crisis, Ernst & Young assisted its client Lehman Brothers to implement Repo 105 transactions, which allowed the company to temporarily reduce its leverage when preparing its financial statements.[152] The DOJ, again, did not pursue criminal charges against the auditor.[153] The New York Attorney General did, however, claiming Ernst & Young "helped Lehman 'engage in a massive accounting fraud.'"[154] The case recently settled for $99 million.[155]

Some academics warn that regulators' unwillingness to prosecute is now apparent to the Big 4, which may create moral hazard.[156] The failure to criminally prosecute accounting firms that break the law effectively renders them "too big to fail," claim Professors Allen, Ramanna, and Roychowdhury in their Harvard Business School working paper.[157] But these worries are unfounded. From their paper, it is clear that Big 4 concern over litigation risk subsumes any perception that they are too big to fail.[158] In making this conclusion, the authors examine the ways in which the Big 4 advocate for legislative change.[159]

Accounting firms routinely lobby Congress to influence accounting standards to opportunistically fit their practices.[160] Public corporations also have a vested interest in influencing accounting legislation. Companies prefer standards that allow

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150. WILLIAMS ET AL., *supra* note 5, at 56.

151. DIRECTORATE FOR FIN. & ENTER. AFFAIRS COMPETITION COMM., *supra* note 17, ¶ 14; *see also infra* note 226.

152. *See* Gerakos & Syverson, *supra* note 2, at 2.

153. *See id.* at 2.

154. *Id.* at 2 n.3.

155. Nick Brown, *Ernst & Young to Pay $99 Million to End Lehman Investor Lawsuit*, REUTERS (Oct. 18, 2013, 6:23 PM), http://www.reuters.com/article/2013/10/18/lehmanbros-investors-idUSL1N0I81UL20131018.

156. *See* Cunningham, *supra* note 108, at 1.

157. Allen, Ramanna & Roychowdhury, *supra* note 32, at 3; *see also* Ascher & Foer, *supra* note 135, at 3.

158. *See* Allen, Ramanna & Roychowdhury, *supra* note 32, at 29.

159. *See id.* at 1–2.

160. *See id.* at 2.

greater flexibility in financial reporting.[161] Businesses that can customize their accounting metrics can earn higher rents, by reporting higher earnings figures and minimizing taxable income.[162] When allowed to produce customized audits, accounting firms reap higher fees from clients due to the amounts saved in taxes or higher earnings figures reported. Flexibility in accounting principles comes at the expense of objectivity, however.

Contrary to their clients' desire for flexibility in accounting standards, the Big 4 advocate for less discretion and more objectivity in accounting principles as a means to reduce their litigation exposure.[163] Auditing financial statements is made less controversial, and less susceptible to litigation, when audit firms are forced to account for transactions in strictly specified manners.[164] An audit firm's exposure to litigation increases as accounting rules become more flexible because clients will persuade auditors to fine-tune their financials in the most beneficial ways possible.[165]

If the Big 4 viewed themselves as too big to fail, one would expect them to advocate for flexible accounting standards as they would be able extract higher fees from clients using more creative accounting methods. But, in reality, the Big 4 support objective—and affirmatively oppose flexible—accounting principles.[166] Expected litigation and political cost theory reveal that auditors have incentives to support accounting rules that increase objectivity at the expense of higher audit fees.[167] Professors Allen, Ramanna, and Roychowdhury find that this confirms the Big 4 do not in fact believe they are too big to fail.[168] If they believed so, they would not be so concerned about potentially destructive litigation, because the federal government would simply bail them out.

161. *See id.* at 9–10.
162. *See id.*
163. *See id.* at 6.
164. *See id.* at 9–10.
165. *See id.*
166. *See id.* at 36.
167. *See id.* at 11.
168. *See id.* at 36.

C. *Anticompetitive Behavior*

In the post-Arthur Andersen era, there is reduced competition and increased opportunity to price audit services in an anticompetitive manner.[169] Some posit evidence of higher audit fees since Arthur Andersen's collapse as proof that firms have begun to price audits anticompetitively.[170] A careful review of audit pricing debunks this theory.

The increase in audit fees was attributable to new regulatory requirements under the Sarbanes-Oxley Act (SOX) rather than anticompetitive practices.[171] The significant increase in audit fees under SOX reflects the new, more complex audit regime and the fact that accounting firms no longer need to underprice audits to attract consulting business. The amount of audit work required under SOX became sufficient to support the firms.[172]

Moreover, in 2000, the then-Big 5 were investigated for anticompetitive acts in Italy. They were ultimately found guilty of anticompetitive coordination.[173] The Big 5 "violated Italian antitrust law by concluding agreements that covered virtually every aspect of competition between the auditing firms."[174] They circulated an annual benchmark of audit fees and hours, established rules for acquiring new clients, and agreed on how to respond to client requests for discounts.[175] The fines im-

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169. *See* Gerakos & Syverson, *supra* note 2, at 12.

170. As a means of illustration, "average audit fees for Standard & Poor's 500 companies increased 27 percent in 2002 . . . ." D'AGOSTINO, *supra* note 1, at 35. Audit fees increased an average of 19.3% per year between 2003–2006. Chan et al., *supra* note 46, at 36 (increasing 10.5%, 54.7%, 7.3%, and 4.7%, respectively, between 2003–2006).

171. Under SOX, Accounting Standard No. 2 (AS 2) was introduced to regulate audits of a company's internal controls. Under AS 2, auditors focused on minute details unlikely to affect a company's financial statements, which turned out to be much more costly to implement than initially expected. Accounting Standard No. 5 (AS 5) was enacted in 2006 as a direct response to company complaints about the high cost of complying with AS 2. WILLIAMS ET AL., *supra* note 5, at 14. AS 5 provided more customizable audits that lowered overall costs. Once AS 5 was implemented, audit fees dropped. Between 2007–2009, fees dropped 7.2% annually, on average. Between 2008–2011, the Big 4 reduced audit fees by 12.43% annually, on average. Chan et al., *supra* note 46, at 32, 36.

172. *See Ascher*, *supra* note 6, at 17, 18.

173. *Id.* at 26–28.

174. *See id.* at 27.

175. *See id.* at 28.

posed totaled $2.3 million, most of which were charged to Arthur Andersen.[176]

The DOJ presumes market conditions are conducive to coordinated interaction if firms have "previously engaged in express collusion affecting the relevant market, unless competitive conditions in the market have since changed significantly."[177] Hence, anticompetitive concerns today are not completely unfounded given the industry's past. To gauge whether anticompetitive pricing is currently occurring in the market, the 2003 Government Report explained the government's formulation of a pure price competition model[178] and its 2008 study detailed an econometric analysis; each report revealed that the current level of concentration "does not appear to be affecting audit quality."[179]

Concentration ratios and HHI calculations are good indicators of market structure, but they only measure the *potential* for firms to exercise market power, not its existence. Despite the lack of evidence revealing anticompetitive activity in the market today, many argue for reforms to lessen market concentration.

IV.
Proposals to Reduce Concentration

The current level of concentration has not yet yielded anticompetitive effects, only limited auditor choice and the *potential* for the Big 4 to exert significant market power. However, the loss of another auditor would indeed be detrimental to capital markets. The Public Company Accounting Oversight Board stated that "regulators do not have 'a clue' how to re-

176. *Id.*

177. U.S. Dep't of Justice & the Fed. Trade Comm'n, *supra* note 12, at 25.

178. The model considered only price in the selection of an auditor, not quality or reputation. The results revealed a market distribution that mirrored the composition of the audit market currently, thus relieving anticompetitive concerns. D'Agostino, *supra* note 1, at 25.

179. The analysis considered the relationship between market concentration and audit fees. From the results, the 2008 Government Report conclusively "found no evidence that price competition to date has been impaired" by the high consolidation of accounting firms. *Id.* Further, the agency also concluded the current level of concentration "does not appear to be affecting audit quality." Williams et al., *supra* note 5, at 5.

spond if one of the big four accounting firms were to collapse."[180] In light of these concerns, many proposals have been offered to decrease industry concentration. Some of the most intelligible suggestions are (1) divestment of audit groups, (2) mandatory auditor rotation, and (3) capping liability.

A. *Divestiture*

Mandating divestiture of an audit group from one or more of the Big 4 is an extreme measure. Presumably, it would create a greater number of audit firms with the capacity to audit large public companies because even one-half of a Big 4 audit team is considerably larger than the next largest competitor.[181] Such a proposal would surely decrease concentration temporarily. But, divestment is a very drastic remedy reserved for only the direst circumstances. The D.C. Circuit Court of Appeals recently stated that divestiture should be applied to unitary companies with great caution and "tailored to fit the wrong creating the occasion for the remedy."[182] While concentration in certain audit sectors and revenue categories approach those held by monopolists in previous splits, the overall audit market is not nearly as concentrated. For example, in 2010, each Big 4 firm handled approximately 16.8% of all audit engagements[183] and 24.5% of large company audits.[184]

Furthermore, courts would have to find a violation of antitrust law before mandating a divestiture remedy. Early on in American antitrust jurisprudence, the Supreme Court announced that large market share and the mere potential to exercise market power is not an offense: "[T]he law does not make the mere size of a corporation, however impressive, or the existence of an unexerted power on its part an offense, when unaccompanied by unlawful conduct in the exercise of

180. Ascher, *supra* note 6, at 16.

181. *See Networks by Fee Income*, ACCOUNTANCYAGE.COM (Jan. 2013), http://www.accountancyage.com/digital_assets/6839/All_int_charts_2013v2.pdf.

182. Spencer Weber Waller, *Remedies for Monopolization and Abuse of Dominance: A Little History and Some Thoughts on Disclosure and Access*, BRIT. INST. INT'L & COMP. L. 9 (2008) (citing United States v. Microsoft, 253 F.3d 34, 107 (D.C. Cir. 2001)).

183. Gerakos & Syverson, *supra* note 2, at 8.

184. WILLIAMS ET AL., *supra* note 5, at 19.

its power."[185] However, when a company deliberately purchases control to gain significant market power—without acquiring it organically through "normal expansion to meet the demands of a [growing] business"—the Court has ruled that it is, in itself, illegal: The purchased potential to exercise significant market power, "regardless of the use made of it, constitutes" a violation of antitrust law.[186] In such instances, the mere potential to exercise significant market power constitutes a violation. This distinction was articulately laid out years later in *United States v. Alcoa* (1945), when Judge Learned Hand, writing for the Second Circuit, proclaimed:

> A single producer may be the survivor out of a group of active competitors, merely by virtue of his superior skill, foresight and industry. In such cases a strong argument can be made that, although the result may expose the public to the evils of monopoly, [antitrust law] does not mean to condemn the resultant of those very forces which it is its prime object to foster: *finis opus coronat.* The successful competitor, having been urged to compete, must not be turned upon when he wins.[187]

The Big 4 might retain the ability to exert monopoly power if they were to coordinate among themselves; however, there is no evidence of anticompetitive coordination occurring in the market today.[188] Further, the somewhat equal market distribution between four independent firms coupled with the lack of any recent mergers aimed at acquiring control of the audit industry oppose framing the Big 4's high market share as an antitrust violation in itself. As such, divestiture is likely an unavailable remedy.

Moreover, there are genuine adverse effects to divestiture. Splitting an audit group from a firm would cause it to lose a depth of expertise, staff, and geographic reach in addition to suffering diminished economies of scale. As a result, audit costs would increase while their quality would decrease. For

185. United States v. International Harvester Co., 274 U.S. 693, 708 (1927).

186. United States v. Reading Co., 253 U.S. 26, 57 (1920).

187. United States v. Aluminum Co. of America, 148 F.2d 416, 430 (2d Cir. 1945).

188. *See* WILLIAMS ET AL., *supra* note 5, at 5.

these reasons, many industry participants consider divestment too radical, potentially ineffective, and costly to execute.[189]

B. *Mandatory Rotation*

Academics often praise the values of mandatory rotation systems, in which companies are required to switch auditors after a term of years with the same accounting firm.[190] While this would certainly force companies to try to alternate accounting firms, it is not clear that large corporations would willingly choose non-Big 4 auditors: "A very substantial number of Fortune 500 corporations have used the same auditor for 25 consecutive years or more."[191] In fact, eight of the twenty companies that have appeared on the Fortune 500 list consecutively for the last 100 years have used the same auditor throughout their tenure on the Fortune 500.[192] The goals behind a rotation system are two-fold: (1) to increase audit quality by untying the bonds companies and their auditors develop over decades of continued business, and (2) to decrease industry concentration by forcing companies to use alternate, non-Big 4 auditors.[193]

First, mandatory rotation is presumed to increase audit quality by giving a company's financials a fresh look by a new, allegedly more independent auditor.[194] This presumption is somewhat unsound. Studies show that audit quality increases over one's tenure as the auditor for a particular client.[195] At least in the initial years of a new audit engagement, the incidence of failures to identify accounting irregularities would increase significantly because of the auditor's lack of familiarity with the client.[196] Second, mandatory rotation may not be effective at decreasing concentration because large corporations would "likely just rotate to another one of the largest" auditors

189. *See* Ascher, *supra* note 6, at 41.
190. *See* D'Agostino, *supra* note 1, at 26.
191. Bautista et al., *supra* note 19, at 6.
192. *Id.*
193. *See* Williams et al., *supra* note 5, at 52.
194. *See* Bautista et al., *supra* note 19, at 6.
195. *See* Gerakos & Syverson, *supra* note 2, at 26.
196. *Id.*

cycle after cycle.[197] Today, when large corporations switch auditors, they often simply retain another Big 4 auditor.[198]

Some suggest that non-Big 4 auditors will take on larger public clients because a mandatory rotation regime coupled with SOX independence requirements would force companies to use non-Big 4 auditors.[199] But this logic is also flawed. By forcing a company to no longer use its auditor of choice, legislators would effectively reduce the number of viable firms from four to three, thereby *increasing* industry concentration as opposed to the program's stated aim of *decreasing* it. By forcing companies to retain auditors they are otherwise unwilling to retain in the free market, the audit industry is made worse. Market participants are well aware of these concerns, which is why most accounting firms and large corporations believe that mandatory rotation would not reduce industry concentration.[200]

While a rotation scheme would increase concentration in the short-term, the long-term results might provide additional auditors capable of auditing multinational corporations. Nevertheless, there are significant costs associated with such a proposal. Initial year audit costs could increase by more than 30% due to an auditor's lack of familiarity with clients and their operations.[201] Professors Gerakos and Syverson calculated the estimated consumer surplus losses to U.S. public companies in 10-year and 4-year rotation programs to be between $2.4–3.6 billion and $4.3–5.5 billion, respectively.[202] The authors also estimated that audit fees would rise by approximately $772 million and $1.34 billion, respectively, due to the artificially stunted competition.[203] Thus, total costs of 10-year and 4-year rotation programs are between $3.1–3.5 billion and $5.6–6.4 billion,[204] respectively, which would constitute an increase in public company audit expenditures of around 50% or more.[205]

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197. *Id.*
198. *See* WILLIAMS ET AL., *supra* note 5, at 23.
199. *See id.*
200. *See id.* at 52.
201. *Id.*
202. Gerakos & Syverson, *supra* note 2, at 4, 21, 24.
203. *Id.* at 28.
204. *Id.*
205. Public company audit expenditures totaled $11 billion in 2010, which

The American Institute of CPAs advised against mandatory rotation, stating that it would hinder the audit committee's oversight efforts.[206] On the other hand, former SEC Chairman Arthur Levitt supports mandatory rotation because "investors deserve the perspectives of different professionals every so often, particularly when an auditor's independence can be reasonably called into question."[207] However, the U.S. House of Representatives Financial Services Committee unanimously passed a bill in June 2013 prohibiting the Public Company Accounting Oversight Board from mandating a rotation program.[208]

Internal partner rotation is another less drastic program that is often suggested. This requires only that lead partners switch after a term of years working with a particular audit client.[209] The goal here is to lessen the informal relationships that evolve over years of continued business between lead partners and corporate executives. In fact, this system has already been effectuated under SOX.[210] Beginning in 2002, SOX requires the rotation of lead and reviewing audit partners after service has been provided to a particular client for five consecutive years.[211] There are certain independence benefits to having new lead and reviewing audit partners supervise a company's audit, which is to be distinguished from an entirely new audit firm.

C. *Litigation Reform*

The proposal most often suggested by the Big 4 is to cap damages in securities litigation.[212] Firms contend that Congress must limit auditor liability to prevent the loss of another large firm through adverse litigation. Caps on liability would decrease the risk of destructive civil litigation, and as a result would also increase the availability of insurance to an

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means $6 billion dollars in added costs would constitute an increase of over 50%. *See id.* at 4 (noting that public company audit expenditures were $11 billion in 2010).

206. *See id.* at 2.
207. *Id.*
208. *Id.* at 2.
209. *See* Doralt et al., *supra* note 4, at 96.
210. *See* WILLIAMS ET AL., *supra* note 5, at 10.
211. *Id.* at 53.
212. *See id.* at 8, 55.

industry that desperately calls for it. However, there are high social and industry costs associated with capping auditor liability.

In 1990, Laventhol & Horwath (then-seventh largest CPA firm) collapsed, which constituted the largest bankruptcy of any professional organization in United States history.[213] The overriding reason for the firm's failure was the massive weight of its liability burden.[214] The firm's former CEO Robert Levine stated, "It wasn't the litigation we would lose that was the problem . . . . It was the cost of winning that caused the greatest part of our financial distress."[215]

The European Commission recently took another approach. Its Commissioner said that "unlimited liability combined with insufficient insurance coverage is no longer tenable" in the audit market.[216] In 2008, the European Union officially recommended that its twenty-seven member-states adopt measures to limit auditor liability consistent with each state's own legal system.[217] To date, ten European states have passed such legislation in various forms.[218]

Outright caps on liability are contentious. Investors and legislators view litigation as a supplement to regulation as a check on audit quality.[219] Civil litigation provides a useful incentive for auditors to be more careful when reviewing a client's books. The 2008 Government Report acknowledged that liability caps and limitations to regulatory enforcement could potentially reduce the incentive for auditors to produce quality work.[220] Moreover, capping liability would deprive injured parties of a mechanism to obtain adequate relief for their losses.[221] Another concern submitted by industry participants is that if such caps were instituted for accounting firms, the sums paid by faltering companies, investment banks, and insurance companies would increase because they would not be

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213. *See* Michael J. Cook et al., *The Liability Crisis in the United States: Impact on the Accounting Profession*, 174 J. ACCT. *5 (1992).
214. *Id.*
215. *Id.*
216. See Ascher, *supra* note 6, at 35.
217. *See id.* at 35, 48.
218. *See id.* at 48.
219. *See* WILLIAMS ET AL., *supra* note 5, at 6.
220. *See id.*
221. *See* Ascher & Foer, *supra* note 135, at 6.

similarly protected.[222] For these reasons, caps on civil liability are not advisable and are not likely to be instituted.

In the criminal context, the Big 4 have proposed limiting liability to individual partners and auditors who engage in wrongdoing, as opposed to holding the entire firm liable.[223] They recall that Arthur Andersen was indicted, and subsequently dissolved, because of the actions of a few partners and accountants in one of their Texas offices.[224] The DOJ guidance states that "prosecutors must consider, among other factors, whether an indictment would cause 'disproportionate harm' to employees who have not been proven personally culpable and the effect of prosecution on the public in determining whether to charge a firm."[225]

To an extent, this is what prosecutors have already begun to do. In 2005, the DOJ indicted nineteen individuals at KPMG for their part in a fraudulent tax shelter scheme.[226] And in 2007, the DOJ indicted four Ernst & Young partners for an alleged tax fraud conspiracy.[227] However, the DOJ declined to comment on whether they considered the potential negative consequences their prosecutorial decisions could cause.[228]

Because enforcement agencies have already begun to approach accounting prosecutions in this manner, the proposed limitation would have little effect. Further, removing the option to criminally prosecute a firm would give partners a partial safe harbor to commit fraud. Thus, restricting criminal liability is, likewise, not likely to be instituted.

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222. *See* WILLIAMS ET AL., *supra* note 5, at 56.

223. *See id.* at 46, 56; *see also* D'AGOSTINO, *supra* note 1, at 53.

224. Gary M. Cunningham & Jean E. Harris, *Enron and Arthur Andersen: The Case of the Crooked E and the Fallen A*, 3 GLOBAL PERSP. ON ACCT. EDUC. 27, 31–33 (2006).

225. WILLIAMS ET AL., *supra* note 5, at 57.

226. *See id.* at 56; *see also* Deferred Prosecution Agreement Between U.S. Atty's's Office for S. Dist. of N.Y. and KPMG (Aug. 26, 2005) (on file with the *NYU Journal of Law & Business*); Indictment, 19 Individuals Charged in Superseding Indictment Filed in Criminal Tax Case related to KPMG Tax Shelters (U.S. Att'y S.D.N.Y., Oct. 17, 2005).

227. WILLIAMS ET AL., *supra* note 5, at 56; *see also* Indictment, Four Individuals Charged in Criminal Tax Fraud Related to Ernst & Young Tax Shelters (U.S. Att'y S.D.N.Y., May 30, 2007).

228. WILLIAMS ET AL., *supra* note 5, at 57.

V.
Appropriate Legislation in a Deconcentrating Market

Notwithstanding each proposal's shortcomings, the audit market as a whole has been steadily deconcentrating since SOX was implemented in 2002. For example, the Big 4's market share of mid-sized companies (with revenues between $100–500 million) dropped from 90% to 71% between 2002–2006.[229] There are now more mid-sized auditors servicing public companies of all sizes, except those with revenues greater than $1 billion, which categorically continue to use the Big 4.[230] In the IPO market as well, mid-sized auditors are gaining ground on the Big 4. Small IPO companies (with revenues less than $150 million) retained non-Big 4 auditors on 40% of offerings in 2007, up from 18% in 2003.[231] Mid-sized IPO companies (with revenues greater than $150 million) retained non-Big 4 auditors on 13% of offerings in 2007, up from 0% in 2003.[232] The largest IPO companies continue to use the Big 4 almost exclusively.[233]

Adding to this apparent deconcentration of the audit industry since SOX was enacted, the Big 4's Gini coefficient reveals less discrepancy between their respective market shares.[234] The Gini index measures the equality of shares held by suppliers in a given market. Big 4 firms' Gini coefficient dropped from 40.1 to 31.4 between 2001 and 2007, which is "consistent with increased equality among the Big 4 auditors."[235] Markets with suppliers that are more or less equal are thought to be more competitive than those with great disparities in market share.[236]

These figures illustrate that the audit market as a whole is responding to SOX by deconcentrating. There has yet to be any significant change in the Big 4's market share of the country's largest corporations, however. In due time, mid-sized au-

229. *Id.* at 18; *see also* Ascher, *supra* note 6, at 22.
230. *See* Williams et al., *supra* note 5, at 19.
231. *Id.* at 44, 46.
232. *Id.* at 45, 46.
233. *Id.* at 44, 46.
234. Kimberly Dunn, Mark Kohlbeck & Brian W. Mayhew, *The Impact of the Big 4 Consolidation on Audit Market Share Equality*, 30 Auditing: J. Prac. & Theory 49, 63 (2011).
235. *See id.*
236. *See id.* at 50.

ditors may successfully challenge the Big 4's command over the large company audit market as well. Audit clients are in agreement: 76% of companies polled favor allowing market forces to operate without further governmental intervention.[237]

Much of the recent criticism waged against accounting firms is misplaced. Auditors were not involved in many of the "primary causes of the [most recent] crisis: bad lending and investing decisions; a lack of understanding of risk; and flaws in the credit-rating system. Auditing is not meant to stop companies from making dumb business moves, just to make sure those moves are properly disclosed."[238] This distinguishes the role auditors played in the 2008 financial crisis from the 2002 dot-com bubble, when accounting firms "were at the center of the [crisis] when companies such as Enron Corp. and WorldCom Inc. collapsed amid scandals."[239] SOX was instituted immediately after the 2002 technology bubble burst, and has been working well to reform the audit industry for the better. Further calls for reform to instantly decrease concentration among large auditors are unadvisable.

More general legislation aimed at targeting structural problems in capital markets may be more beneficial than continuing to target large auditors. Examining the commonalities between the 2002 dot-com bubble and the 2008 financial crisis is illustrative. For example, there is a strong parallel between the role played by auditors in 2002 and credit rating agencies in 2008: "In both cases, the firms are paid by the companies they are supposed to evaluate independently."[240] Credit rating agencies, like auditors, employ the "issuer pay model" where companies, instead of investors, pay intermediaries for their independent assessments.[241] Professor Stout of UC Los Angeles School of Law observes, "When the people being watched get to choose their watchdog, they're not going to choose the toughest animal around."[242] Further, the credit-rat-

237. D'Agostino, *supra* note 1, at 26.

238. Michael Rapoport, *Role of Auditors in Crisis Gets Look*, Wall St. J. (Dec. 23, 2010, 12:01 AM), http://www.wsj.com/articles/SB20001424052748703814804576036094165907626.

239. *Id.*

240. *Id.*

241. *See id.*

242. *Id.*

ing industry is a captive market beholden to a tight oligopoly as well: three large credit rating agencies (Standard & Poor's, Moody's, and Fitch) control about 95% of the ratings business.[243] Clearly, high concentration in watchdog markets is a common structural feature in the corporate world not specific to public accounting.

Furthermore, an intermediary's failure to identify inaccuracies and fraud (as occurred with auditors in 2002 and credit rating agencies in 2008) can occur in a variety of settings. In a Columbia Law School working paper, Professor Coffee explains, "Securities markets have long employed 'gatekeepers'—independent professionals who pledge their reputational capital—to protect the interests of dispersed investors who cannot easily take collective action."[244] "Gatekeepers" include auditors, debt-rating agencies, securities analysts, investment bankers, and attorneys.[245] These market participants are inextricably conflicted, as they are oftentimes selected and paid by the firms they must evaluate. In theory, however, gatekeepers would not rationally "sacrifice [their] reputational capital for a single client or a modest fee."[246] The renowned Judge Easterbrook, writing for the Seventh Circuit, confirmed this theory in *DiLeo v. Ernst & Young*:

> The complaint does not allege that [the auditor] had anything to gain from any fraud by [its client]. An accountant's greatest asset is its reputation for honesty, closely followed by its reputation for careful work . . . . It would have been irrational for any of them to have joined cause with [the client].[247]

In practice, Coffee explains numerous business realities may influence gatekeepers to acquiesce to a client's fraudulent schemes: a decline in deterrent threats (civil or criminal), less emphasis on reputational quality in captive markets, and in-

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243. *See* Christopher Alessi, Roya Wolverson & Mohammed Aly Sergie, *The Credit Rating Controversy*, COUNCIL ON FOREIGN REL. (Oct. 22, 2013), http://www.cfr.org/financial-crises/credit-rating-controversy/p22328.

244. John C. Coffee, Jr., *Gatekeeping Failure and Reform: The Challenge of Fashioning Relevant Reforms* 2 (Colum. L. Sch. Center for L. & Econ. Stud., Working Paper No. 237, 2003).

245. *Id.* at 6.

246. *Id.* at 13.

247. *Id.* at 15 (citing DiLeo v. Ernst & Young, 901 F.2d at 629 (7th Cir. 1990)).

creased inducements from clients.[248] Coffee concludes, "[P]rofessional gatekeepers may sometimes acquiesce in managerial fraud, even though the apparent reputational losses seem to dwarf the gains to be made from the individual client."[249]

To combat a gatekeeper's urge to partake in fraudulent schemes, Coffee proposes stricter liability for gatekeepers.[250] He claims that increasing intermediary liability may correct this apparent divergence between rational theory and seemingly irrational practice.[251] Coffee's tightened regulatory regime is premised on the existing legal framework failing to dissuade gatekeeper wrongdoing because judges hastily dismiss claims of intermediary fraud on the basis of irrationality.

Increasing gatekeeper liability cannot entirely resolve the systemic problems in capital markets, however. Such a response would be overly simplistic and irresponsible—especially in the audit market where the few large auditors that remain routinely settle lawsuits for hundreds of millions of dollars, a sum that closely approaches the viability thresholds of these vitally important institutions.[252] Contrary to Coffee's proposed legislation, Professors Choi and Pritchard advocate for very different reforms.[253] First, they contest Coffee's reading of the Easterbrook opinion:

> Easterbrook's dismissal of the complaint is based not on blind faith that people do not act irrationally, but rather the plaintiffs' failure to provide any evidence that irrational acts had occurred . . . . Easterbrook imposes a rule that avoids the temptation to [assume fraud has knowingly occurred]. The overall rate of fraud by corporations is very low, and the percentage of those frauds in which the auditors participate is lower still . . . . The temptation—when faced by the salient evidence of huge losses that typically prompt

248. *See id.* at 13.
249. *Id.* at 14.
250. *See id.* at 40, 47, 61.
251. *Id.*
252. *See* Cunningham, *supra* note 108, at 13–14; *see also* McKenna, *supra* note 18.
253. Stephen Choi & Adam C. Pritchard, *Behavioral Economics and the SEC* (U. Mich. John M. Olin Center L. & Econ., Working Paper No. 03-002, 2003).

> securities fraud suits—is to ignore this very low base rate in assessing whether there has been fraud.[254]

Easterbrook ultimately dismissed the lawsuit because the particular facts alleged were insufficient to constitute a valid action, not because he blindly accepted the auditor's defense that to partake in such a fraud would have been irrational. By requiring particularized facts, the courts require more than a mere allegation that an auditor (or other gatekeeper) was involved in a corporate fraud. Thus, judges do not presume intermediaries always act rationally, as Coffee worries.

Professors Choi and Pritchard assert that increasing gatekeeper liability is not the answer: Governmental regulation of intermediaries and company "disclosures may be unnecessary and potentially wasteful."[255] Appropriate legislation should counteract the biases facing intermediaries, investors, and regulators; otherwise, "regulation may well do more harm than good."[256] For example, contrary to Coffee's proposal, the authors suggest that legislation should *reduce* intermediary liability by "raising the standards for establishing liability."[257] Because lawsuits against intermediaries and their clients simply result in transfers of money from gatekeepers to lawyers and investors "with no reduction in fraud," stricter liability only "increase[s] the cost of investment."[258] Thus, reforms aimed at increasing gatekeeper liability are not only wasteful but also potentially harmful.

Legislation specifically crafted to alter one's incentive structure and combat biases is more beneficial than blanket increases to gatekeeper liability. Just as SOX was implemented following the 2002 dot-com bubble to restructure accountants' incentives, the Dodd-Frank Wall Street Reform and Consumer Protection Act was instituted in 2010 to, among other things, regulate credit rating agencies.[259] A key provision in SOX prohibited accountants from auditing their consulting clients,

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254. *Id.* at 55–56 n.223.
255. *Id.* at 2, 4.
256. *Id.* at 84.
257. *Id.* at 73.
258. *Id.*
259. *Brief Summary of the Dodd-Frank Wall Street Reform and Consumer Protection Act*, S. COMM. ON BANKING, HOUSING, & URB. AFF., *available at* http://www.banking.senate.gov/public/_files/070110_Dodd_Frank_Wall_Street_Reform_comprehensive_summary_Final.pdf.

thereby relieving a fundamental conflict of interest. Similarly, Dodd-Frank addresses numerous conflicts of interest faced by credit rating agencies: the Act prohibits compliance officers from working on ratings, methodologies, or sales;[260] and imposes a timeframe within which ratings agency employees cannot switch to work for a client or underwriter.[261] In addition, in August 2014, the SEC voted 3 to 2 to implement further restrictions on credit rating agencies "to ensure their interest in winning business doesn't affect ratings analysis."[262] *The Wall Street Journal* reports that these "rules [are] designed to curb conflicts of interest at credit-rating firms, following criticism the firms failed to adequately sound alarms about flawed mortgage securities ahead of the financial crisis."[263] Furthermore, the Dodd-Frank Act established the Office of Credit Ratings to oversee ratings agencies, similar to SOX's establishment of the Public Company Accounting Oversight Board to oversee accounting firms.[264]

Time will tell if the altered incentive structures proposed by SOX and Dodd-Frank will successfully remedy many of the systemic issues in their respective industries. At the present time, however, no further governmental regulation is required.

Conclusion

Although the earnings and critiques of the nation's largest auditors continue to rise, concentration in the audit industry on the whole is nevertheless steadily decreasing. Despite the Big 4's continued dominance of large public company audits, the already occurring deconcentration of the audit industry coupled with the lack of any apparent anticompetitive be-

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260. *See* Anu Narayanswamy, *Dodd Frank: How Rating Agencies Contributed to the Financial Crisis*, SunlightFoundation.com (Aug. 18, 2011, 9:56 AM), http://sunlightfoundation.com/blog/2011/08/18/credit-rating-agencies/.

261. *See Brief Summary of the Dodd-Frank Wall Street Reform and Consumer Protection Act*, *supra* note 259.

262. Andrew Ackerman, *SEC Votes 3-2 to Complete Rules Curbing Conflicts at Credit-Rating Firms*, Wall St. J. L. Blog (Aug. 27, 2014, 1:30 PM), http://blogs.wsj.com/law/2014/08/27/sec-votes-3-2-to-complete-rules-curbing-conflicts-at-credit-rating-firms/.

263. *Id.*

264. *See Brief Summary of the Dodd-Frank Wall Street Reform and Consumer Protection Act*, *supra* note 259.

havior supports a wait-and-see approach. There are still valid concerns regarding the Big 4's oligopoly. Another Big 4 merger or dissolution would drastically exacerbate the already limited choice of auditors available to large corporations. If such an event were to occur, swift legislative action may be required. At this time, however, additional reforms aimed at instantly decreasing large auditor concentration are unnecessary and unwise.

Recent concerns regarding the Big 4's inability to predict the financial crisis are misguided. History and economic theory tell us that recessions and economic crises occur for a variety of reasons and cannot be remedied entirely by reforms to intermediary liability. As such, increasing gatekeeper liability is not advisable. But if gatekeeper failures persist, further reforms to their incentive structures—in more creative ways than simply increasing liability—may be required.