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SHOULD ISSUERS BE ON THE HOOK FOR LADDERING? AN EMPIRICAL ANALYSIS OF THE IPO MARKET MANIPULATION LITIGATION

Stephen J. Choi and A.C. Pritchard***

I. INTRODUCTION

On December 6, 2000, the *Wall Street Journal* ran a front-page story exposing abuses in the market for initial public offerings (IPOs).¹ The story revealed “tie-in” agreements between investment banks and initial investors seeking to participate in “hot” offerings.² Under those agreements, initial investors would commit to buy additional shares of the offering company’s stock in secondary market trading in return for allocations of shares in the IPO.³ As the *Wall Street Journal* related, those “[c]ommitments to buy in the after-market lock in demand for additional stock at levels above the IPO price. As such, they provide the rocket fuel that sometimes boosts IPO prices into orbit on the first trading day.”⁴ This process of encouraging purchases in the aftermarket at ever-higher prices has come to be known as “laddering.” This Article presents a study of the role and extent of culpability of issuers of stock in such laddering schemes.

The *Journal’s* account of the practice essentially lays out a conspiracy between underwriters and their favored investor-customers to engage in a scheme of market manipulation.⁵ Retail investors—who end up purchasing the stock after the IPO at inflated prices—systematically lose from the manipulation.

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1. Susan Pulliam & Randall Smith, *Seeking IPO Shares, Investors Offer to Buy More in After-Market*, WALL ST. J., Dec. 6, 2000 at A1.

2. Offerings are described as “hot” if the demand for shares is likely to exceed supply.

3. Pulliam & Smith, *supra* note 1.

4. *Id.*

5. The *Journal* story was the watershed event for this scandal, but not the first public discussion. The SEC’s Division of Market Regulation had warned earlier that year that “tie-in” agreements were “prohibited by Rules 101 and 102 of Regulation M, and may violate other anti-fraud and anti-manipulation provisions of the federal securities laws.” Staff Legal Bulletin, Division of Market Regulation No. 10, Prohibited Solicitations and “Tie-In” Agreements for Aftermarket Purchases (Aug. 25, 2000).

What benefits do underwriters receive from boosting the IPO price? At first glance, the clear winners from a hot IPO are those initial investors who purchase at the IPO offering price, typically large institutional investors. Underwriters may then benefit in a number of indirect ways. First, underwriters of firm commitment offerings (under which the underwriters bear the risk of failing to sell out the offering) reduce their risk. Investors are more willing to purchase IPO shares if they expect immediate gains in the stock price in the secondary market. Second, underwriters gain a reputational benefit. By elevating the after-market price above the IPO price, underwriters allow their customers—the institutional IPO investors—to sell their overvalued stock to retail investors in the aftermarket. A drop in stock price before the institutional investors sell their IPO allotments into the secondary market would damage the underwriters' IPO reputations among the institutional investors. Among the services underwriters provide to issuers is their ability, based on the underwriters' reputations, to bring investors willing to buy the IPO stock. Laddering therefore may enhance the underwriters' ability to charge higher fees from subsequent issuers. Third—and less benign from the issuer's perspective—underwriters may obtain under-the-table commissions from favored investor-clients. In a follow-up story on the laddering scheme, the *Journal* reported a joint investigation into the allegations by the Securities and Exchange Commission (SEC) and the U.S. Attorney for the Southern District of New York.⁶ That story pointed to underwriters demanding commissions from investors favored with hot IPO allocations: "Wall Street dealers may have sought and obtained larger-than-typical trading commissions in return for giving coveted allocations of IPOs to certain investors."⁷

To the extent laddering (and the promises of some investors to direct more trading commissions to underwriters) represents hidden kickbacks, the IPO prospectus may be materially misleading in omitting such information. Prospectuses, the disclosure documents provided to IPO investors, must explain the commissions and fees being charged for the offering. The payments to underwriters—indirectly through laddering—could amount to extra undisclosed underwriting fees.

6. Randall Smith & Susan Pulliam, *U.S. Probes Inflated Commissions for Hot IPOs*, WALL ST. J., Dec. 7, 2000, at C1.

7. *Id.* While this Article was in the editing process, the SEC proposed a series of modifications to Regulation M governing, among others, the activities of underwriters in the public offering process. The SEC proposed to prohibit underwriters from using greater allocations of IPO shares as an inducement to obtain higher trading commissions on unrelated transactions (or other indirect forms of compensation) from favored investors. See Securities and Exchange Commission, SEC Proposes IPO Allocation Reforms (Oct. 13, 2004), available at <http://www.sec.gov/news/press/2004-145.htm>.

Not surprisingly, the fallout from these revelations has been severe for the investment banking industry. The SEC's investigation into the practice led, so far, to settlements with Credit Suisse First Boston (\$100 million), Goldman Sachs (\$40 million), Morgan Stanley (\$40 million), Robertson Stephens (\$28 million) and J.P. Morgan (\$25 million).⁸ The magnitude of these fines suggests that the SEC was able to uncover substantial evidence of the laddering scheme. The National Association of Securities Dealers (NASD) has proposed rules to try and dampen the frothy IPO aftermarket that makes such abuses possible. The rules would, among other things, ban market orders on the first day of trading after the IPO.⁹

Potentially far more damaging to the underwriters than SEC enforcement or rule changes is the deluge of class action lawsuits that followed in the wake of the laddering revelations. In the year after the *Journal's* stories, plaintiffs' lawyers filed suits alleging fraud in connection with 309 IPOs that debuted between 1998 and 2000. Those suits have been consolidated into a single proceeding in the Southern District of New York.¹⁰ After the investment banks' motion to dismiss was rejected, commentators warned, "If they lose, damages could be in the billions."¹¹

Few tears will be shed for the investment bankers. They appear to have been caught being overly aggressive in their efforts to separate "fools" (the retail investors who eventually end up holding overvalued shares) from their money. Perhaps more sympathy can be mustered, however, for the *issuers* who have been caught up in the fallout from this scandal. Underwriting firms may have deliberately priced offerings below the level justified by market demand in order to better extract kickbacks from the IPO initial investors. The scheme alleged in the

8. Randall Smith & Susan Craig, *Firms Close in on Settlement of IPO Inquiry*, WALL ST. J., June 22, 2004, at C1; SEC Sues CSFB for IPO Violations; CSFB Will Pay \$100 Million, SEC Litigation Release No. 17,327 (Jan. 22, 2002), available at <http://www.sec.gov/litigation/litreleases/lr17327.htm>; SEC Sues Robertson Stephens, Inc. for Profit Sharing in Connection with Initial Public Offerings; Robertson Stephens, Inc. Consents to Pay \$28 Million, SEC Litigation Release No. 17,923 (January 9, 2003), available at <http://www.sec.gov/litigation/litreleases/lr17923.htm>; SEC Sues J.P. Morgan Securities Inc. for Unlawful IPO Allocation Practices; J.P. Morgan Agrees to Settlement Calling for Injunction and Payment of \$25 Million Penalty, SEC Litigation Release No. 18,385 (October 1, 2003), available at <http://www.sec.gov/litigation/litreleases/lr18385.htm>.

9. Raymond Hennessey & Phyllis Plitch, *IPO Market May Face Restriction*, WALL ST. J., Jan. 12, 2004, at C4. The SEC's proposed modifications to Regulation M, discussed *supra* note 7, would also increase the "restricted period" beyond the present 5-day period "during which distribution participants must refrain from activity that could stimulate the market for the security in distribution." Securities and Exchange Commission, *supra* note 7.

10. *In re Initial Pub. Offering Sec. Litig.*, 241 F. Supp. 2d 281, 294 (S.D.N.Y. 2003). A parallel suit against the underwriters alleging antitrust violations was dismissed. Jonathan Stempel, *Judge Tosses IPO Suits Against 10 Banks*, REUTERS, Nov. 3, 2003.

11. Jake Keaveny & Gail Applerson, *Judge Rejects Effort to Dismiss Lawsuit Over Initial Offerings*, N.Y. TIMES, Feb. 20, 2003, at C5.

laddering lawsuits therefore provides one potential answer to the long-standing puzzle of IPO underpricing.¹²

Greater underpricing transfers value from the issuer to the initial investors, compensating the investors for the risk involved in purchasing shares in the after market at overinflated prices as part of the laddering scheme (e.g., the risk that the market price may collapse before the investors are able to sell the shares they purchase in the aftermarket). The transfer of value also compensates investors (with the issuer's money) for directing higher trading commissions to the underwriters in later transactions. IPO issuers acquiesce in this general pattern of underpricing, presumably because they are at an informational or bargaining disadvantage relative to the underwriters who are privy to the market demand for the IPO shares. Underpricing may therefore provide underwriters a hidden means to siphon greater commissions indirectly from the issuer. This explanation suggests that issuers, together with retail investors, are the principal victims of laddering schemes; if IPOs were priced to reflect demand more accurately they would generate more capital for the firm.¹³ Nonetheless, the issuers have been named as co-defendants in the suits.

The IPO laddering complaints allege that the failure to disclose the aftermarket trading scheme in the section of the registration statement relating to underwriter compensation violated both Section 11 of the Securities Act of 1933 ("Securities Act")¹⁴ and Section 10(b) of the Securities Exchange Act of 1934 ("Exchange Act").¹⁵ Section 11 creates the greatest risk of liability for the issuer-defendants.¹⁶ Under Section 11, issuers making public offerings of securities are strictly liable to investors for any material misstatements in the registration statements that

12. IPO underpricing refers to the large first-day returns many IPOs experience systematically, suggesting that the IPOs are underpriced relative to the valuation in the market. For evidence of underpricing, see Roger G. Ibbotson, *Price Performance of Common Stock New Issues*, 2 J. FIN. ECON. 235 (1975); Jay R. Ritter, *The "Hot Issue" Market of 1980*, 57 J. BUS. 215 (1984); Clifford W. Smith, Jr., *Investment Banking and the Capital Acquisition Process*, 15 J. FIN. ECON. 3 (1986). Other theories exist to explain underpricing. See Seha M. Tinic, *Anatomy of Initial Public Offerings of Common Stock*, 43 J. FIN. 789, 790 (1988) (arguing that underpricing reduces the exposure of issuers to legal liability). Our sample, in contrast, provides evidence that those issuers with the *greatest* amount of underpricing are significantly more likely to face suit.

13. This possibility raises the question of why issuers do not rely on Dutch auctions to sell their shares in IPOs, which would effectively eliminate underpricing. W.R. Hanbrecht & Co. has promoted the Dutch auction alternative for a number of years, but so far has achieved little market penetration. The question of why issuers have not opted for Dutch auctions is beyond the scope of this article.

14. 15 U.S.C. § 77k (2000).

15. *Id.* § 78j(b). The IPO laddering complaints can be found on the Web at <http://www.iposecuritieslitigation.com> (visited on January 30, 2004).

16. Although perhaps not the greatest damages exposure because Section 11 limits damages to the offering amount. See Securities Act of 1933 § 11(g). Section 10(b) claims are not similarly limited although they are more difficult to plead and prove. See Securities Exchange Act of 1934 § 10(b).

accompany those offers.¹⁷ The district court, unsurprisingly, rejected the issuer-defendants' argument that they could not be held liable under Section 11 because they were unaware of the laddering practice.¹⁸ After their motion to dismiss was in large part rejected, the issuers entered into a settlement with the plaintiffs, guaranteeing at least a \$1 billion recovery.¹⁹

We do not quarrel with the district court's reading of Section 11; the provision sweeps broadly, making issuer knowledge and culpability irrelevant. The issuers' liability exposure nonetheless raises a substantial policy question: Should issuers be liable for wrongdoing by underwriters in the distribution process for public offerings even where the issuers themselves are not culpable for (and do not benefit from) the laddering scheme?²⁰ If one thinks that some liability is appropriate, does it make sense to impose strict liability on issuers for the conduct of underwriters? Or would a scienter standard, or at least a negligence standard (in the form of a due diligence defense), be more appropriate for misrepresentations in this context? From a deterrence perspective, liability only makes sense if the defendant is positioned to avoid the harm in the first place.

Are issuers well placed to detect misrepresentations relating to the distribution process?

Our study attempts to shed light on the culpability of the issuers caught up in the laddering scheme. We study a random sample of the defendant issuers, matched with similar firms that conducted IPOs during the same period but who were not named as defendants in the laddering litigation. To summarize our central findings, we find no systematic evidence that the sued firms were more likely to have engaged in fraud.

So what? Why should we care if the issuer-defendants are not in fact culpable for the underwriters' efforts to engage in laddering (and indeed may have been harmed by underpricing)? At stake is the more general question of when third parties should be held liable for the wrongdoing

17. See Securities Act of 1933 §§ 6(a), 11(a)(1), 15 U.S.C. §§ 77f(a), 77k(a)(1).

18. See *In re Initial Pub. Offering Sec. Litig.*, 241 F. Supp. 2d 281, 343 (S.D.N.Y. 2003).

19. To be sure, this averages out to a little more than \$3 million per issuer, so the overall impact on the sued firms is not very substantial. One speculates, however, that the firms that failed to get the Section 10(b) claims against them dismissed, see *infra* text accompanying notes 30-35, may have contributed significantly more than the average firm.

20. Of course, if laddering permanently raised stock prices, the issuer would benefit. At the very least, the issuer could sell subsequent equity offerings at a higher price. To the extent laddering pushes a company's price above its true, fundamental value, we are doubtful that the overinflated valuation will continue indefinitely. As new information on the company comes to light (through SEC periodic disclosure filings, for example), the market eventually will readjust the price of the company toward its fundamental value.

of others under the securities laws. Section 11's liability scheme enlists underwriters, auditors, and others involved in public offerings as monitors of the issuer's disclosures for fraud. The regime does not, however, make underwriters, auditors, and other third parties insurers against fraud (as they would be under strict liability). Instead, Section 11 affords a due diligence defense to third parties.²¹ The due diligence defense strikes a balance by enlisting third parties to monitor the issuer—acting as gatekeepers—but it protects them from liability for conduct beyond their knowledge and control.²² Drafting third parties as gatekeepers makes little sense if the third parties cannot limit the actions of the primary wrongdoer.²³ Imposing liability on third parties in such circumstances would simply induce third parties to raise their fees (with no offsetting benefit). The net effect would be to raise the overall cost of capital.

The laddering litigation turns the original scope of Section 11 on its head. Instead of underwriters bearing responsibility for the wrongdoings of the issuers, now issuers bear liability for the wrongdoings of the underwriters. The critical difference, however, is that the present structure of Section 11 does not afford issuers the due diligence defense provided to underwriters and other third parties. But if the issuer truly is not culpable, forcing the issuer to act as an insurer for the underwriter will raise the cost of capital without any corresponding social gain from enhanced deterrence.²⁴

We proceed as follows. Part II develops a series of hypotheses relating to the plaintiffs' choice of defendants and the issuers' culpability in the laddering scheme. Part III describes our sample and presents descriptive statistics comparing the firms sued in that litigation with firms that avoided suit. Part IV presents the main findings of our multivariate regressions. Part V concludes by discussing potential policy implications of our findings for the scope of liability under Section 11.

21. See Securities Act of 1933 § 11(b)(3). The due diligence defense is not available for the issuer. See *id.*

22. The due diligence defense allows a Section 11 defendant (other than the issuer) to avoid liability if it meets the burden of showing that the defendant had "reasonable ground to believe and did believe" in the truth of the misleading statement. In certain circumstances, the defendant must also make a "reasonable investigation" as to the truthfulness of the statement. See Securities Act of 1933 § 11(b)(3).

23. Liability might make sense if the third party could diversify the risk more cheaply than investors. That seems unlikely given the trivial costs to investors of diversification.

24. This effect may be mitigated if issuers can seek contribution from the underwriters. It is not eliminated, however, as the SEC takes the position that indemnification agreements are void as violating public policy. Even if indemnification were permissible, issuers would still face very substantial litigation costs.

II. HYPOTHESES

Did the plaintiffs' lawyers sue the issuer-defendants based on evidence of their involvement in the laddering scheme? Or was the issuers' role irrelevant to the plaintiffs' filing decisions? To shed light on this question, we develop a series of hypotheses, relying on the allegations found in the lawsuit and the court's decision on the issuers' motion to dismiss. We also look to prior work studying the determinants of securities fraud class action filings in developing our hypotheses.

Our first hypothesis is fairly obvious. The main focus of the laddering lawsuit is the conduct of the underwriters. Did the plaintiffs choose which issuers to sue based on the issuers' choice of underwriter?

Hypothesis 1: Issuers were sued based on their choice of underwriter.

Even if underwriter choice played a role in the selection of issuers to sue, it seems unlikely that *all* issuers associated with the underwriters engaged in laddering practices were sued. Prior studies of securities fraud litigation show that factors relating to potential damages from litigation are an important factor influencing the decision to sue. Plaintiffs' attorneys will not bring claims that, even if successful, offer the attorneys an insufficient return to cover the costs of litigation. Because the claims against the issuers included purchases in the secondary market, factors relating to "fraud on the market" damages are likely to weigh heavily in the plaintiffs' lawyers' decision to name an issuer in the suit. Prior work has found that share turnover and market capitalization (both related to the size of potential damages under Rule 10b-5)²⁵ are important determinants in the decision to sue.²⁶

Hypothesis 2: Sued firms will have greater potential damages.

The nature of the market manipulation scheme alleged is also likely to have influenced the choice of issuers to sue. The most obvious possibility is that the plaintiffs' attorneys selected the issuers whose firms had the biggest "pop" on the first trading day after their IPO. A large price

25. The SEC promulgated Rule 10b-5 under Section 10(b) of the Exchange Act. *See* Securities Exchange Act Rule 10b-5; Securities Exchange Act of 1934 § 10(b).

26. *See, e.g.,* MARILYN F. JOHNSON ET AL., DO THE MERITS MATTER MORE? CLASS ACTIONS UNDER THE PRIVATE SECURITIES LITIGATION REFORM ACT (University of Michigan Law School John M. Olin Center for Law & Economics, Working Paper No. 02-011, 2003), available at <http://www.law.umich.edu/CentersAndPrograms/olin/abstracts/discussionpapers/2002/Johnson%20%20Nelson%20Pritchard%2002011.pdf>.

gain helps plaintiffs to tell a persuasive story of market manipulation by the underwriters and their customers (i.e., the large gain is due to the manipulation). A large gain is also likely to correlate with large damages.²⁷ It does little, however, to make a case for *issuer* culpability. A large price gain on the first day suggests that issuers have left substantial sums of money on the table. Pricing the offering higher would have produced much larger proceeds from the offering for the issuer.²⁸

Hypothesis 3: Sued issuers will have greater first-day returns.

Closely connected to the allegation of inflated first-day returns is the plaintiffs' contention that the investment banks implicated in the scheme gave a further boost to the stock price of the issuers by issuing biased research reports—"booster shots"—immediately after the expiration of the quiet period for the offering (25 calendar days after the IPO where the securities are listed on an exchange or NASDAQ).²⁹ Such booster shots may have provided support to the stock price, allowing the initial institutional investors that assisted in the laddering scheme profitably to cash out their holdings at the expense of retail investors.³⁰

Hypothesis 4: Sued firms will have greater returns immediately after the expiration of the quiet period.

The artificial inflation allegedly created by the laddering scheme also leads to our next hypothesis. Presumably this artificial inflation would be difficult to sustain over an extended period because the operating performance of the firms would not justify the high valuations in the secondary market. This presumption became stronger after the *Journal* published its story detailing the laddering scheme. If the line of

27. Empirical evidence exists that IPOs with a larger first-day return experience greater long-term underperformance in the first three years after the IPO. See Jay R. Ritter, *The Long-Run Performance of Initial Public Offerings*, 46 J. FIN. 3 (1991).

28. The differential between the offering price and the secondary market trading price consists of two parts: (a) the underpricing of the offering price below the issuer's fundamental value, and (b) the overpricing in the market due to laddering. As discussed in the Introduction, *supra*, the underpricing is necessary to compensate initial investors to bear the risk of participating in the laddering scheme. Issuers, on the other hand, may profit by eliminating the underpricing, thereby bringing the offering price up toward the fundamental value and obtaining higher offering proceeds.

29. *In re Initial Pub. Offering Sec. Litig.*, 241 F. Supp. 2d 281, 309 (S.D.N.Y. 2003). See Securities Act Rule 174(d), 17 C.F.R. § 230.174(d) (2004).

30. It is possible that insiders may use such booster shots to sell securities. Most offerings, however, include a lockup option for insiders that extend on average for 6 months after the IPO. See *infra* Table 7. It is therefore unlikely that benefiting insiders motivated the booster shots on the part of the underwriter-investment banks.

reasoning is correct, the sued firms should show lower long-run returns than their non-sued peers.

Hypothesis 5: Sued firms will have lower long-run returns measured from the day after the start of the IPO to the publication of the Wall Street Journal laddering article.

The above hypotheses focus on the impact of laddering on secondary market prices. Even if laddering has some impact on secondary market prices, whether issuers are culpable remains a separate question. We develop a number of additional hypotheses to test issuer culpability.

Turning to the principal allegations in the lawsuits, the Section 11 claims shed little light on issuer culpability because issuers are strictly liable under that provision. The Section 10(b) claims, however, require more.³¹ In order to establish liability under Section 10(b) the plaintiffs must show that the issuer-defendants acted with scienter.³² Moreover, Section 10(b) claims must survive the heightened pleading requirements imposed by the Private Securities Litigation Reform Act of 1995, which requires plaintiffs to "state with particularity facts giving rise to a strong inference that the defendant acted" with scienter.³³

The complaints attempt to meet this pleading burden by two means. First, the suits allege that the issuer-defendants were aware of the laddering conspiracy through the involvement of their executives in the road shows for their offerings.³⁴ Actual knowledge, of course, would easily satisfy the scienter requirement. Unfortunately for the plaintiffs, the court concluded that mere participation in the roadshows was not sufficient to create a strong inference of knowledge.³⁵

The complaints, however, also rely on motive as circumstantial evidence of scienter. Motive, of course, is also a relevant factor in assessing culpability. The plaintiffs allege that the issuer-defendants benefited from the laddering scheme by using their (inflated) stock as consideration in post-IPO corporate acquisitions, as well as selling more shares to the public in follow-on offerings after the IPO.³⁶ Here the plaintiffs fared better, with the court upholding claims against 185 of the 309 issuers. Of these 185 issuers, 156 had done stock-based acquisitions

31. The Section 10(b) claims allow the plaintiffs' lawyers to collect substantially greater damages. See Securities Exchange Act of 1934 § 10(b), 15 U.S.C. § 78j(b) (2000). Section 11 damages are capped at the offering price. See Securities Act of 1933 § 11(g), 15 U.S.C. § 77k(g) (2000).

32. See *Ernst & Ernst v. Hochfelder*, 425 U.S. 185, 193 (1976).

33. Securities Exchange Act of 1934 § 21D(b)(2), 15 U.S.C. § 78u-4(b)(2) (2000).

34. *In re Initial Pub. Offering Sec. Litig.*, 241 F. Supp. 2d 281, 368 (S.D.N.Y. 2003).

35. *Id.* at 363 n.108, 368.

36. *Id.* at 320.

after their IPOs and 29 had follow-on offerings subsequent to their IPOs.³⁷

The district court, facing motions to dismiss in 309 cases, understandably used broad strokes to prune away what it perceived as weaker claims. But the motive and opportunity analysis employed is supposed to distinguish defendants likely to have committed fraud from those suffering business reverses. Do the mere facts of making an acquisition or a follow-on offering, neither all that unusual for growing firms, really provide a "strong inference" of fraudulent intent? The motive-and-opportunity inquiry can be sharpened by comparing the sued firms with a set of matching firms that made IPOs at the same time, but did not face a laddering-related suit. Were the sued firms more likely to have made acquisitions or offerings than the firms that avoided litigation?

Hypothesis 6: Post-IPO, sued issuers were more likely to acquire another company using stock as consideration or issue equity securities in a follow-on offering or both (providing the issuers with a motive to assist in the laddering scheme).

Agency costs may affect the issuer's tolerance for market manipulation schemes in the secondary market. As noted above, underpricing is a clear prerequisite to the laddering scheme. Pricing the offering close to the market-clearing valuation for the shares will effectively eliminate the scope for potential manipulation. Absent compensation, institutional investors will not agree to take on the risk of making aftermarket purchases at inflated share prices, resulting in less underpricing. If insiders are selling shares as part of the IPO, or venture capitalists are looking to cash out their investments, it would be reasonable to expect them to push for the highest possible offering price. Hard bargaining by these insiders would limit the possibility of a post-offering run up of the price in the secondary market. By contrast, if the insiders are holding on to their shares, one would expect them to be more interested in the highest possible price in the *secondary* market, and therefore be in favor of laddering schemes. One would expect these insiders to cash out after the IPO lock-up on their shares expires, typically six months after the offering.

37. *Id.* at 370-71. One hundred and fourteen issuers prevailed on their motions to dismiss the Section 10(b) claims against them because either no allegation of an acquisition or offering was made against them (93 issuers), or the allegations failed to specify the number of shares or monetary values involved in the acquisitions (21 issuers). *Id.* Two issuers escaped because their acquisitions occurred after the close of the class period and nine issuers were never named as defendants. *See id.* at 370 n.126, 371.

Hypothesis 7: Sued firms will be less likely to have included the shares of insiders as part of the IPO.

Hypothesis 8: Insiders of sued firms are more likely to have sold shares after the IPO.

If agency costs affect the tolerance of issuers for manipulative schemes on the part of the underwriters, monitoring devices may be relevant to the likelihood of fraud. Some studies have found that companies with weaker monitoring environments are more prone to engage in fraud.³⁸ Weak monitoring may result from less than independent board structures.

Hypothesis 9: Sued firms are less likely to have independent board structures.

Finally, culpability of the issuers can also be assessed by looking at their *ex post* results. Perhaps the sued firms are simply bad actors. *Ex post* measures of issuer culpability include other suits related to the IPO, suits unrelated to the IPO, and SEC enforcement actions. Similarly, restatements of financial results may reflect manipulation of accounting rules to create the appearance of better performance. Issuers who engage in questionable accounting practices, or who otherwise face securities fraud suits (related and unrelated to the IPO) and SEC enforcement actions, may have characteristics (e.g., a willingness to push the boundaries of legality) that make them more likely to agree to assist underwriters in engaging in manipulation of the aftermarket through laddering.

Hypothesis 10: Sued firms will be more likely to be subject to additional lawsuits or enforcement actions or both.

Hypothesis 11: Sued firms will be more likely to restate their financial results.

III. SAMPLE SELECTION AND DESCRIPTIVE STATISTICS

The Web site for the plaintiffs' attorneys in the IPO laddering litigation has a list of all 309 issuers whose IPOs are the subject of the

38. See, e.g., Mark S. Beasley, *An Empirical Analysis of the Relation Between the Board of Director Composition and Financial Statement Fraud*, 71 ACCT. REV. 443 (1996) (finding that a greater percentage of outside directors correlates with a lower likelihood of fraud, but that a greater number of directorships in other firms correlates positively with fraud).

laddering lawsuit.³⁹ To reduce the time needed to hand-collect data, we selected half of the firms at random. We then excluded financial firms (SICs 6000-6999),⁴⁰ foreign firms, spin-offs, and issuers who were not named as defendants in the laddering litigation. We then selected a match for each of the remaining issuer-defendants from IPOs coming to market in 1999 and 2000. Firms sued in the laddering litigation were excluded from the matching sample. Matches were chosen initially from firms doing IPOs the same year, within the same 3-digit SIC code, and with offering amounts between 33% and 300% of the sued firm's offering amount. If no firms met these criteria, we expanded our search for matches to firms within the same 2-digit SIC code and the other years of our sample period. Sued firms that could not be matched were discarded.

These selection procedures left us with 115 sued firms and 115 match firms. As Table 1 demonstrates, the overwhelming majority of both our sued and match firms are listed on NASDAQ. Not surprisingly, high-tech firms (the sector with the heaviest concentration of hot IPOs) dominate the sample.

Table 1: Sample of IPO Laddering Sued and Matching Firms

Panel A: Sued and Matching Firms by IPO Year

<i>Year of the IPO</i>	<i>Number of Sued Firms</i>	<i>Number of Matching Firms</i>
1998	2	0
1999	63	63
2000	50	52
Total	115	115

39. See <http://www.iposecuritieslitigation.com/amended.php3> (last visited Aug. 5, 2004). Only the first three managing underwriters for each offering are tracked. Underwriters who are defendants in the IPO Laddering litigation are identified from <http://www.ipofraud.com> (maintained by Melvyn I. Weiss) (last visited Aug. 5, 2004).

40. SIC stands for "Standard Industrial Classification." The SIC system provides a unified system to classify companies into industry groupings. For more information on SIC codes see <http://www.osha.gov/pls/imis/sicsearch.html>.

Panel B: Breakdown of Sued and Matching Firms by Exchange

<i>Exchange</i>	<i>Sued</i>	<i>Percent</i>	<i>Match</i>	<i>Percent</i>	<i>Total</i>	<i>Percent</i>
NASDAQ	113	98.3%	107	93.0%	220	95.7%
NYSE	0	0.0%	6	5.2%	6	2.6%
AMEX	0	0.0%	1	0.9%	1	0.4%
SMCAP	0	0.0%	1	0.9%	1	0.4%
Unknown	2	1.7%	0	0.0%	2	0.9%
Total	115	100.0%	115	100.0%	230	100.0%

Panel C: Sued Firms by SIC Code

<i>Description of Industry Group</i>	<i>SIC 3-Digit Code</i>	<i>Frequency</i>	<i>Percentage</i>
Computer Programming, Data Processing, and Other Computer Related Services	737	58	50.4%
Miscellaneous Business Services	738	12	10.4%
Telephone Communications	481	9	7.8%
Electronic Components And Accessories	367	6	5.2%
Communications Equipment	366	6	5.2%
Computer And Office Equipment	357	5	4.3%
Drugs	283	4	3.5%
Others		15	13.0%
Total		115	100.0%

Hypothesis 1 posits that plaintiffs' attorneys selected issuers for suit based on their choice of underwriters. The data does not bear out this prediction. Table 2 compares characteristics relating to the under-

writers for the two samples. All of the sued firms had an underwriter-defendant as the lead managing underwriter, while 98.3% of the matched sample had an underwriter-defendant as the lead managing underwriter as well. We conclude that the issuer defendants in the laddering litigation have not been named as a result of their choice of underwriter.

Table 2: Underwriters

Only the first three managing underwriters for each offering are tracked. Underwriters who are defendants in the IPO laddering litigation are identified from www.ipofraud.com (maintained by Milberg Weiss).

	<i>Sued</i>	<i>Match</i>	<i>p-value</i>
Fraction of issuers with a managing underwriter which is also a defendant in the IPO laddering litigation	1.000	0.983	0.1568

The p-value is from a two-sided t-test of the difference in means between the sued and match firm samples.

Table 3 compares the offering characteristics for the sued and match firms. The sued firms have an average offering price of \$17.50 per share, significantly greater than the match firm average of \$14.60. This corresponds with a significantly greater market capitalization for the sued firms, despite the sued firms' smaller assets (although the latter difference is not statistically significant). Other differences relating to the offering are insignificant.⁴¹ Overall, Table 3 offers limited support for Hypothesis 2, which posits that factors related to potential damage amounts will be an important determinant of suit.

41. Note that because we select matching firms in part based on closeness in offering amount with the sued firms, the offering amounts are not statistically different between the sued and matching firm samples, suggesting that our matching procedure largely succeeded.

Table 3: Sued and Match Firms Offering Characteristics

	<i>Sued</i>	<i>Match</i>	<i>p-value</i>
Offer Price	17.5	14.6	0.0001***
Offer Amount (mill.)	95.1	94.0	0.8855
Offered shares as fraction of outstanding pre-IPO	0.810	0.641	0.4184
Offer Amount/Mkt Cap	0.211	0.237	0.1947
Fraction of offerings with a Lockup Option	0.817	0.887	0.1384
Market Capitalization (based on IPO Offer Price) (mill.)	618.2	456.9	0.0044***
Assets (mill.)	148.4	181.4	0.1511

The p-value is from a two-sided t-test of the difference in means between the sued and match firm samples.

*** significant at the 1% level, ** significant at the 5% level, * significant at the 10% level.

Table 4 compares the market returns for the two samples following the IPOs. Not surprisingly, there is substantial evidence to support Hypothesis 3 (that sued firms will have greater first-day returns). Panel A shows that sued firms have a mean first-day unadjusted return of 139.15%, while the match firms have returns of just 38.48%.⁴² We find no support, however, for Hypothesis 4 (based on the plaintiff's "booster shot" allegation) that predicts that sued firms will have greater returns immediately after the expiration of the quiet period. Panel B shows that the sued firms had a mean adjusted return of -1.48% for the two-day period after the end of the quiet period for the IPO. The match firms by contrast had -1.00% adjusted return for the same period.⁴³ This evidence is inconsistent with the hypothesis that underwriters employed a "booster shot" for laddering IPO securities—allowing the initial institutional investors to sell out at an eventual profit, and shifting the eventual loss from the overinflated shares onto unsuspecting retail consumers.

Recall that Hypothesis 5 postulated that the sued firms would have lower long-run returns after the IPO. The data in Panel C of Table 4

42. We use unadjusted first-day returns because investors, the press, and plaintiffs' attorneys generally focus on the raw price increase on the first day of an IPO.

43. Returns were adjusted based on the Center for Research in Security Prices's (CRSP) NYSE/NASDAQ/AMEX market index. This may result in a bias in our adjusted returns if the NASDAQ returns do not closely track the CRSP index. As we use the same index for both the sued and match sample, however, and both samples are overwhelmingly listed on the NASDAQ, there is little chance that our choice of index will bias our results.

(Adjusted Return from the Closing Price on the IPO Date to December 6, 2000) provides little support for Hypothesis 5. Sued firms had a greater mean adjusted long-term return of -26.00%, compared with an adjusted long-term return of -43.61% for matching firms. On the other hand, sued firms had a lower *median* adjusted long-term return equal to -74.00%, compared with -68.18% for matching firms. Neither difference is statistically significant.

Finally, Table 4 also demonstrates that the sued firms have greater share turnover (see Panel D), a finding consistent with Hypothesis 2 (that sued firms will have characteristics leading to greater potential calculated damages at trial). The differences between the two samples, while statistically significant at both the mean and the median, are relatively modest.

Table 4: Aftermarket Performance

Panel A: First-Day Post-IPO Unadjusted Return

The first-year post-IPO unadjusted return is defined as the difference between the closing price on the first day of aftermarket trading post-IPO and the IPO price divided by the IPO price.

	<i>n</i>	25%	Median	75%	Mean
Suit	114	0.7040	1.2000	1.8571	1.3915
Match	113	0.0000	0.1572	0.4873	0.3848

t-test of difference in means = -8.3217 (p=0.0000)

Wilcoxon rank-sum test z-statistic = -8.906 (p=0.0000)

Panel B: Adjusted Return From End of Quiet Period to 2 Days After End of Quiet Period

Adjusted return is adjusted based on the CRSP NYSE/AMEX/NASDAQ market index return.

	<i>n</i>	25%	Median	75%	Mean
Suit	115	-0.0765	-0.0323	0.0299	-0.0148
Match	115	-0.0669	-0.0178	0.0322	-0.0100

t-test of difference in means = 0.360 (p=0.7191)

Wilcoxon rank-sum test z-statistic = 0.788 (p=0.4308)

Panel C: Adjusted Return From the Closing Price on the IPO Date to December 6, 2000

Adjusted return is adjusted based on the CRSP NYSE/AMEX/NASDAQ market index return.

	<i>n</i>	25%	Median	75%	Mean
Suit	112	-0.9200	-0.7400	-0.4212	-0.2600
Match	99	-0.9407	-0.6818	-0.1874	-0.4361

t-test of difference in means = -0.858 (p=0.3919)

Wilcoxon rank-sum test z-statistic = 0.340 (p=0.7339)

Panel D: First-Year Turnover

The first-year turnover is calculated for the first year after the IPO for all firms (except those where an IPO laddering suit is filed within the first year of the IPO) as follows: $1 - (1 - \text{Turn})^{252}$, where Turn is average daily trading volume divided by the number of shares outstanding, and 252 is the average number of trading days for the IPO firms in the sample for the first year after the IPO.

	<i>N</i>	25%	Median	75%	Mean
Sued	110	0.8712	0.9528	0.9937	0.9149
Match	115	0.7679	0.8949	0.9651	0.8490

t-test of difference in means = -3.8053 (p=0.0002)

Wilcoxon rank-sum test z-statistic = -4.054 (p=0.0001)

In summary, we find only weak evidence of any impact from IPO laddering. The strongest evidence comes from the first-day returns: sued firms had a significantly larger first-day return as compared to matching firms. Even here, an alternative hypothesis is possible: plaintiffs' attorneys simply may have "cherry-picked" those firms that happened to enjoy the largest first-day post-IPO return as defendants. Such firms and associated underwriters may look "suspicious" to juries even if no real fraud occurred. We nonetheless start from the presumption that laddering did elevate post-IPO stock prices and that the underwriters in

fact were culpable. This presumption is bolstered by the very substantial settlements resulting from the SEC investigation of laddering.⁴⁴

We focus more directly on the culpability of issuers under Hypotheses 6 through 11. Do sued firms take advantage of the run-up produced by the laddering to sell shares in follow-on offerings, as suggested by Hypothesis 6? Table 5 shows that the sued firms are almost twice as likely to have undertaken a follow-on offering during the class period (27.8% of the sued firms, as compared to 14.8% of the match firms). They also are more likely to have done a stock-based acquisition, although the difference here is not statistically significant. We interpret these findings as limited support for the motive allegations in the plaintiffs' complaint, which the district court credited across the board. Of course, there remains a difficult issue of causation. All else being equal, one would expect a firm that has experienced substantial stock price gains to favor raising capital by selling stock—from the firm's perspective, equity looks cheap compared to debt.

**Table 5: Follow-On Equity Offerings and Acquisitions
(to 12/6/2000)**

	<i>Sued</i>	<i>Match</i>	<i>p-value</i>
Follow-on Equity Offering	0.2783	0.1478	0.0156**
Mean Follow-on Equity Offering Amt (Mill).	364.5	272.1	0.3897
Post-IPO Acquisition	0.1150	0.0783	0.3491
Post-IPO Acquisition Amt (Mill).	1098.7	1074.5	0.9806

The p-value is from a two-sided t-test of the difference in means between the sued and match firm samples.

*** significant at the 1% level, ** significant at the 5% level, * significant at the 10% level.

Turning to the question of sales by insiders as part of the IPO, Table 6 supports the prediction of Hypothesis 7 that insiders of the sued firms will be less likely to have sold shares as part of the IPO. The match firms are nearly three times as likely to have included secondary offerings in their IPOs, consistent with the view that insiders selling shares as part of the IPOs will oppose underpricing and thereby make it difficult

44. For information regarding some of these settlements, see *supra* note 8.

for underwriters to compensate investors to engage in laddering. Moreover, the number of shares sold and the percentage of the overall number offered both are greater for the match firms. The insiders of the matched firms sell more, despite the fact that their percentage of shareholdings pre-IPO is roughly the same as the insiders of the sued firms. As a result, the insiders of the match firms end up with a smaller percentage post-IPO, although they still own a substantial 45% (compared to the 50% held by the sued firm insiders).

Table 6: Sales of Secondary Shares in the IPO

	<i>Sued Sample Mean</i>	<i>Match Sample Mean</i>	<i>p-value</i>
Presence of a secondary share offering in the IPO	0.0782	0.2087	0.0046***
Amount of secondary share sales (mill)	1.4281	6.3809	0.0198**
Amount of secondary share sales as fraction of total offering amount	0.0109	0.1125	0.0615*
Insider ownership of shares as fraction of outstanding shares pre-IPO	0.6077	0.5777	0.3913
Insider ownership of shares as fraction of outstanding shares post-IPO	0.5032	0.4467	0.0482**

The p-value is from a two-sided t-test of the difference in means between the sued and match firm samples.

*** significant at the 1% level, ** significant at the 5% level, * significant at the 10% level.

Table 7 provides evidence related to whether insiders use laddering to assist in post-IPO sales of shares in the secondary market. Little difference exists in the prevalence of lock-up provisions for insiders—88.7% of the match firms and 83.2% of the sued firms have lock-up provisions.⁴⁵ The mean lock-up time for sued and match firms was

45. Lock-up provisions are contractual agreements under which insiders of a company going public agree not to sell their shares in the company for a period of time after the offering.

approximately 6 months. Unless laddering worked to elevate share prices for a period greater than 6 months after the offering (unlikely for shares trading in relatively efficient markets), it is unlikely that insiders used laddering to facilitate insider sales. As a measure for the post-IPO sales by insiders of shares, we looked at the percentage point change in insider ownership (for directors and officers) from immediately after the IPO to the first available proxy statement after the IPO (on average 531 days after the IPO). Table 7 shows that insiders of sued firms reduced their ownership by 16.65 percentage points from after the IPO to the first proxy statement.⁴⁶ In contrast, insiders at the matching firms reduced their ownership by only 9.64 percentage points (difference significant at the 1% level). At a summary statistic level, this difference in ownership change supports Hypothesis 8 that insiders profited from the laddering through elevated sales of their own shares after the IPO. Because of the extended period of time on average between the first proxy statement and the IPO date, however, our measure of insider sales is overinclusive of sales for which the IPO laddering may have worked to elevate prices.

Table 7: Post-IPO Insider Sale of Shares

	<i>Sued</i>	<i>Match</i>	<i>p-value</i>
Fraction with a Lock-up Provision	0.8319	0.8870	0.2329
Number of Lock-up Days	176.2	176.5	0.9187
Percentage Point Change in Insider Ownership Post-IPO	-16.65	-9.64	0.0006***

The p-value is from a two-sided t-test of the difference in means between the sued and match firm samples.

*** significant at the 1% level, ** significant at the 5% level, * significant at the 10% level.

Table 8 measures corporate governance schemes at the time IPOs were offered. Hypothesis 9 predicts that the sued firms are less likely to have independent board structures. We find no support for Hypothesis 9 in the data. Indeed, the sued firms seem to have generally more independent board structures than the match firms. Specifically, the sued

46. The percentage point decline in insider ownership is defined as the difference (in percentage points) between the ownership percentage immediately after the IPO and the ownership percentage at the time of the first proxy statement after the IPO.

firms have a greater percentage of outside directors on their boards, are more likely to separate the chair and CEO roles, and are more likely to have an independent audit committee. We find additional evidence of higher quality external monitoring: sued firms are also more likely to have a Big 5 auditor (although this difference is only weakly significant) and have a higher average number of block shareholders (defined as greater than 10% of the shares). The data also shows that sued firms are more likely to be associated with a venture capitalist.

Table 8: Corporate Governance at the time of the IPO

All corporate governance variables are measured immediately after the IPO. A grey director is defined as an outside director who is: (a) a founder of the company; (b) a consultant or a person with some other non-director-related business relationship with the issuer; (c) affiliated with the underwriter for the issuer; (d) affiliated with the issuer's law firm; (e) a former employee of the issuer; (f) a relative of a top officer of the issuer; or (g) an affiliate of a large block shareholder (defined as greater than 30% ownership of the votes) of the issuer.

	<i>Sued Sample Mean</i>	<i>Match Sample Mean</i>	<i>p-value</i>
Percent independent (non-grey) directors	0.5550	0.4897	0.0139**
Classified board	0.7391	0.7043	0.5582
Number of directors	7.0174	7.0696	0.8952
Separate CEO/chairman	0.4957	0.3652	0.0460**
External board seats held by independent directors	7.3391	8.0783	0.3674
Directors on audit committee	2.5909	2.6354	0.5839
Independent audit committee	0.6000	0.4522	0.0248**
Big 5 Accounting Firm	1.000	0.974	0.0846*
Venture Capitalist	0.779	0.626	0.0116**
Number of 10% block owners (post-IPO)	2.1130	1.7391	0.0129**
Percent held by largest shareholder (post-IPO)	0.2648	0.2764	0.6252
CEO is the largest shareholder (post-IPO)	0.1652	0.1826	0.7293

The p-value is from a two-sided t-test of the difference in means between the sued and match firm samples.

*** significant at the 1% level, ** significant at the 5% level, * significant at the 10% level.

Turning to *ex post* indicia of culpability, Table 9 illustrates that the match firms are more likely to have been sued for fraud related and unrelated to the IPO, although the difference is not statistically significant. There is no difference in the incidence of SEC enforcement actions, of which there is a negligible number for both samples. These findings do not support Hypothesis 10 (sued firms will be more likely to be named as defendants in additional lawsuits). We do find some support for Hypothesis 11: sued firms are more likely to restate their results, although the overall percentage is not that high (14%). Overall, Table 9 provides little evidence of issuer culpability for the laddering suits.

Table 9: Other Fraud Lawsuits Against the Issuers

Other Suits are defined as suits with non-IPO laddering related securities fraud claims filed against the issuer at any point from the time of the IPO to November 30, 2003 (the date we stopped collecting data in preparation for the 2004 Corporate Law Symposium at the University of Cincinnati College of Law). Other IPO Suits are defined as other suits where the fraud claim relates to the IPO. SEC enforcement actions are those brought by the SEC against the issuer at any point from the time of the IPO to November 30, 2003. Restatements are accounting restatements for the issuer at any point in the period from the IPO to November 30, 2003.

	<i>Total Sued Firms</i>	<i>Number</i>	<i>Percent</i>	<i>Total Match Firms</i>	<i>Number</i>	<i>Percent</i>
Other Suits	115	17	14.8%	115	21	18.3%
Other IPO Suits	115	5	4.4%	115	11	9.6%
SEC Enforcement	114	2	1.8%	115	2	1.7%
Restatements	115	16	13.9%	115	4	3.5%

t-stat of difference between mean Other Suits = 0.708 (p = 0.4797)

t-stat of difference between mean Other Suits Related to the IPO = 1.557 (p= 0.1210)

t-stat of difference between mean SEC Enforcement Actions = 0.0088 (p=0.9930)

t-stat of difference between mean Restatements = -2.845 (p=0.0048)

IV. MULTIVARIATE REGRESSIONS

To provide a more comprehensive picture of the decision of the plaintiffs' lawyers to file suit against these issuers, we construct a series of logit models using the variables discussed above as our independent variables. The dependent variable for these regressions is the incidence of the suit (with 1 for an issuer facing laddering suit and 0 for an issuer without a laddering suit). We present the results in Table 10.

Table 10: Logit Model of the Decision to File an IPO Laddering Suit

<i>Independent Variable</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>
Constant	-6.160* (-1.930)	-7.040* (-1.900)	-7.835*** (-2.140)
IPO Offer Price	-0.014 (-0.240)	0.027 (0.440)	0.033 (0.530)
Log (Market Capitalization)	0.351 (0.900)	0.334 (0.730)	0.378 (0.850)
Log (Adj. Return from Close of IPO Date to Dec. 6, 2000)	0.014 (0.090)	0.023 (0.130)	0.032 (0.180)
First Year Post-IPO Turnover	3.384* (1.710)	3.481 (1.480)	4.215 (1.810)
First-Day Post-IPO Unadjusted Return	1.954*** (4.570)	2.065*** (4.310)	1.765*** (3.930)
Adjusted Return from End of Quiet Period to 2 days after End	0.070 (0.030)	0.625 (0.270)	0.841 (0.380)
Follow-On Equity Offering (to 12/6/2000)	0.054 (0.090)	0.208 (0.310)	0.297 (0.460)
Post-IPO Acquisition	0.410 (0.540)	0.221 (0.260)	0.717 (0.820)
Percentage Point Change in Insider Ownership Post-IPO	-1.366 (-0.890)	-0.409 (-0.250)	-0.663 (-0.410)
Separate CEO/Chair	.	0.628 (1.350)	0.732 (1.580)
Percent independent (non-grey) directors	.	-1.682 (-1.180)	-1.782 (-1.260)
Audit committee independence	.	0.713 (1.300)	0.463 (0.830)

Venture Capitalist	.	0.588 (1.080)	0.730 (1.330)
Number of 10% block owners (after the IPO)	.	0.239 (0.980)	0.191 (0.810)
Amount of secondary share sales as fraction of total offering amount	.	-6.964** (-2.190)	-6.387** (-2.050)
Other IPO Suit	.	-3.993*** (-2.970)	.
Restatement	.	.	1.927** (1.990)
Other Suit	.	.	-2.047*** (-2.670)
N	161	161	161
Pseudo Adj. R2	0.324	0.424	0.412
Log Likelihood	-74.669	-63.673	-64.933

*** significant at the 1% level, ** significant at the 5% level, * significant at the 10% level.

Model 1 focuses on market factors as follows:

$$\text{Lawsuit} = \alpha + \beta_1 \text{IPO Offer Price} + \beta_2 \text{Log}(\text{Market Cap.}) + \beta_3 \text{Log}(\text{Adj. Return from Close of IPO Date to Dec. 6, 2000}) + \beta_4 \text{First-Year post-IPO Turnover} + \beta_5 \text{First-Day Post-IPO Unadj. Return} + \beta_6 \text{Adj. Return from End of Quiet Period to 2 Days after End} + \beta_7 \text{Follow-On Equity Offering} + \beta_8 \text{Post-IPO Acquisition} + \beta_9 \text{Percentage Point Change in Insider Ownership Post IPO} + \epsilon$$

As reported in Table 10, *First-Year Post-IPO Turnover* is weakly significant in Model 1, but our other “damages” variables (*Log(Market Capitalization)* and *Log(Adj. Return from Close of IPO Date to Dec. 6, 2000)*) are insignificant. We interpret these results as offering little or no support for Hypothesis 2, which predicted that sued firms would offer greater potential damages.

First-day Post-IPO Unadjusted Return, however, is strongly significant (as it is in the remainder of our models). We conclude that the data strongly supports Hypothesis 3, that the issuers were selected as defendants based on first-day returns. Our variables relating to the stock market return around the expiration of the quiet period are insignificant (as they are for the remainder of the models), thus lending no support to Hypothesis 4, which posited that “booster shots” may have influenced the selection of defendants.

We also include indicator variables for post-IPO acquisitions and follow-on equity offerings in Model 1 to capture the issuers' motives for conspiring in the laddering scheme alleged by the plaintiffs. Both the *Post-IPO Acquisition* and *Follow-on Equity Offering* variables are insignificant in this model and remain insignificant in our other models as well. This study concludes that there is little support for Hypothesis 6 (that sued firms were more likely to engage in acquisitions or follow-on offerings after the IPO) in our data. Lastly, we include a variable for the *Percentage Change in Insider Ownership Post-IPO* to measure insider sales after the IPO. Unlike the summary statistics reported above in Table 7, we find no evidence that higher insider sales are related to a higher probability of facing a lawsuit in the IPO laddering litigation. The coefficient on the *Percentage Change in Insider Ownership Post-IPO* variable is statistically insignificant in Model 1 (as well as in the other models).

Model 2 adds variables that are more closely related to monitoring, including corporate governance variables as follows:

$$\begin{aligned} \text{Lawsuit} = & \text{Model 1 Variables} + \beta_{10} \text{Separate CEO/Chair} + \beta_{11} \text{Percent} \\ & \text{independent (non-grey) directors} + \beta_{12} \text{Audit Committee Independence} \\ & + \beta_{13} \text{Venture Capitalist} + \beta_{14} \text{Number of 10\% Block Owners (after} \\ & \text{the IPO)} + \beta_{15} \text{Amount of Secondary Share Sales as Fraction} \\ & \text{of Total Offering Amount in the IPO} + \beta_{16} \text{Other IPO Suits} + \epsilon \end{aligned}$$

The governance variables are generally insignificant, except for the separation of the roles of the CEO and the Chairman, which correlates with the incidence of suit (the opposite of the predicted direction). Thus, Hypothesis 9, relating to board independence, finds no support here.⁴⁷ On the other hand, our measure for potential agency costs relating to underpricing—the percentage of secondary shares sold in the IPO—is negatively correlated with suit. The more secondary shares (e.g., shares in the hands of directors, officers, and other pre-IPO shareholders) sold in the offering, the less likely the firm is to face a laddering suit. This supports Hypothesis 7 (that sued firms are less likely to have a secondary offering as part of the IPO). Firms are less likely to tolerate excessive underpricing (to the benefit of the underwriters), if directors, officers, and other shareholders directly bear the cost when they sell shares in the IPO.

We also include variables relating to *ex post* issuer culpability in Model 2. The presence of another suit relating to the IPO (*Other IPO Suit*) is negatively correlated with being named as a defendant in the laddering

47. As a check for robustness, we re-estimated each of the models with just one of the governance variables (rather than all of them together in the model). We found similar results—the only significant variable was the separation of the roles of CEO and Chairman of the Board.

litigation. This result is inconsistent with Hypothesis 10 that sued firms will be more culpable as measured by other bad acts leading to lawsuits related to the IPO. However, the negative correlation may also reflect awareness by plaintiffs' lawyers that multiple suits could quickly exhaust the limits of insurance coverage rather than any lack of culpability on the part of the laddering defendant issuers.

Model 3 removes the indicator variable for *Other IPO Suit* and replaces it with more general variables intended to capture whether the issuer has a propensity for fraud as follows:

$$\begin{aligned} \text{Lawsuit} = & \text{Model 1 Variables} + \beta_{10} \text{Separate CEO/Chair} + \beta_{11} \text{Percent} \\ & \text{independent (non-grey) directors} + \beta_{12} \text{Audit Committee Independence} \\ & + \beta_{13} \text{Venture Capitalist} + \beta_{14} \text{Number of 10\% Block Owners (after} \\ & \text{the IPO)} + \beta_{15} \text{Amount of Secondary Share Sales as Fraction} \\ & \text{of Total Offering Amount in the IPO} + \beta_{16} \text{Restatement} + \beta_{17} \text{Other} \\ & \text{Suit} + \epsilon \end{aligned}$$

The variables include securities fraud litigation, whether or not related to the IPO (*Other Suit*) and accounting restatements (*Restatement*). The *Other Suit* variable is also negatively correlated with suit, but the *Restatement* variable is positively correlated. This latter result, while supporting Hypothesis 11 (that sued firms are more likely to restate their financial results), is somewhat surprising, given our other findings relating to issuer culpability. Not all restatements are necessarily alike or demonstrate wrongdoing on the part of the issuer. Moreover, it may be that plaintiffs' attorneys are selecting firms with a restatement (a visible, if somewhat noisy, indicia of fraud by the issuer) as a target in the laddering litigation. Perhaps the presence of a restatement casts doubt on the credibility of the issuer-defendant, notwithstanding the fact that the misrepresentations at issue in the laddering litigation had nothing to do with the firm's financial statements. The lack of other suits based on non-laddering fraud claims, however, provides evidence that the laddering issuer-defendants (despite the higher fraction of restatements) are not engaged in sufficiently egregious conduct to warrant significantly higher numbers of other suits compared with the matching firms.

Overall, our logistic regression offers little support to the notion of issuer culpability in the laddering suits. The market return for the first day after the IPO is strongly significant and correlated with suit in all specifications, while the presence of secondary sales of shares held by insiders as part of the IPO is negatively correlated with suit. These facts are consistent with the plaintiffs' story that the issuers were complicit in the laddering scheme. They are equally consistent, however, with an agency cost bargaining story, in which the issuers are victims of the

insiders and underwriters, not culprits. Our other variables intended to capture issuer culpability are generally insignificant or the opposite of the predicted direction.

V. POLICY IMPLICATIONS AND CONCLUSION

We provide evidence that casts doubt on the culpability of issuers for the efforts of underwriters to manipulate the IPO aftermarket through laddering agreements with favored investor-customers. When directors, officers, and other pre-IPO shareholders sell secondary shares as part of the IPO, evidence exists that the issuer will resist underpricing and laddering schemes because such schemes reduce the proceeds for the secondary offering, as well as for the firm. Nonetheless, in our multivariate logit model, no evidence exists that issuers benefit from laddering either through the use of elevated share prices in post-IPO acquisitions or through follow-on equity offerings after the IPO. Moreover, sued firms are much less likely to face a fraud lawsuit (whether related to the IPO or not) than the matching firms, indicating that factors that may make a firm more prone to engaging in questionable behavior are less prevalent among the sued firms.

Of course, our findings are only as robust as the quality of our proxies for issuer culpability. While the proxies do not capture the "state of mind" of the issuers (indeed, such a proxy probably does not exist), they correlate with both the potential motive on the part of issuers to engage in laddering as well as characteristics within the issuer that may make the issuer more prone to engage in fraud. The plaintiffs' attorneys stressed post-IPO acquisitions and follow-on equity offerings as indicia of an issuer's culpability in their complaints against the IPO laddering issuers. Indeed, only these 10b-5 claims survived the issuers' motion to dismiss (although the § 11 claims survived for all of the firms).

Forcing issuers to bear responsibility for the wrongdoing of underwriters when the issuers are not necessarily culpable (and themselves may have been harmed through excessive underpricing) may make sense if the issuers are the best source of insurance for retail investors who end up with the inflated shares and experience systematic losses. But the issuers at the IPO stage are not repeat-players. Consequently, the firms are in no better position than many investors to spread the risk of loss from mispriced shares. Moreover, to the extent the issuers often are at an informational disadvantage relative to the underwriters, the issuers are not in a position to monitor or deter aftermarket manipulation on the part of the underwriters. In such a situation, imposing liability on issuers for the underwriters' bad conduct without any form of due diligence defense simply raises costs for issuers contemplating an

initial public offering without any corresponding social benefits in the form of enhanced deterrence.

Section 11 contemplates a due diligence defense when third parties, such as underwriters and auditors, are held responsible for wrongdoings on the part of the issuer in a public offering.⁴⁸ Our Article suggests that issuers should, at the very least, enjoy a corresponding due diligence defense when forced to bear responsibility for the wrongdoings of underwriters and other third parties. Under such a defense, the issuer's culpability would turn on the corporate insider's knowledge or care in uncovering information about the underwriters' wrongdoings (as imputed to the issuer). If the insiders are not implicated in the scheme, the issuer would likely be able to establish its due diligence.

The issuer (particularly for IPOs) often is not in a good position to police the actions of underwriters. Issuers often are not repeat players and lack the expertise to monitor underwriters. Further, agency problems may affect the knowledge and care corporate insiders take on behalf of the issuer. To the extent insiders desire to line their own pockets through expected later sales at elevated prices in the secondary market, the insiders may acquiesce to the laddering scheme at the expense of the issuer. An argument exists therefore that the issuer should enjoy even a greater defense against Section 11 claims where the primary wrongdoer is a third party whenever the issuer does not directly benefit from the fraud. A broader defense would shield issuers who do not engage in a post-IPO offering of shares or acquisition from Section 11 claims primarily made against the underwriters in the laddering cases. This defense could be invoked even when insiders have knowledge (or with reasonable care should have knowledge) of the laddering scheme. Under either a due diligence defense or a more comprehensive defense, issuers obtain at least partial protection from Section 11 liability where the issuer is not culpable for the wrongs of third parties.

48. Full symmetry might require that underwriters be strictly liable for misrepresentations in the registration statement concerning the distribution process. We take no position on this possibility.