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Laddering? An Empirical Analysis of the
IPO Market Manipulation Litigation

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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**

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Abstract

Under Section 11 of the Securities Act of 1933, firms making public offerings of securities are strictly liable to investors for any material misstatements in the registration statements that accompany those offers. This strict liability regime is premised on the notion that issuers are best placed to avoid misstatements in the registration statement. Section 11 gives other potential defendants a “due diligence” defense to reflect their lesser ability to ensure the accuracy of the registration statement. The recent spate of “laddering” lawsuits alleging manipulation of the aftermarket for certain stocks issued in “hot” initial public offerings (IPOs) presents a role-reversal in that underwriters, rather than issuers, are alleged to be the principal wrongdoers. This paper compares a randomly selected sample of the defendant-issuers in the IPO laddering lawsuits with a matched sample of IPO firms not included in the laddering litigation. We find few differences between the sued firms and the match firms that would suggest that the issuers are culpable for laddering schemes. These findings call into question – at least under some circumstances – the deterrent value of the strict liability regime of Section 11 for corporate issuers. We propose a due diligence defense for issuers for statements in the registration statement relating to situations in which the primary wrongdoer is not the issuer.

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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.” 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.

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 doing 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

¹ Susan Pulliam & Randall Smith, *Seeking IPO Shares, Investors Offer to Buy More in After-Market*, Wall St. J. A1 (Dec. 6, 2000).

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

³ Id.

⁴ Id. at A10.

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.”

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 aftermarket 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 reputation among the institutional investors. Among the services underwriters provide to issuers is their ability, based on the underwriters' reputation, to bring investors willing to buy the IPO stock. Laddering therefore may enhance the underwriters' reputation with future issuers as well. 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 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 kick-backs, the IPO prospectus may be materially misleading in omitting such information. Prospectuses, the disclosure documents provided to IPO investors, require a rundown on commissions and fees being charged for the offering. The payments to underwriters—indirectly through laddering—could amount to extra undisclosed underwriting fees.

Staff Legal Bulletin No. 10, Prohibited Solicitations and “Tie-In” Agreements for Aftermarket Purchases (Aug. 25, 2000).

⁶ Randall Smith & Susan Pulliam, *U.S. Probes Inflated Commissions for Hot IPOs*, Wall St. J. C1 (Dec. 7, 2000)

⁷ Id.

Not surprisingly, the fallout from these revelations has been severe for the investment banking industry. The SEC's investigation into the practice has led (so far) to settlements with Credit Suisse First Boston (\$100 million), Robertson Stephens (\$28 million) and JP. Morgan (\$25 million).⁸ The magnitude of these fines suggests that the SEC was able to uncover substantial evidence of the laddering scheme. The 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 actions that followed in the wake of the 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 all been consolidated in 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

Not too many 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 their customers. The scheme alleged in the

⁸Securities and Exchange Commission v. Credit Suisse First Boston Corporation, Litigation Release No. 17327 (Jan. 22, 2002); Securities and Exchange Commission v. Robertson Stephens, Inc., Litigation Release No. 17923 (January 9, 2003); Securities And Exchange Commission v. J.P. Morgan Securities Inc., Litigation Release No. 18385 (October 1, 2003).

⁹Raymond Hennessey & Phyllis Plitch, *IPO Market May Face Restriction*, Wall St. J. C4 (Jan. 12, 2004).

¹⁰In re Initial Public Offering Securities Litigation, 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).

laddering lawsuits therefore provides one potential answer to the longstanding puzzle of IPO underpricing.¹² Greater underpricing transfers value to the initial investors, thereby compensating the investors for the risk involved in purchasing shares at overinflated prices as part of the laddering scheme (e.g., 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. Issuers doing IPOs 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 this scheme—if initial public offerings were priced to more accurately reflect demand 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

¹¹ Jake Keaveny and Gail Appleson, Judge Rejects Effort to Dismiss Lawsuit Over Initial Offerings, Reuters (Feb. 20, 2003) (quoting insightful commentator Pritchard).

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.

both Section 10(b) of the Exchange Act and Section 11 of the Securities Act of 1933.¹⁴ Section 11 creates the greatest risk of liability for the issuer defendants.¹⁵ Under Section 11, issuers making public offerings of securities are strictly liable to investors for any material misstatements in the registration statements that accompany those offers.¹⁶ 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.¹⁷ 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.¹⁸

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) laddering scheme?¹⁹ And if one thinks that some liability is appropriate, does imposing strict liability on issuers for the conduct of underwriters make sense? Or would a scienter standard, or at least negligence (in the form of a due diligence defense), be more appropriate for misrepresentations in this context? From a deterrence

¹⁴ See Section 11, Securities Act; Section 10(b), Exchange Act. The IPO laddering complaints can be found on the web at <http://www.iposecuritieslitigation.com> (visited on January 30, 2004).

¹⁵ Although perhaps not the greatest damages exposure because Section 11 limits damages to the offering amount, see Section 11(g) Securities Act. Section 10(b) claims are not similarly limited although they are more difficult to plead and prove.

¹⁶ See Section 11(a)(1), 6(a).

¹⁷ See 241 F. Supp. at 343.

¹⁸ 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 text at *infra* notes -, may have contributed significantly more than the average firm.

¹⁹ 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 will readjust the price of the company eventually toward its fundamental value.

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 defendant issuers in fact are not 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 of others under the securities laws. Section 11's liability scheme enlists underwriters, auditors, and others involved in a 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.²⁰ 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 control. Drafting third parties as gatekeepers makes little sense if the third parties cannot limit the actions of the primary wrongdoer.²¹ 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

²⁰ See Section 11(b)(3), Securities Act.

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 is truly 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.²²

We proceed as follows. Part 1 develops a series of hypotheses relating to the plaintiffs' choice of defendants and the issuers' culpability in the laddering scheme. Part 2 describes our sample and presents descriptive statistics comparing the firms sued in that litigation with firms that avoided suit. Part 3 presents the main findings of our multivariate regressions. Part 4 concludes by discussing potential policy implications of our findings for the scope of liability under Section 11.

1. Hypotheses

Did the plaintiff's 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.

²¹ 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.

²² 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.

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) are important determinants in the decision to sue.²³

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 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.²⁴ 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 a bit higher would have produced much larger proceeds from the offering for the issuer.²⁵

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).²⁶ Such booster shots may have provided support to the stock price, allowing the initial institutional investors who assisted in the laddering scheme to profitably cash out their holdings at the expense of retail investors.²⁷

²³ See, e.g., Johnson, Nelson & Pritchard, *Do the Merits Matter More?*

²⁴ 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).

²⁵ 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 over-pricing in the market due to the laddering. As discussed *supra* in the Introduction, 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.

²⁶ 241 F. Supp. 2d at 309. See Section 4(3), Securities Act; Rule 174(d), Securities Act (setting forth the 25 calendar day prospectus delivery period).

²⁷ 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 Table 6, *infra*. It is therefore unlikely that benefiting insiders motivated the booster shots on the part of the underwriter-investment banks.

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 becomes stronger after the *Journal* publishes its story detailing the laddering scheme. If the line of 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.²⁸ In order to establish liability under Section 10(b) the plaintiffs must show that the issuer defendants acted with scienter.²⁹ Moreover, Section 10(b) claims must survive the heightened pleading requirements imposed by the Private Securities Litigation

²⁸ The Section 10(b) claims allow the plaintiffs' lawyers to collect substantially greater damages – Section 11 damages are capped at the offering price. See Securities Act § 11(g).

²⁹ *Ernst & Ernst v. Hochfelder*, 425 U.S. 185 (1976).

Reform Act of 1995, which requires plaintiffs to “state with particularity facts giving rise to a strong inference that the defendant acted” with scienter.³⁰

The complaints attempt to meet this pleading burden by two means. First, the suits allege that the defendant issuers were aware of the laddering conspiracy through the involvement of their executives in the road shows for their offerings.³¹ 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.³²

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.³³ Here the plaintiffs fared better, with the court upholding their claims against 185 of the 309 issuers. Of these 185 issuers, 156 had done stock-based acquisitions after their IPO and 29 had follow-on offerings subsequent to their IPO.³⁴

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 having made an acquisition or a follow-

³⁰ Exchange Act §21D)(b)(2).

³¹ 241 F. Supp. at 368.

³² 241 F. Supp. at 363 n. 108 & 368.

³³ 241 F. Supp. at 320.

³⁴ 241 F. Supp. at 370. 114 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). See 241 F. Supp. at 370-371. Two issuers escaped because their acquisitions occurred after the close of the class period and nine issuers were never named as defendants. See 241 F. Supp. at 370 n. 126 & 371.

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: Sued issuers were more likely to acquire another company using stock as consideration post-IPO and/or issue equity securities in a follow-on offering post-IPO (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. Underpricing is a clear prerequisite to the laddering scheme – transferring value from the issuer to initial IPO investors who then kick back part of the transfer to the underwriters in the form of higher trading commissions and assistance in laddering schemes. 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, we would 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, we would expect them to be more interested in the highest possible price in the *secondary* market (and therefore be in favor of laddering schemes). We would expect these insiders to cash out after the IPO lock-up on their shares expires (typically six months after the offering).

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 issuers' tolerance 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.³⁵ 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 issuers 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.

³⁵ See, e.g., Mark D. Beasley, An Empirical Analysis of the Relation Between the Board of Director Composition and Financial Statement Fraud, 71 *Accounting Review* 443-465 (1996) (finding that a greater percentage of outside directors correlate with a lower likelihood of fraud, but that holding a greater number of directorships in other firms correlates positively with fraud).

Hypothesis 10: Sued issuers will be more likely to be subject to additional lawsuits and/or enforcement actions.

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

2. Sample Selection and Descriptive Statistics

The website for the plaintiffs' attorneys in the IPO laddering litigation has a list of all 309 issuers whose IPOs are the subject of the laddering lawsuit.³⁶ 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), 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 sued firms from IPOs coming to market in 1999-2000. 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 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.

³⁶ <http://www.iposecuritieslitigation.com/amended.php3> (last visited March 25, 2004).

Table 1: Sample of IPO Laddering Suit and Matching Firms**Panel A: Suit and Matching Firms by IPO Year**

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

Panel B: Breakdown of Suit and Matching Firms by Exchange

<i>Exchange</i>	<i>Suit</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: Suit 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 underwriters for the two samples. 100.0% of the suit 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>Suit</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

Table 3 compares the offering characteristics for the suit 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.³⁷ Overall, Table 3 offers limited support for Hypothesis 2 which posits that factors related to potential damages amount will be an important determinant of suit.

³⁷ Note that because we select matching firms in part based on closeness in offering amount with the suit firms, the offering amounts are not statistically different between the suit and matching firm samples, suggesting that our matching procedure largely succeeded.

Table 3: Suit and Match Firms Offering Characteristics

	<i>Suit</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

*** 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%.³⁸ 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.³⁹ This evidence is inconsistent with the hypothesis that underwriters employed a "booster shot" for laddering IPO securities—allowing the initial institutional investor customers to sell out at an eventual profit (thereby shifting the eventual loss from the overinflated shares onto non-favored and unsuspecting retail consumers).

³⁸ 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.

³⁹ Returns were adjusted based on the Center for Research in Security Prices (CRSP)'s 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.

Recall that Hypothesis 5 postulated that the sued firms would have lower long-run returns after the IPO. The data in Panel C (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 a 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%	<i>Median</i>	75%	<i>Mean</i>
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%	<i>Median</i>	75%	<i>Mean</i>
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%	<i>Median</i>	75%	<i>Mean</i>
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%	<i>Median</i>	75%	<i>Mean</i>
Suit	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 compared with 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 the underwriters in fact were culpable. This presumption is bolstered by the very substantial settlements resulting from the SEC investigation of laddering.⁴⁰

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 done 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 here. 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>Suit</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

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

⁴⁰ See supra note 8.

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 IPO, consistent with the view that insiders selling shares as part of the IPO will oppose underpricing and thereby make it difficult for underwriters to compensate investors to engage in laddering. Moreover, the number of shares sold and the percentage of the overall number offered are both 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>Suit 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**

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

Table 7 provides evidence on whether insiders use laddering to assist in post-IPO sales of shares in the secondary market. Little difference exists in the prevalence of lockup provisions

for insiders – 88.7% of the match firms and 83.2% of the sued firms have lockup provisions.⁴¹ On average, the mean lockup times for sued and match firms was 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 sued firm insiders reduced their ownership by 16.65 percentage points from after the IPO to the first proxy statement.⁴² 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.

⁴¹ Lockup 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.

⁴² 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.

Table 7: Post-IPO Insider Sale of Shares

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

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

We turn to measures of corporate governance in Table 8. 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 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). We also find 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>Suit 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

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

Turning to *ex post* indicia of culpability, we see in Table 9 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 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 does not provide much 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 in the period 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 Law School). 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 in the period 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 Suit 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)

3. Multivariate Regressions

To provide a more comprehensive picture of the plaintiffs' lawyers' decision 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

Independent Variable	Model 1	Model 2	Model 3
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:

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

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 Unadj. 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 issuer’s 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. We conclude 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* as a measure of 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:

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

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.⁴³ 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)

⁴³ 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.

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 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 D&O 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:

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

Our 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. And 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 defendant issuer, notwithstanding the fact that the misrepresentations at issue in the laddering litigation have 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 defendant issuers (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.

4. Policy Implications and Conclusion

We provide evidence that casts doubt on whether the issuers are culpable for the efforts by 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 does exist 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, if anything, 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 (a post-IPO acquisition or follow-on equity offering) as well as characteristics within the issuer that may make the issuer more prone to engage in fraud more generally (the existence of other securities fraud lawsuits against the issuer). The plaintiffs’ attorneys stressed post-IPO acquisitions and follow-on equity offerings as indicia of the issuer’s culpability in their complaints against the IPO laddering issuers. Indeed, only these 10b-5 claims survived the issuer’s 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 indeed 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 thereby 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.⁴⁴ Our paper suggests that issuers should at the very least enjoy a corresponding due diligence defense when forced to bear responsibility for the wrongdoings on the part of underwriters and other third parties. Under such a defense, the issuer's culpability would turn on the corporate insiders' 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 initial public offerings) 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. As well, 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 into the secondary market at elevated prices, 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

⁴⁴ 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.

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, thereby reducing the cost of capital.