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Why do firms switch underwriters?☆

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Abstract

In the mid-1990s, 30% of firms completing an SEO within three years of their IPO switched lead underwriter. This article provides evidence on why they switched. Contrary to predictions of prior research, there is little evidence that firms switch due to dissatisfaction with underwriter performance at the time of the IPO. A surprising result is that switchers' IPOs were significantly less underpriced than non-switchers' IPOs. However, switchers raised fewer proceeds than expected, compared to the mid-point of the filing range, while non-switchers raised significantly more proceeds. There are two main reasons for switching. Firms graduate to higher reputation underwriters, and they strategically buy additional and influential analyst coverage from the new lead underwriter. Survey results support these conclusions.

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Client loyalty in the underwriting business is, as they say, not what it used to be. In the 1970s and before, firms commonly used the same lead underwriter for both initial public offerings (IPOs) and follow-on equity offerings.[1] For IPO firms in the years 1993–1995, there were 578 identifiable firms consummating a seasoned equity offering within three years of their IPO, paying almost $2 billion in fees to underwriters. Nearly one-third, or 180 of these issuers switched to a new lead underwriter for the follow-on deal. Naturally, these switches affect the competitive landscape and profit allocation among underwriters. For example, we calculate that the gross spreads controlled by the switched–to underwriters were about $463 million in our sample of 180 firms.[2]

Why do so many issuers change underwriters? Certainly a more fundamental first question is how and why firms choose a particular underwriter initially, at the time of the IPO. A small body of academic literature on the relation between underwriter reputation and issuer choice focuses on observable factors such as initial and long–term underpricing in the IPO market, tombstone rankings, and underwriter market share.

The economic benefits to a firm of associating itself with high quality underwriters appear to be well established. Michaely and Shaw (1994) show that higher capitalized (and, by inference, higher quality) underwriters underprice less in the period 1984–1988. Beatty and Ritter (1986) show that short-run mispricing by underwriters is associated with future market share losses in underwriting fees. Dunbar (2000) finds that the IPO underwriters who underprice the most, providing the highest first-day returns for investors, lose IPO market share over time. If the amount of underpricing is taken as a proxy for lower quality, then the perception of quality appears to be related to underwriters' aggregate market share gains and losses in the 1970s and 1980s. The

[1] See Siconolfi (1996) which shows an increase in switching in the 1990s. For our purposes, we will define "to underwrite" as "to be the lead underwriter of a common stock sale to the public." Later, we will examine changes among co-managers of an underwriting, and specifically distinguish "lead" from "co-" managers.

[2] Practically speaking, the lead manager does not receive the entire gross spread amount, but he has substantial control in allocating it. We include as Appendix A, a listing of the top 25 underwriting firms and the proceeds and fees associated with the deals underwritten in the 1993–1995 period. We also include the number of follow–on deals retained, lost and gained by each of these underwriters.

implication is that firms engaging less frequently in underpricing, and being of presumably higher quality, will extract a higher proportion of the proceeds for the company and early investors. Nanda et al. (1995) and Carter et al. (1998) also report that the excess performance of IPOs underwritten by higher quality investment banks is more positive in the long run.

In the 1990's, the relationship between underwriter prestige and underpricing appears to have reversed. Beatty and Welch (1996) demonstrate that higher quality underwriters have underpriced more in the 1990s. Kumar et al. (1998) confirm this observation, and find that the most prestigious underwriters with the highest market shares typically are associated with the hottest, most underpriced IPOs.

Prior research has identified high quality underwriting firms through indirect inference. Carter and Manaster (1990) and Carter et al. (1998) provide a metric of underwriter "pecking order," ranking firms by where they appear on the tombstones of completed offerings. Megginson and Weiss (1991) link reputation of underwriters to the market share of offerings completed. They implicitly argue that the highest-quality underwriters will gain the largest offerings and the highest proportion of fees.

One problem with using market share or a proxy like tombstone rankings to measure reputation or quality is that the specific tasks for which the underwriter is rewarded are undefined or, at best, ambiguous. What do higher quality underwriters promise and presumably deliver? While the literature provides a few starting points to begin understanding underwriter quality and choice, it has failed to address some important factors.

James (1992) examines underwriter choice and the decision to switch underwriters in the context of relationship-specific assets. The initial setup costs associated with investing in firm-specific information required to underwrite an equity offering are high. Thus, James finds that the longer the time between the IPO and the follow-on offering, the more likely a firm is to switch underwriter as the value of its firm-specific information degrades. Second, he finds that the marginal cost of repeat business with the same firm is lower, leading underwriters to charge lower initial fees when they expect follow-on deals with the same firm. Finally, he finds that pricing errors at the time of the IPO, whether underpricing or overpricing, are related to the decision to change lead underwriter.

Nanda and Warther (1998) examine the relationship between underwriting fees and loyalty, defined as repeat dealings with the same lead underwriter. They document that client loyalty to underwriters has declined over time. While firms that exhibit greater loyalty pay higher underwriter fees, Nanda and Warther (1998) conclude that fees are not important in the switching decision. They also find that larger, more frequent issuers of securities are more likely to switch lead underwriter. They posit that this relation occurs because such firms have less need for a close relationship with a particular investment bank for obtaining

advice on financing or other issues, so they switch opportunistically among banks.

In addition to the fee structure and the initial pricing issues examined by James (1992) and Nanda and Warther (1998), investment banking firms provide services beyond simply pricing the IPO for their clients. At the time of an IPO, underwriters are responsible for marketing the issue through a road show, placing it in the hands of committed long-term investors, and providing price stabilization in the after-market. Further, the relationship between the issuing firm and the underwriter does not end at the IPO date. For those firms listing on Nasdaq, which make up 74% of our sample, following the IPO, underwriting firms are also expected to maintain an active market in the shares of the issuer. Ellis et al. (2001) show that this market making is a profitable opportunity for underwriters, albeit a small one, in the month after the IPO.

Another important ongoing service is the provision of research to investors by the underwriter's security analysts. While Womack (1996) and Barber et al. (2001) show that sell-side security analysis has modest, predictive investment value, a convincing case for its relationship to economic value for the underwriter has not been made. The financial press has reported incredible increases in salaries of sell–side research analysts in recent years, suggesting that these increases are driven by the contributions analysts make to underwriting, and not by the value of recommendations and earnings estimates (see Gallant (1995) and McGough (1999)).

The underwriter reputation literature has so far focused on the loss of aggregate market share by underwriters. We focus on underwriter market share gains and losses at the micro level by examining the individual decisions issuers make to retain or switch underwriters for follow-on equity offerings. Contrary to our expectations and to the predictions of prior research, we find little evidence that firms switch because the IPO lead underwriter made mistakes such as excessive underpricing or poor share placement, during the IPO process. In fact, we find that non-switching firms were significantly more underpriced than the IPOs of switching firms. However, we find that switching firms often received fewer proceeds in the IPO than originally anticipated, as compared to the mid-point of the filing range, while non-switchers received significantly more than the mid-point value. Overall, we find that the decision to change initial underwriter appears to reflect dissatisfaction with the longer-run service aspects following the IPO. Our results indicate that untimely or non–existent research coverage by the lead underwriter and the perceived quality of the research analyst at competing underwriter firms significantly affects the switching decision.

The complexity of the relationship between the issuing firm and the underwriter, coupled with the variety of services provided by the underwriter, led us to undertake a field-based survey. We directly asked the decision makers, the chief financial officers (CFOs) and chief executive officers (CEOs) at the corporations

that completed IPOs and later switched underwriters, which factors were most important to them. One important contribution of this study is a list and ranking of the reasons executives cited for selecting their IPO lead underwriter and for the decision to switch. Many of their common responses are either absent or only cursorily examined in prior studies.

Of the switching executives, two-thirds report that they were reasonably or extremely pleased with the job performance of their IPO underwriter. In fact, only about 15% of respondents report dissatisfaction with some aspect of the original IPO transaction as the primary switching motivation. In general, they give high marks to the initial marketing and service responsiveness of the investment bank, but much lower marks to the post-transaction follow up by the corporate finance department and especially research coverage by security analysts.

Two significant reasons stand out in the responses of firms that switched lead underwriter. First, IPO firms that have higher reputation alternatives at the follow-on offering, "trade up" to more prestigious underwriters. We call this the graduation effect. Second, switching issuers appear to want to buy better research coverage. More or improved research coverage is mentioned as the top reason by 44% of switching executives, while 88% cite research as one of the top three reasons for their switch. When a firm moves to a new underwriter, a large part of the new relationship it wants to establish is research coverage.

The survey reveals that underwriting fees are given low priority in the decision to switch. Fee structure received the lowest ranking among all decision criteria when selecting a lead underwriter. Chen and Ritter (2000) analyze underwriter fee structure and document an apparent lack of price competition. They provide several plausible explanations for a clustering of spreads at exactly 7%. Our analysis supports the explanation that underwriters do not attempt to compete by offering lower fees because fees are relatively unimportant to firms issuing equity. It is not readily apparent that lowering fees would result in increased business for any single firm.

The rest of the paper proceeds as follows. Section 1 provides the institutional background for underwriter choice, and provides the main hypotheses that we will test. Section 2 describes the data and sample selection methods used in the paper. Section 3 provides a description and analysis of the firms conducting IPOs and later follow-on offerings, focusing on a comparison of switchers and non-switchers. Section 4 details and analyzes the results of the survey results obtained from corporate executives. Section 5 provides a market-based test of the value of the switching decision and Section 6 discusses the implications of the findings and presents our conclusions.

1. Hypotheses about underwriter choice and switching

Our primary objective is to examine the reasons that IPO issuers switch underwriters. We use two datasets to try to infer this reasoning process. The first

data set contains market-based information, including prices, earnings estimates, and trading patterns observed at the time of the IPO until the follow-on offering. The second data set contains the direct opinions we elicited from a questionnaire mailed to and from telephone conversations with corporate executives responsible for the decision to switch.

Our framework for evaluating the services provided by underwriters that influence the switching decision includes tangible and intangible factors. By tangible factors, we mean specific measurable tasks that an underwriter may perform more or less well. By intangible factors, we mean broad notions of reputation and perceptions of quality.

The tangible services provided by the underwriter that are empirically measurable at the time of the IPO and through the period of competition for the follow-on deal include pricing, share placement, trading support, and research coverage. Firms whose IPO underwriters do not meet the expectations of the issuer's executives in these areas will be more likely to switch underwriters.

The intangible factors an underwriter brings to the relationship are predominantly reputational. Empirical proxies cannot easily measure many of an underwriter's actions that signal its quality, like quality of investment bankers, skill at valuation, value of advising, or reputational value of certification. Yet firms select an investment banker with a higher reputation for the unquantifiable benefits associated with its status. We conjecture that the intangible factors rationally should be highly correlated with the tangible factors we consider.

The first tangible factor is advice provided in the initial competition for the IPO. A lead underwriter and co-managing underwriters are often chosen following a bake-off competition in which several firms pitch their strengths and recommend strategies for the new firm. There is likely to be a high level of personalized service and handholding provided during this pre-IPO period. The second obvious service provided is the planning and administration of the roadshow, a marketing process intended to make the issuer known to investors, especially institutional investors.

While these two factors are tangible services, they are not easily or objectively measured. While we do not empirically test these factors, we argue that underwriter performance in these terms is presumably satisfactory, or the underwriter would not have won the business. Survey responses by CFOs support this conclusion.

An important element of the bake-off competition in the pre–IPO process is the valuation and pricing of the IPO shares. We have reported that Beatty and Ritter (1986), Michaely and Shaw (1994), and Dunbar (2000) find that changes in underwriter IPO market share are related to the degree of previous IPO underpricing by the underwriter. The implication is that underwriters who do not price well, thereby leaving too much money on the table, are subsequently sanctioned by a loss of business. The first testable hypothesis we offer is thus:

Hypothesis 1: Mispricing of the IPO. Firms will tend to switch underwriters for the follow-on equity offering if their IPO lead underwriter leaves too much money on the table.

At the time of the IPO, an important goal of the underwriting firm is to place shares with buy-and-hold institutional investors. While measuring this placement success is difficult, one indication is the level of poor share placement, or flipping, at the time of the IPO. Krigman et al. (1999) demonstrate that high levels of flipping are positively correlated with lower future institutional holdings of a stock. Thus, a low level of flipping can be used as a measure of share placement success, as:

Hypothesis 2: Unsuccessful placement of shares by the IPO underwriter. Firms will tend to switch underwriters if the placement strategy was not successful, as measured by the extent of flipping at the time of the IPO.

Hypotheses 1 and 2 measure underwriter competence at the time of the IPO. However, underwriters are also in the business of providing longer-term aftermarket support for their clients. This support takes the form of research coverage and trading support following the IPO. Hypotheses 3 and 4 relate to underwriter performance that is longer term in nature.

Underwriters for firms listing on Nasdaq are expected to make a continuing, active market in the shares of the firm. We conjecture that an IPO underwriter providing minimal market making will lose future business. Similarly, we expect that dominant market makers will gain new business:

Hypothesis 3: Low level of market making by the IPO underwriter. Firms will tend to switch underwriters if the trading desk of the IPO underwriter does not maintain an active and presumably, dominant market in its shares. Similarly, competitors of the IPO lead underwriter with a dominant market making presence in an issue are likely to win the new business.

Prior to the IPO, the marketing effort of underwriting firms focuses on introducing the firm to institutional investors through the roadshow process. The marketing role does not end at the IPO. For 25 days following an IPO, the Securities and Exchange Commission (SEC) prohibits publicity about the company or its offering by the investment banker. Following this "quiet period," a key role of the underwriting firm is to provide research coverage of the new listing, thus maintaining interest and a following in the stock.

Indeed, Michaely and Womack (1999) show that lead IPO underwriters regularly recommend the firms they take public within the first year after the issue date. They show that these "booster shots" raise the price of IPO stocks temporarily. The more research generated on a firm, which is typically favorable, the larger the investor following, and potentially, the greater the trading volume and liquidity. Thus, the timeliness and quality of research coverage are important components of underwriter service:

Hypothesis 4: Research coverage. Firms will tend to switch underwriters if the IPO underwriter's research department does not provide research coverage in a timely manner. Additionally, a firm will switch underwriters to gain broader research coverage or the coverage of higher reputation analysts.

Finally, in Hypothesis 5 we consider the intangible factors that are difficult to quantify. Empirical proxies cannot easily measure many of an underwriter's actions that signal its quality. Yet investors and issuers appear to know, and choose, high reputation when they see it. Booth and Smith (1986) argue that an important role of the underwriter is to certify the appropriate valuation of the issuer. An implication of this certification, tested and confirmed by Carter et al. (1998) and Nanda et al. (1995), is that underwriters denoted as higher quality offer issues that are initially underpriced less, and that have higher returns in the long run. Higher quality can be signaled, for example, by tombstone or market share rankings. We posit that firms naturally flock to high reputation underwriters. An interesting aspect of the preference for high quality is that it does not appear to be costly to the firm. Chen and Ritter (2000) document that, for most IPOs, the fees paid to the underwriter are exactly 7%.

Hypothesis 5: The graduation effect. Firms will tend to switch underwriters when they can obtain the services of a higher reputation underwriter for the follow-on offering.

Hypothesis 5 suggests that firms do not necessarily change their underwriters as a reaction to poor performance, or punishment. Rather, the firm selects a higher reputation investment banker for the unquantifiable benefits associated with its status. We conjecture that this graduation effect, if it exists, is related to, and could be a result of the services measured in Hypotheses 1–4. We test for the graduation effect separately, because a number of researchers have offered models and proxies that attempt to measure intangible reputation.

2. Data and sample selection

The data used in this study come from several sources. Firms that conducted an initial public offering between January 1993 and December 1995, which then returned to the capital market for a seasoned equity offering (SEO) within three years following the IPO, are identified using the Securities Data Company (SDC) New Issues Database. We define a year as 252 trading days. Thus, our sample includes all IPO firms that returned to the equity market within 756 trading days of the IPO. SDC reports a total of 2,049 initial public offerings between January 1993 and December 1995. Of these, 578 (28%) returned to the equity market for a seasoned offering within three years.

As we are interested in the decision to change lead underwriter, we exclude six firms whose IPO lead underwriter went out of business prior to the seasoned offering. Our final sample of combination IPO/SEOs for which we have SDC

data for variables such as offering dates, number of shares offered, offer prices, lead underwriters, and co-managers at the IPO and SEO, covers 572 firms. Almost one-third of our sample, 180 of 572 firms, changed lead underwriter for the first SEO. This data represents the primary sample used in our study.

There were several mergers and acquisitions in the investment banking industry during the study period. We do not exclude offerings underwritten by merged or acquired firms. For example, Kidder Peabody was taken over by Paine Webber in 1994. If a firm used Kidder Peabody as the lead underwriter for its IPO and Paine Webber as the lead underwriter at the SEO, we do not consider this to be a change of lead underwriter. If the firm had chosen to use Morgan Stanley at the SEO, this choice would be counted as a change of lead underwriter.

To examine the research coverage provided by lead underwriting firms, we collect data from the I/B/E/S Detailed Analysts Estimates Database (IBES). Using broker and analyst translation codes, provided to us by IBES, we merge the SDC and IBES datasets to allow an examination of the level and timeliness of research coverage provided by the IPO and SEO lead underwriters. Of the 572 firms doing a follow-on offer in our sample, 520, or 91%, have some level of IBES coverage following the IPO. For those 520, IPO lead underwriters provided research estimates on only 438 of the firms.

While whether research coverage exists is important, we also consider the quality or reputation of the research analysts that provide the earnings estimates. We use the Institutional Investor Annual All-America Research Team rankings as an indicator of the quality of the best analysts in each industry. Analysts included on either the first, second, or third All-America Research team during the years 1992 through 1996, are defined as all-stars for the purposes of this study.

To examine whether firms change lead underwriter because of poor underwriter performance at the time of the IPO, we collect trade and quote data from the New York Stock Exchange TAQ Database (TAQ). This source permits an examination of intraday results such as a firm's underpricing, defined as the return from the offer price to the opening trade, and the level of flipping on the IPO's first trading day. Finally, we examine both raw and risk-adjusted returns between the IPO and the SEO using data from the Center for Research in Security Prices (CRSP).

The average firm in our sample raised \$65.4 million at the IPO and \$73.4 million at the SEO. The firm waited 451 days, or 1.25 years, from the date of the IPO to return to the market for its first SEO. The median elapsed period is 385 days, or 1.08 years. Table 1 shows data for firms in two categories: those that did not switch lead underwriter, and those that did switch. Note that the firms that switched lead underwriter are significantly smaller at the time of the IPO and waited longer for an SEO than the non-switching firms.

A change of lead underwriter does not necessarily mean that the lead IPO underwriter is no longer used at all, reflecting that the underwriter had been fired. Many IPO lead managers become non-lead co-managers for follow-on

Table 1
Summary information for sample of 572 firms that issued follow-on equity issues within three years after an initial public offering

Firms that conducted an IPO between January 1993 and December 1995, and completed a follow-on SEO within three calendar years are partitioned into two groups based on choice of underwriter at the time of the IPO and the SEO. Non-switchers (392) are defined as firms that used the same lead underwriter for both the IPO and first SEO, and switchers (180) are firms that used a different lead underwriter at the IPO and SEO. Data are provided on offering details at the time of the IPO and the SEO, including shares offered, proceeds raised, fees, and manager rankings. The alpha from calendar time regressions controlling for size and book-to-market effects are provided. Long-term size adjusted returns measured around the IPO and SEO are also provided. Mean values are provided unless otherwise indicated. For the IPO and SEO underwriter rankings, the proceeds ranking scale is inverted such that the underwriter with the highest proceeds has rank 1.0. The Carter-Manaster rank is from 0 to 9, with 9 typically the bulge-bracket firms. The Megginson-Weiss rank is based on the percentage market share earned by the underwriter.

			Statistical comparison	
	Non-switchers	Switchers	*t*-stat.	*p*-value
Observations (N)	392	180		
Calendar days from IPO to SEO (median)	320.5	556.5	− 7.44	0.0001
IPO Characteristics:				
Proceeds ($mil.)	77.6	38.8	6.26	0.0001
Proceeds, median ($mil.)	41.5	22.0		
Shares offered	4,571,565	2,831,670	6.14	0.0001
Primary shares as % of shares offered	83.5	90.3	− 3.36	0.0008
Price per share	14.7	11.1	7.88	0.0001
Market value, median ($mil.)	129.7	67.2	1.37	0.1683
SEO Characteristics:				
Proceeds ($mil.)	84.0	50.2	6.23	0.0001
Proceeds, median ($mil.)	60.7	38.3		
Shares offered	3,347,682	2,564,482	4.46	0.0001
Primary shares as % of shares offered	59.5	74.5	− 4.78	0.0001
Price per share	24.5	19.0	5.87	0.0001
Market value, median ($mil.)	290.2	167.5	1.26	0.2050
IPO gross spread	6.79%	7.42%	− 5.87	0.0001
IPO gross spread (median)	7.00%	7.00%		
SEO gross spread	5.17%	5.78%	− 4.39	0.0001
SEO gross spread (median)	5.07%	5.52%		
IPO Underwriter rankings				
Proceeds rank	16.48	44.01	− 7.62	0.0001
Carter-Manaster	8.42	7.49	6.47	0.0001
Megginson-Weiss	4.25	2.94	3.20	0.0015
SEO Underwriter rankings				
Proceeds rank	16.48	31.26	− 4.22	0.0001
Carter-Manaster	8.42	8.14	2.46	0.0145
Megginson-Weiss	4.25	3.44	2.11	0.0357

Table 1 (*continued*)

			Statistical comparison	
	Non-switchers	Switchers	*t*-stat.	*p*-value
Long–term performance (size-adjusted returns)				
Alpha of monthly calendar-time regression	2.47%	2.52%	F = 0.0084	0.9270
1 Year Post-IPO	157.1%	148.9%	0.94	0.3502
1 Year Post-IPO (Median)	134.7%	126.9%		
1 Year Pre-SEO	43.0%	63.5%	− 2.08	0.0390
1 Year Pre-SEO (Median)	28.6%	33.2%		
1 Year Post-SEO	2.3%	− 0.1%	0.41	0.6819
1 Year Post-SEO (Median)	− 3.0%	− 13.6%		

offerings suggesting that the underwriter has been demoted. Similarly, the decision to change lead underwriter does not necessarily mean that a completely new underwriter is chosen. Often, an IPO co-manager becomes the lead SEO manager whereby the underwriter is promoted. To illustrate the transition from lead manager to co-manager and co-manager to lead manager, Table 2 shows a transition matrix from IPO to follow-on SEO lead and co-managers.

Fig. 1 shows that nearly 50% of the lead-switching firms retained the IPO lead manager as a co-manager in the follow-on underwriting team. Many of the switching firms selected outsiders for the SEO, such that 75% of switchers selected a new underwriting firm, uninvolved as a manager at the IPO, as the lead manager. Among the switchers, firms that fired their lead manager are significantly smaller than firms that demoted the lead manager. However, our general conclusion is that the demoted group and the fired group are more similar than they are different.

Like James (1992), and more recently Nanda and Warther (1998), we find that the percentage gross spread at the IPO and SEO are lower for firms that do not switch lead underwriter for follow-on offerings. However, when we control for the size of the offering, we find no statistical difference in the fees charged to switchers and non-switchers. Using our sample data, we estimate regressions of IPO and SEO fees as follows:

$$\text{IPO gross spread} = 10.52 - 0.85\,\text{Ln}\,(\text{IPO Proceeds}) + 0.19\,\text{switch},$$
$$\text{Adj.}R^2 = 0.71 \tag{1}$$

and

$$\text{SEO gross spread} = 11.18 - 1.35\,\text{Ln}\,(\text{SEO Proceeds}) - 0.21\,\text{switch},$$
$$\text{Adj.}R^2 = 0.31. \tag{2}$$

Lead Underwriter Transition Matrix

	Co-manager at IPO is lead manager on SEO *"co-manager promoted"*	Uninvolved manager at IPO is lead manager on SEO *"totally new lead"*	Count Percent
Lead IPO manager Is co-manager on SEO *"demoted"*	**A** 30 16.7% *"manager flip-flop"*	**C** 58 32.2%	88 48.9%
Lead IPO manager is uninvolved at SEO *"fired"*	**B** 16 8.9%	**D** 76 42.2% *"total switch"*	92 51.1%
Count	46	134	180
Percent	25.6%	74.4%	100.0%

Fig. 1. The 180 firms that conducted an IPO between 1993 and 1995, completed a follow-on SEO within three years, and used a different lead underwriter at the time of the IPO and the SEO are partitioned into four categories. We evaluate the status of the IPO lead manager at the time of the SEO and find that in 88 of 180 deals, the IPO lead manager was demoted to co-manager. In the 92 other deals, the IPO lead manager is uninvolved at the SEO. Additionally, we evaluate whether a co-manager from the IPO is promoted to lead manager at the SEO, or whether an outside manager is brought in. In 134 of 180 cases, a new lead underwriter is hired to perform the SEO.

The IPO and SEO gross spreads are defined as (fees/offer proceeds) $\times 100$. Switch is an indicator variable set to 1 if the firm switched lead underwriter for the SEO. A positive coefficient on the switch variable indicates higher fees for switching firms. In both the IPO and SEO estimation, the switch coefficient is not significantly different from zero. Our results indicate that there do exist economies of scale in underwriting, and that underwriters charge higher fees for small offerings, consistent with high start-up costs.

3. Empirical results

Our tests include both univariate comparisons of the switching and non-switching groups, and multivariate probit estimations corroborating the important univariate conclusions.

3.1. Evidence on the first-day hypotheses

The first two hypotheses address the pricing and share placement performance of the lead underwriter on the first day of the IPO. Table 2 provides details of underwriter performance measures on day one of the IPO. While the

Table 2
Descriptive statistics on the pricing and trading activity on the first day of the initial public offering for switching and non-switching firms.

Firms that conducted an IPO between January 1993 and December 1995, and completed a follow-on SEO within three calendar years, are partitioned into two groups based on choice of underwriter at the time of the IPO and the SEO. Non-switchers (392) are defined as firms that used the same lead underwriter for both the IPO and first SEO. Firms that used a different lead underwriter at the IPO and SEO are labeled switchers (180). Information is provided on the level of IPO underpricing and the trading activity on the opening day of the IPO.

			Statistical comparison	
	Non-switchers	Switchers	*t*-stat	*p*-value
Observations (N)	392	180		
Stocks traded on Nasdaq (#)	275	152		
Offer to open at IPO, mean	14.2%	7.7%	4.97	0.0001
median	8.6%	5.0%		
Offer price revision, mean	3.2%	− 4.6%	5.47	0.0001
median	2.9%	0.0%		
Flipping ratio at IPO, median	26.7%	25.5%	− 0.32	0.7508
Volume day 1/IPO shares offered	67.2%	46.5%	6.09	0.0001
Deals underpriced by 60%				
Number	15	0		
Percent of sample	3.8	0.0		
Deals with zero underpricing				
Number	77	48		
Percent of sample	19.6	26.7		
Deals with negative underpricing				
Number	7	12		
Percent of sample	1.8	6.7		

literature suggests that underwriters who engage in excessive underpricing lose future market share, we find that the firms staying with their lead underwriters are significantly more underpriced at the IPO. The average first-day return for the sample of IPOs is 14.2% for non-switchers versus 7.7% for switchers. In fact, there are no switching firms underpriced by more than 60%, while 15 firms with this level of extreme underpricing did not switch. This breakpoint is used for classifying extra-hot deals by Krigman et al. (1999). Using a breakpoint of 40% or 50% yields approximately the same result. Examination of the switchers that

fired the lead underwriter compared to those that demoted the lead underwriter reveal no difference in the level of underpricing. Thus, a first tentative conclusion is that firms do not appear to replace the lead underwriter as a result of excessive underpricing at the IPO, contrary to the literature on underpricing and market share.

Excessive underpricing may result from marketing success during the road-show. If an IPO is successfully marketed, additional demand for shares is generated. Investment banks can raise the offer price relative to the initial filing range to lower excess demand. When underwriters increase the offer price relative to the mid-point of the filing range, issuing firms raise more capital than they originally anticipated, and presumably should be pleased with the marketing efforts of the underwriter. It is not clear that firms will penalize underwriters due to underpricing following a positive price revision.

To test this hypothesis, we calculate the price revision as the percentage change from the mid-point of the initial filing range to the final offer price at the IPO. We find that shares of switching firms were offered at prices 4.6% lower than the mid-point of the filing range, compared to an upward revision of 3.2% for non-switching firms. Thus the higher level of underpricing for the non-switching firms follows a higher than originally anticipated offering price.

We also find that a significantly greater percentage of firms that switch lead underwriter, nearly one-third of the switchers, had cold deals at the IPO, with opening day prices at or below the offer price. In effect, one could conclude (although we do not) that firms later sanctioned their underwriters for fairly or overpricing their IPO. This empirical result is clearly contrary to the predictions of most theoretical models dealing with underwriter reputation and underpricing.

Issues opening for trading at or below the offer price do leave less money on the table, all else being equal, but possibly at the cost of alienating new shareholders and leaving a bad taste in the mouths of investors. Overpricing potentially may make it more difficult for the IPO underwriter to issue equity in the future to once "burned" investors. Changing to a new lead underwriter (and a potentially different investor clientele) may be a way for the issuer to mitigate or avoid the residue of investors' "bad taste" from the IPO. James (1997) shows that underwriters are associated with unique investor coalitions. Thus changing lead underwriter may be a way to reach a new coalition of investors.

The second hypothesis relates to the placement of shares at the IPO. We use the level of first day flipping at the IPO as a measure of placement failure, where higher levels of flipping indicate worse placement results. Following Krigman et al. (1999), we define flipping as the ratio of first-day dollar volume composed of sell-signed block-trade transactions, to total dollar volume traded on the first day. We use the Lee and Ready (1991) algorithm to classify trades as either

buy-motivated or sell-motivated. Sell-signed transactions are trades executed below the mid-point of the current bid-ask spread. These researchers show that IPO firms incurring the most flipping on the first trading day have lower size and risk-adjusted returns over the next year.

Table 2 indicates that the level of flipping is not significantly different between the switching and non–switching groups. Thus, the initial share placement success, at least as defined by the flipping ratio, does not appear to contribute regularly to the decision to change lead underwriters. Additionally, examination of the number of institutions owning the stock and the percent of institutional ownership in the issues between the IPO and the SEO, through six months following the SEO, reveals no difference between the switching and non-switching groups. On average, both switching and non-switching firms gain 15 institutional owners following the SEO relative to six months before the SEO.

3.2. Evidence regarding market making

The third hypothesis relates to the market making activities of the IPO and follow-on underwriters. There are several potential trading-based explanations for why an underwriter might be replaced. For example, if market making is a key decision variable to an issuer, and if someone other than the IPO lead has become the main market maker in the issuer's stock, it may be more likely that the dominant trader will become the new lead underwriter. To explore this possibility, we focus on the percent of monthly trading conducted through the IPO lead underwriter and the follow-on lead underwriter in the year prior to the follow-on offering.

Fig. 2 consists of two graphs that compare the monthly trading market share by the lead IPO underwriter and the lead follow-on underwriter. Because market-making data is only available for firms traded on the Nasdaq, Fig. 2 covers only Nasdaq-listed firms. Among firms that switched, lead IPO managers who were fired exhibit a significantly lower percentage of monthly trading volume in the year prior to the follow-on offering than IPO lead managers who were demoted (see top graph of Fig. 2). The firms that switched by promoting a co-manager to lead manager do not significantly differ from non-switching firms in the level of market making until the last two months before the seasoned offering.

Additionally, we find that IPO co-managers who were promoted to lead manager for the follow-on offering, shown in the bottom graph of Fig. 2, traded about 22% of the volume in the year before the follow-on deal. When a totally new lead manager is hired for the follow-on deal, we observe that the new underwriter traded an insignificant amount of the monthly volume until the particular month of the follow-on offering. Therefore, we can reject one of our hypotheses. On average, for the switchers, a new follow-on lead manager is not hired because it has been a dominant market maker in the target firm.

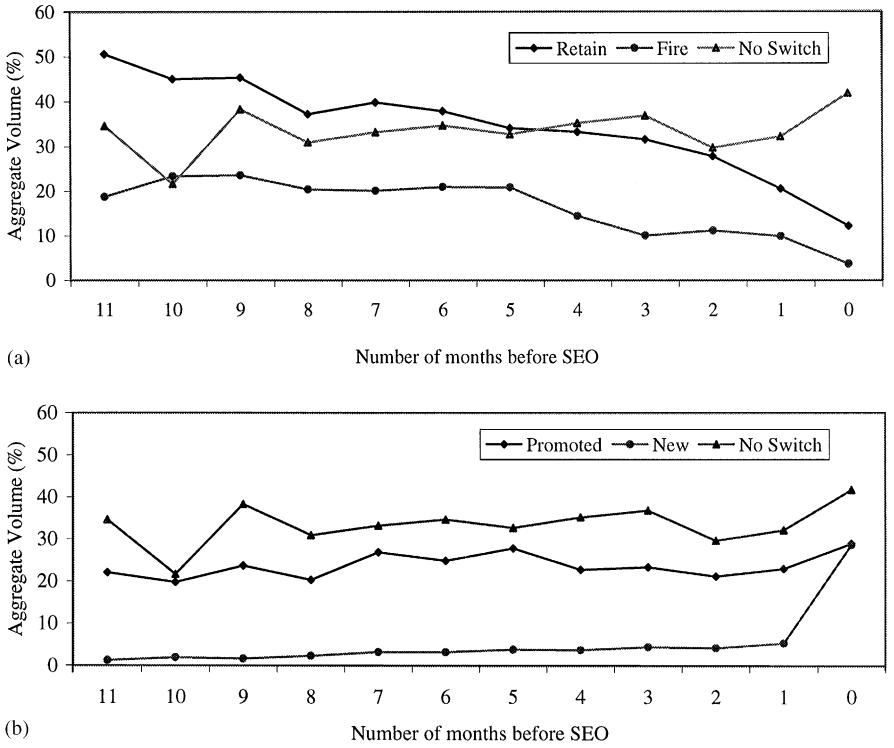

Fig. 2. Market maker trading data is presented for 118 of the 180 Switcher IPO/SEO combinations and 101 non-Switcher firms for which data are available from Nasdaq. We present the aggregate monthly percent of trading volume executed by the IPO and SEO lead underwriter in the 11 months preceding the SEO and the month of the SEO. The top graph presents the data partitioned into firms that retained the IPO lead underwriter as a co-manager at the SEO (55) compared to those that "fired" the IPO lead underwriter (63). The bottom graph partitions the data into firms that promoted a co-manager at the time of the IPO to SEO Lead (26) compared to firms that hired a totally new lead underwriter (92). Fama-MacBeth regressions for both graphs reject the hypothesis that the two groups are similar.

3.3. Evidence regarding research coverage

The fourth hypothesis relates to the research coverage, or lack of coverage, provided by the IPO lead underwriter and to the possibility that firms switch underwriters to gain additional coverage that is associated with potentially higher prestige analysts. We also consider the possibility that issuers switch to underwriters with analysts who have more favorable opinions of their firm.

Despite the evidence in Table 1 that the switcher firms are smaller than non-switchers, we find in Table 3, Panel A, that a slightly higher percent of these switchers are covered by IBES (94% versus 90%). We observe, however, that only 68% of the lead IPO managers for the switchers covered the target firm in IBES, as compared to 80% coverage among those firms that did not switch. The list of lead underwriters who do not pick up coverage of newly issued firms contains 56 different underwriting firms, including Goldman Sachs, Merrill Lynch, and Morgan Stanley. Thus, the lack of research coverage does not appear to be a result of IBES not picking up coverage from these firms. Not only were fewer of the switchers covered by their IPO lead manager, but the number of days from the IPO to the first estimate is also significantly longer for these firms, 107 days compared to 69 days for the non-switchers.

We also examine the number and quality of recommendations issued by the various competitors for the follow-on managership. Michaely and Womack (1999) find that IPO lead underwriters issue more recommendations and more favorable recommendations than the unaffiliated analysts in the first year following the IPO. They also find that the recommendations the underwriters provide are less accurate predictors of future stock prices. Using research recommendations issued by First Call, we examine the number of research reports by both the IPO and SEO lead underwriters in the six months before and after the SEO. We find that the switched-from IPO lead underwriter provided a mere 1.27 research reports in the six months prior to the SEO, compared to 3.11 reports available for non-switching firms. The difference is significant at the 0.0001 level. Following the SEO, we find that the new SEO lead underwriter provides an average of 5.00 research reports for switching firms, a number insignificantly different from the 4.62 reports provided for the non–switching firms by their lead underwriter. Thus, the aggregate evidence is consistent with the hypothesis that firms will be more likely to switch when research coverage is minimal or untimely.

We also show, not surprisingly, that the non-switcher firms, which are typically larger in size, have on average more analysts following them both pre- and post-SEO. In addition, we find that the average firm in both categories picks up, on average, six-tenths of an IBES-reporting analyst from three months before to three months after the follow-on offering.

We also test whether IPO and SEO underwriter analysts are biased in their earnings estimates compared to the consensus estimates. We calculate the bias of the lead underwriter analyst as the difference between the earnings per share (EPS) estimate of the IPO lead underwriter and the consensus EPS estimate, scaled by the stock price. The bias of both the IPO lead analyst and the SEO lead analyst are slightly positive. However the amount of bias is not significantly different between the switching and non-switching groups.

Panel B of Table 3 details the coverage provided by Institutional Investor All Stars for the switchers and non-switchers. Consistent with their smaller size,

Table 3
Descriptive statistics on the level and timeliness of research coverage by lead underwriters of IPOs and SEOs

Firms that conducted an IPO between January 1993 and December 1995, and completed a follow-on SEO within three calendar years are partitioned into two groups based on choice of underwriter at the time of the IPO and the SEO. Non-switchers (392) are defined as firms that used the same lead underwriter for both the IPO and first SEO. Switchers (180) are defined as firms that used a different lead underwriter at the IPO and SEO. Information is provided on the aftermarket support variables, including the quantity and timeliness of research coverage on IBES and analyst following from the Institutional Investor All-Star polls published in 1993 through 1997. Analyst bias is defined as the difference in EPS estimate relative to the consensus estimate scaled by the stock price.

			Statistical comparison	
	Non-switchers	Switchers	*t*-stat.	*p*-value
Panel A. IBES coverage				
Observations	392	180		
Firms covered by IBES (%)	89.8	94.4		
Firms for which IPO lead provides estimate at any point in time (%)	80.4	63.8		
Firms for which IPO lead provides first IBES estimate (%)	41.6	40.6		
Days from IPO to first estimate by IPO lead (median)	69	107	− 3.03	0.0026
Firms for which SEO lead provides estimate at any time (%)	80.9	78.3		
Firms for which SEO lead provides first IBES estimate (%)	41.6	18.9		
Days from SEO to first estimate by SEO lead (median)	− 225	− 54	− 4.67	0.0001
Average number analyst following on IBES				
3 months pre-SEO	2.68	2.21	2.33	0.0200
3 months post-SEO	3.28	2.83	1.97	0.0494
Firms with analyst following on IBES (%)				
3 months pre-SEO	77.0	71.1		
3 months post-SEO	78.1	78.9		
Average bias of IPO lead analyst, Pre-SEO (months − 9 to − 3)	0.12%	-0.00%	0.82	0.4137
Average bias of SEO lead analyst, Post-SEO (months + 3 to + 9)	0.04%	0.07%	− 0.28	0.7765

Table 3 (*continued*)

	Non-switchers		Switchers	
	Number	Percent	Number	Percent
Panel B. All-Star Coverage				
IPO lead has All-Star coverage, pre-SEO (firms)	100	25.5	24	13.3
Firms with any All-Star coverage, pre-SEO	163	41.6	51	28.3
IPO lead has All-Star coverage, post-SEO (firms)	120	30.6	15	
SEO lead has All-Star coverage, post-SEO (firms)	120	30.6	37	20.6
Firms with any All-Star coverage, post-SEO	214	54.6	80	44.4
Increase in firms with All-Star coverage (%)		31.3	56.9	
Increase in lead All-Star coverage (%)		20.0	116.7	

only 13% of firms switching lead managers had been covered by an All-Star working for the IPO lead underwriter, while 25% of the non-switchers had lead IPO All-Star coverage. In the post-IPO, but pre-SEO, period, only 28% of switching firms were covered by any All-Star, lead manager or otherwise, versus 42% for non-switching firms.

When we compare All-Star coverage for switchers and non-switchers before and after the SEO, we find a substantially greater increase in All-Star lead manager analysts and total All-Star analysts for the switchers than for the non-switchers. Lead All-Stars increase from 13% to 20% for switchers, and coverage by any All-Star rises from 28% to 44%. These increases occur in spite of the fact that those firms that fire their lead manager typically lose coverage by that analyst.

Thus, we offer the important finding that the percentage increase in lead or total All-Star coverage is significantly greater for the switchers than the non-switchers. Thus, our hypothesis that firms switch to gain more, more timely, and higher reputation research coverage appears to be supported in this preliminary univariate analysis.

3.4. Evidence regarding graduation

Finally, we hypothesize that firms switch to gain the services and prestige of a higher reputation underwriter. Table 1 shows that, at the time of the IPO, the firms that subsequently chose not to switch were underwritten by higher

Table 4
Determinants of firms changing lead underwriter in seasoned equity offerings following an initial public offering

Firms that conducted an IPO between January 1993 and December 1995, and completed a follow-on SEO within three calendar years, are partitioned into two groups based on choice of underwriter at the time of the IPO and the SEO. Non-switchers (392) are defined as firms that used the same lead underwriter for both the IPO and first SEO; switchers are defined as firms that used a different lead underwriter at the IPO and at the SEO (180). Four probit models are estimated to predict the probability of a firm switching lead underwriter based on (1) characteristics of IPO lead underwriter performance at the time of the IPO, (2) the quantity, quality, and timeliness of research coverage in the period between the IPO and the SEO, (3) variables related to the graduation hypothesis, and (4) a combination of characteristics from each individual model. The dependent variable in the estimations is equal to 1 for firms that switched lead underwriter, and 0 for firms that did not switch. Concordant responses reflect that among all possible switcher/non-switcher pairs, the regression model predicts the switch accurately this percentage of the time. *indicates significance at the 10% level, and **indicates significance at the 5% levels.

	Performance		Research		Graduation		Comprehensive	
	Estimate	*p*-value	Estimate	*p*-value	Estimate	*p*-value	Estimate	*p*-value
Control variables:								
Intercept	11.398	(0.0019)**	11.408	(0.0003)**	10.007	(0.0011)**	10.881	(0.0001)**
Log of IPO expected proceeds	− 0.746	(0.0001)**	− 0.722	(0.0001)**	− 0.674	(0.0001)**	− 0.716	(0.0001)**
Revision in IPO proceeds (%)	− 0.6249	(0.4071)	− 2.427	(0.0002)**	− 2.427	(0.0001)**	− 1.600	(0.0439)**
Day 1 performance variables:								
Offer to open return at IPO	− 2.158	(0.0306)**					− 1.328	(0.1821)
Flipping day 1 at IPO	0.864	(0.1449)						
Day 1 relative volume	− 0.827	(0.0329)**					− 0.377	(0.3784)
IPO gross spread	16.786	(0.2743)						
Research variables:								
Days to first estimate by IPO lead			0.002	(0.0001)**			0.000	(0.4390)
Change in total All-stars pre-post SEO			− 0.371	(0.0005)**			− 0.1259	(0.1975)
Net gain/loss of lead All-star coverage			1.504	(0.0006)**			1.415	(0.0006)**

IPO lead All-star		− 0.621	(0.0512)**		− 0.558	(0.0661)*
Bias of SEO lead earnings estimates		3.148	(0.7942)			
Graduation variables:						
Change in manager rank			− 0.011	(0.0042)**	− 0.007	(0.0861)*
SEO gross spread			− 3.031	(0.7394)		
Offering size (% change)			0.038	(0.7049)		
Raw return from IPO to SEO			− 0.097	(0.5448)		
Days from IPO to SEO			0.002	(0.0001)**	0.002	(0.0001)**
Observations	570	444		571		570
Pseudo R-square	0.152	0.208		0.181		0.212
Concordant responses	75.3%	77.5%		77.0%		79.4%

reputation lead managers. For example, the Carter–Manaster ranking, which is scaled from 1 to 9, shows that firms that do not later switch have an average 8.42 rating, versus a 7.49 rating for the switchers. This result and the other ranking procedures tell a consistent story. The switchers had been lead underwritten at the time of the IPO by lower reputation underwriters.

An examination of the underwriter rankings at the time of the follow-on offering shows a significant pickup in quality of underwriters selected by the switchers. The Carter–Manaster ranking increases from 7.49 at the IPO to 8.14, a difference significant at the 0.0001 level, at the SEO for the switchers, versus 8.42 for the non-switchers. Sixty percent of the switchers traded up to a higher reputation manager, according to the Carter–Manaster rank, while 10% switched to an underwriter of equal rank.

3.5. A multivariate probit analysis of the factors behind switching

The univariate analysis of switchers and non-switchers is potentially misleading if the factors examined are highly correlated. We provide probit regressions in Table 4 to address the robustness of the results in a multivariate setting. The probit analysis models the probability that a firm will switch lead underwriter by setting the dependent variable to one if the firm switches lead underwriter and to zero otherwise. The computed coefficients on the independent variables, along with their t-statistics and p-values, give pseudo-probability estimates of whether a particular variable increases the chance of a firm switching, indicated by a positive coefficient, or decreases it, indicated by a negative coefficient.

We construct three probit models to individually test subsets of the hypotheses, and one comprehensive model that simultaneously consider all important factors relevant to the decision to change lead underwriter. To control for the size of the issuers in our estimations, we decompose IPO proceeds into an expected and unexpected component. The expected proceeds are defined as the log of the shares offered times the midpoint of the initial filing range. This variable captures the expected offering size prior to the IPO. The unexpected proceeds are related to the price revision relative to the initial filing range. We define the revision as the number of shares offered times the change in price from the midpoint of the filing range to the final offer price, divided by the expected proceeds. This variable has been shown to be highly correlated with the level of underpricing in an issue (see Hanley, 1993).

The first regression includes variables related to underwriter performance on the day of the IPO. As can be seen in Table 4, the greater the level of underpricing, the less likely a firm is to switch underwriter. This finding is consistent with our univariate results, but runs counter to literature on underpricing and underwriter reputation, which argues that leaving too much money on the table is a bad thing.

Also significant in this estimation is the ratio of first-day trading volume to shares offered, or turnover. The higher the initial activity in a stock, the less likely that a change in lead underwriter will be made. Flipping, defined as the percentage of first-day volume traded as sell-signed blocks, does not differ significantly between switchers and non-switchers. Therefore, our results do not support Hypotheses 1 and 2. From our analysis, firms do not appear to change lead underwriters because of underpricing at the IPO or because of the poor placement of shares as proxied by the level of flipping.

The second regression equation considers the timeliness, quantity, and quality of research coverage. We find that timeliness and perceived quality of research coverage is important in the decision to change lead underwriter. Firms value timeliness of research, as measured using the length of time from the IPO to the first IPO lead research coverage provided to IBES. The greater the number of days to the start of research coverage, the more likely a firm is to change lead underwriter. Perceived research quality also matters. Having a lead IPO All-Star analyst makes it significantly less likely that a firm will change. Finally, firms that change the lead underwriter pick up a significant net gain in All-Star coverage after the SEO. This regression lends support to Hypothesis 4. Research coverage, both in timeliness and perceived quality, are important in the underwriter decision.

The final individual estimation considers variables related to the graduation hypothesis. Controlling for firm size, the significant variables are the change in manager rank and the time between offerings. We use a proceeds–based manager rank constructed using all IPOs issued during the 1993 through 1996 horizon. The measure is ordinal and the largest underwriter is ranked one. The change in firm size and the stock's return between the IPO and SEO do not explain the decision to switch. Consistent with James (1992), we find that the length of time between offerings is an important explainer of the switching decision.

Finally, we simultaneously test the hypotheses by including all significant variables from the individual estimations in one model of underwriter switching. The comprehensive estimation reveals that both the perceived quality of research coverage, as represented by All-Star coverage, and graduation, as represented by trading up in manager rank, are important to the decision to change lead underwriter for a follow-on offering. As in the univariate results, we fail to find that firms sanction their IPO lead underwriter for poor performance on pricing or share placement by changing lead underwriter.

4. Executive opinions from switching firms

Our second approach to determining why firms switch lead underwriter is more frequently used in marketing research than finance. We asked executives,

using a survey questionnaire, why they decided to switch. Our goal was to construct a survey with both content validity and pragmatic validity. That is, the survey should adequately cover each important aspect of the issue under analysis, and it should be predictive of future actions. To this end, we gave respondents several opportunities to add comments or other reasons in the questionnaire. In about 30% of the completed surveys, respondents added comments. A copy of the questionnaire is included as Appendix B.[3]

We mailed the questionnaire to the chief financial officers of the 180 switching issuers. After the initial mailing, we followed up with telephone calls and faxes. In a dozen cases, the surveys were completed by telephone, and we completed a questionnaire using the responses given over the phone. The interviews were extremely valuable in eliciting the subtle nuances of the decision-making process. Overall, we received responses from 62 CFOs, or 34% of the possible respondents. In about 5% of cases, the company had merged or the current financial management did not participate in the IPO and follow-on offerings, and thus no responses are possible.

One potential problem with surveys is a self-selection bias. That is, the firms that chose to respond to our survey may be significantly different from those that chose not to respond. Table 5 compares the 62 responding and 118 non-responding firms. We provide details on the firms at the time of the IPO and SEO. Overall, we find no significant difference between the responding and non-responding firms. We thus have no reason to believe that self–selection is an important issue biasing our survey results.

The questionnaire was designed to ask about two related sets of issues. First, we asked CFOs about the reasons for choosing the IPO underwriter and the company's satisfaction with various aspects of the IPO underwriting. Second, we asked about the decision to undertake a follow-on offering, the reasons for choosing the follow-on underwriter, and the manager's satisfactions with that underwriter's job. The responses are compiled in Tables 6 and 7.

While the survey was designed for ease of response, our analysis mirrors that of Section 3. Each question in the survey includes potential responses supporting each of the hypotheses. A benefit of the survey is that we can address issues for which we were unable to develop empirical proxies, like services provided to the firm by the lead underwriter prior to the IPO. We report the percentage of respondents, ranking each factor first, second, and third, and the percent that suggest it was not important in the decision.

4.1. Evidence on pre-IPO services

Lead underwriters provide several tangible services prior to the IPO that are not empirically measurable by obtainable data. These include the bake-off

[3] See Sudman and Bradburn (1982) and Churchill (1988) for a discussion of survey objectives and design.

Table 5
Summary information on survey respondents compared to survey non-respondents

Firms that conducted an IPO between January 1993 and December 1995, and completed a follow-on SEO within three calendar years, and changed lead underwriter are partitioned into two groups based on whether they responded to our survey questionnaire. Data are provided on offering details at the time of the IPO and the SEO, including proceeds raised, fees, and manager rankings. For the IPO and SEO underwriter rankings, the proceeds ranking scale is inverted such that the underwriter with the highest proceeds has rank 1.0. The Carter-Manaster rank is from 0 to 9, with 9 typically the bulge-bracket firms. The Megginson-Weiss rank is based on the percentage market share earned by the underwriter. Unless otherwise stated, mean values are reported.

	Survey		Statistical comparison	
	Respondents	Non-respondents	*t*-stat.	*p*-value
Observations (N)	62	118		
Calendar days from IPO to SEO	597.5	552.2	− 1.13	0.2689
Sample breakdown by major industries (% of firms)				
Manufacturing	44.4	45.6		
Services	15.5	19.6		
Wholesale	9.5	5.4		
Number of other industries represented	8	11		
IPO characteristics				
Market value at IPO ($ mil.)	108.4	124.1	0.41	0.6861
Proceeds ($ mil.)	41.7	37.5	− 0.51	0.6080
Secondary shares as % of shares offered	8.0	10.8	− 0.93	0.4374
Offer price per share ($)	11.2	11.0	− 0.28	0.7837
Gross spread	7.23%	7.50%	1.45	0.2049
Underpricing (offer to open return)	9.2%	4.4%	3.21	0.0016
Flipping day 1	33.1%	28.0%	− 1.69	0.0927
SEO Characteristics				
Market value at SEO ($ mil.)	273.0	305.5	0.34	0.7316
Proceeds ($ mil.)	54.1	48.5	− 0.79	0.4215
Secondary shares as % of shares offered	20.2	31.1	− 1.87	0.0628
Offer price per share ($)	18.8	19.1	0.18	0.8601
Gross spread	5.69%	5.73%	0.18	0.8572
IPO underwriter ranking				
Proceeds rank	44.90	43.60	− 0.18	0.8581
Carter-Manaster	7.14	7.66	1.74	0.0844
Megginson-Weiss	2.21	3.28	1.53	0.1276
SEO Underwriter Ranking				
Proceeds Rank	36.80	28.76	− 0.98	0.3298
Carter-Manaster	8.13	8.14	0.05	0.9597
Megginson-Weiss	3.87	3.27	− 0.81	0.4196

Table 6
Survey responses by switching executives on IPO underwriter factors

This table presents the survey questionnaire results for questions 1–3 of the survey shown in Appendix A. We sent questionnaires to 180 firms conducting an IPO in the years 1993–1995 that also issued shares in a follow-on equity offering and switched lead underwriters from the IPO to the follow-on offering. The survey elicited responses from 62 (or 34%) of the firms. In Question 2, the *z*-statistic calculates the statistical significance of the difference of each factor's average from the overall average. * and ** denote statistical significance at the 5% and 1% level, respectively. n.m. indicates that a response is not meaningful.

		This response ranked by CFO			% ranking in top 3	% saying not important
		1st	2nd	3rd		
Panel A: Reason for choosing IPO lead underwriter (question 1)						
A	Underwriter's overall reputation and status	19.6	25.8	21.4	67.9	0.0
B	Quality and reputation of the research department/analyst	21.4	14.5	19.0	54.7	3.8
C	Underwriter's industry expertise and connections	21.4	14.5	7.1	45.3	1.9
D	Institutional investor client base of the underwriter	1.8	9.7	14.3	24.5	3.8
E	Pricing and valuation promises	7.1	11.3	2.4	22.6	11.3
F	Market making, trading desk and liquidity provision services	1.8	8.1	11.9	20.8	5.7
G	Other (please list other criteria you consider important)	14.3	3.2	0.0	18.9	n.m.
H	Non-equity-related services (e.g., advice on M&A, debt)	1.8	3.2	11.9	15.1	18.9
I	No other underwriter choices (write-in response to Other)	10.7	0.0	2.4	13.2	n.m.
J	Retail client base of the underwriter	0.0	6.5	4.8	11.3	18.9
K	Fee structure	0.0	3.2	4.8	7.5	7.5

Other responses include:
Commitment to making the deal successful; Prior relationship with underwriter; Demonstrated ability to raise capital in a tough market; Creativity of banking team; Aftermarket performance of previous IPOs by the underwriter; Relationships with another underwriter

		Number of CFOs choosing each scale rank					Average score	*Z*-stat
		1	2	3	4	5		
Panel B: Performance Assessment of IPO Lead Underwriter (question 2, 1 to 5 (bad to good) scale)								
A	Responsiveness to questions and concerns prior to IPO	2	3	15	18	7	3.56	3.83**
B	Roadshow and the marketing process	2	8	14	19	3	3.28	2.02*
C	Placement of shares with institutional investors	5	9	11	12	5	3.07	0.43
D	Pricing	5	11	17	13	4	3.00	0.06
E	Initial aftermarket trading and price support (if any)	5	8	15	13	2	2.98	− 0.08
F	Placement of shares with retail investors	5	5	16	9	2	2.95	− 0.25
G	Market making (trading) after the initial IPO week	8	9	16	6	4	2.74	− 1.35
H	Responsiveness to questions and concerns after the IPO	5	14	13	11	1	2.75	− 1.53
I	Analyst research coverage	15	10	9	8	6	2.58	− 2.00*
		Percent responding						
Panel C: Overall Appraisal of Performance of IPO Lead Underwriter (question 3)								
	(a) The performance did not meet my expectations	30.9%						
	(b) Relatively happy with the IPO lead underwriter's performance	56.4%						
	(c) Extremely happy with the IPO lead underwriter's performance	12.7%						

Table 7
Survey responses by switching executives on follow-on underwriter factors

This table presents the survey questionnaire results for questions 4–6 of the survey shown in Appendix A. We sent questionnaires to 180 firms conducting an IPO in the years 1993–1995 that also issued shares in a follow-on equity offering and switched lead underwriters from the IPO to the follow-on offering. The survey elicited responses from 62 firms, for a response rate of 34%. n.m. indicates that a response is not meaningful.

		Percent Responding
Panel A: Plans for an SEO at Time of IPO (question 4)		
(a) Yes		41.2%
(b) Perhaps, depending on conditions		29.4%
(c) No		29.4%

		This response ranked by CFO				
		1st	2nd	3rd	% ranking in top 3	% saying not important
Panel B: Reason for switching to a new lead underwriter for your first SEO (question 5)						
A	Reputation and perceived quality of SEO lead underwriter	27.2	11.1	10.5	59.3	1.7
B	Research department and analyst reputation of SEO lead underwriter	14.9	20.6	5.3	47.5	3.4
C	Knowledge of your industry by SEO lead underwriter's corp. fin. professionals	7.4	12.7	15.8	39	5.1
D	Future research coverage promised by SEO lead underwriter	9.9	11.1	12.3	37.3	5.1
E	To gain additional exposure	7.4	11.1	10.5	32.2	8.5
F	Dissatisfaction with IPO lead underwriter — frequency of analyst coverage	8.6	7.9	8.8	28.8	13.6
G	Future market making (trading) promised by SEO lead underwriter	1.2	4.8	12.3	18.6	1.7
H	Size/market capitalization of SEO lead relative to IPO lead underwriter	6.2	3.2	5.3	16.9	5.1
I	Dissatisfaction with IPO lead underwriter — market making (trading) services	4.9	3.2	7	16.9	11.9
J	Dominant market making by SEO lead underwriter since IPO	4.9	6.3	3.5	16.9	3.4
K	Other (please list other criteria you consider important)	4.9	6.3	0	13.6	n.m.
L	Dissatisfaction with IPO lead underwriter — corporate finance services/pricing	2.5	0	5.3	8.5	20.3
M	Dissatisfaction with IPO lead underwriter — research recommendations	0	1.6	3.5	5.1	20.3

		Percent Responding
Panel C: Overall Appraisal of Performance of SEO Lead Underwriter (question 6)		
(a) The performance of the SEO lead underwriter did not meet my expectations		14.5%
(b) I was relatively happy with the SEO lead underwriter's performance		50.9%
(c) I was extremely happy with the SEO lead underwriter's performance		34.5%

competition, and the planning and administration of the roadshow. These services are valuable to an issuer in the pre-IPO period. There is likely to be a high level of service and handholding provided during this period. The CFOs in our sample give high marks to their IPO lead underwriters for the q uality of service provided during the pre-IPO period. The responses to questions 2A, regarding pre-IPO responsiveness, and 2B, regarding the roadshow, have Z-scores of 3.83 and 2.02, respectively, each statistically significant. We compute Z-scores in two ways. First, we subtract the overall mean from subgroup mean and divide by the computed variance. In a second analysis, we subtract the mean of each individual's responses from his own rankings and then compute a Z-score. Our results are robust to each methodology.

4.2. Evidence on IPO first-day hypotheses

The first-day services provided by the IPO lead underwriter include the pricing of the offering and the initial share placement. We find that 24.5% of the responding executives list the institutional client base (question 1D) among the top three reasons for selecting the IPO lead underwriter, and 22.6% cite pricing promises made by the underwriter (question 1E).

The performance assessment of the lead underwriter on these dimensions (questions 2C, 2D, 2F) reveals moderate satisfaction. Share placement and pricing at the IPO were given an average rank of 3 on a 1–5 scale. Only 8.5% of the responses list dissatisfaction with the pricing and corporate finance services at the IPO (question 5L) among the top three reasons for the switch, while 20.3% rank this reason as an unimportant factor.

Overall, the performance of the IPO lead underwriter in the pre-IPO period through the IPO first day is highly rated among issuing firms. Consistent with the empirical results presented in Section 3, the survey results provide no evidence of dissatisfaction with pricing and share placement as important factors in the decision to switch lead underwriter for the SEO.

4.3. Evidence regarding market making for Nasdaq firms

An important service that underwriters provide Nasdaq firms is liquidity. Underwriters maintain an active market in the shares of issuing firms. We found previously that the level of market making is significantly lower for IPO lead firms that were fired compared to those who were retained as co-manager or lead manager. The survey results add a broader understanding of this result.

While 20.8% of firms list liquidity provision and market making as important services for the selection of the IPO lead underwriter (question 1F), 16.9% list dissatisfaction with the level of market making as one of their top three reasons for switching (question 5I). Additionally, 18.6% of the responses include promises of market making by the new SEO lead as one of their top three reasons for

switching (question 5G). Thus, market making and liquidity provision are important to issuing firms. However, some underwriters clearly fail to perform these services well, and lose business as a result.

4.4. Evidence regarding research coverage

One difficulty in the proxy-based empirical investigation of the reasons for switching lead underwriter is disentangling buying research from graduating to a higher-quality underwriter. The survey technique allows us to address this issue by simultaneously offering the competing hypotheses to the decision-makers.

The empirical results strongly support research coverage as important in the decision to switch underwriters. Research coverage seems to matter due to both disappointment with the IPO lead and promises made by the SEO lead. The survey responses support this conclusion.

Fifty-five percent of firms list the research department or analyst at the IPO lead firm as a primary reason for their selection (question 1B). The performance assessment of the IPO lead underwriter on analyst research coverage (question 2I) receives the lowest ranking (Z-score $= -2.00$, significant at 0.05 level). More than half, or 25 of 48 of the firms that answered this question rank research coverage by the IPO lead underwriter as 1 (15 firms) or 2 (10 firms) on a 1–5 ranking. Additionally, four of the top six reasons cited for switching lead underwriter are research-related (questions 5B, 5D, 5E, 5F).

Interestingly, it is the frequency of analyst coverage by the IPO lead (question 5F), not the research recommendations (question 5M) that receives low marks. There are two possible reasons behind this response. Either firms are not concerned with what is being said about them, and may be unwilling to say so. Alternatively, sell-side equity analysts may provide mostly positive research recommendations, and keep negative opinions to themselves.

4.5. Evidence regarding graduation

The reputation and status of the lead underwriter is the most frequently cited reason both for selecting the IPO lead underwriter (question 1A) and for switching to the new SEO lead underwriter (question 5A). Reputation and status are cited as a top three reason for 67.9% of firms selecting an IPO lead, and 59.3% cite these reasons among the top three reasons for switching to a new underwriter for the SEO. Interestingly, we found that we had left out one significant and common response for selecting a lead IPO underwriter, in that 13% of the CFOs reported that they essentially had no other choice of underwriter. These respondents were not aware of another interested underwriting firm.

Overall, the reputation, perceived quality, relative size, and industry expertise of the underwriter are very important in the decision to switch lead underwriter

at the SEO. Thus, when respondents are provided with a choice between graduation-related issues and research-related issues, graduation ranks first, and research is a very close second (questions 5A–5F).

The survey results provide an added dimension to the analysis and permit a better understanding of the switching decision and the value that issuers place on the services provided by investment banks. Overall, the survey results are quite consistent with the inferences drawn from the empirical proxies in Section 3. Thus, our conclusions exhibit convergent validity, the highly desirable attribute that multiple measurement processes converge to the same answers.

5. Market valuation of the switching decision

We have presented consistent evidence that equity-issuing firms value the post-IPO services provided by the lead underwriter. We have not addressed whether the value of the services translates into shareholder wealth. If firms value sell-side equity analyst research and the reputation of the investment banker, the underlying theoretical reason is the maximization of shareholder wealth. Thus, our final analysis is an examination of whether the market recognizes the value of the decision to switch underwriters. We examine the SEO announcement returns for evidence of market valuation effects.

We are able to locate the SEO announcement date for 454 of the 572 firms in our sample. Of this group, 142 are switching firms and 312 are non-switching firms. We use this subset in our inquiry into the market valuation of the switching decision. We calculate the cumulative abnormal return (CAR) for the three-day window centered on the announcement date, as the return on the stock less the return on the CRSP value-weighted NYSE/AMEX/Nasdaq index.

Consistent with the literature, we find negative abnormal announcement returns averaging -1.83%. On a univariate level, there is no statistical difference between the announcement returns for the switching and the non-switching firms. Thus, the mere decision to switch is not valued differentially by the market during this three-day window.

We regress the determinants of the SEO CAR cross–sectionally to test whether the market values the factors related to the decision to switch. In the estimation, we control for several factors, including the size of the offering, using the SEO proceeds as a percent of the market value of the firm, the number of days from the IPO to the SEO, the relative size of the SEO compared to the IPO, using SEO shares offered divided by the IPO shares offered, the average monthly price run-up between the IPO and the SEO, and the percentage of the offering that is primary versus secondary shares. The variables of interest include an indicator variable set to one if a firm switches lead underwriter for its first SEO, the change in rank of the lead underwriter, which is based on the manager proceeds rank described in Section 3, and two interaction variables.

The first interaction is between the switching indicator and an indicator set to one if the IPO lead firm had an All-Star analyst covering the firm. This measure is intended to capture whether the market sanctions issuers for switching away from strong research coverage. The second interaction term is between the switching indicator and an indicator set to one if the new lead firm has an All-Star analyst who picks up coverage of the firm following the SEO. This measure is intended to capture whether the market rewards issuers for switching to an underwriter with an All-Star analyst covering their industry. Results of the estimation are presented in Table 8.

The announcement CAR is smaller, or less negative, when a firm switches to a higher-ranked manager for the SEO. This result is consistent with the value attributable to the perceived reputation of higher-quality investment banks. Controlling for all other factors, however, the decision to switch lead manager is not significant.

When a firm chooses to switch away from an investment bank that is providing All-Star research coverage, the market penalizes the firm, as evidenced by a larger, or more negative CAR at the announcement. When a firm switches to an underwriter that could potentially provide All-Star coverage, the parameter estimate is positive, but not statistically significant. This result is consistent with value associated with switching to All-Star coverage. Overall, the market does value underwriter reputation and sell-side All-Star research coverage as early as the announcement date of the SEO.

6. Conclusions

So, why do issuing firms switch underwriters? Before attempting to finalize this central question, two preliminaries should be mentioned. First, firms that issue follow–on equity within 3 years of their IPO have had higher returns than the typical IPO. The stocks in our sample appreciate, on average, more than 120% in the first year after the IPO. The distributions of returns for switching and non-switching firms are approximately identical for this measure of long-term stock price performance. The decisions analyzed here are thus not necessarily those of the typical IPO.

Second, it is clear from the survey responses and telephone conversations with CFOs that no one answer holds for all firms. The precise reasons behind why decisions are made are as varied as the number of decisions that were made. We try rather to find common responses that are typical of the decisions made in the second lead-underwriter decision process. We believe that the convergence of the survey data with the empirical proxies for the various factors supports our conclusions that there are three common themes.

First, switching is not primarily driven by dissatisfaction with the actions of the IPO lead underwriter around the time of the IPO. The stocks of switching firms are less hot at the IPO than those of non-switchers, and poor

Table 8
Cross-sectional estimation of determinants of CAR surroundig SEO announcement date and factors relating to the decision to switch lead underwriter

Cumulative abnormal returns (CARs) over a three-day window surrounding the announcement of a seasoned equity offering are regressed on factors relating to the decision to switch lead underwriter. We control for the size of the offering relative to the IPO, the percent of primary shares issued, the log of the SEO proceeds in millions, the average monthly performance of the stock in the period between the IPO and the SEO, and the number of days between the IPO and the SEO. The factors of interest include an indicator variable set to 1 if the firm switches lead underwriter, the change in manager rank, an indicator variable set to 1 if the firm switches away from a lead underwriter that provided an All-Star research analyst, and an indicator set to 1 if the firm switches to an underwriter that could potentially provide All-Star coverage. The regression includes 454 of 572 firms for which we could locate an announcement date for the SEO.

	Intercept	Primary shares	Relative size	Log SEO proceeds	Price runup	Days: IPO to SEO	Switch	Mgr Rank change	Switch-lose star	Switch-gain star
Estimate	− 9.60	0.01	0.23	0.99	0.15	0.00	0.87	0.03	− 4.35	1.16
t-statistic	− 4.73	1.20	1.83	2.34	2.64	2.72	1.05	2.74	− 2.69	0.87
p-value	0.0001	0.2293	0.0683	0.0199	0.0086	0.0069	0.2956	0.0064	0.0075	0.3863
F-Value		4.35								
p-value		< 0.0001								
Adjusted *r*-squared		0.0642								
Observations		454								

pricing and poor share placement were mentioned by only a few CFOs in our survey. The main areas of dissatisfaction relate to long-term and service-oriented issues. Question 2 of the survey shows that research report production and corporate finance follow-up after the IPO generate the least-positive responses.

The second finding is that issuers, when possible, trade up to higher-reputation underwriters for the first seasoned offering. The survey evidence confirms that a majority of CFOs acknowledge overall underwriter reputation as a key factor in both their IPO and SEO decisions. This is supported by the Carter–Manaster ranking data, showing that 60% of the issuers improved their underwriter ranking and 10% kept the same ranking when switching at the time of the SEO.

We noted that one of the problems with the previous academic literature on underwriter reputation and market share is that the underwriter's specific actions are undefined or ambiguous. Our survey results help to delineate the specific actions that issuers value when they decide to change or retain their first underwriter.

The third finding is that issuers regularly initiate a change, addition, or improvement in research coverage by Wall Street and, in particular, the lead underwriter, during the follow-on underwriting. The supporting evidence for this conclusion is multidimensional. Of CFOs deciding to switch, 88% respond that at least one of the research coverage-related answers in question 5 of the survey ranks as one of their top three reasons. Table 3 shows that a higher proportion of switcher firms had not been followed by IBES after the IPO, and that these switcher firms pick up substantially more and higher-quality research coverage after the SEO than do the non-switchers.

We therefore conclude that issuers place value on incremental and perceived high-quality research coverage by sell-side analysts. They allocate their resources, in the form of underwriting fees, to increase and improve this coverage. Surprisingly, this well-known fact on the Street has not been previously documented in the academic literature. Our results help explain the incredible increase in salaries of sell-side research analysts in recent years. Why issuers place such high value on sell-side research coverage is a significant and important question for further research.

Appendix A

Table 9 contains the 25 top underwriters ranked by IPO proceeds and separately by SEO proceeds during the period January 1993 through December 1995. We include the underwriter IPO and SEO ranks, the number of IPO and SEO deals completed, the IPO and SEO fees generated in millions and the total IPO and SEO proceeds raised in millions.

Table 10 contains the 25 top underwriters ranked by IPO proceeds during the period January 1993 through December 1995. We include the number and total proceeds in millions of SEO deals lost, gained and retained by each underwriter. We separately calculate the net gain or loss of SEO business by each underwriter during the period January 1993 through December 1998.

Appendix B. Survey on underwriter choice

1. Reasons for Choosing IPO Lead Underwriter

Please rank the decision criteria you used for selecting your IPO lead underwriter. Put the number '1' next to the most important, '2' by your second choice and '3' by your third choice. Additionally, place an 'X' next to any criterion you consider NOT important.

Underwriter's Overall Reputation & Status..... _____
Quality and Reputation of the Research Department/Analyst..... _____
Non-Equity-Related Services (e.g., advice on M&A, debt)..... _____
Fee Structure..... _____
Pricing & Valuation Promises..... _____
Underwriter's Industry Expertise and Connections..... _____
Market Making, Trading Desk & Liquidity Provision Services..... _____
Institutional Investor Client Base of the Underwriter..... _____
Retail Client Base of the Underwriter..... _____
Other (Please list other criteria you consider important)..... _____
..... _____
..... _____

2. Performance of IPO Lead Underwriter

How satisfied were you with the service provided by the IPO lead underwriter at the time of your IPO and in the year after your IPO? Please rank each item using a 1 to 5 scale. (Place an 'X' next to any item, for which you have no opinion.)

(*Extremely Unsatisfied*) 1 2 3 4 5 (*Extremely Satisfied*) ——————►

Roadshow and the Marketing Process..... _____
Responsiveness to Questions/Concerns Prior to IPO..... _____
Pricing..... _____
Placement of Shares with Institutional Investors..... _____
Placement of Shares with Retail Investors..... _____
Initial Aftermarket Trading & Price Support (if any)..... _____
Market Making (Trading) after the Initial IPO Week..... _____
Analyst Research Coverage..... _____
Responsiveness to Questions/Concerns after the IPO..... _____

Table 9
Summary of top 25 IPO underwriters: IPO and SEO proceeds, deals, and fees, 1993–1995.

	All IPOs January 1993 through December 1995				All SEOs January 1993 through December 1995			
	Rank	Deals	Fees	Proceeds	Rank	Deals	Fees	Proceeds
Merrill Lynch & Co.	1	131	1,073.0	18,343.8	1	194	881.5	21,631.1
Goldman, Sachs & Co.	2	90	900.2	16,684.1	2	100	610.5	17,680.4
Morgan Stanley & Co. Incorporated	3	86	562.2	9,686.5	3	87	443.9	12,579.4
Smith Barney, Harris Upham & Co. Incorporated	4	74	456.6	7,590.6	5	76	261.8	5,967.7
Donaldson, Lufkin & Jenrette Securities Corporation	5	65	355.1	5,505.2	7	53	264.6	5,837.5
CS First Boston	6	58	266.4	5,475.0	6	65	323.7	9,387.7
Lehman Brothers Incorporated	7	44	315.5	5,126.4	4	87	332.0	8,985.1
Salomon Brothers Inc.	8	22	278.4	4,712.5	8	52	230.4	5,343.5
Dean Witter Reynolds Inc.	9	28	280.9	4,664.2	25	15	43.3	994.6
Kidder, Peabody & Co. Incorporated	10	40	283.0	4,242.4	24	24	59.5	1,139.3
PaineWebber Incorporated	11	43	177.9	3,570.6	12	52	132.8	3,116.0
Alex. Brown & Sons, Incorporated	12	90	233.3	3,390.4	10	63	197.5	3,954.4
Oppenheimer & Co., Inc.	13	36	177.0	2,675.5	22	27	54.6	1,159.6
Bear, Stearns & Co. Inc.	14	38	145.7	2,381.5	13	37	98.8	2,078.2
Prudential Securities	15	43	147.2	2,268.9	15	35	86.4	1,737.7
Robertson Stephens & Co.	16	62	155.1	2,225.8	16	36	86.4	1,729.0
Montgomery Securities	17	60	150.2	2,148.0	9	89	248.8	5,179.1
JP Morgan Securities, Inc.	18	11	92.7	1,678.5	17	13	61.0	1,707.1
Hambrecht & Quist Incorporated	19	55	103.1	1,478.5	14	42	104.3	1,983.9
Piper, Jaffray Inc.	20	18	65.7	1,063.3	30	18	29.3	516.1
Dillon, Read & Co. Inc.	21	15	57.3	909.2	21	17	49.9	1,199.7
Lazard Freres & Co.	22	7	39.6	704.3	29	5	22.2	534.7
William Blair & Company	23	25	47.9	682.2	23	23	54.9	1,151.1
NatWest Securities Limited	24	14	43.6	656.8	20	21	72.7	1,392.6
Morgan Keegan & Co., Inc.	25	12	44.1	629.5	26	15	45.1	845.1

Table 10
Summary of top 25 IPO underwriters: SEO deals lost, gained and retained, 1993–1998.

	Deals lost		Deals gained		Deals retained		Net deals gained or lost	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Merrill Lynch & Co.	7	482.7	10	947.9	24	3,843.5	3	465.2
Goldman, Sachs & Co.	4	380.9	5	406.8	28	4,195.4	1	25.9
Morgan Stanley & Co. Incorporated	3	270.6	11	823.3	24	3,843.5	8	552.7
Smith Barney, Harris Upham & Co. Incorporated	4	298.8	13	976.5	11	930.8	9	677.7
Donaldson, Lufkin & Jenrette Securities Corporation	8	684.7	4	267.2	19	2,483.0	(4)	(417.5)
CS First Boston	4	414.7	3	299.8	11	2,056.4	(1)	(114.9)
Lehman Brothers Incorporated	9	880.1	8	458.7	14	1,482.3	(1)	(421.4)
Salomon Brothers Inc.	4	265.6	6	434.4	10	641.6	2	168.8
Dean Witter Reynolds Inc.	1	57.2	0	0.0	6	381.0	(1)	(57.2)
Kidder, Peabody & Co. Incorporated	5	169.5	1	80.6	7	533.3	(4)	(88.9)
PaineWebber Incorporated	2	115.7	5	187.1	9	485.4	3	71.4
Alex. Brown & Sons, Incorporated	4	267.8	5	298.0	30	2,029.2	1	30.2
Oppenheimer & Co., Inc.	4	152.1	5	212.7	4	281.0	1	60.6
Bear, Stearns & Co. Inc.	2	123.3	6	195.1	6	467.2	4	71.8
Prudential Securities	5	201.3	3	95.6	12	565.0	(2)	(105.7)
Robertson Stephens & Co.	3	119.3	8	227.8	11	582.9	5	108.5
Montgomery Securities	5	197.5	9	564.5	27	1,362.7	4	367.0
JP Morgan Securities, Inc.	0	0.0	2	187.6	4	444.1	2	187.6
Hambrecht & Quist Incorporated	4	131.1	13	526.5	18	1,065.2	9	395.4
Piper, Jaffray Inc.	1	37.8	1	9.0	4	137.9	0	(28.8)
Dillon, Read & Co. Inc.	1	20.0	1	18.9	3	195.4	0	(1.1)
Lazard Freres & Co.	2	141.2	0	0.0	1	123.9	(2)	(141.2)
William Blair & Company	2	68.3	0	0.0	7	575.7	(2)	(68.3)
NatWest Securities Limited	0	0.0	0	0.0	4	191.5	0	0.0
Morgan Keegan & Co., Inc.	2	109.8	2	92.6	4	226.8	0	(17.2)

3. Which of the following three statements most closely represents your appraisal of the performance of your IPO lead underwriter?

The performance of the IPO lead underwriter did not meet expectations ..... ———

I was relatively happy with the IPO lead underwriter's performance ..... ———

I was extremely happy with the IPO lead underwriter's performance ..... ———

4. At the time of your IPO, did you have plans for a seasoned equity offering?

Yes, probably ——— Perhaps, depending on conditions ——— No ———

5. Reasons for Switching to a New Lead Underwriter for your first Seasoned Equity Offering

Please rank the following decision criteria. Put the number '1' next to the most important, '2' by your second choice and '3' by your third choice. Additionally, place an 'X' next to any criterion you consider NOT important in the decision to change lead underwriter for your SEO.

Dissatisfaction with IPO Lead Underwriter-Corporate Finance Services/Pricing ..... ———

Dissatisfaction with IPO Lead Underwriter-Frequency of Analyst Coverage ..... ———

Dissatisfaction with IPO Lead Underwriter-Research Recommendations ..... ———

Dissatisfaction with IPO Lead Underwriter-Market Making (Trading) Services ..... ———

Reputation and Perceived Quality of SEO Lead Underwriter ..... ———

Research Department/Analyst Reputation of SEO Lead Underwriter..... ———

To Gain Additional Exposure ..... ———

Size/Market Capitalization of SEO Lead Relative to IPO Lead Underwriter ..... ———

Future Research Coverage Promised by SEO Lead Underwriter ..... ———

Dominant Market Making by SEO Lead Underwriter since IPO ..... ———

Future Market Making (Trading) Promised by SEO Lead Underwriter ..... ———

Knowledge of your Industry by SEO Lead Underwriter's Corp. Fin. Professionals ..... ———

Other (Please list other criteria you consider important) ..... ———

..... ———

..... ———

6. Which of the following three statements most closely represents your appraisal of the performance of your SEO Lead Underwriter?

The performance of the SEO lead underwriter did not meet expectations ..... ———

I was relatively happy with the SEO lead underwriter's performance..... _____

I was extremely happy with the SEO lead underwriter's performance... _____

7. Would you like to receive a completed copy of my study?

Yes _____ No _____

If yes, please provide a name and address:
Name:
Address:
Feel free to provide any additional information or comments on: **"What was your main reason for switching lead underwriter?"** If you are willing to talk briefly about your SEO decision process, please provide a phone number or give me a call at (XXX) XXX-XXXX. Be assured that your participation in this study and any information you provide will be kept strictly confidential.

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