

Trends in Seasoned Equity Offering Discounts, 1986-2003

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Summary

An analysis of 5,505 seasoned equity offerings (SEOs) during 1986-2003 indicates that the average offering of new shares is priced at a discount of 3.3% from the closing price on the day before the issue. A significant discount difference exists between the two major US stock markets. The average discount is 4.1% for Nasdaq-listed firms compared to 2.0% for companies listed on the NYSE. Over the time period examined, Nasdaq firms are much more likely to have offer prices set at integer values than NYSE-listed companies. Offer price clustering produces higher SEO discounting and hence increases the indirect cost of issuing new shares. After adjusting for asymmetric information and clustering factors, Nasdaq-listed firms have a discount 153 basis points higher than NYSE-listed stocks during the 1998-2003 time period.

* This report is based on the academic paper entitled “Discounting and Clustering in Seasoned Equity Offering Prices” by the same authors.

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1. Introduction

This study examines the discounting of 5,505 U.S. seasoned equity offerings (SEOs) during the 1986-2003 time period. A seasoned equity offering occurs when a New York Stock Exchange (NYSE) or Nasdaq-listed company issues additional shares of equity to investors in a public offering. The discount is defined as the percent change from the offer price (OP) to the prior closing price (P_{T-1}), $\left[\left(\frac{P_{T-1} - OP}{OP}\right) \times 100\%\right]$. We report that the average offering is priced 3.3% below the closing market price of the day before the issue. The magnitude of this discount has increased relative to the prior academic research.

Categorizing by exchange, we find that Nasdaq-listed shares are, on average, discounted significantly more than shares listed on the New York Stock Exchange: 4.1% versus 2.0%, respectively. In every year since 1988, the discount is higher for Nasdaq firms than for companies listed on the NYSE. Regarding the discount as an indirect cost of the issue, an average SEO on Nasdaq costs an issuing firm more than twice as much than if it is listed on the NYSE.

The discount difference across exchanges also exists for median values. The median SEO discount for NYSE-listed firms is only 1.0% compared to 2.6% for Nasdaq-listed companies during 1986-2003. The difference in median discount between the exchanges is statistically significant at conventional levels. The purpose of this paper is to examine possible explanations for the dramatic difference in discount levels between the two exchanges.

We study two hypotheses that may be able to explain the documented patterns: ‘asymmetric information’ and ‘offer price clustering.’ SEO pricing follows a characteristic pattern that partly explains the discounting. Our paper provides evidence that offer prices are not uniformly distributed. Similar to the findings of Christie and Schultz (1994) for Nasdaq dealer quotes, SEO offer prices cluster around whole integers. In other words, the offer price is set at the closing market price, but rounded down to the near, but not necessarily to the next integer. For a stock trading at $\$51 \frac{3}{8}$, the offer price might even be rounded down to $\$50$. Surprisingly, as financial markets use a wider array of possible prices (i.e., $\frac{1}{8}$, $\frac{1}{16}$, $\frac{1}{32}$, and decimals) to value stocks, SEO offer prices increasingly cluster at whole dollars.

Finally, after adjusting for factors, such as underwriter quality, size, industry, stock price, and offer price clustering, we find that being listed on Nasdaq adds 153 basis points to the discount that issuing firms pay to investors during the 1998-2003 time period. Interestingly, during 1986-1991, there was no significant difference in realized SEO discounts between the two main US exchanges.

2. Data and Sampling Procedures

A. Sample Selection

The data contain all SEOs by U.S. operating companies occurring between January 1986 and December 2003 as identified by the Securities Data Company (SDC). The preliminary sample excludes equity offerings by closed-end investment funds, real-estate investment trusts (REITs), unit investment trusts, beneficial interests, limited partnerships, American Depositary Receipts (ADRs), and right and unit issues. In addition, the issuing firm must be traded on the NYSE or Nasdaq to be included in this

study. The final sample contains 5,505 U.S. SEOs that would be of interest to the typical money manager.

B. Trends in SEO Discounts

Figure 1 shows the trend in SEO discounts over our time period by exchange. The SEO discount is computed as the percent change from the offer price to the prior closing price, $\left[\left(\frac{P_{T-1} - OP}{OP}\right) \times 100\%\right]$. As clearly shown in Figure 1, the magnitude of the SEO discounts, both mean (Panel A) and median (Panel B), has trended upward during our sample period. Since 1990, there is a substantial difference in the mean and median SEO discount between the two exchanges.

Table 1 reports the number and price discount for the SEO sample categorized by exchange. The proportion of Nasdaq issues has generally increased throughout the period. Overall, about 62% of our SEO sample is listed on Nasdaq compared to 38% listed on the NYSE. Table 1 reports that the average discount for NYSE SEOs is 2.0% during the 1986-2003 time period compared to 4.1% for Nasdaq offerings. The difference across exchanges also exists for median values. The median SEO discount for NYSE-listed firms is 1.0% compared to 2.6% for Nasdaq-listed companies.

Our documented SEO discounts are larger in magnitude than that reported in previous academic studies. For example, Smith (1977) reports an average offer-to-close of 0.5% for his sample of 328 SEOs conducted on the NYSE/Amex during the 1971-1975 time period. Loderer, Sheehan, and Kadlec (1991) report an average offer-to-close of 1.4% for 1,606 offerings occurred in 1980-1984. In particular, Loderer, Sheehan, and Kadlec report evidence of discounting just for Nasdaq SEOs (1.6% on average) during

1980-1984. They find little evidence on the Amex (1.2% is the mean), and none on the NYSE (0.0%).

From 1986 to 2003, SEO discounts have increased on both exchanges. For example, NYSE issues report an average discount increasing from 0.7% in 1986 to 3.0% in 2003. Similarly, Nasdaq SEOs have an average discount increasing from 0.6% to 5.1%. The increase is more evident for Nasdaq issues and since the early 1990s. In the following section, we test possible explanations to account for the documented patterns of the SEO discounts.

3. Possible Explanations for the SEO Discounts

A. Asymmetric Information Hypothesis

Asymmetric information in the SEO market leads to a “winner’s curse” problem faced by uninformed investors. The inability to distinguish between ‘bad’ and ‘good’ stock issues forces the uninformed investors to pull out of the market. Uninformed investors will submit bid orders only if the offerings are, on average, underpriced. The greater is the ex ante uncertainty of the offering faced by investors, the greater is the expected discount.

Following this line of reasoning, we would expect that the increase in average SEO discounts might be due to a change in the composition of firms issuing new equity. In other words, a shift in the riskiness of firms doing an SEO might explain the increase in the typical discount. To test this hypothesis, we use some proxies typically applied as asymmetric information measures: the relative issue proceeds, underwriter prestige, and the issuer industry.

Our first proxy is the domestic SEO proceeds relative to the issuer market value at the close of the trading day before the offering. The higher is the ratio between proceeds and market value, Proceeds/Mkt , the greater is presumably the uncertainty connected with the offering. The second proxy deals with the certification nature of using a prestigious banker for the offering. We classify high-prestige and low-prestige underwriters by their respective Carter and Manaster (1990) reputation rank. For example, banks such as Goldman Sachs, Morgan Stanley, and Merrill Lynch are categorized as high-prestige underwriters. Finally, we define utility SEOs as firms operating in the two-digit SIC industry of 49, and tech issues by using the SIC codes in the Appendix of Loughran and Ritter (2004). New issues by technology firms should have higher discounts than utility offerings.

Table 2 reports the average SEO discount by the four proxies of ex ante uncertainty and exchange: NYSE (Panel A) and Nasdaq (Panel B). Unsurprisingly, issues with greater uncertainty report higher average SEO discounts on the major markets. In Panel A riskier issues on the NYSE, by all four proxies, are discounted by 2.1%-2.4%, compared to 1.3%-2.0% for less risky SEOs. In Panel B, riskier Nasdaq offerings report an average SEO discount ranging from 4.1% to 5.1%, against 2.2% to 4.0% for less risky issues.

Moreover, by categorizing our sample period into three sub-intervals (1986-1991, 1992-1997, and 1998-2003), we report that the average SEO discount has generally increased over time for both riskier and less risky offerings. The increase in the average discount, however, does not seem to be accompanied by a huge shift in the proportion of riskier SEOs as the asymmetric information hypothesis might suggest. On Nasdaq,

numerous issues are categorized in the technology sector. Yet, the increase in the proportion of tech offerings does not fully explain the rise of the average SEO discount. Non-tech issues, in fact, also report an upward trend in average discount during the 1986-2003 time period. By comparing the two panels of Table 2, we report that Nasdaq SEOs, categorized by all proxies, have higher average discounts. For example, offerings with high relative proceeds are discounted, on average, by 4.1% on Nasdaq compared to 2.4% on the NYSE.

B. Offer Price Clustering

We now focus on the mechanisms in the offer price setting. Our purpose is to investigate whether the SEO discount can be explained by particular patterns in the setting of offer prices. Thus, we will analyze the interaction between secondary and offering prices. Figure 2 provides the comparison between the distributions of dollar fractions for the prior closing price and the offer price. Panel A reports the fraction distribution for P_{T-1} of all SEOs during the 1986-2000 period. Using a sixteenth quotation system, the distribution is not regularly uniform but is concentrated around well-defined fractions. It is possible to draw a sort of ‘pecking order’ among fractions. The integer or ‘zero-fraction’ price is more frequently used, followed by other even-eighth fractions (\$0.25, \$0.50, and \$0.75), the odd-eighths (\$0.125, \$0.375, \$0.625, and \$0.875) and the odd-sixteenths (\$0.0625, \$0.1875, \$0.3125, \$0.4375, \$0.5625, \$0.6875, \$0.8125, and \$0.9375).

Panel B of Figure 2 shows the frequency distribution of dollar fractions for SEO offer prices in 1986-2000. The fractions are strongly clustered towards zero and \$0.50. About 38% of the SEOs are placed at integers and more than 20% at \$0.50. Finally, the

odd-sixteenths are a small percentage (1.5%). The clustering towards zero and the emphasized avoidance of odd-eighths in the distribution of offer price fractions make the price patterns quite distinct.

Starting on January 29, 2001, 100% of NYSE-listed stocks could be priced in decimals. By April 9, 2001, all Nasdaq-listed firms could be priced in decimals. Figure 3 shows the fraction distribution of the prior closing price (Panel A) and of the offer price (Panel B) during the 2001-2003 period, by using a decimal quotation system. Strikingly, the decreased price discreteness produced by decimalization has not slowed the clustering trend in SEO offer prices. From 2001 to 2003, about 33% of SEOs are priced at whole dollars.

Next, we examine the average discount of SEOs priced at integers or in dollar fractions. Table 3 reports that Nasdaq issues priced at whole dollars have an average discount of 4.9% over the time period compared to 2.8% for NYSE issues. The difference is statistically significant at conventional levels. SEOs priced at integer offer prices report higher average discounts than issues priced at fractions. Notice that a higher proportion of Nasdaq SEOs are priced in whole dollar terms compared to SEOs listed on the NYSE. About 42% of Nasdaq SEOs are priced in whole dollars compared to less than 30% for NYSE firms. In the following section we summarize all the insights collected in a multivariate regression analysis.

4. Multiple Regression Framework

This section combines the two previous elements of the study into a regression model. The dependent variable is the percentage SEO discount for our sample of 5,505 SEOs during 1986 to 2003.

$$\begin{aligned}
SEO\ DISCOUNT = & \beta_0 + \beta_1 PROCEEDS/MKT + \beta_2 REPUTATION\ Dummy + \beta_3 UTILITY\ Dummy \\
& + \beta_4 TECH\ Dummy + \beta_5 CLUSTER + \beta_6 LNPRICE + \beta_7 NASDAQ\ Dummy + \varepsilon
\end{aligned}$$

The first four regressors are consistent with the asymmetric information hypothesis. We include the PROCEEDS/MKT variable, defined as the ratio between the domestic proceeds and the issuer market value at the time of the SEO. REPUTATION is a dummy equal to one if the lead manager is of high-quality. UTILITY and TECH are two dummies related to the issuer's industry. The fifth regressor, CLUSTER, is a dummy variable equal to one if the offer price is set at integers or to zero if the offer price is set in dollar fractions. LNPRICE is the natural logarithm of the closing price of the day before the issue in dollars. This control variable captures the expected negative relationship between the stock price level and the SEO discount, due to the decreasing relative tick size. Finally, the model includes a Nasdaq dummy variable that equals one if the issuing firm is listed on Nasdaq.

Table 4 reports the coefficients and White's heteroscedasticity-adjusted t-statistics of the ordinary least squares model for SEO discount. The first six regressions are univariate. The expected signs of asymmetric information proxies are confirmed. The positive coefficient of PROCEEDS/MKT captures the liquidity effect produced by an increasing issue proceeds, relative to the market value of equity at the time of the offering. Prestigious underwriters report lower discounts. As expected, the coefficients of industry dummies are opposite in sign: UTILITY is negative while TECH is positive. The relationship between clustering at whole dollars and the SEO discount is significantly positive. As shown by the negative coefficient of LNPRICE, the lower is the closing price, the higher is the discount. In regression 6, the relation is positive between

Nasdaq and the discount. Nasdaq stocks are associated with higher initial SEO returns than NYSE-listed shares.

Controlling simultaneously for other variables, the relation between NASDAQ and the SEO discount continues to be positive and statistically significant. All independent variables are significant predictors of the SEO discount except for PROCEEDS/MKT. In particular, a Nasdaq issue has a discount of 113 basis points higher than a comparable NYSE offering.

In Panel B of Table 4 the regression model categorizes the sample by sub-intervals. During 1986 to 1991, the coefficient on the Nasdaq dummy is not statistically significant. Since 1991, both the CLUSTER and NASDAQ dummies are highly significant. Setting the offer price at whole dollars implies an increase of the SEO discount by 1.2% during 1992-1993 and 2.1% during 1998-2003. After adjusting for other factors, listing on Nasdaq means an increasingly higher SEO discount than if the firm was listed on the NYSE. The difference goes from 36 basis points during 1986-1991 to 153 basis points during 1998-2003.

5. Conclusion

An analysis of 5,505 U.S. SEOs during the 1986 to 2003 time period indicates that an average offering of new shares is priced at a discount of 3.3% (from the closing market price on the day before the issue). This discount has increased relative to earlier periods studied and it is significantly higher for Nasdaq stocks than for NYSE-listed shares. After adjusting for various factors, Nasdaq-listed firms have an average discount 153 basis points higher than similar NYSE firms during 1998-2003. Our paper's findings are summarized in Table 5.

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Table 1
Number and Discount of SEOs Categorized by Issue Year and Listed Market, 1986-2003

Issue Year	Number		Average Discount		T-test of difference between means (p-value)	Median Discount		Wilcoxon Rank-sum Test (p-value)
	NYSE	Nasdaq	NYSE	Nasdaq		NYSE	Nasdaq	
1986	126	197	0.7%	0.6%	0.7882	0.0%	0.0%	0.4160
1987	92	96	0.8%	1.5%	0.3095	0.0%	0.0%	0.4255
1988	42	37	1.4%	0.9%	0.3569	0.9%	0.0%	0.4937
1989	51	93	1.0%	1.2%	0.7313	0.0%	1.1%	0.0281
1990	50	57	0.6%	2.4%	0.0002	0.0%	1.8%	0.0001
1991	155	193	1.6%	3.9%	0.0000	0.7%	2.6%	0.0000
1992	150	180	1.4%	4.3%	0.0000	0.9%	2.9%	0.0000
1993	186	287	1.9%	4.3%	0.0000	0.7%	2.7%	0.0000
1994	108	162	1.7%	4.0%	0.0000	1.0%	2.8%	0.0000
1995	119	318	1.7%	3.8%	0.0001	0.9%	2.8%	0.0000
1996	167	355	1.7%	5.2%	0.0000	1.2%	3.5%	0.0000
1997	141	309	1.9%	4.2%	0.0000	1.5%	2.9%	0.0000
1998	120	194	2.8%	4.0%	0.1067	1.8%	2.6%	0.0071
1999	102	247	2.9%	4.9%	0.0217	2.3%	3.2%	0.0094
2000	72	260	2.8%	5.8%	0.0161	2.8%	4.8%	0.0047
2001	113	156	3.0%	5.1%	0.0032	2.6%	4.1%	0.0150
2002	137	123	3.5%	4.0%	0.4718	3.0%	3.3%	0.3840
2003	147	163	3.0%	5.1%	0.0005	2.6%	4.3%	0.0029
Total	2,078	3,427	2.0%	4.1%	0.0000	1.0%	2.6%	0.0000

The sample consists of U.S. seasoned equity offerings (SEOs) during the 1986 to 2003 time period. Closed-end investment funds, REITs, unit investment trusts, beneficial interests, limited partnerships, ADRs, right issues, and unit offerings are excluded from the sample. The SEO discount is defined as the price change from the offer price to the closing price the day before the offering. The last column reports the test of difference between median SEO discount by listed market.

Table 2
Average SEO Discount Categorized by Proxies of ex ante Uncertainty and Listed Market

Panel A: NYSE

Proxies	Overall		1986-1991		1992-1997		1998-2003	
	Discount	N	Discount	N	Discount	N	Discount	N
Relative Issue Proceeds								
High (Proceeds/Mkt)	2.4%	675	1.1%	152	2.3%	310	3.5%	213
Low (Proceeds/Mkt)	1.8%	1,402	1.0%	364	1.4%	560	2.8%	478
Underwriter Prestige								
Low-Prestige	2.1%	341	0.8%	45	1.9%	120	2.6%	176
High-Prestige	2.0%	1,737	1.1%	471	1.7%	751	3.2%	515
Utility Industry								
Non-Utility Issues	2.1%	1,728	1.2%	412	1.9%	735	3.1%	581
Utility Issues	1.3%	350	0.6%	104	0.8%	136	2.7%	110
Technology Industry								
Tech Issues	2.2%	140	1.5%	21	2.2%	50	2.5%	69
Non-Tech Issues	2.0%	1,938	1.1%	495	1.7%	821	3.1%	622
All NYSE SEOs	2.0%	2,078	1.1%	516	1.7%	871	3.0%	691

Panel B: Nasdaq

Proxies	Overall		1986-1991		1992-1997		1998-2003	
	Discount	N	Discount	N	Discount	N	Discount	N
Relative Issue Proceeds								
High (Proceeds/Mkt)	4.1%	2,077	2.2%	426	4.8%	1,107	4.4%	544
Low (Proceeds/Mkt)	4.0%	1,350	1.4%	247	3.5%	504	5.4%	599
Underwriter Prestige								
Low-Prestige	5.1%	1,399	2.6%	216	5.7%	652	5.3%	531
High-Prestige	3.4%	2,028	1.6%	457	3.4%	959	4.6%	612
Utility Industry								
Non-Utility Issues	4.1%	3,346	1.9%	635	4.4%	1,582	5.0%	1,129
Utility Issues	2.2%	81	1.9%	38	3.0%	29	1.5%	14
Technology Industry								
Tech Issues	4.3%	997	1.8%	138	4.3%	416	5.0%	443
Non-Tech Issues	4.0%	2,430	1.9%	535	4.4%	1,195	4.9%	700
All Nasdaq SEOs	4.1%	3,427	1.9%	673	4.4%	1,611	4.9%	1,143

The sample consists of operating seasoned equity offerings during the 1986 to 2003 time period. The SEO discount is defined as the price change from the offer price to the closing price of the day before the offering.

Table 3
Average SEO Discount and Clustering of the Offer Price Categorized by Listed Market

Issue Year	Whole Dollars		T-test of difference between means (<i>p</i> -value)	Fractions of Dollars		T-test of difference between means (<i>p</i> -value)
	NYSE	Nasdaq		NYSE	Nasdaq	
1986	1.7% (N=32)	0.4% (N=76)	0.2376	0.3% (N=94)	0.7% (N=121)	0.4265
1987	0.6% (N=26)	1.6% (N=29)	0.2500	0.9% (N=66)	1.5% (N=67)	0.5412
1988	2.5% (N=12)	1.0% (N=12)	0.2035	1.0% (N=30)	0.9% (N=25)	0.8342
1989	1.1% (N=16)	0.9% (N=21)	0.8165	0.9% (N=35)	1.3% (N=72)	0.6150
1990	0.9% (N=12)	3.7% (N=14)	0.0068	0.6% (N=38)	2.0% (N=43)	0.0053
1991	1.8% (N=48)	4.9% (N=68)	0.0012	1.5% (N=107)	3.4% (N=125)	0.0040
1992	2.5% (N=40)	4.6% (N=73)	0.0260	1.0% (N=110)	4.0% (N=107)	0.0000
1993	3.9% (N=48)	5.1% (N=107)	0.1959	1.2% (N=138)	3.9% (N=180)	0.0000
1994	2.7% (N=30)	4.1% (N=61)	0.0997	1.4% (N=78)	4.0% (N=101)	0.0001
1995	3.2% (N=33)	3.9% (N=126)	0.4456	1.1% (N=86)	3.8% (N=192)	0.0001
1996	2.6% (N=43)	6.1% (N=171)	0.0028	1.4% (N=124)	4.4% (N=184)	0.0000
1997	2.3% (N=54)	4.6% (N=135)	0.0016	1.5% (N=87)	3.9% (N=174)	0.0012
1998	2.9% (N=41)	5.1% (N=83)	0.0670	2.8% (N=79)	3.2% (N=111)	0.6663
1999	3.5% (N=45)	5.7% (N=140)	0.0453	2.4% (N=57)	4.0% (N=107)	0.2791
2000	3.2% (N=20)	7.6% (N=155)	0.0533	2.6% (N=52)	3.2% (N=105)	0.7420
2001	3.3% (N=42)	6.4% (N=69)	0.0139	2.9% (N=71)	4.1% (N=87)	0.1302
2002	4.7% (N=33)	3.5% (N=44)	0.3400	3.1% (N=104)	4.3% (N=79)	0.1694
2003	4.6% (N=38)	6.3% (N=50)	0.1789	2.5% (N=109)	4.6% (N=113)	0.0014
Total	2.8% (N=613)	4.9% (N=1,434)	0.0000	1.6% (N=1,465)	3.4% (N=1,993)	0.0000

Table 4
Ordinary Least Squares Model of the SEO Discount

Panel A: Whole Sample

	1	2	3	5	4	6	7
<i>Intercept</i>	2.62 (17.09)	4.52 (27.49)	3.27 (37.05)	2.69 (28.68)	7.72 (14.16)	2.00 (20.00)	6.43 (10.85)
<i>PROCEEDS/MKT</i>	3.44 (4.79)						-0.46 (-0.62)
<i>REPUTATION Dummy</i>		-1.79 (-9.73)					-1.00 (-5.49)
<i>UTILITY Dummy</i>			-1.77 (-9.36)				-0.82 (-4.16)
<i>TECH Dummy</i>			0.75 (3.29)				0.49 (2.12)
<i>CLUSTER Dummy</i>				1.62 (9.85)			1.53 (9.08)
<i>LNPRICE</i>					-1.43 (-8.26)		-1.18 (-6.67)
<i>NASDAQ Dummy</i>						2.08 (14.14)	1.13 (7.08)
R-squared	0.01	0.02	0.01	0.02	0.02	0.03	0.07
Number of Obs.	5,504	5,505	5,505	5,505	5,505	5,505	5,504

Panel B: Sample by Sub-Intervals

	1986-1991	1992-1997	1998-2003
<i>Intercept</i>	3.71 (3.66)	10.24 (11.75)	7.36 (6.91)
<i>PROCEEDS/MKT</i>	-0.12 (-0.13)	1.35 (1.69)	-4.11 (-2.15)
<i>REPUTATION Dummy</i>	-0.51 (-1.61)	-0.90 (-4.02)	-0.02 (-0.06)
<i>UTILITY Dummy</i>	-0.39 (-1.12)	-0.81 (-3.20)	-0.64 (-1.54)
<i>TECH Dummy</i>	-0.07 (-0.21)	0.61 (2.15)	0.00 (0.02)
<i>CLUSTER Dummy</i>	0.60 (2.12)	1.21 (5.74)	2.11 (5.85)
<i>LNPRICE</i>	-0.70 (-2.38)	-2.50 (-10.17)	-1.29 (-3.91)
<i>NASDAQ Dummy</i>	0.36 (1.50)	1.02 (5.30)	1.53 (4.44)
R-squared	0.03	0.16	0.05
Number of Obs.	1,189	2,481	1,834

The dependent variable, SEO DISCOUNT, is defined as the percentage price change from the offer price to the closing price of the day before the offering. White's heteroscedasticity-adjusted t-statistics are in parentheses.

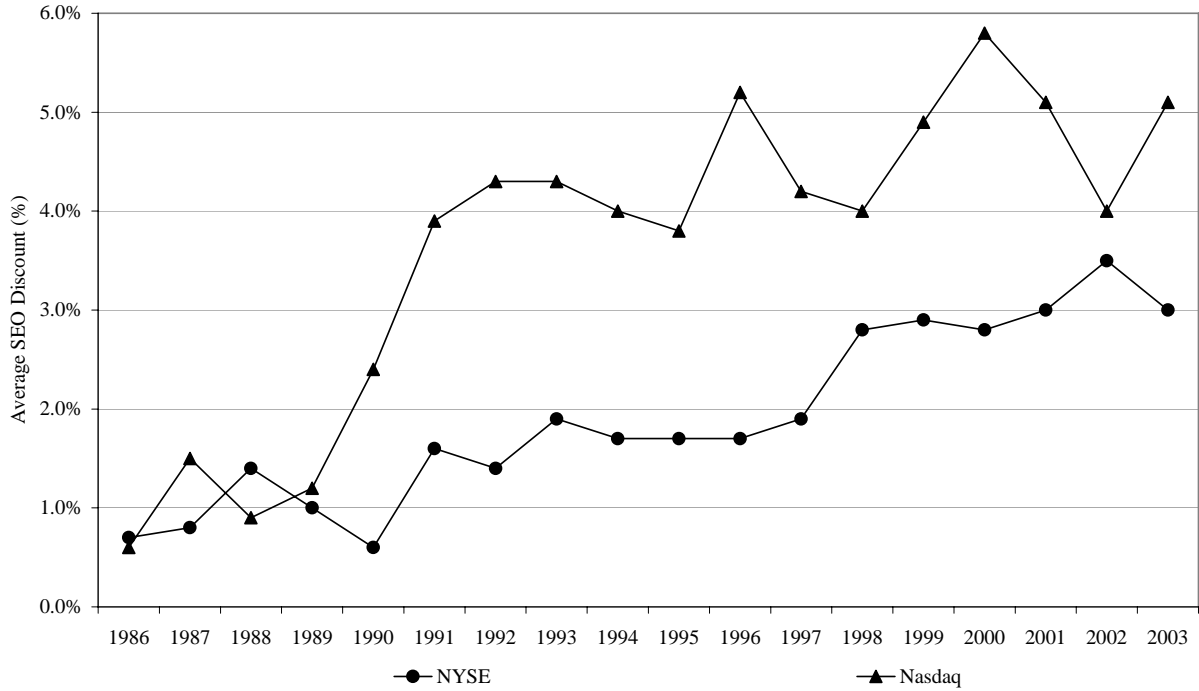
$$SEO\ DISCOUNT = \beta_0 + \beta_1 PROCEEDS/MKT + \beta_2 REPUTATION\ Dummy + \beta_3 UTILITY\ Dummy + \beta_4 TECH\ Dummy + \beta_5 CLUSTER\ Dummy + \beta_6 LNPRICE + \beta_7 NASDAQ\ Dummy + \varepsilon$$

Table 5
Summary of the Paper's Findings

- A large number of US firms issued seasoned equity (5,505) during the 1986-2003 time period.
- The level of seasoned equity offering (SEO) discounts differs sharply by exchange.
- Average Nasdaq SEO discount is 4.1%.
- Average NYSE SEO discount is 2.0%.
- Median SEO discounts by exchange: 2.6% for Nasdaq compared to 1.0% for NYSE firms.
- Nasdaq firms are more likely to set an integer offer price than NYSE-listed firms.
- Adjusting for various factors, Nasdaq firms experience a discount 153 basis points higher than comparable NYSE-listed firms during 1998-2003.

Figure 1
Discounts of SEOs, 1986-2003

Panel A: Average SEO Discount



Panel B: Median SEO Discount

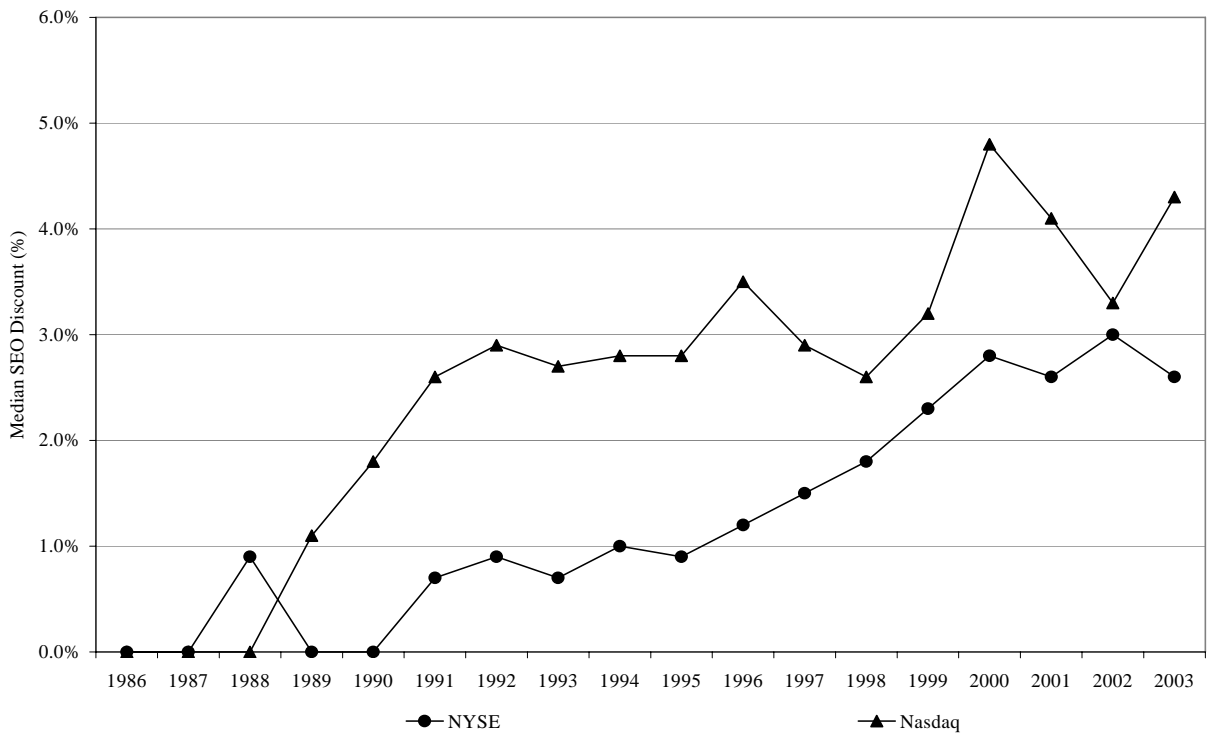
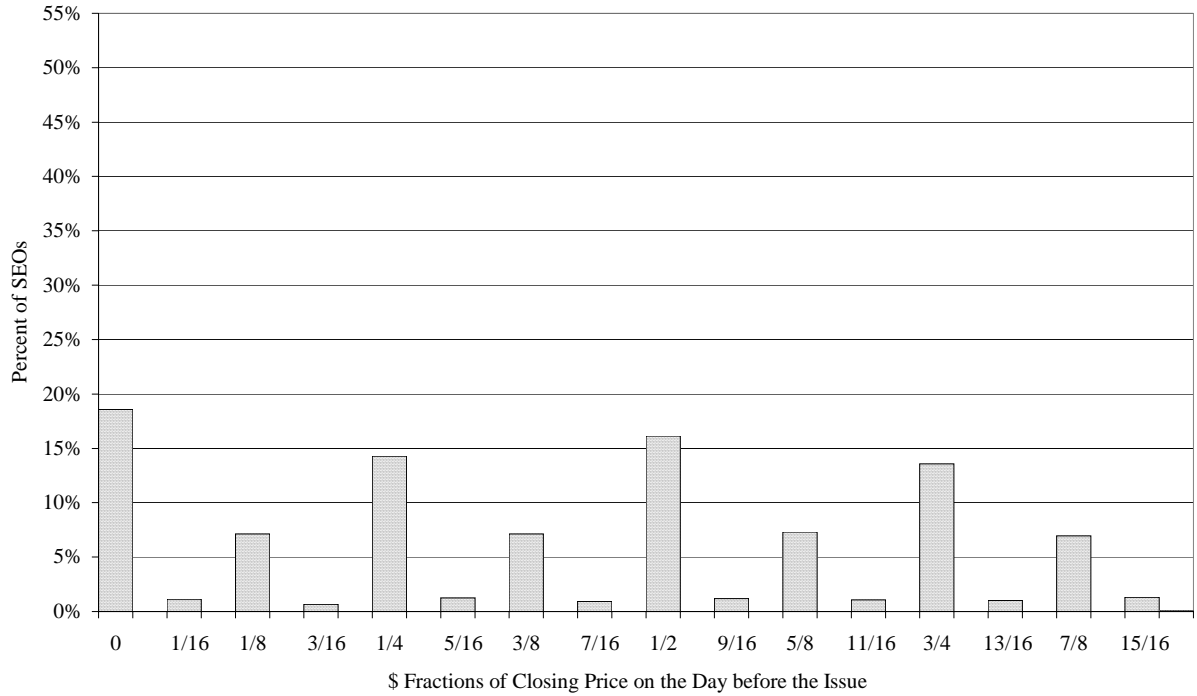


Figure 2
Distribution of Dollar Fractions for SEO Prices, 1986-2000

Panel A: Distribution of Dollar Fractions for the Closing Price on the Day before the Issue



Panel B: Distributions of Dollar Fractions for the Offer Price

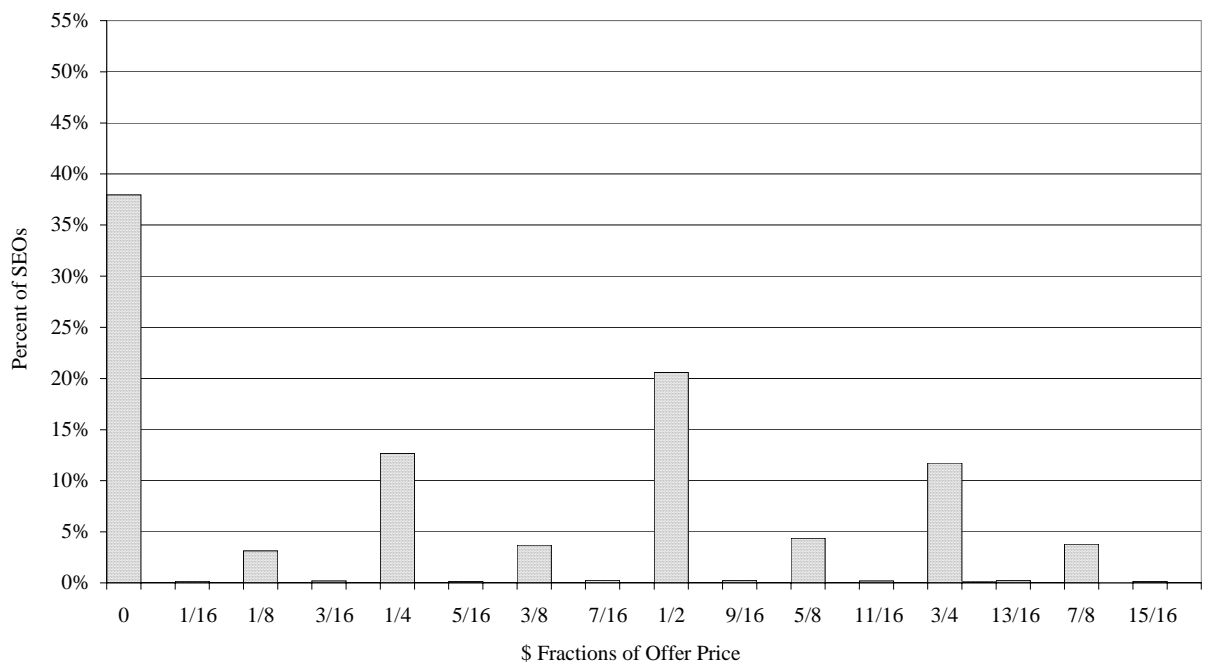
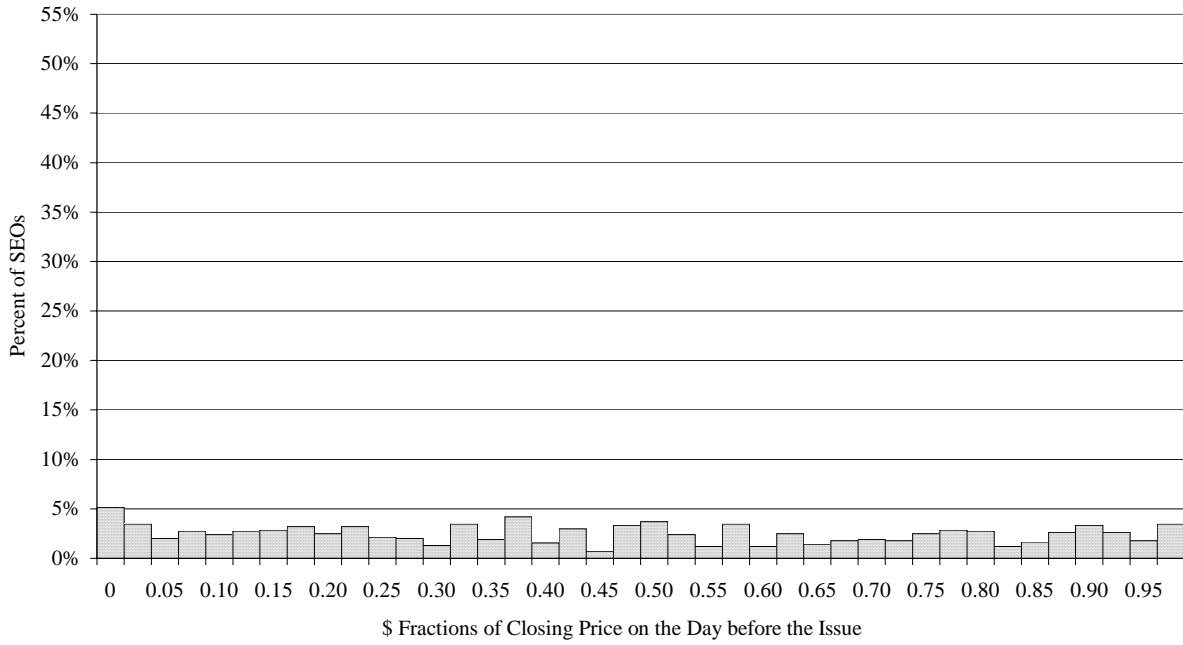


Figure 3
Distribution of Dollar Fractions for SEO Prices, 2001-2003

Panel A: Distribution of Dollar Fractions for the Closing Price on the Day before the Issue



Panel B: Distributions of Dollar Fractions for the Offer Price

