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EQUITY FINANCING DECISIONS - A CANADIAN PERSPECTIVE

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A Thesis
In
the John Molson School of Business

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ABSTRACT

EQUITY FINANCING DECISIONS - A CANADIAN PERSPECTIVE

Stephen McHarg

We document the operating performance of Canadian firms that issue different types of seasoned equity financings (common shares, units, warrants) and initial public offerings in the years prior to and following their issue. The results indicate that the operating performance of public firms that issue equity decline in the years following such issues. This underperformance is more pronounced among firms with smaller market capitalizations. The price to book ratio is not a significant determinant of the change in median operating performance of issuers after issue. The operating performance of issuing firms in the consumer products industry underperforms that of the industrial, natural products, and 'others' industries.

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EQUITY FINANCING DECISIONS - A CANADIAN PERSPECTIVE

1. **INTRODUCTION**

An initial public offering (IPO) occurs when stock is issued to the public for the first time by a firm. This happens when a firm goes from being privately owned to being publicly owned. A seasoned equity offering (SEO) occurs when a publicly owned company that already has stock on the market issues additional stock on the market or a large block of the company's shares is resold in the market.

Various studies report negative abnormal stock returns for seasoned equity offerings in the days following the announcement date. For 128 industrial firms for the period of 1963-1981, Asquith and Mullins (1986) report that, on average, the stock price of a firm decreases by 3% following an SEO announcement. This represents a significant loss for existing shareholders. Therefore, it is important to understand management's motivation for raising capital through SEOs in the capital markets, given their declines in share prices. Different information models exist to explain this decline. One explanation is that management has better information about the firm's assets than do outside investors. A second explanation is that managements prefer to retain excess cash for negative net present value projects. Consistent with these arguments, there is evidence that managements issue equity following a run-up in their firm's stock prices. However, if the capital is received to invest in profitable investment opportunities, then these negative abnormal declines in performance should not occur.

¹ Asquith and Mullins (1986), Masulis and Korwar (1986) and Mikkelson and Partch (1986).

The research on Canadian SEOs is sparse. Kryzanowski and Rakita (2000) examine a combined sample of 427 public and private issues over a five-year period 1993-1997. They report significant negative abnormal returns for non-resource companies. They report that pre-announcement period market-adjusted returns and the type of issue are important in determining abnormal returns, whereas industry classification and size (the ratio of the amount raised from the issue to the market value of the firm prior to the announcement) are not.

The purpose of this thesis is to examine the long-run operating performance of Canadian firms that issue equity to explain any inherent anomalies around the time of the IPO and SEO announcements. A decrease in the operating performances of firms in the years following seasoned equity issues would support the existence of information asymmetry between management and outside investors. On the other hand, an increase in operating performances of firms in the years following seasoned equity offerings would indicate that the capital acquired by managements was used for profitable investment opportunities. Specifically, this thesis examines if the operating performances of public firms that issue equity decline in the years following such issues, and if such declines are greater for firms with high price to book ratios (so-called "growth firms") and small market capitalizations ("size"). This thesis also examines if such declines are industry specific.

The research conducted herein is important because it investigates an issue that has not been addressed sufficiently in Canada. Its results may provide managers, investors.

portfolio managers, financial institutions, governments and other academic researchers with additional insights about the relationship between long-run operating performance and the decision to issue equity. It also provides insight into the role of asymmetric information between corporate managers and outside investors in such decisions.

The remainder of the thesis is structured as follows. Section II reviews the theoretical and empirical literature. Section III discusses the data collection procedure, methodology and descriptive statistics. Section IV discusses the results of the tests performed for each hypothesis. Section V summarizes the findings of this study, discusses their implications and provides suggestions for future research.

2. **REVIEW OF THE LITERATURE**

Healy and Palepu (1990) examine 97 SEOs by firms listed on the New York Stock Exchange (NYSE) and American Stock Exchange (ASE). They find that firms that issue SEOs do not experience declines in their earnings compared to either their previous year's earnings or to the earnings of the firm's industry. They also report no downward revision of a firm's earnings by analysts following a SEO. Based on their findings, firms appear to reduce debt and issue equity when they foresee an increase in risk in future earnings due to an increase in business risk. Therefore, a firm's earnings become more volatile following an issue of equity.

Ritter (1991) reports that the three-year holding period return following an IPO between 1975-84 underperformed its matching firm. Specifically, an investor who invested one

dollar in a representative IPO at the end of the first day of public trading was left with eighty-three cents three years later relative to an investment of one dollar in the matching representative firm listed on the AME or NYSE. When the post-offering performances of IPOs are categorized by industry, firms that issue IPOs underperform those that do not for eleven of the fourteen industries. Therefore, Ritter concludes that the overall underperformance in the years following an IPO can not be attributed to any specific industry.

Spiess and Affleck-Graves (1995) examine both the average monthly adjusted returns in the 60 months following the SEO and the holding period returns of 1247 primary offerings by firms listed on the Nasdaq. AME or NYSE for the period of 1975-1989. They find that long-run stock returns become progressively worse, and are significantly heightened for both smaller firms and those with higher price to book ratios. When post-offering stock performance of SEOs is categorized by industry, firms that issue equity underperform those that do not in thirteen of the sixteen industries studied. Therefore, their results indicate that overall declines in stock returns in the years following a SEO can not be attributed to any specific industry.

Jain and Kini (1994) report that the operating performances of firms issuing IPOs decline in the years following the issue. Although sales and capital expenditures increase in the years following the issue, the level of pre-IPO profitability is not maintained in the post-IPO period. They also examine the relationship of price to book ratios, price to earnings ratios and earnings for the pre and post-IPO periods. They find that these ratios

are not sustained in the years following the IPO. This suggests that the high expectations of future earnings growth by investors prior to the issue are not met.

Loughran and Ritter (1995) examine the long-term stock performance of both SEOs and IPOs. In the five years following the issue, the geometric average annual return for IPOs and SEOs is 5.1%, compared to 11.8% for their matching firms, and 7.0%, compared to 15.3% for their matching firms. The authors find significant underperformance in the years following an issue.

Loughran and Ritter (1997) report that the operating performance of firms that issue SEOs peaks at approximately the time of issue, declines thereafter and the decline is larger for smaller issuers. They also find that the deterioration of operating performance in the years after the SEO is not as pronounced for issuing firms that quickly increase either their sales or capital expenditures.

McLaughlin, Safieddine and Vasudevan (1998) report that the operating performances of SEO firms have larger improvements prior to the issue, and larger declines following the issue. These declines are larger for firms with higher price to book ratios, and for firms with smaller market capitalizations. They report a positive association between the level of property, plant and equipment and improvements in operating performance.

2.2 Possible Explanations

With the exception of the study by Healy and Palepu (1990), these studies consistently find that the operating performances of firms improve prior to issue and deteriorate in the years after issue. Some of the explanations for why operating performance behaves in such a manner are discussed next.

Heinkel (1982) reports that changes in a company's leverage are a signal about their future earnings. Since debt requires interest payments to bondholders, a firm will incur only that amount of debt that it can repay in order to avoid financial distress. Since no payment for equity is required, a company that issues equity over debt is interpreted by investors as having weaker future earnings.

Myers and Majluf (1984) report that the stock prices of companies that issue seasoned equity drops. This occurs because investors believe that management acts in the best interests of its existing shareholders, and would only issue equity if they believed that their existing assets were overvalued. Therefore, asymmetric information between management and investors is one possible explanation of why companies issue SEOs.

Miller and Rock (1985) hypothesize that investors believe that the amount of external financing required is a reflection of a firm's future earnings. If a firm's uses of cash exceeds its sources of cash, then the firm needs to raise capital in the markets. The greater the amount of external financing required, the greater the signal to investors that the company's future earnings will be worse.

Jensen (1986) reports that excess cash within a firm can result in management investing in negative net-present value projects because of a lack of investment opportunities. In order to alleviate this problem, investors prefer that excess cash be distributed through dividend payouts or stock repurchases, and any additional capital required for projects be raised through the debt market. This forces management to use excess cash wisely because defaulting on interest payments may lead to financial distress. Therefore, should management raise capital through an equity offering instead of a debt offering, then a decrease in operating performance is expected following a SEO.

De Bondt and Thaler (1985) were the first to attempt to study whether or not investor behaviour influences stock returns. They examine a portfolio of stocks that were ranked based on three year returns, and find that those stocks which were past winners were future losers and vice versa. De Bondt and Thaler (1989) suggest that the past performance of a firm tends to revert back to its mean. This is a possible explanation for the pre run-up in operating performance prior to a new equity issue, and the subsequent decline. Loughran and Ritter (1995) separate firms with large price run-ups by issuers and non-issuers, and find that the five-year returns for issuers and non-issuers are 26% and 98%, respectively. This suggests that the operating performance of issuing firms is greater in the years prior to the issue and less in years thereafter.

All of these explanations suggest that managers have information about the firm's future operating performance that is not available to outside investors. Lee (1997) reports that top executives of firms knowingly sell overvalued equity. The number of shares sold by

top executives greatly outnumbers the number of shares bought prior to that company's issuance of new equity. In addition, the holding period returns of issuers in the three years following an issue are less than the holding period returns for the issuer's industry.

Lee also finds that prior to an issue, top executives buy fewer shares in companies that are larger in size, and they purchase fewer shares in companies with higher price to book ratios. Gombola, Lee and Liu (1997) report similar findings but observe that top executives sell shares in increments over time in order not to face penalties regarding insider trading.

3 DATA COLLECTION, METHODOLOGY AND DESCRIPTIVE STATISTICS

3.1 Data Collection

Canadian firms that issued SEOs or IPOs are retrieved from the Financial Post Record of New Issues for the six-year period 1991-1996. Firms are included in the sample if their issue price is greater than \$2, if the issue is completed and not withdrawn, and if the issuer did not issue equity in the three years prior to the issue. These issues include SEOs of common shares, units, and warrants, and IPOs. In cases where firms issued equity on more than one occasion in any given year, only the one with the earliest announcement date is included in our sample. With the exception of IPOs, the same firm is included in the sample more than once if no equity is issued for at least three years between the separate issue announcement dates.

For firms that are still active as of the end of 1999, operating performance is examined over a six-year window; the two years prior to the issue, the year of the issue, and the three years following the issue. For delisted firms, operating performance is examined over a three-year window; the year prior to the issue, the year of the issue and the year following the issue. The window for delisted companies is reduced because accounting data is not available for the longer window. A three-year period was chosen following the issue to allow time for firms that invest in property, plant and equipment to have their operating performances reflect the impact of such investments. A five-year period, as is customary in most U.S. studies, was not chosen because accounting data was not available.

The accounting data are retrieved from a software package provided by Stock Guide

Publications Guide. In a few cases where data for certain years was missing. CanCorp is

used to obtain the missing information, but only if its data on total assets and operating

performance is consistent with the data that was already available in Stock Guide. In this

study, operating performance before both depreciation and interest expense is used

instead of earnings in order not to show any bias in operating performance. Bias can

result from a change in capital spending or from a change in tax reform (Barber and Lyon,

1996; and McLaughlin, Safieddine and Vasudevan, 1998). In both Stock Guide and

CanCorp, operating performance is calculated as total revenue less cost of sales,

corporate costs and research expense. In order to compare each firm's operating

performance over time, operating performance is scaled by its corresponding total assets.

3.2 Methodology

A control portfolio is created in order to compare the operating performance of SEO firms to an appropriate benchmark. Issuing firms are matched with non-issuing firms according to a three step algorithm proposed by Barber and Lyon (1996), and followed closely by McLaughlin, Safieddine and Vasudevan (1998) and Loughran and Ritter (1997). Non-issuing firms are defined as those Canadian firms that have not issued equity in both the three years prior to and following the issue. There are no restrictions on the number of times a non-issuing firm can be used as a matching firm. In order to examine the abnormal return of issuing firms, the operating performance of non-issuing firms is subtracted from that of issuing firms as suggested in McLaughlin. Safieddine, and Vasudevan (1998). This is referred to herein as "matched seasoned equity".

The first step of the algorithm requires the listing and matching of all issuing and non-issuing firms according to their two digit SIC code. In this case, they are listed according to their two digit industry code as listed by Stock Guide. The second step requires the elimination of all non-issuing firms whose total assets do not fall between 25 percent and 200 percent of the issuing firm's total assets for the year prior to the issue. These parameters were chosen due to the lack of non-issuing firms available. The last step involves selecting the non-issuing firm whose operating performance before depreciation and interest, when scaled to total assets, is closest for the year prior to the issue.

If this three step algorithm does not produce a matching firm, then an alternative two-step algorithm is used whereby it is not necessary to match firms according to their industry classification. First, all non-issuing firms not within 90 percent and 110 percent of total assets for the year prior to the issue are eliminated. Second, the non-issuing firm whose operating performance before depreciation and interest, when scaled to total assets, is closest for the year prior to the issue is chosen.

Below we examine the operating performance of firms that issued SEOs of common shares, common shares & units, common shares & warrants, and common shares. units & warrants, and IPOs. The same groupings apply when delisted firms are included in the sample. In order to eliminate any potential outliers, all firms whose operating performances scaled to assets in the year prior to the issue, which are higher than the 99th percentile or lower than the first percentile, are eliminated from the sample as in McLaughlin, Safieddine, and Vasudevan (1998).

The median is used to report operating performance, as is customary when dealing with the skewness of accounting ratios (Healy and Palepu (1990), Jain and Kini (1994).

McLaughlin, Safieddine, and Vasudevan (1996) and Loughran and Ritter (1997)). In some cases, the mean also is reported. Both the medians and means for issuing and non-issuing firms are tested to determine if they are significantly different from zero. The Wilcoxon matched-pairs, signed rank test is used to determine if two medians are statistically different. From this point onwards, all statistical significance is determined at the 0.05 level unless stated otherwise.

3.3 <u>Descriptive Statistics</u>

Table 1A reports the mean and median values of assets, operating performance, operating performance scaled to assets, capital expenditures and the price to book ratios for both issuing and non-issuing firms in the year prior to the issue. For the price to book ratios, the price refers to the closing stock market price on the last day of the fiscal year, and the book value refers to the net worth of the company on a per share basis. Preferred share capital and the equity of convertible debt instruments are excluded from the book value. With respect to firms that issue IPOs, their price to book ratios in the year prior to the issue is assumed to be the same as the year of their issue. This is because firms that go public have no trading history prior to their issue. The p-values for tests of the differences in the means and medians are also provided in Table 1A.

For the assets and operating performances scaled to assets for issuing and non-issuing firms, the results indicate that the means and medians of these values are not statistically different from each other. This indicates that non-issuing firms that were chosen according to the algorithm provide a proper benchmark.

The mean price to book ratios for firms that issue common shares, common shares & units, and common shares & warrants are not statistically different from zero. In contrast, the median price to book ratios for all firms that issue equity is significantly different from zero. Furthermore, the medians of issuing and non-issuing firms are statistically different from each other for firms that issue SEOs of common shares & warrants, and

common shares, units & warrants, and IPOs. In addition, the median price to book ratios for these issuing firms is higher than for the non-issuing control sample.

When delisted firms are included in the sample and compared with firms without delisted companies, no statistical differences exist between their means or medians for the various financial measures. Table 1B reports the same descriptive statistics as in Table 1A but includes the delisted firms. In Table 1B, there are some statistical differences between the medians and these are highlighted in bold. There also is a significant difference in the mean price to book ratios for IPOs, but this is the only observation dealing with the means which is significantly different among these samples.

4 EMPIRICAL RESULTS

4.1 Post-Issue Operating Performance

The first null hypothesis. H_0^1 , is that the operating performance of Canadian firms that issue SEOs will remain unchanged in the years following an issue. Our expectation is that their performance will remain the same.

In the following analysis, we focus on the operating performance of matched SEOs of common shares, common shares & units, common shares & warrants, and common shares, units & warrants, and IPOs. The mean and median operating performance of those firms that issue common shares also are compared with the mean and median operating performance of the other subsets to test if they are significantly different from

each other. These tests are not reported and only those results which are significantly different are discussed. For each subset, the operating performance from year i to j is examined followed by the operating performance relative to the year of issuance. The results of panels B and D of each table, which consist of delisted firms, are not discussed because the results are robust to the inclusion or exclusion of subsequently delisted issuers.

4.1.1 Common Shares

Summary statistics on changes in operating performance for firms that issue common shares are reported in Panels A and C of Table 2A.

In Panel A of Table 2A, both the mean and median operating performance from year -1 to +1 for the 67 common share SEOs decrease by a significant 5.15% and 0.95%. respectively. The mean operating performance from year -1 to +3 also decreases significantly by 5.63%.

As shown in Panel C of Table 2A, the mean and median operating performances are a significant -3.75% and -1.03%, respectively, in the year following the issue. In year +3, the mean is a significant -4.23% (0.10 level). These results indicate that the operating performances of firms that issue SEOs decline in the years following an issue.

4.1.2 Common Shares and Units

Summary statistics on changes in operating performance for firms that issue common shares and units are reported in Panels A and C of Table 2B. These results are compared with those of common share SEOs in Panel A and C of Table 2A.

In Panel A of Table 2B, similar patterns of declines in operating performances are observed for the sample of 84 common shares and units. The significant decrease in the mean and median operating performances from years -1 to +1 is 5.01% and 1.00%. respectively. The mean operating performance from years -1 to +3 also decreases significantly by 4.03% (0.10 level). These results are similar to those for the common share SEOs in Panel A of Table 2A.

In Panel C of Table 2B, the mean operating performance in year +1 is a significant -3.50%. This is the only statistically significant change in this subsample for operating performances relative to the year of issuance. These results are not statistically different from those for the subsample of common share SEOs in Panel C of Table 2A.

4.1.3 Common Shares and Warrants

Summary statistics on changes in operating performance for firms that issue common shares and units are reported in Panels A and C of Table 2C. These results are compared with those of common share SEOs in Panel A and C of Table 2A.

In Panel A of Table 2C, the mean and median decreases in operating performances from years -1 to +1 for the sample of 93 common shares with warrants are 4.06% and 0.82% (both at 0.10 level), respectively. The mean operating performance from year -1 to +3 decreases by 4.93% (0.10 level). These observations are not statistically different from those obtained for the common share SEOs in Panel A of Table 2A.

As shown in Panel C of Table 2C, the mean operating performance for the sample of shares with warrants in year -1 is a significant 2.01% (0.10 level). This indicates that companies that issue common shares with warrants realize positive operating performances in the year prior to the issue. The median operating performance in year 0 is greater for issuing firms than non-issuing firms by a significant 1.20% (0.10 level).

4.1.4 Common Shares, Units, and Warrants

Summary statistics on changes in operating performance for firms that issue common shares, units and warrants are reported in Panels A and C of Table 2D. These results are compared with those of common share SEOs in Panel A and C of Table 2A.

In Panel A of Table 2D, for the year -1 to +1, the mean and median decrease in operating performances for the sample of 108 SEOs with common shares, units and warrants is 3.98% and 0.54% (0.10 level), respectively. These results are not significantly different from those for the common shares in Panel A of Table 2A.

As shown in Panel C of Table 2D, the matched mean operating performance in year -2 is a significant 2.31% (0.10 level). For year -1, the matched mean operating performance is a significant 1.88% (0.10 level). These results indicate that the mean operating performance in the years prior to the issue are positive but decline as the issuance year approaches. In the year of the issue, the median operating performance is a significant 1.40%. These results are not statistically different from those for the sample of common share SEOs in Panel C of Table 2A.

4.1.5 <u>Initial Public Offerings</u>

Summary statistics on changes in operating performance for firms that issue IPOs are reported in Panel A and C of Table 2E. These results are compared with those of common share SEOs in Panel A and C of Table 2A.

In Panels A & C of Table 2E, neither the annual change in operating performances nor the returns on operating performances relative to the year of issuance are statistically significant. However, when we compare the results for the common share SEOs and the IPOs, some of the results are statistically different.

The median matched operating performance from year -2 to -1 indicates that firms that issue common shares decrease by 1.31% (Panel A of Table 2A), and firms that issue IPOs increase by 2.08% (Panel A of Table 2A). These results are statistically different at the 0.05 level. This indicates that there is a greater run-up in operating performances for IPOs than for common share SEOs.

When examining the unmatched Canadian issuers of common shares and IPOs (firms which have not been matched according to the algorithm), there are noticeable differences (Panel C of Tables 2A and 2E). The median operating performances relative to the issue year for year -2 is significantly greater for IPOs by 2.10% (0.10 level). For year -1, the mean and median operating performance is significantly greater for IPOs by 10.10% and 5.01%, respectively. In the year of issuance, the mean and median operating performance for IPOs is are greater by a significant 10.68% and 6.57%, respectively. Lastly, in the year following the issuance (year +1), the mean and median operating performance is greater for IPOs by a significant 9.64% and 4.58%, respectively. These results indicate that the operating performances of unmatched Canadian firms that issue IPOs are greater than the operating performances of unmatched Canadian firms that issue common share SEOs.

4.1.6. Summary of Hypothesis One Tests

In summary, firms that issue SEOs of common shares, common shares & units, common shares with warrants, and common shares, units & warrants exhibit statistically significant declines in the years following an issue, mainly from years -1 through +1 and years -1 to +3. These results are similar to those reported by Loughran and Ritter (1997). McLaughlin, Safieddine and Vasudevan (1998), and Spiess & Afleck-Graves (1995). The results are robust to the inclusion or exclusion of subsequently delisted issuers. Thus, we reject the hypothesis that operating performances do not change in the years following issuance.

We can not conclude that management issue SEOs following a run-up in operating performance, because the results from years -2 to -1 are not statistically significant.

However, because operating performances decline in the years following an issue, we can conclude that management appear to have superior information about future prospects than do outside investors. Also, the capital that is raised does not improve the intermediate operating performances of the issuers in the three years following the issue year. Lastly, the operating performances of unmatched Canadian firms that issue IPOs are better than those that issue SEOs at least over the first few years post issue. However, it can not be concluded that changes in operating performance exist for IPOs in the years following issuance.

4.2 Relationship Between Post-Issue Operating Performance and the Issuer's Price to Book Ratio

The second null hypothesis, H_0^2 , is that changes in operating performances do not depend on the issuer's price to book ratio. Our expectation is that the decline in operating performances in the years following an issue will not vary directly with the issuer's price to book ratio.

The comparisons of the operating performances of firms that issue SEOs based on their price to book (p/b) ratios for each sample of issuer type is based on a separation of each sample into two subsamples where the two subsamples are formed on the basis of the median p/b ratio for year -1 for the total sample of SEOs.

4.2.1 Comparison of Year *i* to Year *j* for SEOs

Summary statistics on changes in operating performance based on the issuer's price to book ratio from year *i* to *j* for firms that issue SEOs of common shares, common shares & units, common shares & warrants, and common shares, units & warrants, and IPOs are reported in Table 3A.

In Table 3A, for issuers of unmatched common share SEOs, the underperformance in median operating performance is greater from -1 to +2 for firms with higher p/b ratios by a significant 4.19%. The median operating performance for firms of matched SEOs is not statistically different when split into two subsamples based on their median p/b ratios. This result for the matched SEOs is consistent for the common shares & units, common shares & warrants, and common shares, units & warrants samples, but not for the IPOs as will be discussed shortly.

For SEO issuers of common shares and units, the decline in median operating performance is greater for unmatched firms with higher p/b ratios as shown in Panel A of Table 3A. From years -1 to +1, this decline is greater for higher p/b ratio issuers by a significant 1.03% (0.10 level). From years -1 to +2, the underperformance is greater for higher p/b ratio issuers by a significant 3.92%.

As shown in Table 3A, for SEO issuers of common shares & warrants, the underperformance in median operating performance is greater by a significant 3.01% (0.10 level) for unmatched firms with higher p/b ratios from years -1 to +2. For SEO

issuers of common shares, units & warrants, the underperformance in operating performance is greater by 2.90% (0.10 level) for unmatched firms with higher p/b ratios from years -1 to +2.

4.2.2 Comparison of Year i to Year j for IPOs

As shown in Table 3A, for issuers of IPOs, the decline in median operating performance is greater by 2.90% (0.11 level) for unmatched firms with higher price to book ratios from -1 to +3. However, the underperformance in median operating performance is greater for matched IPO firms with lower price to book ratios by 11.39% (0.11 level) from -1 to +1. When the delisted firms are included in the sample ((Table 3B), no change is statistically significant for the IPOs and all the SEO samples.

4.2.3 Comparison of Level of Operating Performance by Issuer Price to Book Ratio for Year i

Summary statistics on changes in operating performance based on the issuer's price to book ratio around the year of issuance for firms that issue SEOs of common shares. common shares & units, common shares & warrants, and common shares units & warrants, and IPOs are reported in Table 3C.

For the unmatched common shares & warrants SEOs in Table 3C, the median operating performance is greater by a significant 2.42% (0.10 level) for firms with higher p/b ratios in year -1. This observation also is found for unmatched IPOs where the median operating

performance of firms with higher p/b ratios is greater by 5.70% in year -1, by 4.49% (0.11 level) in year 0, and by 6.05% in year 1.

For the matched common share & warrant SEOs in Table 3C, the median operating performance is greater for firms with higher p/b ratios by a significant 3.93% (0.10 level) in year -1. The differences are not significant for any of the other years.

When the samples included delisted firms in Table 3D, some of the matched median operating performances which were not significant in Table 3C are now significant. For matched common share & warrant SEOs in Table 3D, when thirteen delisted firms are added to the sample, the median operating performance is greater for firms with higher p/b ratios by a significant 4.57% in year -1 and 3.60% in year 0. For matched SEOs of common shares, units and warrants, when eighteen delisted firms are added to the sample, the operating performance is greater for firms with higher p/b ratios by a significant 2.95% in year -1 and 3.38% in year 0. The differences are not significant for any of the other years.

4.2.4 Summary of Hypothesis Two Tests

For the different unmatched SEO subsets, the decline in median operating performance is greater for firms with higher p/b ratios. However, for the matched SEO samples, only the median operating performance of firms that issue IPOs over the period from year -1 to year +1 is statistically different (0.11 level). This result weakly indicates that the decrease in median operating performance is greater for firms that issue IPOs with lower

p/b ratios. Based on the median operating performance results relative to the year of issue, the few statistically significant results indicate that the median operating performance is greater for firms with higher p/b ratios, regardless of whether the firms are matched or unmatched.

When delisted firms are included in the sample, there is evidence that the matched operating performance of firms with higher p/b ratios perform better than those with smaller p/b ratios in years -1 and 0.

However, given the overall weak results, we can not reject the hypothesis that the change in median operating performance of firms do not depend on the issuer's price to book ratio.

4.3 Relationship Between Post-Issue Operating Performance and Issuer Size

The third null hypothesis, H_0^3 , is that any change in median operating performance in the years following an issue does not depend on the size of the issuer.

For each subset of SEOs, we compare the average operating performance for firms whose book values are greater than the median book value to that for firms whose book values are lower than the median book value. The book value is that for year -1.

Summary statistics on changes in operating performance based on the issuer's size from year i to j for firms that issue SEOs of common shares, common shares & units, common

shares & warrants, and common shares, units & warrants, and IPOs are reported in Table 4A.

For the year *i* to *j* comparisons, the underperformance in median operating performance for unmatched SEOs is greater for firms with smaller book values (Table 4A). For unmatched common share & unit SEOs, this underperformance is greater by a significant 3.56% (0.10 level) in year -1 to +2. For unmatched SEOs involving common shares & warrants, and common shares, units and warrants, the underperformance in median operating performance is significantly greater by 2.74% and 2.97% (both at 0.10 level). respectively, for year -1 to +2. For unmatched IPOs, the decline in median operating performance is greater for firms with a lower book value in years -1 to +1, -1 to +2 and -1 to +3. Their changes are a significant 4.46%, 7.05% and 6.62% (0.11 level). respectively. When the four delisted firms are included in the unmatched IPO sample (Table 4B), the median decrease in operating performance is greater for firms with smaller book values by a significant 4.46%.

As shown in Table 4A, with respect to the matched SEOs, the underperformance in median operating performance of firms that issued both common shares and units is greater for those with smaller book values. From year -1 to +1, this underperformance is greater by a significant 4.57% (0.10 level). When eight delisted firms are added to the sample of SEOs involving common shares & units (Table 4B), the underperformance in median matched operating performance from year -1 to +1 is greater by a significant 3.87% for firms with smaller book values.

Summary statistics on changes in operating performance based on the issuer's size around the year of issuance for firms that issue SEOs of common shares, common shares & units. common shares & warrants, and common shares, units & warrants, and IPOs are reported in Table 4C.

In Table 4C, for the year *i* to issue year unmatched firm comparisons, the median operating performance is greater for firms with higher book values. For year 0, median operating performance is greater by 7.37% for unmatched firms that issue common shares. In years 0 and 1, median operating performance is greater by 6.76% and 6.72%, respectively, for firms that issued unmatched common shares & units. In year 0, median operating performance is greater by 4.84% (0.10 level) for firms that issue unmatched common shares & warrants. When the eight delisted firms are included in the sample of SEOs of common shares and units (Table 4D), the unmatched median operating performance is greater by 6.16% and 6.40% for firms with higher book values in years 0 and 1.

For the year *i* to issue year matched firm comparisons (Table 4C), median operating performance is greater by 3.40% (0.10 level), 5.45% and 4.63% (0.10 level) for firms with smaller book values relative to year 0 for the SEOs of common shares & units. common shares & warrants, and common shares, units & warrants respectively. These results are similar when delisted firms are included in the sample.

Furthermore, in Table 4D, when delisted firms are added to SEOs of common shares for year 0 and SEOs of common shares & warrants for year -1, the median operating performance now is greater by a significant 5.06% and by a significant 2.77%, respectively, for those SEO issuers with smaller book values.

4.3.1 Summary of Hypothesis Three Tests

In summary, the median operating performance of unmatched issuers of SEOs is higher for issuers with larger book values. The decline in median operating performance of unmatched firms is greater for issuers with smaller book values.

However, given the overall weak results of the matched issuers of SEOs and IPOs, we can not reject the hypothesis that the change in median operating performance of firms does not depend on the size of the firm.

4.4 <u>Industry Effects in Post-Issue Operating Performance</u>

The fourth null hypothesis. H_o^4 , is that any change in operating performance in the year following an issue is the same for all industries irrespective of the type of security issued. For this analysis, we use the following industry classifications: consumer products, industrial products, natural resources, and 'others'. Natural resources include gold, precious minerals, metals & minerals, oil & gas, and paper & forest products. 'Others' include financial services, communication & media, conglomerate, real estate, transportation, and environment services. The number of observations is lowest for the consumer product industry classification.

For each type of security offering, the change in mean and median operating performance relative to book value is examined from years -2 to -1, -1 to +1, -1 to +2 and -1 to +3. The equalities of the means and medians for the four industry classifications are tested for each of these time horizons. The discussion concentrates on the statistically significant results. Panels B and D of Tables 5A through 9D, which include delisted firms, will only be referred to if there is an observation different from those without the delisted firms.

For common share SEOs within consumer products, Panel A of Table 5A, mean and median operating performance of matched issuers decrease from year -1 to +3. The mean and median decreases are 27.89% (0.10 level) and 8.55%, respectively. Relative to the issue year, Panel C of Table 5A, both the mean and median matched operating performances of 7.57% and 7.69% (0.10 level), respectively, are significant.

For common share SEOs within industrial products, Panel A of Table 5B, the mean and median operating performance for matched issuers significantly declines from year -1 to +1. The mean and median change is -5.73% (0.10 level) and -4.79% (0.10 level), respectively. In the year of the issue, Panel C of Table 5B, the mean and median operating performance is 6.60% and 5.65%, respectively. In the year following the issue, the mean matched operating performance decreased significantly by 4.32% (010 level). Evidence shows that the mean operating performance also declines in the year following an issue for common share issuers in the industrial products industry.

None of the average operating performance changes for the matched common share SEOs are statistically significant for issuers of natural resources (Panel A and C of Table 5C) or 'others' (Panel A and C of Table 5D).

For SEO issuers of common shares and units in the consumer products industry (Panel A of Table 6A), the median matched operating performance decreases by 5.51% from year –1 to +1. The mean and median matched operating performance decreases by 24.05% (0.10) and 8.55%, respectively, for years -1 to +3. For the year of the issue, in Panel C of Table 6A, the median matched operating performance is 6.55% (0.10 level).

In Panel A of Table 6B, similar results are obtained for SEO issuers of common shares and units in the industrial products industry. The mean and median operating performance decreases by 8.61% and 6.74%, respectively, from years -1 to +1. Relative to the year of the issue, Panel C of Table 6B, the mean and median matched operating performance is 5.54% (0.10 level) and 5.65%, respectively.

A comparison of the mean and median differences of operating performances between consumer products (Panel A of Table 6A) and natural resources (Panel A of Table 6C) finds greater underperformance for the former in years -1 to +2 by 23.95% and 9.64%. respectively, and in years -1 to +3 by 9.64% for the mean only. For the years -1 to +1, -1 to +2 and -1 to +3, the median underperformance in operating performances for issuers in consumer products (Panel A of Table 6A) exceeds that of issuers in 'others' (Panel A of Table 6D) by 6.15%, 8.77% and 9.57%, respectively.

The decrease in the median operating performance is greater for issuers in industrial products (Panel A of Table 6B) than in natural resources (Panel A of Table 6C) in years -1 to +1 and -1 to +3. The comparison values are 6.22% and 3.96% (0.10 level), respectively. Similarly, when comparing the median differences between industrial products (Panel A of Table 6B) and 'others' (Panel A of Table 6D), the underperformance is greater for issuers in industrial products than in 'others' in years -1 to +1 and -1 to +3. The respective underperformances are 7.38% and 5.39% (0.10 level), respectively.

For SEO issuers of common shares and warrants in consumer products (Panel A of Table 7A), the mean matched operating performance for years -1 to +3 decreases by 14.36% (0.10 level). Similarly, the median matched operating performance for issuers in industrial products (Panel A of Table 7B) decreases by 4.43% (0.10 level) for years -1 to +1. This decrease in operating performance for years -1 to +1 follows a positive increase in operating performance during the year of issuance, where the mean and median increases are 8.10% and 5.96%, respectively (Panel C of Table 7B). These results indicate a decrease in average operating performance in the years following an issue. For the years -2 to -1, there is no run-up in average operating performance for issuers in 'others' (Panel A of Table 7D). In fact, the mean and median operating performance decrease by 2.98% (0.10 level) and 1.89%, respectively. Thus, it would appear that SEO issuers of common shares and warrants in the 'others' industry experience operating performance difficulty prior to issuance. The mean underperformance in matched operating performances for years -1 to +3 is greater by 16.22% (0.10 level) for issuers in

consumer products (Panel A of Table 7A) than in natural resources (Panel A of Table 7C).

For SEO issuers of common shares, units and warrants, the mean and median matched operating performance for issuers in industrial products (Panel A of Table 8B) decreases for years -1 to +1 by 6.14% and 4.51%, respectively. The mean decrease in operating performance for industrial issuers is 8.21% (0.10 level) for years -1 to +3. The mean and median operating performance is 7.21% and 5.96%, respectively, during the year of the issue, as shown in Panel C of Table 8B.

For SEO issuers of common shares, units and warrants in the 'others' industry (Panel A of Table 8D), no run-up occurs in average operating performance for years -2 to -1, and both the mean and median matched operating performance decrease by 2.33% and 1.08%, respectively (both significant at the 0.10 level).

For SEO issuers of common shares, units, and warrants, the underperformance in mean matched operating performance is greater for issuers of consumer products (Panel A of Table 8A) than those of natural resources (Panel A of Table 8C) by a significant 12.83% (0.10 level) for years –1 to +3. The mean change differential in the operating performances of these SEO issuers in industrial products (Panel A of Table 8B) and natural resources (Panel A of Table 8C) are 4.34% (0.10 level) and 11.81% for the years –1 to +1 and -1 to +3, respectively. The median change differential in these SEO issuers

in industrial products (Panel A of Table 8B) and 'others' (Panel A of Table 8D) is -5.07% for years -1 to +1.

The IPOs of issuers in consumer products (Panel A of Table 9) exhibit a mean and median matched operating performance run-up of 16.78% and 15.75% (0.10 level). respectively, for years –2 to +1, and run-down of 14.55% and 15.41% (0.10 level). respectively, for years –1 to +1. The mean operating performance for these issuers further decreases to 16.52% for years –1 to +3. The mean and median matched operating performance for these issuers are –13.09% and –8.74% (0.10 level), respectively, during the year following issuance, and the mean matched operating performance is –15.07% (0.10 level) in year +3, as shown in Panel C of Table 9A.

The run-up in mean and median operating performances for IPOs of issuers in consumer products (Panel A of Table 9A) is greater by 14.5% and 14.78% (0.10 level), respectively, than issuers of industrial products (Panel A of Table 9B) in years -2 to +1 and by 20.4% and 22.50%, respectively, in years -1 to +1.

The mean and median differential run-ups in operating performances is greater by 17.30% and 20.14% (0.10 level), respectively, for IPO issuers of consumer products (Panel A of Table 9A) than of natural resources (Panel A of Table 9C) for years –2 to +1. The decrease in mean and median operating performances for IPO issuers of consumer products is greater by 9.90% (0.10 level) and 9.41% (0.10 level), respectively, than for IPO issuers of natural resources, for years –1 to +1. The underperformance in mean and

median operating performance also is greater for IPO issuers of consumer products than those of natural resources by 22.94% (0.10 level) and 16.28%, respectively for years -1 to +2 and by 17.83% (0.10 level) and 20.77%, respectively, for years -1 to +3.

When comparing IPO issuers of consumer products (Panel A of Table 9A) and 'others' (Panel A of Table 9D), the mean and median run-up in operating performances is greater for consumer products by 16.15% and 15.87%, respectively, for years –2 to +1. The underperformance in mean and median operating performance is greater for IPO issuers of consumer products than IPO issuers of 'others' by 16.60% and 16.19%, respectively. for years –1 to +1. The underperformance in median operating performance for IPO issuers of consumer products is greater than IPO issuers of 'others' by 11.38% (0.10 level) for years –1 to +2 and its decrease is greater by 20.77% for years -1 to +3.

4.4.1 Summary of Hypothesis Four Tests

The findings in this section can be summarized as follows. First, for common share SEOs, the decrease in operating performances in the years following issue is no different for issuers in consumer products than for those in industrial products.

Second, for common share & unit SEOs, the decrease in operating performances from years -1 to +2 and -1 to +3 is greater for issuers in consumer and industrial products than in natural resources.

Third, for common share & warrant SEOs, the decrease in mean operating performance for years -1 to +3 is greater for issuers in consumer products than in natural resources. and no run-up in operating performance occurs for years -2 to -1 for issuers in consumer products.

Fourth, for common share, unit & warrant SEOs, the decrease in operating performance for years -1 to +3 is greater for issuers of consumer products than those of natural resources. This decrease in operating performance also is greater for years -1 to +1 and -1 to +3 for issuers of 'others' than for natural resource issuers.

Fifth, for IPOs, the decrease in operating performance in the years following the issue is greater for issuers in consumer products than those in industrial products, natural resources or 'others'. A run-up in operating performances for years -2 to -1 is greater for issuers in consumer products than issuers in industrial products and 'others'. The evidence shows that management in the consumer products industry went public after increases in the operating performance of their firms. The average operating performance of their firms decreased in the years following the IPOs.

4.5 Regression Analysis of Operating Performance

As in McLaughlin, Safieddine and Vasudevan (1998), we use a multivariate regression to examine the strength of the results obtained above. The match-adjusted operating performances of Canadian firms for years -1 to +1, years -1 to +2 and years -1 to +3 are regressed on a number of potential determinants or independent variables.

The first potential determinant is the ratio of operating performance to book value of assets for year -2 for the issuer. The coefficient is expected to be negative because firms with stronger operating performance are less likely to require external capital financing.

The second potential determinant is the change in match-adjusted operating performance for years -2 to -1. A negative coefficient is expected for this determinant because managers are likely to believe that any run-up can not be sustained.

The third potential determinant is the ratio of the change for years -1 to +3 in capital expenditures to the total assets in year -1 of the issuing firms. The coefficient is expected to be positive because firms that issue equity to invest in property, plant and equipment, as measured by capital expenditures, are believed to be investing in profitable future growth opportunities. This should result in stronger future operating performance.

The fourth potential determinant is the price to book ratio in year -1 for each issuing firm.

The coefficient of this determinant is expected to be negative because previous studies find that firms with higher currently assessed growth opportunities revert back to the mean in the years following an issue.

The fifth potential determinant is the natural log of total assets in year -1 for each issuing firm. The coefficient of this potential determinant is expected to be positive. Previous studies find that larger firms are expected to do better post issue.

Dummy variables are used to distinguish between offerings involving common shares. units, warrants and IPOs.

As shown in Table 10A, the final sample for years –1 to +1 contains 145 observations of which 66, 24, 16 and 39 are common shares, units, warrants and IPOs, respectively. The final sample for years –1 to +2 contains 143 observations of which 68, 24, 14 and 37 are common shares, units, warrants, and IPOs, respectively. The final sample for years –1 to +3 contains 144 observations of which 67, 24, 14 and 39 are common shares, units, warrants and IPOs, respectively.

The regressions do not include delisted issuers because of the lack of accounting data available for them. Outliers, which are defined as those observations whose studentized residuals are greater than the absolute value of two, are eliminated from the regressions. Since the values of the variance inflation factor for the predictor variables are under four in all three cross-sectional regressions, these variables are not highly correlated among themselves.

The Durbin Watson statistics for the first, second and third cross-sectional regressions are 1.750, 2.109 and 2.253, respectively. This indicates that there is no strong autocorrelation present in the error terms. Based on the Breusch-Pagan test, resulting constancy of the variance of the error terms can not be rejected. Based on the results from the Shapiro-Wilk test, the error terms in the third cross-sectional regression follow a normal

distribution (at the 0.06 level). Those in the first and second regressions do not follow a normal distribution.

The adjusted R-squared values for the first, second and third cross-sectional regressions are 14.77%, 19.24% and 39.98%, respectively. Since the adjusted R-squared values increase as the time from the year prior to the issue increases, the variables chosen to explain the changes in the matched operating performances appear to have more explanatory power as the years following the issue increases. This also indicates that other variables may be included in the regressions to account for the remaining variability. According to Masulis and Korwar (1986), possible additional determinants include leverage, changes in outstanding shares and announcement returns.

Summary statistics of the multivariate regression are provided in Table 10B. The intercept in the first cross-sectional regression for years –1 to +1 is negative (-0.1387) and significant. It captures the constant part of the change in the matched operating performance that is not captured by the dummy variables. The intercept estimates for the second (years –1 to +2) and third (years –1 to +3) cross-sectional regressions also are negative (-0.1643 and -0.2134, respectively). The former is significant only at the 0.10 level. As the length of time from the year prior to issue increases, the estimated intercepts decrease in value. This suggests that the operating performance of companies that issue equity that is not explained by the determinants used deteriorates over time.

The coefficient estimated for the ratio of operating performance to book value for the first and second cross-sectional regressions are negative (-0.1110 and -0.1913, respectively) and significant. The estimated coefficient for this variable is negative but not significant in the third cross-sectional regression. These results indicate that firms that have greater cash flows prior to issue have significant declines in the years following issue.

The estimated coefficients for the change in matched operating performances from year -2 to -1 are significant and negative (-0.4013, -0.6058 and -0.7091, respectively) for all three cross-sectional regressions. Once again, the values of these estimated coefficients decrease as time from the year prior to the issue increases. These results imply that the decrease in operating performances in the subsequent years is greater as the run-up from year -2 to year -1 increases.

The estimated coefficients for the natural log of the book value of assets in year –1 are significant and are positive for all three cross-sectional regressions (0.0109, 0.0124 and 0.0177, respectively). This result indicates that operating performances are better in the years following the issue for firms with lower information asymmetry whereby information asymmetry is proxied by firm size.

The estimated coefficients for the change in capital expenditures only are significant (and positive at 0.0501) for the second cross-sectional regression. Thus, weak evidence exists that firms that issue equity to invest in capital expenditures have improvements in their operating performances.

Contrary to expectations, the estimated coefficients for the dummy variable for warrants is significant (0.10 level) and positive (0.0616), but only for the first cross-sectional regression. The coefficient estimates for this variable are not significant for the other two cross-sectional regressions. This is weak evidence that firms that issue equity with warrants perform better in the year following issue. This is contrary to expectation because in past studies (McClaughlin, Safieddine, and Vasudevan, 1998; and Spiess and Afleck-Graves, 1995), issuers of SEOs experience significant declines in operating performance in the years following an issue. The estimated coefficients for all other dummies are not statistically significant.

4.5.1 Summary of Regression Analysis Results

Our findings in this section of the thesis are similar to those of McLaughlin. Safieddine and Vasudevan (1998) and can be summarized as follows. First, firms with a higher cash flow prior to issue experience greater declines in operating performance in the years following the offerings. Second, firms that have a higher run-up in operating performance prior to a SEO exhibit greater declines in operating performance in the years following issue. Third, firms that invest more in capital expenditures experience improved operating performance in the years following issue. Fourth, larger firms relative to assets exhibit higher increases in their operating performance. Fifth, firms that issue equity with warrants have improved operating performance for years –1 to +1.

-1 to +2 and –1 to +3. Finally, no statistically significant relationship exists between the ratios of price to book and operating performance changes.

5 CONCLUDING REMARKS AND DIRECTIONS FOR FUTURE RESEARCH

5.1 Concluding Remarks

This thesis examines the operating performances of Canadian firms that issue seasoned and initial public offerings of securities. Few Canadian studies address this topic.

Previous U.S. studies conclude that the decline in operating performances in the years following issue results from asymmetric information between management and outside investors.

Our univariate analyses find that the operating performances of Canadian firms that issue equity declines in the years following issue. No evidence exists to support the notion that this decline is due to a run-up in operating performance prior to offering. This decline in average operating performance is inconclusive for issuers that differ in both their price to book ratios and market capitalizations. A greater decline in operating performance occurs for issuers in the consumer products industry.

However, the multivariate regression results indicate that firms with greater run-ups in operating performances and higher cash flows prior to issue experience greater declines in operating performance after issue. Those firms that are larger in size, invest more in capital expenditures and issue common shares with warrants experience an increase in operating performance in the years following issue. Similar to the results of the

univariate analysis, the price to book ratio is not a significant determinant of the change in the median operating performance of issuers after issue.

5.2 <u>Directions for Future Research</u>

Although Fama (1998) and Barber and Lyon (1997) agree to disagree about which models have better empirical specifications and better power of test statistics, it would be interesting to revisit this question of using a reference portfolio (equally weighted index). different control firms, and the three factor model of Fama and French (1993) in order to compare our results with those which would arise from these different models.

It would be interesting to examine the impact on operating performance when including issuing firms within the telecommunications industry, especially those that issued between 1997 and 2001. Furthermore, when examining operating performance, it would be interesting to separate firms according to the stock options held by management.

6 REFERENCES

Asquith, P. and D.W. Mullins, 1986, "Signaling with Dividends. Stock Repurchases, and Equity Issues," Financial Management (Autumn), 27-44.

Barber, B.M. and J.D. Lyon, 1997, "Detecting Long-Run Abnormal Stock Returns: The Empirical Power and Specification of Test Statistics," Journal of Financial Economics, 341-372

Brous, P.A., 1992, "Common Stock Offerings and Earnings Expectations: A Test of the Release of Unfavorable Information," Journal of Finance (September), 1517-1536.

Chemmanur, T.J., and P. Fulghieri, 1997, "Why Include Warrants in New Equity Issues? A Theory of Unit IPOs,", Journal of Financial and Quantitative Analysis (March), 1-24.

Fama, E.F., 1998, "Market Efficiency, Long-Term Returns, and Behavioral Finance." Journal of Financial Economics (March), 283-306.

Fama, E.F. and K. French, 1993, "Common Risk Factors in Returns on Stocks and Bonds." Journal of Finance, 3-56.

Fama, E.F. and K. French. 1995, "Size and Book-to-Market Factors in Earnings and Returns," Journal of Finance (March). 131-155.

Gombola, M., H.W. Lee, and F.Y. Liu, 1997, "Evidence of Selling by Managers after Seasoned Equity Offerings Announcements," Financial Management (Autumn), 37-53.

Healy, P.M. and K.G. Palepu, 1990, "Earnings and Risk Changes Surrounding Primary Stock Offers," Journal of Accounting Research (Spring), 25-48.

Jain. B.A. and O. Kini, 1994, "The Post-Issue Operating Performance of IPO Firms." Journal of Finance (December), 1699-1726

Jensen, M.C., 1986, "Agency Costs of Free Cash Flow, Corporate Finance and Takeovers," American Economic Review (May), 654-665.

Jung, K., C.K. Kim and R. Stulz, 1996, "Timing, Investment Opportunities, Managerial Discretion, and the Security Issue Decision," Journal of Financial Economics (October), 159-185.

Krasker, W.S., 1986, "Stock Price Movements in Response to Stock Issues under Asymmetric Information," Journal of Finance (March), 93-105.

Kryzanowski, L. and I. Rakita, 2000, "An Empirical Analysis of Canadian Seasoned Equity Offerings," Working Draft, Concordia University.

Lakonishok, J., A. Shleifer and R.W. Vishny, 1994, "Contrarian Investment, Extrapolation, and Risk," Journal of Finance (December), 1541-1579.

Lee, Inmoo., 1997, "Do Firms Knowingly Sell Overvalued Equity?," Journal of Finance (September), 1439-1466.

Lehn, K. and A. Poulsen, 1989, "Free Cash Flow and Stockholder Gains in Going Private Transactions," Journal of Finance (July), 771-787.

Loughran, T. and J.R. Ritter, 1995, "The New Issues Puzzle," Journal of Finance (March), 23-51.

Loughran, T. and J.R. Ritter, 1997, "The Operating Performance of Firms Conducting Seasoned Equity Offerings," Journal of Finance (December), 1823-1850.

Masulis, R. and A.N. Korwar, 1986, "Seasoned Equity Offerings – An Empirical Investigation," Journal of Financial Economics, 91-118.

McLaughlin, R., A. Safieddine, and G. Vasudevan, 1998, "The Information Content of Corporate Offerings of Seasoned Securities: An Empirical Analysis." Financial Management (Summer), 31-45.

Mikkelson, W.H. and M.M. Parch, 1986, "Valuation Effects of Security Offerings and the Issuance Process," Journal of Financial Economics, 31-60.

Mikkelson, W.H., M.M. Parch and K. Shah, 1997, "Ownership and Operating Performance of Companies that go Public," Journal of Financial Economics, 281-307.

Miller, M.H. and K. Rock, 1985, "Dividend Policy under Asymmetric Information." Journal of Finance (September), 1031-1051.

Myers, S.C. and N.S. Majuf, 1984, "Corporate Financing and Investment Decisions when Firms have Information that Investors do not have," Journal of Financial Economics (June), 187-221.

Patel, A., D.R. Emery and Y.W. Lee, 1993, "Firm Performance and Security Type in Seasoned Offerings: An Empirical Examination of Alternative Signaling Models." Journal of Financial Research (Fall), 181-193.

Ritter, J.R., 1991, "The Long-Run Performance of Initial Public Offerings." Journal of Finance (March), 3-27.

Rock, K., 1986, "Why New Issues are Underpriced," Journal of Financial Economics. 187-212.

Spiess, K and J.A. Afleck-Graves, 1995, "Underperformance in Long-Run Stock Returns Following Seasoned Equity Offerings," Journal of Financial Economics (July), 243-267.

Table 1A. Descriptive Statistics

	SEO		Non SEO	SEO	D values for	D values for	
	Mean	Median	Mean	Median	differences in means	differences in medians	ZI
Assets (Year -1)							
Common Shares	719680***	340996***	625495***	152642***	0.6210	0.3894	49
Common Shares & Units	786193***	194442***	665322***	113651***	0.5664	0.7583	84
Common Shares & Warrants	585141.1***	137306***	510262	113244***	0.6033	0.6608	93
Common Shares, Units & Warrants	269299	125265***	568455***	104191***	0.5562	0.5871	108
Initial Public Offerings	210853**	32860***	246201	21404***	0.8177	0.6485	38
Operating Performance (Year -1)							
Common Shares	83130***	20715	62923	15372***	0.4712	0.3894	29
Common Shares & Units	73222***	18696***	59542***	9594***	0.5571	0.5383	84
Common Shares & Warrants	67912	18450***	52137***	9383	0.4517	0.1881	93
Common Shares, Units & Warrants	63525***	14427***	52158***	9383	0.5431	0.2774	108
Initial Public Offerings	26764	4752***	22129	3280	0.7869	0.1715	38
Operating Performance/Assets (Year -1)							
Common Shares	0.0832***	0.1097***	0.0691	0.1022***	0.6135	0.2282	29
Common Shares & Units	0.0860	0 1092***	0.020	0.0865***	0.5190	0.1239	84
Common Shares & Warrants	0.0943***	0.1116***	0.0742***	0.1001***	0.3543	0.1077	93
Common Shares, Units & Warrants	9260.0	0.1114***	0.0788***	0.0865***	0.2858	0.1033	108
Initial Public Offerings	0.1842***	0.1598***	0 1571	0 1544***	0.3152	0.6485	38
Capital Expenditure (Year -1)							
Common Shares	2269	8500	45967	259	0.3520	0.6056	29
Common Shares & Units	64492	6445***	41908***	5589***	0.3007	0.7583	84
Common Shares & Warrants	55564***	6269	36487***	4923***	0.3113	0.1881	93
Common Shares, Units & Warrants	54614***	6445***	35440***	4954	0.2671	0.7860	108
Initial Public Offerings	10175	1005	15992*	524	0.568	0.1715	38
Price to Book (Year -1)							
Common Shares	2 3543	1 3569***	2.6803	1.0649***	0.9009	0.3894	29
Common Shares & Units	2.3861	1.3137***	2.4280*	1.0363***	0.9841	0.3560	84
Common Shares & Warrants	2 3662	1 4834***	2.5231**	1.1035***	0.9339	0.0129	93
Common Shares, Units & Warrants	2.3951*	1 4371***	2.4311**	1.0610***	0.9824	0.0291	108
Initial Public Offerings*	2 8525***	2 4855***	5 9775***	1.8904***	0.1197	0.0683	38

*Initial Public Offerings at (Year 0)

Table 1B. Descriptive Statistics (Delisted Companies Included)

	730						
	Mean	Median	Mean Mean	Median	p values for differences in means	p values for differences in medians	Z
Assets (Year -1)							1
Common Shares	660120***	246153***	576943.3***	123130***	0.6116	0.5284	78
Common Shares & Units	711300***	131585***	605490***	112531***	0.5539	0.6737	102
Common Shares & Warrants	508151***	117496***	447218***	89335***	0.6007	0.6979	119
Common Shares, Units & Warrants	553325***	87831***	474239***	53035	0.5428	0.3466	144
Initial Public Offerings	177473**	32109	205875**	19354***	0.8198	0.3049	47
Operating Performance (Year -1)							
Common Shares	77397	18696	58434***	9594***	0.4291	0.5241	78
Common Shares & Units	90689	13255***	55412***	9134***	0.4963	0.3258	102
Common Shares & Warrants	60138***	13255***	46281***	9124***	0.4092	0.1547	119
Common Shares, Units & Warrants	55272***	11578***	44651***	7651	0.4622	0.2394	144
Initial Public Offerings	22939.	4248	19027	3280	0.7787	0.0648	47
Operating Performance/Assets (Year -1)							
Common Shares	0.0732***	0.1092***	0.0602	0.1001	0.4959	0.3443	78
Common Shares & Units	0.0806	0.1092***	0.0679***	0.0862***	0.5886	0.1226	102
Common Shares & Warrants	0.0994***	0.1222***	0.0691	0.0916	0.1030	0.0140	119
Common Shares, Units & Warrants	0.0963***	0.1187***	0.0686***	0.0857***	0.1107	0.0022	144
Initial Public Offerings	0.1704***	0.1595***	0.1452***	0.1504***	0.3074	0.5382	47
Capital Expenditure (Year -1)							
Common Shares	63711***	7517	44162***	6105	0.3676	0.5284	78
Common Shares & Units	58215***	5024***	39665	2749***	0.3131	0.6737	102
Common Shares & Warrants	48321	7608***	33904***	2749***	0.3366	0.0523	119
Common Shares, Units & Warrants	45538***	6445***	31392	2355***	0.2845	0.0995	144
Initial Public Offerings	9334**	1144	13191	659	0.6405	0.1509	47
Price to Book (Year -1)							
Common Shares	1.9966	1.3780***	2 4207	1,1943***	0.8530	0.2073	78
Common Shares & Units	1.9416	1,3977**	2.2511**	1.0649***	0.8644	0.0680	102
Common Shares & Warrants	1.9324	1.4871***	2 2234***	1.1035***	0.8496	0.0066	119
Common Shares, Units & Warrants	2.0709	1.5847***	2 0974***	1.0991	0.9834	0.0022	144
Initial Public Offerings*	1.5055	2.3640***	5 1411***	1.7454***	0.0546	0.0648	47

Initial Public Offerings at (Year 0)

TABLE 2A. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES

Common Shares N=67

Common Granes H-OI					
Panel A	A: Change in Operatin	ig Performance to	Book Value fro	m Year i to Year j	
	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Seasoned Equity Offering					
Mean	0 0019	-0.0340	-0 0176	-0.0347	
Median	-0.0097	-0.0075	-0.0009	0.0073	
Non Seasoned Equity Offering					
Mean	-0 0164	0 0175	-0.0020	0.0216	
Median	0.0006	-0 0089	0 0167	0.0295*	
Matched Seasoned Equity Offering					
Mean	0.0183	-0.0515**	-0 0156	-0.0563**	
Median	-0 0131	-0 0095**	-0 0041	-0.0195	

Common Shares Including Delisted Companies N=78

Panel B. Chang	ge in Operating Performance to Book Value from Year i to Yea	ar j
	-1 to +1	
Seasoned Equity Offering		
Mean	-0 0288	
Median	-0 0055	
Non Seasoned Equity Offering		
Mean	0 0195	
Median	-0 0036	
Matched Seasoned Equity Offering		
Mean	-0 0483**	
Median	-0 0067**	

Common Shares N=67

Panel C	Ratio of Operating P	edormance to B	ook Value for the	Year Relative to	the Issue Year	
Faller	-2	-1	0	1	2	3
Seasoned Equity Offering						
Mean	0 0813***	0 0832***	0 0560***	0 0491**	0 0656***	C 0485
Median	0 1034***	0 1097***	0 0796***	0 0946***	0 1060***	0 1168***
Non Seasoned Equity Offering						
Mean	0 0855***	0.0691***	0 0569**	0 0866***	0.0672**	0 0907***
Median	0 0930***	0 1022***	0 0878***	0 0950***	0 0974***	0 1067***
Matched Seasoned Equity Offering						
Mean	-0 0043	0.0140	-0 0009	-0 0375**	-0.0016	-J 0 -: 23°
Median	0 0118	0 0060	0 0120	-0 0103°	0.0130	-0 C1 - 1

Panel D Ratio o	of Operating Performance to B	ook Value for the	Year Helative to the Issue	rear
	-1	0	1	
Seasoned Equity Offering				
Mean	0 0732***	0 0607***	0 0444*	
Median	0 1092***	0 0899***	0 0961***	
Non Seasoned Equity Offering				
Mean	0 0602***	0 0543***	0 0797***	
Median	0 1001***	0 0878***	0 0968***	
Matched Seasoned Equity Offering				
Mean	0 0130	0 0063	-0 0353**	
Median	0.0082	0 0151**	-0 0102	
""Significance at the 0.01 level		_		
**Significance at the 0.05 level				
*Significance at the 0.10 level				

TABLE 2B. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES & UNITS

Common Shares & Units N=84

COMMUNICITION OF COMMUNICATION					
P	anel A. Change in Operatir	ng Performance to	Book Value fro	m Year i to Year j	
	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Seasoned Equity Offering					
Mean	0.0021	-0.0328**	-0.0168	-0 0273	
Median	-0.0035	-0 0070	-0.0025	0.0073	
Non Seasoned Equity Offering					
Mean	-0 0100	0.0174	-0 0117	0.0130	
Median	-0.0005	-0 0046	0 0113	0 0264	
Matched Seasoned Equity Offenng					
Mean	0 0121	-0 0501°°	-0.0052	-0.0403°	
Median	-0.0073	-0 0089**	0 0053	-0 0069	

Common Shares & Units: Including Delisted Companies N=102

Panel B Chang	e in Operating Performance to Book Value from Year i to Yea	<u>arj</u>
	-1 to +1	
Seasoned Equity Offering		
Mean	-0 0270 °	
Median	-0 0041	
Non Seasoned Equity Offering		
Mean	0 0195	
Median	-0 0006	
Matched Seasoned Equity Offering		
Mean	-0 0465* *	
Median	-0 0073**	

Common Shares & Units N=84

Common Shares & Units N=84	Ratio of Operating I	Performance to F	cok Value for th	e Year Relative t	o the Issue Year	
Farier	-2	-1	0	1	22	3
Seasoned Equity Offering						
Mean	0 0839***	0 0860***	0 0605***	0 0533***	0 0692***	0 0587**
Median	0 1019***	0 1092***	0 0748***	0 0874***	0 1005***	0 1:17***
Non Seasoned Equity Offering						
Mean	0 0809***	0 070 9	0 0575***	0 0883***	0 0593**	0 0839***
Median	0 0892***	0 0865***	0 0812***	0 0939***	0 0939***	0 1062***
Matched Seasoned Equity Offering						
Mean	0 0030	0 0151	0 0030	-0 0350**	0 0100	-0 0252
Median	0 01 18	0 0060	0 0167°	-0 00 9 8	0 0121	-0 0125

Panel D. Hatio	of Operating Performance to B	ook value for the	Teal helative to the issue	169
	-1	0	1	
Seasoned Equity Offering				
Mean	0 0806***	0 0680***	0 0537***	
Median	0.1092***	0 0822***	0 0906***	
Non Seasoned Equity Offering				
Mean	0 0679***	0 0595***	0 0874***	
Median	0 0862***	0 0820***	0 0950***	
Matched Seasoned Equity Offering				
Mean	0 0128	0 0085	-0 0337**	
Median	0.0070	0 0194**	-0 0102	

^{***}Significance at the 0.01 level **Significance at the 0.05 level *Significance at the 0.10 level

TABLE 2C. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES & WARRANTS

Common Shares & Warrants N=93

Panel A	Change in Operating	ng Performance to	Book Value fro	m Year i to Year i	
	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Seasoned Equity Offering					
Mean	0.0020	-0.0302°	-0 0189	-0.0383°	
Median	-0 0081	-0.0038	0.0003	0.0073	
Non Seasoned Equity Offening					
Mean	-0.0004	0.0104	0 0033	0 0110	
Median	0.0071	-0 0043	0.0167	0 0276	
Matched Seasoned Equity Offering					
Mean	0.0024	-0:0406°	-0.0221	-0.0493°	
Median	-0 0102	-0.0082°	-0 0041	-0 0102	

Common Shares & Warrants; Including Delisted Companies N=119

Panel B. Chan	ige in Operating Performance to Book Value from Year i to Ye	ar:
	-1 to +1	
Seasoned Equity Offening		
Mean	-0 0240°	
Median	-0 0022	
Non Seasoned Equity Offering		
Mean	0.0152	
Median	0 0009	
Matched Seasoned Equity Offering		
Mean	-0 0392 **	
Median	-0 0022	

Common Shares & Warrants N=93

Panel C. Ratio of Operating Performance to Book Value for the Year Relative to the Issue Year						
	-2	-1	0	1	2	3
Seasoned Equity Offering						
Mean	0 0928***	0 0943***	0 0731***	0.0641***	0 0754***	0 0560**
Median	0 1091***	0 1116***	0 0945***	0 1050***	0 1167***	0 1172***
Non Seasoned Equity Offering						
Mean	0 0746***	0 0742***	0 0653***	0 0845***	0 0774***	0 0852***
Median	0 0930***	0 10001***	0 0878***	0 0950***	0 100€***	0 1067***
Matched Seasoned Equity Offering						
Mean	0 0177	0 0201*	0 0078	-0 0205	-0 0020	-0 0292
Median	0 0124	0 0060	0 0120*	-0 0072	0 0113	-0 0083

Common Shares & Warrants: Including Delisted Companies N=119

Panel D. Ratio	of Operating Performance to E	ook value for th	Year Relative to the Issue Yea	<u> </u>
	-1	0	1	
Seasoned Equity Offering				
Mean	0.0994***	0 0216	0 0755***	
Median	0.1222***	0 0187***	0.1092***	
Non Seasoned Equity Offering				
Mean	0 0691***	-0.0089	0 0843***	
Median	0 0916***	0 0043	0 0986***	
Matched Seasoned Equity Offering				
Mean	0.0304**	0.0216	-0 0089	
Median	0.0191***	0.0187***	0.0043	

[&]quot;Significance at the 0.01 level "Significance at the 0.05 level "Significance at the 0.10 level

TABLE 2D. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES, UNITS & WARRANTS

Common Shares & Units & Warrants N=108

Panel A: Change in Operating Performance to Book Value from Year i to Year j					
	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Seasoned Equity Offering					
Mean	0 0025	-0.0305**	-0 0197	-0.0293	
Median	-0.0035	-0.0038	-0.0003	0 0079	
Non Seasoned Equity Offering					
Mean	0.0068	0.0093	-0 0094	0.0012	
Median	0.0021	-0.0036	0 0113	0.0234	
Matched Seasoned Equity Offering					
Mean	-0.0043	-0.0398**	-0.0102	-0.0304	
Median	-0 0074	-0 0054°	0 0075	0.0006	

Common Shares & Units & Warrants; Including Delisted Companies N=144

Panel B. Chang	e in Operating Performance to Book Value from Year i to Yea	ar <u>j</u>
	-1 to +1	
Seasoned Equity Offering		
Mean	-0 0220°	
Median	-0 0009	
Non Seasoned Equity Offering		
Mean	0 0179*	
Median	0 0014	
Matched Seasoned Equity Offering		
Mean	-0 0399***	
Median	-0 0046**	

Common Shares & Units & Warrants N=108

Pane	Panel C. Ratio of Operating Performance to Book Value for the Year Relative to the Issue Year					
	-2	-1	0	1	2	3
Seasoned Equity Offering						
Mean	0 0952***	0 0976***	0 0737***	0.0671***	0 0780***	0 0684***
Median	0 1024***	0 1114***	0.0899***	0 0970***	0 1073***	0 1157***
Non Seasoned Equity Offering						
Mean	0 0720***	0 0788***	0 0658***	0 0881***	0 0694***	0 0800
Med:an	0 0899***	0 0865***	0 0833***	0 0935***	0 0987***	0 1063***
Matched Seasoned Equity Offering						
Mean	0 0231*	0.0188*	0 0079	-0 0210	0 0086	-0 0116
Median	0 0132	0 0056	0 0140**	-0 0040	0 0101	0 0002

Common Shares & Units & Warrants; Including Delisted Companies N=144

Panel D. Ratio	of Operating Performance to B	Book Value for the	e Year Relative to the Issue Y	ear
	-1	0	1	
Seasoned Equity Offering				
Mean	0 0963***	0.0865***	0 0743***	
Median	0 1187***	0 1096***	0 1051***	
Non Seasoned Equity Offering				
Mean	0.0686***	0 0648***	0 0866***	
Median	0.0857***	0 0820***	0 0971***	
Matched Seasoned Equity Offering				
Mean	0.0276***	0.0217*	-0 0123	
Median	0.0176***	0.0230***	0.0023	
""Significance at the 0.01 level				
**Significance at the 0.05 level				
*Significance at the 0.10 level				

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TABLE 2E. CHANGES IN OPERATING PERFORMANCE FOR INITIAL PUBLIC OFFERINGS

Initial Public Offering N=38

Pane	I A Change in Operating	g Performance to	Book Value from	Year I to Year I	
	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
nitial Public Offening					
Mean	0 0609***	-0.0387*	-0.0683***	-0.0727***	
Median	0.0400***	-0.0333**	-0.0251***	-0.0535***	
Non Initial Public Offering					
Mean	0.0249**	-0.0506°	-0 0630**	-0.0379**	
Median	0.0183**	-0.0211	-0.0235**	-0.0255°	
Matched Initial Public Offering					
Mean	0.0360	0.0120	-0.0053	-0 0349	
Median	0.0208	-0.0020	-0.0049	-0.0340	

Initial Public Offering Including Delisted Companies N=47

Panel B. Cha	Panel B Change in Operating Performance to Book Value from Year i to Year j				
	-1 to +1				
Initial Public Offenng					
Mean	-0 0416**				
Median	-0 0255**				
Non Initial Public Offering					
Mean	-0 0399*				
Median	-0 0064				
Matched Initial Public Offering					
Mean	-0 0017				
Median	-0 0045				

Initial Public Offering N=38

Pane	I C Ratio of Operating F	enormance to b	look value for th	e Year Heiative	o trie issue rear	
	-2	-1	0		2	3
Initial Public Offering						
Mean	0 1233***	0 1842***	0 1628***	0 1455***	0 1159***	0 1115***
Median	0 1243***	0 1598***	0 1453***	0 1404***	0 1291***	0 1191***
Non Initial Public Offering						
Mean	0 1322***	0 1571***	0 1599***	0 1065***	0 094:***	0 1192***
Median	0 1241***	0 1544***	0 1451***	0 1193***	0 1029***	C 1117***
Matched Initial Public Offering						
Mean	-0 0089	0 0271	0 0028	0 0390	0 0218	-0 0078
Median	-0 0035	0 0112	0 0061	0 0102	0 0130	0.0030

	-1	0	11	
Initial Public Offering				<u> </u>
Mean	0.1704***	0 1637***	0 1288***	
Median	0 1595***	0 1535***	0.1377***	
Non Initial Public Offering				
Mean	0.1452***	0 1495***	0 1053***	
Median	0.1504***	0.1301***	0.1199***	
Matched Initial Public Offering				
Mean	0 0252*	0 0143	0 0235	
Median	0 0056*	0 0067	0 0015	

[&]quot;Significance at the 0.05 level "Significance at the 0.10 level

TABLE 3A. CHANGES IN OPERATING PERFORMANCE FROM YEAR I TO YEAR J BASED ON PRICE TO BOOK

seasoned Equity Offenng	hange in Operating Performance -2 to -1	-1 to +1	-1 to +2	-1 to +3
ommon Shares N=33				
Median Book Value	-0.0119*	-0.0038	0.0085	0.0159
Median Book Value	0.0020	-0.0168	-0.0334	-0.0199
-Values for Differences)	(0.4636)	(0.2219)	(0.0279)	(0.2219)
ommon Shares & Units N=42				
Median Book Value	-0.0044	-0.0027	0 0098	0.0159
Median Book Value	0.0015	-0 0205*	-0 0294	-0 0183
-Values for Differences)	(0 6644)	(0.0827)	(0 0092)	(0.1931)
ommon Shares & Warrants N=46	0.0119**	-0.0035	0.0071	0 0129
Median Book Value	-0.0118** -0.0007	-0.0205	-0.0230	-0 0183
Median Book Value -Values for Differences)	(0 4068)	(0 4068)	(0.0971)	(0 4068)
ommon Shares, Units & Warrants N≖54	-0 0052	-C 0028	0 0071	0 0159
Median Book Value	0 0014	-0.0123°	-0 0219	-0 0141
Median Book Value -Values for Differences)	(0 4435)	(0.4435)	(0 0554)	(0 4435)
not D. N. a. Officiano N. 10				
tal Public Offenngs N=19	0 0391***	-0 0326**	-0 0252**	-0 0373**
Median Book Value Median Book Value	0 0409	-0.0444	-0 0249	-0 0663**
	(0.7489)	(0.7489)	(0 7489)	(0 1094)
-Values for Differences)	(0.1403)	(0 . 703)	,,,,,,,,	
n Seasoned Equity Offenng	-2 to -1	-1 to +1	-1 to +2	-1 to +3
ommon Shares N=33 Median Book Value	0 0073	-0 0089	-0 0065	0 0023
Median Book Value Median Book Value	-0 0083	-0 0029	0 0168	0 0363.
Median Book Value -Values for Differences)	(0 4636)	(0.8070)	(0.8070)	(0 4636)
	10 -000,	1		
ommon Shares & Units N=42	0 0041	-0 0005	0.0086	0 0219
Median Book Value	-0 0054	-0 0109	0 0113	0 029
Median Book Value	(0 6644)	(0 6644)	(1 0000)	(0 6644)
-Values for Differences)	(0.0044)	10 00447	(1 5555)	(2 0000)
ommon Shares & Warrants N=46			0.0177	0 0286
Median Book Value	0 0072	-0 001	0 0177	0 0251
Median Book Value	0.0015	-0 0109	0.0140	(1 0000)
-Values for Differences)	(0.6783)	(0.6783,	(0.7107)	(1 0000)
ommon Shares, Units & Warrants N=54				
Median Book Value	0 0 0 45	0 0022	0 0191	0 0285**
Median Book Value	0.0015	-0 0127	0 0045	0 0022
-Values for Differences;	(1 000C:	(0.2504)	(0 3337)	(G 25C4)
bai Public Offerings N=19				
Median Book Value	0 0096	-0 0005	-0 0042	0 0156
Median Book Value	0 0538**	-0 0856**	-0 1256***	-0 1151**
-Values for Differences)	(0.1094)	(0 1094)	(C 1094)	(0 0250)
atched Seasoned Equity Offening	-2 to -1	-1 15 +1	-1 to +2	-1 to +3
ommon Shares N=33		0.0022	0.0083	0 0070
Median Book Value	-0.0195*	-0 0033 -0 0295**	0 0082 -0 0245	-0 0155°
Median Book Value	-0.0062 (0.2219)	(0 2219)	(0 2219)	(0.8070)
-Values for Differences)	(0.2213)	(C 44 0)	(a ee . a)	,-
ommon Shares & Units N=42	-0 0132	-0 0036	-0 0156	-0 0058
Median Book Value Median Book Value	-0.0008	-0 0286**	-0 0048	-0 0075
Median Book Value -Values for Differences)	(0.3856)	(0 3856)	(0.6644;	(1 0000)
ommon Shares & Warrants N=46				
Median Book Value	-0 0132	-0 002	0 0053	-0 0195
Median Book Value	-0 0074	-0 0286	-0 0154	-0 0075
-Values for Differences)	(0 6783)	(0 2134)	(0 4068)	(0 4068)
ommon Shares, Units & Warrants N=54				
WISHUM SHEETS, USING & TREHENIS 14234	-0 0094	-0.0256	-0 0002	-0 0175
Median Book Value	-8300.0-	-0.0118	0 0162	0.0088
		·· -	(0.4435)	(0.2504)
Median Book Value	(0.7016)	(0 4435)	(0.4433)	
Median Book Value -Values for Differences)		(0 4435)	(0.4433)	, , ,
Median Book Value -Values for Oifferences) stal Public Offenings N=19		(0 4435) -0 0394*	-0 0114	-0 0348
Median Book Value Median Book Value -Values for Oxferences) utal Public Offerings N=19 Median Book Value Median Book Value	(0.7016)			

^{***}Significance at the 0.01 level

[&]quot;Significance at the 0.05 level

^{*}Significance at the 0.10 level

TABLE 3B. CHANGES IN OPERATING PERFORMANCE FROM YEAR I TO YEAR J BASED ON PRICE TO BOOK RATIO, INCLUDING DELISTED COMPANIES

Seasoned Equity Offenng	ating Performance to Book Value from Year if	
ommon Shares N=39		
Median Book Value	-0 0038	
Median Book Value	-0.0075	
-Values for Differences)	(0 8220)	
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
ommon Shares & Units N=50		
Median Book Value	-0 0035	
Median Book Value	-0.0060	
-Values for Differences)	(0.6906)	
ommon Shares & Warrants N=59		
Median Book Value	-0 0022	
Median Book Value	-0.0044	
-Values for Differences)	(0.8545)	
ommon Shares, Units & Warrants N∈72		
Median Book Value	0 0020	
Median Book Value	-0.0060	
-Values for Differences)	(0.7398)	
vades to billere cesy	(0.7330)	
tal Public Offenngs N=23		
Median Book Value	-0 0160**	
Median Book Value	-0 0255	
-Values for Differences)	(0 7705)	
	(0.700)	
on Seasoned Equity Offering	-1 to +1	
ommon Shares N=39		
Median Book Value	-0 0089	
Median Book Value	0 0016	
-Values for Differences)	(0 4997)	
Table of the second	(
ommon Shares & Units N=50		
Median Book Value	-0 0005	
Median Book Value	-0 0006	
-Values for Differences)	(1 0000)	
ommon Shares & Warrants N±59		
Median Book Value	-0 0036	
Median Book Value	0 0060*	
-Values for Differences)	(0 5823)	
ommon Shares, Units & Warrants N±72		
Median Book Value	0 0022	
Median Book Value	0 0606	
Values for Differences)	(1 0000)	
tial Public Offenings N≠23		
Median Book Value	0 0083	
Median Book Value	-0 0305***	
Values for Differences)	(0.1448)	
Antara Sanagara En la Ottoria	1,2,1	
tched Seasoned Equity Offening	-1 to +1	
mmon Shares N=39		
Aedian Book Value	-0 0228	
Median Book Value	-0 0201*	
Values for Differences)	(0 4997)	
mmon Shares & Units N≈50		
mmon Snares & Units N≈50 Median Book Value	-0 0036	
Median Book Value Median Book Value	-0 0036 -0 0142*	
Values for Differences)	(0 4260)	
	(0 4200/	
mmon Shares & Warrants N=59		
Median Book Value	-0 0087	
fedian Book Value	-0 0102*	
Values for Differences)	(0 5823)	
	12 9020)	
mmon Snares, Units & Warrants N=72		
Median Book Value	0 0026	
Median Book Value	-0.0205**	
-Values for Differences)	(0 1839)	
	(5.000)	
tial Public Offenings N=23		
Median Book Value	-0 0394**	
Median Book Value	0 0681	
-Values for Differences)	(0 1448)	

^{***}Significance at the 0.01 level

[&]quot;Significance at the 0.05 level

^{*}Significance at the C 10 leve

TABLE 3C. CHANGES IN OPERATING PERFORMANCE AROUND THE ISSUE YEAR BASED ON PRICE TO BOOK

easoned Equity Offening	perating Performance t	-1	C C	1	2	3
ommon Shares N=33						
Median Book Value	0.1024***	0.1003***	0 0628***	0.1052***	0.1070***	0 1168***
Median Book Value	0.1091***	0 1156***	0 0907***	0 0847**	0 0992***	0.1147**
-Values for Differences)	(0 8070)	(0.2219)	(0.4636)	(0.2219)	(0 4636)	(0 8070)
ommon Shares & Units N=42						
Median Book Value	0.1013***	0.1006***	0.0594***	0 1009***	0.1038***	0 1128***
Median Book Value	0.1058***	0.1165***	0.0807***	0.0820***	0 0986***	0 1103***
-Values for Differences)	(0.6644)	(0.1931)	(0.6644)	(0.3856)	(0 3856)	(1 0000)
ommon Shares & Warrants N=46						
Median Book Value	0 1024***	0 0989***	0 0701***	0 1052***	0 1078***	0 1170***
Median Book Value	0 1245***	0.1231***	0.1147***	0.0979***	0 1187***	0 1193***
-Values for Differences)	(0.2134)	(0.0971)	(0 4068)	(0 6783)	(0 4068)	(0.6783)
ommon Shares, Units & Warrants N=54						
Median Book Value	0 1013***	0 1006***	0.0701***	0 1038***	0 1038***	0 1170***
Median Book Value	0.1185***	0 1231***	0 0943***	0 0929***	0 1175***	0 1103***
Values for Differences)	(0.2504)	(0 1254)	(0 4435)	(0 4435)	(0 4435)	(0.7016)
	, ,	,				
ai Public Offerings N=19						
Median Book Value	0 1025***	0 1517***	0 1305***	0 1235***	0 1159***	0 1323***
Median Book Value	0 1355***	0 2087***	0 1754***	0 1840***	0 1424***	C 1154***
Values for Differences)	(0 3368)	(0 0250)	(0 1094)	(0.0040)	(0.3368)	(C 7489.
n-Seasoned Equity Offenng	.2	-1	<u>c</u>		<u>2</u>	3
mmon Shares N=33	0.001.000	0.000	0.0705***	0 0919***	0 0915	0 1064***
Median Book Value	0.0916***	0 0867***	0 0795*** 0 0878**	0.0919***	0 1253***	G 1175***
Median Book Value	0 0954***			(0.0872)	(C 2148)	(0.6198
Values for Differences)	(0 8070)	(0.0872)	(0 4636)	(0.0072)	(0 2 . 40)	(0 0.30
mmon Shares & Units N=42						
Median Book Value	0 0809***	0 0779***	0 0757***	0.0870***	0 0878***	0 100
Median Book Value	0 0949***	0 1068***	0 0878***	0 0996***	0 1009***	C 1064***
Values for Differences)	(0 1931)	(0 1931)	(0 3856)	(0.0827)	(0 6644)	(1 GOOG,
ommon Shares & Warrants N=46			:			0.07
Median Book Value	0 0907***	0 0865***	0.0787***	0 0862***	0 0969***	0 1054***
Median Book Value	0 0973***	0 1039***	0.0914***	0 1114***	0 1181***	0 1134***
-Values for Differences)	(0.4068)	(0.2134)	(0 3260)	(0 0495)	(0.0971)	(0.5293.
ommon Shares, Units & Warrants %=54	0 0820***	0.0805***	0 0774***	0.0866	0 0969***	0 1354***
Median Book Value Median Book Value	0 0961***	0 1034***	0.0878***	0 0985***	C 102****	0 1060***
Values for Differences)	(0.1759)	(0.2504)	(0.2504)	(0.0554)	(0.2504)	(1 0000
Tables to tomore to total	10 11 00					
tial Public Offerings N=19						
Median Book Value	0 1204***	0 1460***	0 1246***	0 1254***	0 1142***	0 1140***
Median Book Value	0 1241***	0.2109***	0 1529***	0 1031	0 0903***	0 1012***
Values for Differences)	(0.3169)	(0 1094)	(0.7489)	(0 3368)	(0.7489.	(C 7489)
	-5	-1	0	1	2	3_
iched Seasoned Equity Offenng						
mmon Shares N=33						
mmon Shares N=33 Aedian Book Value	0 0183	-0 0038	0 0000	-0 0221	0 0142	-0.0011
mmon Snares N≃33 Aedian Book Value Aedian Book Value	0 0183 -0 0084	0 0154	0 0272	-0 0197**	0 009	-6 04411
immon: Shares N=33 Median: Book Value Median: Book Value	0 0183					
immon Shares N=33 Median Book Value Median Book Value -Values for Differences)	0 0183 -0 0084	0 0154	0 0272	-0 0197**	0 009	-6 04411
immon Shares N=33 Median Book Value Median Book Value Values for Differences) Immon Shares & Units N=42	0 0183 -0 0084 (0 4636)	0 0154 (0 4636)	0 0272 (0 4636)	-0 0197** (0 2219)	0 009	-6 04411
mmon Shares N=33 Median Book Value Median Book Value Values for Diffarences) Immon Shares & Units N=42 Median Book Value	0 0183 -0 0084 (0 4636) 0 0196*	0 0154 (0 4636) 0 006	0 0272	-0 0197**	0 009 (0 8070)	-0 0441* (0 2219;
mmon Shares N=33 Aedian Book Value Aedian Book Value Values for Differences) mmon Shares & Units N=42 Aedian Book Value Aedian Book Value	0 0183 -0 0084 (0 4636)	0 0154 (0 4636)	0 0272 (0 4636) 0 0069	-0 0197** (0 2219) -0 005	0 009 (0 8070) 0 0045	-0 04411 (0 2219; -0 0053
mmon Shares N=33 Aedian Book Value Aedian Book Value Values for Differences) mmon Shares & Units N=42 Aedian Book Value Aedian Book Value	0 0183 -0 0084 (0 4636) 0 0196* -0 0099	0 0154 (0 4636) 0 006 0 0045	0 0272 (0 4636) 0 0069 0 0356**	-0 0197** (0 2219) -0 005 -0 0124	0 009 (0 8070) 0 0045 0 0137	-0 04411 (0 2219) -0 0053 -0 0153
mmon Shares N=33 Median Book Value Median Book Value Values for Differences) Immon Shares & Units N=42 Median Book Value Median Book Value Values for Differences)	0 0183 -0 0084 (0 4636) 0 0196* -0 0099	0 0154 (0 4636) 0 006 0 0045	0 0272 (0 4636) 0 0069 0 0356** (0 1931)	-0 0197** (0 2219) -0 005 -0 0124 (0 3856)	0 009 (0 8070) 0 0045 0 0137 (0 6644)	-6 04411 (0 2219; -6 0053 -0 0153 (0 6644)
mmon Shares N=33 Aedian Book Value Aedian Book Value Values for Differences) mmon Shares & Units N=42 Aedian Book Value Aedian Book Value Values for Differences) mmon Shares & Warrants N=46	0 0183 -0 0084 (0 4636) 0 0196* -0 0099	0 0154 (0 4636) 0 006 0 0045 (1 0000)	0 0272 (0 4636) 0 0069 0 0356** (0 1931)	-0 0197** (0 2219) -0 005 -0 0124 (0 3856)	0 009 (0 8070) 0 0045 0 0137 (0 6644)	-0 04411 (0 2219) -0 0053 -0 0153 (0 6644) -0 0125
rrmon: Snares N=33 Aedian Book Value Aedian Book Value Values for Differences) rmmon Shares & Units N=42 Aedian Book Value Aedian Book Value Values for Differences) rmmon Shares & Warrants N=46 Aedian Book Value Aedian Book Value Aedian Book Value	0 0183 -0 0084 (0 4636) 0 0196* -0 0099 (0 3856) 0 0132 0 0137	0 0154 (0 4636) 0 006 0 0045 (1 0000) -0 0045 0 0348	0 0272 (0 4636) 0 0069 0 0356** (0 1931) 0 0009 0 0296**	-0 0197** (0 2219) -0 005 -0 0124 (0 3856) -0 005 -0 0112	0 009 (0 8070) 0 0045 0 0137 (0 6644) 0 0118 0 008	-0 04411 (0 2219) -0 0053 -0 0153 (0 6644) -0 0125 -0 0048
rrmon: Snares N=33 Aedian Book Value Aedian Book Value Values for Differences) rmmon Shares & Units N=42 Aedian Book Value Aedian Book Value Values for Differences) rmmon Shares & Warrants N=46 Aedian Book Value Aedian Book Value Aedian Book Value	0 0183 -0 0084 (0 4636) 0 0196* -0 0099 (0 3856)	0 0154 (0 4636) 0 006 0 0045 (1 0000)	0 0272 (0 4636) 0 0069 0 0356** (0 1931)	-0 0197** (0 2219) -0 005 -0 0124 (0 3856)	0 009 (0 8070) 0 0045 0 0137 (0 6644)	-0 04411 (0 2219) -0 0053 -0 0153 (0 6644) -0 0125
mmon Shares N=33 Median Book Value Median Book Value Values for Differences) immon Shares & Units N=42 Median Book Value Median Book Value Values for Differences) immon Shares & Warrants N=46 Median Book Value Median Book Value Median Book Value Median Book Value Values for Differences)	0 0183 -0 0084 (0 4636) 0 0196* -0 0099 (0 3856) 0 0132 0 0137	0 0154 (0 4636) 0 006 0 0045 (1 0000) -0 0045 0 0348	0 0272 (0 4636) 0 0069 0 0356** (0 1931) 0 0009 0 0296**	-0 0197** (0 2219) -0 005 -0 0124 (0 3856) -0 005 -0 0112	0 009 (0 8070) 0 0045 0 0137 (0 6644) 0 0118 0 008	-0 04411 (0 2219) -0 0053 -0 0153 (0 6644) -0 0125 -0 0048
mmon Shares N=33 Median Book Value Median Book Value Values for Differences) mmon Shares & Units N=42 Median Book Value Median Book Value Values for Differences) mmon Shares & Warrants N=46 Median Book Value Values for Differences) vmmon Shares & Warrants N=46 Median Book Value Values for Differences) vmmon Shares, Units & Warrants N=54	0 0183 -0 0084 (0 4636) 0 0196* -0 0099 (0 3856) 0 0132 0 0137 (1 0000)	0 0154 (0 4636) 0 006 0 0045 (1 0000) -0 0045 0.0348* (0 0971)	0 0272 (0 4636) 0 0069 0 0356** (0 1931) 0 0009 0 0296** (0 6783)	-0 0197** (0 2219) -0 005 -0 0124 (0 3856) -0 005 -0 0112 (0 6783)	0 009 (0 8070) 0 0045 0 0137 (0 6644) 0 0118 0 008 (0 6783)	-0 04411 (0 2219) -0 0053 -0 0153 (0 6644) -0 0125 -0 0048 (0 6783)
mmon Shares N=33 Median Book Value Median Book Value Values for Differences) mmon Shares & Units N=42 Median Book Value Median Book Value Values for Differences) mmon Shares & Warrants N=46 Median Book Value Values for Differences) wmon Shares & Warrants N=46 Median Book Value Values for Differences) wmon Shares, Units & Warrants N=54 Median Book Value	0 0183 -0 0084 (0 4636) 0 0196* -0 0099 (0 3856) 0 0132 0 0137 (1 0000)	0 0154 (0 4636) 0 006 0 0045 (1 0000) -0 0045 0.0348* (0 0971)	0 0272 (0 4636) 0 0069 0 0356** (0 1931) 0 0009 0 0296** (0 6783)	-0 0197** (0 2219) -0 005 -0 0124 (0 3856) -0 005 -0 0112 (0 6783)	0 009 (0 8070) 0 0045 0 0137 (0 6644) 0 0118 0 008 (0 6783)	-0 04411 (0 2219) -0 0053 -0 0153 (0 6644) -0 0125 -0 0048 (0 6783)
mmon Snares N=33 Median Book Value Median Book Value Values for Differences) mmon Shares & Units N=42 Median Book Value Median Book Value Median Book Value Values for Differences) mmon Shares & Warrants N=46 Median Book Value Values for Differences) mmon Shares & Warrants N=54 Median Book Value Values for Differences)	0 0183 -0 0084 (0 4636) 0 0196* -0 0099 (0 3856) 0 0132 0 0137 (1 0000)	0 0154 (0 4636) 0 006 0 0045 (1 0000) -0 0045 0.0348* (0 0971)	0 0272 (0 4636) 0 0069 0 0356** (0 1931) 0 0009 0 0296** (0 6783) 0 0123 0 0356**	-0 0197** (0 2219) -0 005 -0 0124 (0 3856) -0 005 -0 0112 (0 6783) -0.005 -0 0036	0 009 (0 807c) 0 0045 0 0137 (0 6644) 0 0118 0 008 (0 6783)	-0 04411 (0 2219) -0 0053 -0 0153 (0 6644) -0 0125 -0 0048 (0 6783)
atched Seasoned Equity Offening Immon Shares N=33 Median Book Value Median Book Value Median Book Value Values for Differences) Immon Shares & Units N=42 Median Book Value Median Book Value Values for Differences) Immon Shares & Warrants N=46 Median Book Value Values for Differences) Immon Shares & Warrants N=46 Median Book Value Values for Differences) Immon Shares, Units & Warrants N=54 Median Book Value Values for Differences) Median Book Value Median Book Value Values for Differences)	0 0183 -0 0084 (0 4636) 0 0196* -0 0099 (0 3856) 0 0132 0 0137 (1 0000)	0 0154 (0 4636) 0 006 0 0045 (1 0000) -0 0045 0.0348* (0 0971)	0 0272 (0 4636) 0 0069 0 0356** (0 1931) 0 0009 0 0296** (0 6783)	-0 0197** (0 2219) -0 005 -0 0124 (0 3856) -0 005 -0 0112 (0 6783)	0 009 (0 8070) 0 0045 0 0137 (0 6644) 0 0118 0 008 (0 6783)	-0 04411 (0 2219) -0 0053 -0 0153 (0 6644) -0 0125 -0 0048 (0 6783)
mmon Shares N=33 Median Book Value Median Book Value Values for Differences) immon Shares & Units N=42 Median Book Value	0 0183 -0 0084 (0 4636) 0 0196* -0 0099 (0 3856) 0 0132 0 0137 (1 0000)	0 0154 (0 4636) 0 006 0 0045 (1 0000) -0 0045 0.0348* (0 0971)	0 0272 (0 4636) 0 0069 0 0356** (0 1931) 0 0009 0 0296** (0 6783) 0 0123 0 0356**	-0 0197** (0 2219) -0 005 -0 0124 (0 3856) -0 005 -0 0112 (0 6783) -0.005 -0 0036	0 009 (0 807c) 0 0045 0 0137 (0 6644) 0 0118 0 008 (0 6783)	-0 04411 (0 2219) -0 0053 -0 0153 (0 6644) -0 0125 -0 0048 (0 6783)
mmon Shares N=33 Aedian Book Value Aedian Book Value Values for Differences) mmon Shares & Units N=42 Aedian Book Value Aedian Book Value Values for Differences) mmon Shares & Warrants N=46 Aedian Book Value Values for Differences) mmon Shares & Warrants N=46 Aedian Book Value Values for Differences) mmon Shares, Units & Warrants N=54 Aedian Book Value Values for Differences) values for Differences) values for Differences) values for Differences)	0 0183 -0 0084 (0 4636) 0 0196* -0 0099 (0 3856) 0 0132 0 0137 (1 0000) 0 0156** 0 0111 (0 7016)	0 0154 (0 4636) 0 006 0 0045 (1 0000) -0 0045 0.0348* (0 0971) 0.0041 0.0068 (1.0000)	0 0272 (0 4636) 0 0069 0 0356** (0 1931) 0 0009 0 0296** (0 6783) 0 0123 0 0356** (0 4435)	-0 0197** (0 2219) -0 005 -0 0124 (0 3856) -0 005 -0 0112 (0 6783) -0.005 -0 0036 (1 0000)	0 009 (0 8070) 0 0045 0 0137 (0 6644) 0 0118 0 008 (0 6783) -0 0035 0 0147 (0 7016)	-0 04411 (0 2219) -0 0053 -0 0153 (0 6644) -0 0125 -0 0048 (0 6783) -0 0125 0 0066 (0 7016)
mmon Snares N=33 Median Book Value Median Book Value Values for Differences) mmon Shares & Units N=42 Median Book Value Median Book Value Median Book Value Values for Differences) mmon Shares & Warrants N=46 Median Book Value Values for Differences) mmon Shares & Warrants N=54 Median Book Value Values for Differences)	0 0183 -0 0084 (0 4636) 0 0196* -0 0099 (0 3856) 0 0132 0 0137 (1 0000)	0 0154 (0 4636) 0 006 0 0045 (1 0000) -0 0045 0.0348* (0 0971)	0 0272 (0 4636) 0 0069 0 0356** (0 1931) 0 0009 0 0296** (0 6783) 0 0123 0 0356**	-0 0197** (0 2219) -0 005 -0 0124 (0 3856) -0 005 -0 0112 (0 6783) -0.005 -0 0036	0 009 (0 807c) 0 0045 0 0137 (0 6644) 0 0118 0 008 (0 6783)	-0 04411 (0 2219) -0 0053 -0 0153 (0 6644) -0 0125 -0 0048 (0 6783)

^{***}Significance at the 0.01 level

^{**}Significance at the 0.05 level

^{*}Significance at the 0.10 level

TABLE 3D. CHANGES IN OPERATING PERFORMANCE AROUND THE ISSUE YEAR BASED ON PRICE TO BOOK, INCLUDING DELISTED COMPANIES

Ratio of Operating Performance	to Book Value for the	e Year Relative to t	he Issue Year
Seasoned Equity Offening	-1	C	1
Common Shares N=39			
< Median Book Value	0.0975***	0.0628***	0.1043***
> Median Book Value	0.1174***	0.1151***	0 0921***
(p-Values for Differences)	(0.1153)	(0.2606)	(0.4997)
Common Shares & Units N=50			
< Median Book Value	0.1006***	0.0695***	0.0999***
> Median Book Value	0.1165***	0 0822***	0.0820***
(p-Values for Differences)	(0 4260)	(0.6906)	(0 4260)
Common Shares & Warrants N=59			
< Median Book Value	0.1088***	0.0959***	0.1053***
> Median Book Value	0 1420***	0.1373***	0.1178***
(p-Values for Differences)	(0 0172)	(0.0437)	(0.5823)
Common Shares, Units & Warrants N≠72			
< Median Book Value	0.1102***	0 1001***	0.1052***
> Median Book Value	0.1415***	0.1194***	0 0989***
(p-Values for Differences)	(0.0967)	(0.1839)	(0.5065)
.			
Initial Public Offerings N=23			
< Median Book Value	0 1517***	0 1375***	0 1235***
> Median Book Value	0.2023***	0 1698***	0.1816***
(p-Values for Differences)	(0 1448)	(0.7705)	(0 0412)
No. Comment Co			1
Non-Seasoned Equity Offening	.1		
Common Shares N≈39	0.085 ****	0 0769***	0 0883***
< Median Book Value	0 0864***	0 0950**	0 1154***
> Median Book Value (p-Values for Differences)	(0 1153)	(0 2069)	(0 0429)
(p-values (Cr Differences)	(0 1133)	(0 2003)	(6 6 4 6 5)
Common Snares & Units N=50			
< Median Book Value	0 0779***	0 0740***	0 0892***
> Median Book Value	0 1034***	0 0878***	0 1059***
(p-Values for Differences)	(0 2325)	(0 2325)	(0 0201)
Common Shares & Warrants N=59	0.0067***	0 0779***	0 0840***
< Median Book Value	0.0867***	0 0878***	0 1192***
> Median Book Value (p-Values for Differences)	0 1022***	(0.3593)	(0.0437)
(p-values (or pinerences)	10 30257	10 0000	
Common Shares, Units & Warrants N=72			
< Median Book Value	0 085	0 0774***	0 0892***
> Median Book Value	0 0865***	0 0866***	0 1114***
(p-Values for Differences)	(1 0000)	(0 5065)	(0.0463)
Inibal Public Offenngs N=23		0.1745***	A 1511***
< Median Book Value	0 1300***	0 1245*** 0 1372***	0 1511*** 0 1031
> Median Book Value	0.2109*** (0.3816)	(0 7705)	(0 1448)
(p-Values for Differences)	(0.3070)	10 7 7 00 7	
Matched Seasoned Equity Offening	-1	С	1
Common Snares N=39			
< Median Book Value	0 0023	-0.018	-0 0094
> Median Book Value	0.0222	0 0320**	-0 0122
(p-Values for Differences)	(0.2606)	(0.1153)	(G 4997)
Common Shares & Units N=50	0.0034	0.014	-0 000g
< Median Book Value	0.0071	0 014 0 0360**	-0 0098 -0 0112
> Median Book Value	0 0004 (0 6906)	(0 1114)	(0 6906)
(p-Values for Differences)	(0.0300)	(0.11.7)	\- /
Common Shares & Warrants N=59			
< Median Book Value	-0 0011	0 0125	-0 0029
> Median Book Value	0.0446***	0 0485***	0.013
(p-Values for Differences)	(0 0060)	(0 0437)	(0 8545)
Common Shares, Units & Warrants N=72			0.00
< Median Book Value	0 006	0.014	-0.001
< Median Book Value > Median Book Value	0.0355***	0 0478***	0 0087
< Median Book Value			
< Median Book Value > Median Book Value (p-Valuas for Cimerences)	0.0355***	0 0478***	0 0087
< Median Book Value > Median Book Value (p-Valuas for Cimerences) Initial Public Offenings N=23	0.0355*** (0.0967)	0 0478*** (0 0201)	0 0087
< Median Book Value > Median Book Value (p-Valuas for Cimerences) Initial Public Offenngs N=23 < Median Book Value	0.0355*** (0.0967) 0.0168*	0 0478***	0 0087 (0 7398)
< Median Book Value > Median Book Value (p-Values for Cimerences) Initial Public Offenings N=23	0.0355*** (0.0967)	0 0478*** (0 0201) 0 017	0 0087 (0 7398) -0 0176
< Median Book Value > Median Book Value (p-Valuas for Cimarences) Initial Public Offenngs N=23 < Median Book Value > Median Book Value	0.0355*** (0.0967) 0.0168** 0.0009	0 0478*** (0 0201) 0 017 -0 0171	0 0087 (0 7358) -0 0176 0 0855

^{***}Significance at the 0.01 level

[&]quot;Significance at the 0.05 level

^{*}Significance at the 0.10 level

TABLE 4A. CHANGES IN OPERATING PERFORMANCE FROM YEAR I TO YEAR J BASED ON ISSUER'S SIZE

Channe	n Operating Performan	ce to Book Value fro	om Year i to Year i	
Seasoned Equity Offening	-2 to -1	-1 to +1	-1 to +2	-1 to +3
Common Shares N=33				
< Median Book Value	-0.0119	-0 0126	-0.0168	-0 0167
> Median Book Value	-0 0052	-0 0038	0 0104	0 0099
(p-Values for Differences)	(0 8070)	(0 4636)	(0.2219)	(0 4636)
Common Shares & Units N=42				
< Median Book Value	-0.0068	-0.0217*	-0.0260	-0 008
> Median Book Value	-0.0024	-0.0035	0.0096	0.0086
(p-Values for Differences)	(1 0000)	(0.3145)	(0 0827)	(0 6644)
Common Shares & Warrants N=46				
< Median Book Value	-0 0109	-0 0117	-0 0181	-0 0193
> Median Book Value	-0.0044	-0 0035	0 0093	0 0129
(p-Values for Differences)	(0 4068)	(0 6783)	(0.0971)	(0 4068)
Common Shares, Units & Warrants N≠54				
< Median Book Value	-0 0089	-0 0138	-0.0204	-0 0036
> Median Book Value	-0.0012	-0 0028	0.0093	0 0129*
(p-Values for Differences)	(0.7016)	(0.4435)	(0 0554)	(0.7016)
total Dubi o Ottomora N. 10				
Initial Public Offennes N=19	0 0634*	-0 0450**	-0 0774***	-0 07 82***
< Median Book Value > Median Book Value	0 0297**	-0 0004	-0 0069	-0 0120
> Median book value (p-Values for Differences)	(0.3368)	(0 0250)	(0.0040)	(0 1094)
Non Seasoned Equity Offening	-2 to -1	-1 to +1	-1 to +2	-1 to +3
Common Snares N=33	0.0114	-0 0148	-0 0152	0 0450
< Median Book Value	-0 0114 0 0071	0 0152	0.0167	0 0228*
> Median Book Value (p-Values for Differences)	(0 2219)	(0.0872)	(0.8070)	(0.0872)
(p-values to bindiences)	(0 22 . 3)	(0 00.2)	(0.00)	(4.00.0)
Common Shares & Units N=42				
< Median Book Value	-0 0060	-0 0079	0 0123	0 0464 0 0110
> Median Sook Value	0 0016	-0 0005 (0 6644)	0 0113 (1 0000)	(0.0827)
(p-Values for Differences)	(0 3856)	(0 6644)	(10000)	(0.0027)
Common Shares & Warrants N=46				
< Median Book Value	-0.0017	-0 0109	0 0197	0 0382
> Median Book Value	0 0072	0 0063	0 0113	0 0202*
(p-Values for Differences)	(0.6783)	(0 4068)	(0.4068)	(0.2134)
Common Shares, Units & Warrants N=54				
< Median Book Value	-0.0014	-0 0079	0 0182	0 0360
> Median Book Value	0 0027	0 0047	0 0081	0.0144
(p-Values for Differences)	(1.0000	(0.7016)	(0 699C;	(0.1254)
Initial Public Offenngs N=19				
< Median Book Value	0 0779***	-0 1045**	-0 1258***	-0 1151***
> Median Book Value	0.0011	-0 0005	-0 0042	0.0156
(p-Values for Differences)	(0.0250)	(0 1094)	(0 0250	(0.0040)
Matched Seasoned Equity Offering	-2 to -1	-1 to +1	-1 to +2	-1 10 +3
Common Shares N=33				
< Median Book Value	-0 0074	-0 0295*	-0 0225	-0 0208
> Median Book Value	-0 0189	-0 0052	-0.0041	-0 0155
(p-Values for Differences)	(0 4636)	(0 8070)	(0.8070)	(0.8070)
Common Shares & Units N=42				
< Median Book Value	-0 0074	-0 0447***	-0 0223	-0 0164
> Median Book Value	-0 0070	0 001C	0 0086	-0 0005
(p-Values for Differences)	(0 6644)	(0 0827)	(0 3856)	(C 6644)
Common Shares & Warrants N=46				
< Median Book Value	-0 0088	-0 0118	-0 0031	-0 0124
> Median Book Value	-0 0110	-0.0029	0.0014	-0 0121
(p-Values for Differences)	(1 0000)	(0 4068)	(1 0000)	(1 0000)
Common Shares, Units & Warrants N≖54				
< Median Book Value	-0 0074	-0.0215*	-0 0031	0 0011
> Median Book Value	-0 0079	0 001	0 0086	-0 0005
(p-Values for Differences)	(1.0000)	(0.1254)	(0.7016)	(1 0000)
Initial Public Offenngs N=19	-0 0009	0 0053	0 0034	-0 0127
> Median Book Value < Median Book Value	0.0265*	-0 0092	0 0065	-0 0433
(p-Values for Differences)	(0.1094)	(0 7489)	(0 7489)	(0 3368)
				*C

^{***}Significance at the 0.01 level

[&]quot;Significance at the 0.05 level

^{*}Significance at the 0-10 level

TABLE 4B. CHANGES IN OPERATING PERFORMANCE FROM YEAR I TO YEAR J BASED ON ISSUER'S SIZE, INCLUDING DELISTED COMPANIES

Change in One	rating Performance to Book Value from Year i to	Year:
Seasoned Equity Offening	-1 to +1	
Common Shares N=39		
< Median Book Value	-0.0505	
> Median Book Value	-0.0031	
(p-Values for Differences)	(0 2606)	
Common Shares & Units N=50	-0 0126	
< Median Book Value	-0.0028	
> Median Book Value (p-Values for Differences)	(0 4260)	
D. 1999 in consumos	,,	
Common Shares & Warrants N=59		
< Median Book Value	0 0052	
> Median Book Value	-0.0025	
(p-Values for Differences)	(0 5823)	
Common Shares, Units & Warrants N=72		
< Median Book Value	0.0091	
> Median Book Value	-0 0028	
(p-Values for Differences)	(0 3190)	
O O		
Initial Public Offenngs N=23	-0 0450**	
< Median Book Value > Median Book Value	-0 0004	
(p-Values for Differences)	(0.0087)	
Non Seasoned Equity Offening	-: 10 +1	
Common Shares N=39		
< Median Book Value	-0 0111	
> Median Book Value	0 0152	
(p-Values for Differences)	(0 2606)	
Common Shares & Units N=50		
< Median Book Value	0.0019	
> Median Book Value	-0 0005	
(p-Values for Differences)	(1 0000)	
•		
Common Shares & Warrants N=59	9 9995	
< Median Book Value	-0 0005 0 00 6 0	
> Median Book Value	(0.5823)	
(p-Values for Differences)	10 3023;	
Common Shares, Units & Warrants N=72		
< Median Book Value	0 0046**	
> Median Book Value	-0 0084	
(p-Values for Differences)	(Q 3190 _/	
Initial Public Offenings N=23		
< Madian Book Value	-0 0344°	
> Median Book Value	-0 0053	
(p-Values for Differences)	(0.1448)	
Matched Seasoned Equity Offering	-1 to +1	
Common Shares N#39	-0 0082*	
< Median Book Value > Median Book Value	-0 0052	
(p-Values for Differences)	(0 8220)	
Common Shares & Units N=50		
< Median Book Value	-0 0377***	
> Median Book Value	0.0010	
(p-Values for Differences)	(0 0466)	
Common Shares & Warrants N=59		
< Median Book Value	-0 0033	
> Median Book Value	-0 0006	
(p-Values for Differences)	(0 8545;	
Common Charge Linute & Minmonto 5:-79		
Common Shares, Units & Warrants N=72 < Median Book Value	-0 0117**	
> Median Book Value	-0.0003	
(p-Values for Differences)	(0.3190)	
·	•	
Initial Public Offenings N=23	00194	
< Median Book Value	0 0184 -0 0092	
> Median Book Value (p-Values for Differences)	(0.7705)	
(h. Amara ioi minera ices)	13.7744	
***Significance at the 0.01 level	"Significance at the 0.05 level	*Significance at the 0-10 leve
ergringered at the electricity	- •	-

^{***}Significance at the 0.01 level

^{**}Significance at the 0.05 leve.

TABLE 4C. CHANGES IN OPERATING PERFORMANCE AROUND THE ISSUE YEAR BASED ON ISSUER'S SIZE

seasoned Equity Offenng	perating Performance to -2	-1	C	7	2	3
ommon Shares N=33						
Median Book Value	0.0731**	0.1009**	0.0323**	0.0406	0 0839*	0 1059
Median Book Value	0 1108***	0 1116***	0.1060***	0.1052***	0.1087***	0 1211
-Values for Differences)	(0.4636)	(0.2219)	(0.0279)	(0 2219)	(0 4636)	(0 4636)
mmon Shares & Units N≖42						
Aedian Book Value	0 0899***	0.1070***	0.0325***	0.0356*	0 0650**	0 1045**
ledian Book Value	0.1036***	0.1105***	0 1001	0.1028***	0.1065***	0 1171***
Values for Differences)	(0.3856)	(0 6644)	(0 0301)	(0.0301)	(0 1220)	(0 6644)
ommon Shares & Warrants N=46						
Median Book Value	0 0934***	0 1070***	0 0578***	0 0911**	0 1084**	0 0981
Median Book Value	0.1116***	0 1145***	0.1062***	0.1067***	0 1156***	0 1214***
-Values for Differences)	(0.6783)	(0 6783)	(0.0971)	(0 4068)	(1 0000)	(0 2134)
ommon Shares, Units & Warrants N=54						
Wedian Book Value	0 0919***	0 1105***	0.0578***	0 0706***	0 0947***	0 0981**
Median Book Value	0 1078***	0 1114***	0 1062***	0 1052***	0 1109***	0 1199***
Values for Differences)	(0 2504)	(1.0000)	(0 1254)	(0 2504)	(0 7016)	(0.2504)
on Bubba Officence N-19						
bal Public Offenngs N∞19 Median Book Value	0 1415***	0 2071***	0 1450***	0 1377***	0 1169***	0 1381**
Median Book Value	0 1127***	0 1482***	0 1535***	0 1431***	0 1345***	C 1154***
Values for Differences)	(0.7489)	(0.1094)	(0.7489)	(0.7489)	(0.7485)	(0.3368)
				7		
M-Seasoned Equity Offenng	-2	-1	<u> </u>			 _
ommon Shares N≖33 Median Book Value	0 0916***	0 0831***	0 0521	0 0950***	0 0771**	0 1060***
Median Book Value	0.0965***	0 1104***	0 1028***	0 1083***	0 1012***	G 1099***
vedian book value -Values for Differences)	(0 8070)	(0 2219)	(0 1142)	(0 8070)	(0.1372)	(0.4567)
ommon Shares & Units N=42	0 0652***	0.0718***	0 0436	0 0968***	0.0753**	0 1054***
Median Book Value	0 0032	0 1026***	0 0918***	0 0929***	0.0973***	0 1021***
Median Book Value ·Values for Differences)	(0 0827)	(0.0827)	(0 1931)	(0 6644)	(0.3856)	(1 0000)
1 MIG 3 (O) (D) (1 MIG 10 MIG 2)	(0 0027)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(= :==:/	·= =====		
ommon Shares & Warrants N=46	A 8885	0.0770	0.0540*	0.0023***	0.0052***	0 1052***
Median Book Value	0 0800	0 0772***	0 0549*	0 0922***	0.0968***	0.1052
Median Book Value	0 0990***	0 1070***	0 0950***	0.1016***	G 1101*** (0 4068:	(0.4068
Values for Differences)	(C 2134)	(0 2134)	(0.0381)	(0.5747)	10 4000:	(0 4000
mmon Shares, Units & Warrants N=54						A + 222
Median Book Value	0.0670***	0 0737***	0 0530**	0 0903***	0.0890***	0 1032***
Median Book Value	0 0955***	0 1026***	0 0915***	0 0943***	G 1044***	0 1095***
Values for Differences i	(0.0532)	(0.0554	(0 0554)	(G 7016)	(C 7016)	(0.2460
tai Public Offenngs N=19						
Median Book Value	0 1241***	0.2109***	0 169?***	0 1254	0 0841***	0 0983***
Median Book Value	0 1181***	0 1300***	0 1372***	0 1154***	0 1100***	0 1159***
-Values for Differences:	(0 0953.	(0.0250	(0.7489)	(0.7489)	(C 7489)	(0.7489
atched Seasoned Equity Offening	-2	-1	с	,	2	3
mmon Shares N=33						
Median Book Value	-0 0240	0 0203	0 0391	-0.01717	-C 0C23	-0 0455
Median Book Value	0 0155	0 0023	0 0059	-G 0102	0.0142	-C C*29
Values for Differences)	(0 1256)	(0 8070)	(0 2219)	(0.8676)	(0.8070)	(0.1874)
mmon Shares & Units N=42						
Median Book Value	0 0111	0 0091	0.0431	-0 0227**	-0 0119	-0 0171
Median Book Value	0 0131	0 0041	0 0091	-0 0025	0 0160	0 006 0
Values for Differences)	(0 6644)	(0 6644)	(0 0827)	(0 3856)	(0 1931)	(0 3856)
ommon Shares & Warrants N=46						
mmon Shares & Warrants N=40 Median Book Value	0 0121	0 0261	0 0564**	-0 0056	0 0063	-0 0056
Median Book Value	0 0131	-0 0028	0 0019	-0 0087	0 01 18	-0 0104
	(1 0000)	(0.2134)	(0.0381)	(0 6783)	(1 000G)	(1 0000±
Values for Differences)						
			0 0502**	-0 0024	-0 0073	-0 0029
ommon Shares, Units & Warrants N≖54	0.0170	0.0400	U UDUZ -		0.0126	0.0003
mmon Shares, Units & Warrants N≖54 Median Book Value	0 0178	0.0108	0.0030	_O nnsn		
ommon Shares, Units & Warrants N±54 Median Book Value Median Book Value	0 0120	0.0012	0.0039	-0 0050 (1 0000)		
-Values for Differences) ommon Shares, Units & Warrants N≖54 Median Book Value Median Book Value -Values for Differences)			0.0039 (0.0554)	-0 0050 (1 0000)	(0 4435)	(1 0000)
ommon Shares. Units & Warrants N≖54 Median Book Value Median Book Value	0 0120 (0 7016)	0.0012 (0 4435)	(0.0554)	(1 0000)	(0 4435)	(1 0000)
ommon Shares, Units & Warrants N=54 Median Book Value Median Book Value -Values for Differences) tai Public Offenngs N=19 Median Book Value	0 0120 (0 7016) 0 0005	0.0012 (0 4435) 0 0009	(0.0554) -0.0370	(1 0000)	(0 4435) 0 0025	(1 0000)
ommon Shares, Units & Warrants N≖54 Median Book Value Median Book Value Values for Differences) tal Public Offerings N≖19	0 0120 (0 7016)	0.0012 (0 4435)	(0.0554)	(1 0000)	(0 4435)	(1 0000)

^{***}Significance at the 0.01 leve

[&]quot;Significance at the 0.05 level

^{*}Significance at the 0-10 leve

TABLE 4D. CHANGES IN OPERATING PERFORMANCE AROUND THE ISSUE YEAR BASED ON ISSUER'S SIZE, INCLUDING DELISTED COMPANIES

	nance to Book Value for th			
Seasoned Equity Offening	.1	C		
Common Shares N#39				
< Median Book Value	0 0807*	0 0323**	0 0306	
Median Book Value	0 1174***	0 1060***	0 1052***	
(p-Values for Differences)	(0 1153)	(0.1153)	(0 1153)	
Common Shares & Units N≖50				
c Median Book Value	0 0908***	0 0449***	0.0412*	
> Median Book Value	0.1133***	0 1065***	0.1052***	
(p-Values for Differences)	(0 2325)	(0 0466)	(0 0169)	
Common Channel & Mannello N. 50				
Common Shares & Warrants N=59	0.1222***	0 1151***	0.1050***	
< Median Book Value				
> Median Book Value (p-Values for Differences)	0.1236*** (0.8545)	0.1196*** (0.8545)	0.1147*** (0.3593)	
primos or one erces)	(5.55.5)	(0 55-5)	(0.0000)	
Common Shares, Units & Warrants N±72				
< Median Book Value	0 0766***	0 0657***	0.0880***	
Median Book Value	0 1180***	0 1145***	0 1087***	
p-Values for Differences)	(0 7398)	(0 7398)	(0 3190)	
nital Public Offerings N=23				
k Median Book Value	0 1789***	0 1450***	0 1377***	
> Median Book Value	0 1517***	0 1676***	0 1431***	
p-Values for Differences)	(0.3816)	(0.3816)	(0.7705)	
Non-Seasoned Equity Offering	.,	С	•	
Common Shares N±39				
c Median Book Value	0 0831**	0 0478	0 0950**	
> Median Book Value	0 1104***	0 1028***	0 1083***	
(p-Values for Differences)	(0 1153)	(0.0664)	(0 8220)	
C				
Common Shares & Units N=50	0 0715***	0.0500	0 1005***	
k Median Book Value			0 0939***	
Median Book Value	0 1025***	0.0918		
(p-Values for Differences)	(0.0169)	(0 1114)	(0.1891)	
Common Shares & Warrants N=59				
k Median Book Value	0 0752***	0.0736**	0 0986***	
> Median Book Value	0 1104***	0 0958***	0 1083***	
(p-Values for Differences)	(0.006€)	(0.0122)	(0.8545)	
Common Shares, Units & Warrants %=72				
K Median Book Value	0.0661***	0.0735***	C 1156***	
> Median Book Value	0 1026***	0 0893***	0 0943***	
p-Values for Differences)	(0.0009)	(0.0201)	(C 0967)	
Initial Public Offenngs N=23	0 1589***	0.1301***	0 1288*	
k Median Book Value		0 1301*** 0 1372***	0 1154***	
Median Book Value	0 1300***			
p-Values for Differences)	(0.3816)	(0.7705)	(0.7705)	
Matched Seasoned Egwin, Offening	(0.3816)	(0 7705)		
Matched Seasoned Equity Offening Common Shares N=39	(0.3816)	(0 7705)		
Matched Seasoned Egwin, Offening Common Shares N=39 r Median Book Value	(C 3816) -1	(0 7705) C 0 0595*	(0 7705)	
Matched Seasoned Egwin, Offening Common Shares N=39 k Median Book Value Median Book Value	(0 3816)	(0 7705) C	-0 0171	
Matched Seasoned Equity Offening Common Shares N=39 k Median Book Value b Median Book Value p-Values for Differences	(0.3816) -1 0.0222 0.0050	(0 7705) C 0 0595* 0 0090	-0 0171 -0 0072	
Matched Seasoned Equity Offening Common Shares N=39 k Median Book Value Median Book Value p-Values for Differences Common Shares & Units N=50	0 0222 0 0060 0 862)	0 0595° 0 0090 0 0429	-0 0171 -0 0072 (0 4997)	
Matched Seasoned Eguity Offening Common Shares N=39 k Median Book Value b Median Book Value p-Values for Differences - Common Shares & Units N=50 k Median Book Value	0 0222 0 0060 0 882)	0 07705) C 0 0596* 0 0090 0 0429.	-0 0171 -0 0072 (0 4997) -0 0194**	
Matched Seasoned Eguity Offening Common Shares N=39 k Median Book Value p-Values for Differences Common Shares & Units N=50 k Median Book Value Median Book Value	0 0222 0 0060 0 862)	0 07705) C 0 0595* 0 0090 0 0429. 0 0502* 0 0126	-0 0171 -0 0072 (0 4997) -0 0194** 0 0011	
Matched Seasoned Eguity Offening Common Shares N=39 s Median Book Value p-Values for Differences Common Shares & Units N=50 s Median Book Value h Median Book Value	0 0222 0 0060 0 882)	0 07705) C 0 0596* 0 0090 0 0429.	-0 0171 -0 0072 (0 4997) -0 0194**	
Matched Seasoned Equity Offening Common Shares N=39 k Median Book Value Median Book Value p-Values for Differences Common Shares & Units N=50 k Median Book Value Median Book Value p-Values for Differences)	0 0222 0 0060 0 862)	0 07705) C 0 0595* 0 0090 0 0429. 0 0502* 0 0126	-0 0171 -0 0072 (0 4997) -0 0194** 0 0011	
Matched Seasoned Equity Offening Common Shares N=39 s Median Book Value b Median Book Value p-Values for Differences Common Shares & Units N=50 s Median Book Value b Median Book Value p-Values for Differences) Common Shares & Warrants N=59	0 0222 0 0060 0 862)	0 07705) C 0 0595* 0 0090 0 0429. 0 0502* 0 0126	-0 0171 -0 0072 (0 4997) -0 0194** 0 0011	
Matched Seasoned Equity Offening Common Shares N=39 Median Book Value p-Values for Differences Common Shares & Units N=50 Median Book Value p-Values for Differences) Median Book Value p-Values for Differences) Common Shares & Warrants N=59 Median Book Value	0 0222 0 0060 0 862 -0 0014 0 0119 (0 6906)	0 07705) C 0 0595* 0 0090 0 0429: 0 0502* 0 0126 0 0466;	-0 0171 -0 0072 (0 4997) -0 0194** 0 0011 (0 2325)	
Matched Seasoned Equity Offening Common Shares N=39 k Median Book Value p-Values for Differences Common Shares & Units N=50 k Median Book Value p-Values for Differences) Common Shares & Warrants N=59 k Median Book Value p-Values for Differences) Common Shares & Warrants N=59 k Median Book Value Median Book Value Median Book Value	0 0222 0 0050 0 882) -0 0014 0 0119 (0 6906)	0 0595*** 0 0595** 0 0590 0 0429 0 0502** 0 0126 0 0466)	-0 0171 -0 0072 (0 4997) -0 0194** 0 0011 (0 2325)	
Matched Seasoned Equity Offening Common Shares N=39 Is Median Book Value Is Median Book Value Is Values for Differences Common Shares & Units N=50 Is Median Book Value Indian Book Value	0 0222 0 0060 0 882, -0 0014 0 0119 (0 6906) 0 0337** 0 0060*	0 0595** 0 0595* 0 0090 0 0429 0 0502** 0 0126 0 0466) 0 0625*** 0 0085	-0 0171 -0 0072 (0 499") -0 0194"* 0 0011 (0 2325) 0 0220 -0 0072	
Matched Seasoned Equity Offening Common Shares N=39 k Median Book Value p-Values for Differences Common Shares & Units N=50 k Median Book Value p-Values for Differences) Common Shares & Warrants N=59 k Median Book Value p-Values for Differences) Common Shares & Warrants N=59 k Median Book Value p-Values for Differences) Common Shares & Warrants N=59 k Median Book Value p-Values for Differences)	0 0222 0 0050 0 882) -0 0014 0 0119 (0 6906) 0 0337** 0 0060* (0 0437)	0 0595 0 0090 0 0429 0 0502 0 0126 0 0466) 0 0625 0 0085 0 0018)	-0 0171 -0 0072 (0 4997) -0 0194** 0 0011 (0 2325) 0 0220 -0 0072 (0 1994)	
Matched Seasoned Equity Offening Common Shares N=39 k Median Book Value p-Values for Differences Common Shares & Units N=50 k Median Book Value p-Values for Differences) Common Shares & Warrants N=59 k Median Book Value p-Values for Differences) Common Shares & Warrants N=59 k Median Book Value p-Values for Differences) Common Shares & Warrants N=72 k Median Book Value p-Values for Differences)	0 0222 0 0050 0 082, 0 0814 0 0119 0 6906) 0 0337** 0 0060* (0 0437)	0 0595*** 0 0595*** 0 0502** 0 0502** 0 0466) 0 0625*** 0 0085 (0 0018)	-0 0171 -0 0072 (0 499") -0 0194" 0 0011 (0 2325) 0 0220 -0 0072 (0 1994)	
Matched Seasoned Equity Offening Common Shares N=39 Is Median Book Value In Wedian Book Value	0 0222 0 0060 0 862; -0 0014 0 0119 (0 6906) 0 0337** 0 0060* (0 0437)	0 0595°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°	-0 0171 -0 0072 (0 4997) -0 0194** 0 0011 (0 2325) 0 0220 -0 0072 (0 1994)	
Matched Seasoned Equity Offening Common Shares N=99 < Median Book Value p-Values for Differences. Common Shares & Units N=50 < Median Book Value p-Values for Differences) Common Shares & Warrants N=59 < Median Book Value p-Values for Differences) Common Shares & Warrants N=59 < Median Book Value p-Values for Differences) Common Shares & Warrants N=72 < Median Book Value > Median Book Value > Median Book Value > Median Book Value > Median Book Value	0 0222 0 0050 0 082, 0 0814 0 0119 0 6906) 0 0337** 0 0060* (0 0437)	0 0595*** 0 0595** 0 0502** 0 0502** 0 0466) 0 0625*** 0 0085 0 0018)	-0 0171 -0 0072 (0 499") -0 0194" 0 0011 (0 2325) 0 0220 -0 0072 (0 1994)	
Matched Seasoned Equity Offening Common Shares N=39 k Median Book Value p-Values for Differences Common Shares & Units N=50 k Median Book Value p-Values for Differences) Common Shares & Warrants N=59 k Median Book Value p-Values for Differences) Common Shares & Warrants N=59 k Median Book Value p-Values for Differences) Common Shares & Warrants N=72 k Median Book Value p-Values for Differences) Common Shares, Units & Warrants N=72 k Median Book Value p-Values for Differences)	0 0222 0 0060 0 862; -0 0014 0 0119 (0 6906) 0 0337** 0 0060* (0 0437)	0 0595°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°	-0 0171 -0 0072 (0 4997) -0 0194** 0 0011 (0 2325) 0 0220 -0 0072 (0 1994)	
Matched Seasoned Equity Offening Common Shares N=39 k Mediah Book Value p-Values for Differences Common Shares & Units N=50 k Mediah Book Value p-Values for Differences) Common Shares & Warrants N=59 k Mediah Book Value p-Values for Differences) Common Shares & Warrants N=59 k Mediah Book Value p-Values for Differences) Common Shares & Warrants N=72 k Mediah Book Value p-Values for Differences) Common Shares, Units & Warrants N=72 k Mediah Book Value p-Values for Differences) nkbal Public Offenings N=23	0 0222 0 0060 0 862; -0 0014 0 0119 (0 6906) 0 0337** 0 0060* (0 0437)	0 0595°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°°	-0 0171 -0 0072 (0 4997) -0 0194** 0 0011 (0 2325) 0 0220 -0 0072 (0 1994)	
Matched Seasoned Eguin, Offening Common Shares N=39 < Median Book Value > Median Book Value (p-Values for Differences) Common Shares & Units N=50 < Median Book Value (p-Values for Differences) Common Shares & Warrants N=59 < Median Book Value (p-Values for Differences) Common Shares & Warrants N=59 < Median Book Value (p-Values for Differences) Common Shares, Units & Warrants N=72 < Median Book Value > Median Book Value Description of the Common Shares & Warrants N=72 < Median Book Value Description of the Common Shares & Warrants N=23 < Median Book Value Description of the Common Shares & Warrants N=23 < Median Book Value Description of the Common Shares & Warrants N=23 < Median Book Value Description of the Common Shares & Warrants N=23 < Median Book Value Description of the Common Shares & Warrants N=23 < Median Book Value Description of the Common Shares & Warrants N=23	0 0222 0 0060 0 882; -0 0014 0 0119 (0 6906) 0 0337** 0 0060* (0 0437) 0 0285* 0 0082** (0 1839)	0 0595*** 0 0502** 0 0502** 0 0429; 0 0502** 0 0126 (0 0466) 0 0625*** 0 0085 (0 0018) 0 0599*** 0 0088 (0 0009)	-0 0171 -0 0072 (0 499") -0 01941" 0 0011 (0 2325) 0 0220 -0 0072 (0 1994) 0 0118 -0 0025 (0 7398)	

^{***}Significance at the 0.01 level

[&]quot;Significance at the 0.05 level

^{*}Significance at the 0.10 leve

TABLE 5A. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES IN CONSUMER PRODUCTS INDUSTRY

Common	Shares	N-A
COMMISSION	JIMITS	1420

Panel	A Change in Operatii	ng Performance t	to Book Value fro	m Year i to Year j	
Consumer Products	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Seasoned Equity Offering					
Mean	0.0659	-0.1787	-0.1810	-0.2330	
Median	-0.0231	-0.0094	-0.0185	-0.0071	
Non Seasoned Equity Offering					
Mean	-0 1010	0 0698	0.0128	0 0459	
Median	-0.0192	0.0327	0.0771	0.0546	
Matched Seasoned Equity Offering					
Mean	0.1669	-0 2485	-0 1938	-0.2789*	
Median	-0 0014	-0 0118	-0.0781	-0 0855**	

Panel B Chan	ge in Operating Performance to Book Value from Year i to Ye	arj
Consumer Products	-1 to +1	
Seasoned Equity Offering		
Mean	-0 1181	
Median	0 0060	
Non Seasoned Equity Offering		
Mean	0 0945	
Median	0 0453	
Matched Seasoned Equity Offering		
Mean	-0 2125	
Median	-0 0095	

Common Shares N=8

	C Ratic of Operating					3
Consumer Products	<u>·2</u>	-1	<u> </u>			J
Seasoned Equity Offering						
Mean	-0 0580	0 0079	-0 0335	-0 1707	-0 173	-0 225 0
Median	0 1260	0 1122	0 0636	-0 0143	0 0600	0 1137
Non Seasoned Equity Offering						
Mean	-0 0246	-0 1256	-0 1093	-0 0558	-0 1128	-0 0860
Median	0 0458	0 0681	0 042	0 0831	C 0746	0 1092
Matched Seasoned Equity Offering						
Mean	-0 033-4	0 1335	0 0757**	-0 1150	-0 0603	-0 1454
Median	0.0610	0 0749	0 0769*	0.0187	-0 0633	-0 0389

Canada Banda etc	-1	Book Value for th		
Consumer Products				
Seasoned Equity Offering				
Mean	-0 0442	-0 0451	-0 1622	
Median	0 1088	0 0228	-0 0944	
Non Seasoned Equity Offering				
Mean	-0 1737	-0 1232	-0 0792	
Median	0 0570	0 0394	0 0418	
Matched Seasoned Equity Offering				
Mean	0 1295	0 0780**	-0 0831	
Median	0 0759*	0 0829**	0 0656	

^{**}Significance at the 0.01 level *Significance at the 0.05 level *Significance at the 0.10 level

TABLE 5B. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES IN INDUSTRIAL PRODUCTS INDUSTRY

^	on Shares	AI . 4 0
Comm	on Snare:	N=10

CONTRION SHEETS IV-10					
Panel A	Change in Operation	ng Performance to	o Book Value fro	m Year i to Year j	
Industrial Products	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Seasoned Equity Offening					-
Mean	-0.0104	-0.0208	-0.0088	-0 0439	
Median	-0 0199	-0 0381	-0.0466	-0.0041	
Non Seasoned Equity Offering					
Mean	-0.0246	0 0365	-0 0141	0 0421	
Median	0.0002	-0.0179	0.0119	0.0417	
Matched Seasoned Equity Offering					
Mean	0 0143	-0.0573°	0 0052	-0 0860	
Median	-0 0088	-0.0479*	-0 0192	-0 0072	

Panel B Chang	Panel B. Change in Operating Performance to Book Value from Year i to Year				
Industrial Products	-1 to +1				
Seasoned Equity Offening					
Mean	-0 0205				
Median	-0 0381				
Non Seasoned Equity Offering					
Mean	0 0410				
Median	-0 0127				
Matched Seasoned Equity Offening					
Mean	-0 0615* *				
Median	-0 0479**				

Common Shares N-18

Panel C. Ratio of Operating Performance to Book Value for the Year Relative to the Issue Year						
Industrial Products	-2	- 1	C		2	3_
Seasoned Equity Offering						
Mean	0 1034***	0 0930***	0 0842***	0 0722***	0 0842***	0 0491
Median	C 1126***	0 1128**	0 0786***	0 0847***	0 1008***	0 1114***
Non Seasoned Equity Offering						
Mean	0 1035***	0 0789°	0 0182	0 1154***	0 06 49	0 1210***
Median	0 1180***	0 1192***	0 0656	0 0968***	0 0785***	c c982***
Matched Seasoned Equity Offering						
Mean	-0 0002	C C141	0 0660**	- 0 0 4 32*	0 0193	-0.0719
Median	0.0122	0.0017	0 0565**	-0 0098	0 0254	0 0060

Panei D. Hatio	of Operating Performance to B	ook value for the	Year Relative to the Issue Ye	d:
ndustnal Products	<u>-1</u>	0	1	
Seasoned Equity Offering			-	
Mean	0 0919***	0 0845***	0 0714***	
Median	0 1128***	0 0786***	0 0847***	
Non Seasoned Equity Offering				
Mean	0 0679*	0 0153	0 1089***	
Median	0 1086**	0 0469	0 0968***	
Matched Seasoned Equity Offering				
Mean	0 0240	0 0693**	-0 0375*	
Median	0.0180	0 0565**	-0 0098	

[&]quot;"Significance at the 0.01 level "Significance at the 0.05 level "Significance at the 0.10 level

TABLE 5C. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES IN NATURAL RESOURCES INDUSTRY

		-			
Com	mon	SIL	ros	N=2	ı

Panel A. Change in Operating Performance to Book Value from Year i to Year j					
Natural Resources	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Seasoned Equity Offering					
Mean	0.0025	-0.0408**	-0.0049	-0.0087	
Median	-0 0119	-0.0168**	-0.0275	-0 0369	
Non Seasoned Equity Offering					
Mean	0.0035	-0.0250°	-0.0326°	0.0052	
Median	0.0073	-0.0148°	-0.0293	0 0285	
Matched Seasoned Equity Offering					
Mean	-0.0010	-0 0158	0.0278	-0.0139	
Median	-0.0295	-0 0052	0 01 19	-0 0299	

Panel B. Cha	Panel B. Change in Operating Performance to Book Value from Year i to Year j				
Natural Resources	-1 to +1				
Seasoned Equity Offering					
Mean	-0 0285*				
Median	-0 0126*				
Non Seasoned Equity Offening					
Mean	-0 0127				
Median	-0 0111				
Matched Seasoned Equity Offering					
Mean	-0 0158				
Median	-0 0052				

Common Shares N=21

Panel (Ratio of Operating F	Performance to E	look Value for th	e Year Relative	to the Issue Year	·
Natural Resources	-2	-1	C	•	2	3
Seasoned Equity Offering						
Mean	0 0758***	0 0783***	0 0188	0 0375	0 0734**	0 0696**
Median	0 0817***	0 0695***	0 0373*	0 0461**	0 0855**	0 0829**
Non Seasoned Equity Offering						
Mean	0 0946***	0 0981***	0 1101***	0 0731***	0 0655***	0 1033***
Median	0 0899***	0 0752***	0 0670***	0 0670***	0 0974***	0 1265***
Matched Seasoned Equity Offering						
Mean	-0 0168	-0.0198	-0 0913	-0 0356	0 0080	-6 0337
Median	0 0078	-0 0073	-0 0217	-0 0197	0.0113	-0 039G

Panei D. Ratio (of Operating Performance to E	look Value for the	e Year Relative to the Issue Ye	a:
Natural Resources	-1	0	1	
Seasoned Equity Offering				· ·
Mean	0 0828***	0 0394	0 0543**	
Median	0 0807***	0 0633***	0 0921***	
Non Seasoned Equity Offering				
Mean	0 0965***	0 1078***	0 0838****	
Median	0 0841***	0 0769***	0 0784***	
Matched Seasoned Equity Offering				
Mean	-0 0137	-0 0684	-0 0295	
Median	-0 0024	0 0065	-0 0197	

[&]quot;Significance at the 0 05 level 'Significance at the 0 10 level

TABLE 5D. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES IN 'OTHERS' INDUSTRY

^		Shan		~~
Lom	mon	SHAR	es n	=20

Common Shares M-20				
Panel A	Change in Operation	ng Performance t	o Book Value fro	m Year i to Year j
Other	-2 to -1	-1 to +1	-1 to +2	-1 to +3
Seasoned Equity Offering				
Mean	-0 0113	0 0191°	0 266°	0 0257**
Median	-0 0024	0 0007	0 0109**	0.0233**
Non Seasoned Equity Offening				
Mean	0 0039	0 0241**	0 0353**	0 0107
Median	0.0013	0 0229*	0.0208**	0 0202
Matched Seasoned Equity Offering				
Mean	-0.0172	-0 005	-0 0086	0.015
Median	-0.0102	0 0034	0 0007	-0 0005

Panel B. Change in Operating Performance to Book Value from Year i to Year j		
Other	-1 to +1	
Seasoned Equity Offening		
Mean	-0 0026	
Median	-0 0027	
Non Seasoned Equity Offering		
Mean	0 0069	
Median	0 0190	
Matched Seasoned Equity Offering		
Mean	-0 0095	
Median	0 0034	

Common	Snares	N=ZU

	Ratio of Operating F					
Other	-2	-1	U		2	
Seasoned Equity Offering						
Mean	0 1228***	0 1096***	0 1054***	0 1286***	0 1362***	0 1352***
Median	0 1031***	0 1142***	0 1133***	0 1269***	0 1322***	0 1242***
Non Seasoned Equity Offering						
Mean	0 1039***	C 1078***	0 1022***	0 1319***	0 1431***	0 1185***
Median	0 0948***	0 1053***	0 1034***	0 1358***	C 1259***	0 1092***
Matched Seasoned Equity Offering						
Mean	0 0189	0 0017	0 0032	-0 0C33	-0 0063	0.0167
Median	0.0186	-0 0038	0 0039	-0 0062	0.0116	-0.0161

Panel D. Ratio of Operating Performance to Book Value for the Year Relative to the Issue Year					
Other	-11	0	1		
Seasoned Equity Offering				-	
Mean	0 0915***	0 1027***	0.0890**		
Median	0 1142***	0 1164***	0 1269***		
Non Seasoned Equity Offering					
Mean	0.1037***	0 0978***	0.1106***		
Median	0 1053***	0.1034***	0 1289***		
Matched Seasoned Equity Offering					
Mean	-0 0121	0 0049	-0 0216		
Median	-0 0038	0 0075	-0 0062		

[&]quot;Significance at the 0 05 level "Significance at the 0 10 level

TABLE 6A. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES AND UNITS IN CONSUMERS PRODUCTS INDUSTRY

Common Shares &	Linite	N±10
-----------------	--------	------

0	A Change in Consiste	a Dadamaa A	- Cook Makes to	- Vanc. to Vanc.	
	A Change in Operatir				
Consumer Products	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Seasoned Equity Offering					
Mean	0 0645	-0 1782	-0 1644	-0.2023	
Median	0.0040	-0 0694	-0 0583	-0 0431	
Non Seasoned Equity Offering					
Mean	-0.0784	0.0542	0 0117	0 0383	
Median	-0.0090	0 0136	0 0450	0 0511	
Matched Seasoned Equity Offering					
Mean	0 1428	-0.2324	-0 1761	-0 2405°	
Median	0 0208	-0 0551**	-0 0795	-0 0855**	

Panel B. Change in Operating Performance to Book Value from Year i to Year j				
Consumer Products	-1 to +1			
Seasoned Equity Offering				
Mean	-0 1287			
Median	-0 0247			
Non Seasoned Equity Offering				
Mean	0 0758			
Median	0 0201			
Matched Seasoned Equity Offering				
Mean	-0 2045			
Median	-0 0141*			

Common Shares & Units N=10

Panel C Ratio of Operating Performance to Book Value for the Year Relative to the issue Year						
Consumer Products	-2	-:	Ċ	•	2	3
Seasoned Equity Offering						
Mean	-0 0214	C 0431	-0.0117	-0 1352	-0 1213	-0 1592
Median	0 1260	0 1243	0 0636	0.0071	0 0853	0 1137
Non Seasoned Equity Offering						
Mean	0.9070	-0 0714	-0 0712	-0 0172	-0 0597	-0 033*
Median	0 0615	0.0812	0 042	C 1073	0 1105	C 1244
Matched Seasoned Equity Offering						
Mean	-C 02 5-	C 1145	0 0595*	-C 1179	-0 0ۥ7	-0 12€
Median	0 0469	C 0749*	0.0655*	-0 C318	-0 0673	-0 0487

Panel D Ratio of Operating Performance to Book Value for the Year Relative to the Issue Year					
Consumer Products	-1	_0	1	-	
Seasoned Equity Offering					
Mean	-0 0028	-0 0232	-0 1315		
Median	0 1156	0 0228	-0 0408		
Non Seasoned Equity Offenng					
Mean	-0 1157	-0 0860	- 0 0 39 9		
Median	0 0792	0 0394	0.0901		
Matched Seasoned Equity Offering					
Mean	0 1129	0 0629**	-0 0915		
Median	0 0759**	0 0708**	-0 0283		

^{***}Significance at the 0.01 level **Significance at the 0.05 level *Significance at the 0.10 level

TABLE 6B. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES AND UNITS IN INDUSTRIAL PRODUCTS INDUSTRY

Common	Shares	& Units	N=20

Panel	A. Change in Operating	ng Performance to	o Book Value fro	m Year i to Year j	
Industrial Products	-2 to -1	-1 to +1	-1 to +2	-1 to +3	·····
Seasoned Equity Offering					
Mean	-0.0048	-0 0145	-0 0042	-0 0360	
Median	-0 0068	-0.0229	-0 0328	0 0126	
Non Seasoned Equity Offering					
Mean	-0 0217	0 0717**	0 0255	0 0582	
Median	0 0002	-0.0127	0 0198	0 0572	
Matched Seasoned Equity Offering					
Mean	0 0169	-0.0861**	-0 02 9 7	-0 0942	
Median	-0 0088	-0 0674**	-0 0660	-0 0437	

Common Shares & Units Including Delisted Companies N=23

Common Shares & Units Including Delisted Cor		
Panel B Chang	e in Operating Performance to Book Value from Year i to Year	
Industrial Products	-1 to +1	
Seasoned Equity Offering		
Mean	-0 0147	
Median	-0 0125	
Non Seasoned Equity Offering		
Mean	0 0681**	
Median	-0 0107	
Matched Seasoned Equity Offering		
Mean	-0 0826***	
Median	-0 0507 **	

Common Shares & Units N=20

Panel C Panel C	-2	-1	0	•	2	3
Seasoned Equity Offering						
Mean	0 1030***	0.0983***	0 0923***	0 0838***	0 0940***	0 0623
Median	C 1126***	G 12:6***	C 0935***	0.0911***	0 1038***	0 1179***
Non Seasoned Equity Offening						
Mean	0 0965***	0 0748*	0 0370	C 1465***	0 1003	0 1330***
Median	0 1147***	0 1086***	0 0785	C 1035***	C 0820***	0 1062***
Matched Seasoned Equity Offering						
Mean	0 0065	0 0234	C 055 4°	-C 0627**	-0.0063	-0 0707
Med.an	0.0161	0.0180	0 0565**	-0.01141	0.0097	-0.0055

Common Shares & Units Including Delisted Companies N=23

	of Operating Performance to E		. Tear Helative to the feets	
Industrial Products	1	C	1	
Seasoned Equity Offening				
Mean	0 1003***	0 0931***	0 0856***	
Median	0 1258***	0 0945***	0 0975***	
Non Seasoned Equity Offering				
Mean	C 0787**	0 0464	0 1469***	
Median	0 1039***	0 0736*	0 1083**	
Matched Seasoned Equity Offering				
Mean	0 0216	0 0466	-0 0612**	
Median	0 0280	0 0533*	-0 0126**	

^{**}Significance at the 0.05 level *Significance at the 0.10 level

TABLE 6C. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES AND UNITS IN NATURAL **RESOURCES INDUSTRY**

C	Channe		N-20
Common	Sugres	& Units	17=23

Panel A	Change in Operating	ng Performance to	Book Value fro	m Year i to Year i	
Natural Resources	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Seasoned Equity Offering					
Mean	-0.0043	-0.0404**	-0 0118	-0 0069	
Median	-0.0101	-0.0168**	-0 0260	-0.0094	
Non Seasoned Equity Offering					
Mean	0.0112	-0 0300**	-0 0752	-0 0200	
Median	0 0073	-0 0111**	-0 0087	0.0228	
Matched Seasoned Equity Offering					
Mean	-0 0156	-0 0105	0 0634	0.0132	
Median	-0 0148	-0 0052	0 0169	-0 0041	

Common Shares & Units Including Delisted Companies N±36

Panel B. Chan	ge in Operating Performance to Book Value from Year i to Year	1
Natural Resources	-1 to +1	
Seasoned Equity Offering		
Mean	-0 0281*	
Median	-0 0138°	
Non Seasoned Equity Offering		
Mean	-0 0144	
Median	-C 0070	
Matched Seasoned Equity Offering		
Mean	-0 0137	
Median	-0 0082	

Common Shares & Units N=29

Paner C	Ratio of Operating F	Performance to E	book value for th	e Year Helative	o me issue year	
Natura: Resources	-2	-1	0		2	3
Seasoned Equity Offering		<u> </u>				
Mean	0 0867***	0 0824***	0 0314	0 0420**	0 0705***	0 0755***
Median	0.0817***	0 0695***	0 0467***	0 0423***	0 0726***	0 0829***
Non Seasoned Equity Offering						
Mean	0 0798***	0 0910***	0 0837***	0 0617***	0.0158	0 0710***
Median	C 0811***	0 0661***	0 0609***	0 0489***	0 6420*	0 0874***
Matched Seasoned Equity Offening						
Mean	0 0069	-0 0087	-0 0523	-0 091C	0 3547	0 0045
Median	0.0118	0.0006	0 0065	-0 0029	0.0129	-0 007 ÷

Common Shares & Units Including Delisted Companies N=36

Panel D. Hatio	or Operating Performance to E	cok value for the	e rear meiative to the issue	Yea'
Natural Resources	-1	0	1	
Seasoned Equity Offering				
Mean	0 0882***	0 0534*	0 0601***	
Median	0 0960***	0 0684***	0 0791***	
Non Seasoned Equity Offening				
Mean	0 0886***	0 0809***	0 0742***	
Median	0 0661***	0 0650***	0 0735***	
Matched Seasoned Equity Offening				
Mean	-0 0004	-0 0275	-0 0141	
Median	0.0014	0 0143	-0 0040	

[&]quot;Significance at the 0 05 level Significance at the 0 10 level

TABLE 6D. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES AND UNITS IN 'OTHERS' INDUSTRY

Common Shares & L	Inits	N≃25
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Common Shares & Units N=25					
Panel A	Change in Operation	ng Performance I	to Book Value fro	m Year i to Year j	
Other	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Seasoned Equity Offening					
Mean	-0.0099	0 0197*	0 0264**	0 0258**	
Median	-0.0011	0 0037	0 01 14**	0.0228**	
Non Seasoned Equity Offening					
Mean	0 0021	0 0142	0 0230	0.0049	
Median	0.0006	0 0213	0 0206	0.017	
Matched Seasoned Equity Offering					
Mean	-0.0119	0 0055	0 0034	0 0208	
Median	-0.0066	0 0064	0 0082	0 0102	

Common Shares & Units Including Delisted Companies N=32

Panel 6 Chang	e in Operating Performance to Book Value from Year i to Yea	ar <u>.</u>
Other	-1 to +1	
Seasoned Equity Offening		
Mean	0 0004	
Median	-G 0007	
Non Seasoned Equity Offering		
Mean	0 0034	
Median	0 0073	
Matched Seasoned Equity Offering		
Mean	-0 003C	
Median	0 0056	

Common Shares & Units N=25

Otner	-2		0	1	2	3
Seasoned Equity Offering						
Mean	0 1076***	0 0977***	0 0977***	0 1174***	0 1241***	C 1235***
Median	0 1010***	0.1009***	0 0907***	0 1150***	0 •23••••	0 1175***
Non Seasoned Equity Offering						
Mean	0 0993***	0 1014***	0 0949***	0 1155***	0 1243***	0 1063***
Median	0 0930***	0 09:5***	0 1009***	0 1146***	0 1190***	0 1085***
Matched Seasoned Equity Offering						
Mean	0 0083	-0.0037	0 0028	0.0018	-0 0003	0.0172
Median	0.008	-0.0038	0 0059	-0 0021	0.0142	-0 C1 - 1

	perating Performance to b	ock value for in	Year Relative to the Issue Y	<u>ea </u>
ther	1	C	1	
easoned Equity Offering				
lean	0 0866***	0 0979***	0 0871***	
ledian	0 1006***	0 0983***	0 1101***	
on Seasoned Equity Offening				
lean	0 0998***	0 0948***	0 1032***	
ledian	0 0983***	0 1018***	0 1091***	
latched Seasoned Equity Offering				
lean	-0 0132	0 0031	-0 0162	
ledian	-0 0022	0 0075	-0 0062	

^{*}Significance at the 0.10 level

TABLE 7A. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES AND WARRANTS IN CONSUMER PRODUCTS INDUSTRY

Panel A. Change in Operating Performance to Book Value from Year i to Year j						
Consumer Products	-2 to -1	-1 to +1	-1 to +2	-1 to +3		
Seasoned Equity Offering						
Mean	0.0268	-0.0800	-0.0844	-0.1157		
Median	-0.0138	-0.0075	-0.0110	-0 0078		
Non Seasoned Equity Offering						
Mean	-0 0592	0.0386	0.0017	0.0280		
Median	-0.0124	0.0066	0 0186	0.0357		
Matched Seasoned Equity Offering						
Mean	0.0860	-0.1186	-0.0861	-0 1436°		
Median	0 0047	-0 0095	-0.0346	-0 0543		

Common Shares & Warrants Including Delisted Companies N=15

Panel B. Chang	e in Operating Performance to Book Value from Year i to Ye	ear,
Consumer Products	-1 to +1	
Seasoned Equity Offering		
Mean	-0 0800	
Median	-0 0075	
Non Seasoned Equity Offering		
Mean	0 0386	
Median	0 0066	
Matched Seasoned Equity Offering		
Mean	-0 1186	
Median	-0 0095	

Common Shares & Warrants N=15

Panel C. Ratio of Operating Performance to Book Value for the Year Relative to the Issue Year							
Consumer Products	-2	-1	0	1	2	3	
Seasoned Equity Offering							
Mean	0 0274	0 0541	0 0348	-0 0259	-0 03C3	-0 06*6	
Median	0 1280*	0 1088*	0 1142**	0 1147	0 1194	0 1187	
Non Seasoned Equity Offering							
Mean	0 0414	-0 0178	-0 0027	0 0208	-0.0160	0 0102	
Median	0 0979**	0 0792*	0 0942	0 1244	0 0938	0 11871	
Matched Seasoned Equity Offering							
Mean	-0 0141	0 0719	0 0375	-0 0467	-0 0143	-0 0718	
Median	0 0485	0 0363*	0.0601	0 0043	0 0069	0.0137	

Common Shares & Warrants Including Delisted Companies N=15

Panel D. Ratio o	of Operating Performance to f	Book Value for th	e Year Relative to the issue '	rear
Consumer Products	.1	G	11	
Seasoned Equity Offering				
Mean	0 0541	0 0348	-0 0259	
Median	0 1088*	0 1142**	0 1147	
Non Seasoned Equity Offering				
Mean	-0 0178	-0 0027	0 0208	
Median	0 0792*	0 0942	0 1244	
Matched Seasoned Equity Offering				
Mean	0.0719	0 0375	-0 0467	
Median	0 0363°	0.0601	0 0043	

^{**}Significance at the 0 05 level *Significance at the 0 10 level

TABLE 7B. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES AND WARRANTS IN INDUSTRIAL PRODUCTS INDUSTRY

Panel A Change in Operating Performance to Book Value from Year i to Year j						
Industrial Products	-2 to -1	-1 to +1	-1 to +2	-1 to +3		
Seasoned Equity Offering						
Mean	0.0127	-0 0197	-0 0172	-0 0417		
Median	0.0018	-0.0345	-0 0259	-0 0167		
Non Seasoned Equity Offering						
Mean	0 0108	0 0189	-0.0147	0 0335		
Median	0 0119	-0 0107	0 0197	0 0435		
Matched Seasoned Equity Offering						
Mean	0 0019	-0.0386	-0.0025	-0.0752		
Median	-0 0074	-0 0443*	-0 0100	-0 0208		

Common Shares & Warrants Including Delisted Companies N=31

Panel B. Change in Operating Performance to Book Value from Year i to Year j				
Industrial Products	-1 to +1			
Seasoned Equity Offering				
Mean	-0 0283			
Median	-0 035			
Non Seasoned Equity Offering				
Mean	0 0406			
Median	C 0016			
Matched Seasoned Equity Offering				
Mean	-0 0 6 89**			
Median	-0 0451**			

Common Shares & Warrants N=25

Panel (Ratio of Operating I	Performance to E	Book Value for th	e Year Relative !	o the Issue Year	·
Industrial Products	-2	-1	0	1	2	3
Seasoned Equity Offering						
Mean	0 0868***	0 0995***	0 0953***	0 0800***	0 0823***	0 0578
Median	0 1160***	0 1174***	0 0945***	0 0847***	0 1016***	0 1146***
Non Seasoned Equity Offering						
Mean	0 0588	ი ე69€**	0 0143	0 0885***	0 0549	0 1031***
Median	0 1097***	0 1039***	0 0538	0 0950***	0 0841***	0 1044***
Matched Seasoned Equity Offering						
Mean	0 0280	0 0299	0 0810***	-0 0087	0 0274	-0 0453
Median	0 0139	0 0243	0 0596***	-0 0072	0 0291	0 0115

Common Shares & Warrants Including Delisted Companies N=31

	of Operating Performance to E	sook value for th	e Year Relative to the Issue Ye	
Industrial Products	.1	0	1	
Seasoned Equity Offering				
Mean	0 1079***	0 1036***	0 0795***	
Median	0 1335***	0 1151***	0 0847***	
Non Seasoned Equity Offening				
Mean	0 0398	0 0079	0 0804***	
Median	0 1022**	0 0478	0.0950***	
Matched Seasoned Equity Offening				
Mean	0 0681**	0 0957***	-0 0009	
Median	0 0279**	0 0690***	-0 0061	

^{**}Significance at the 0 05 level *Significance at the 0 10 level

TABLE 7C. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES AND WARRANTS IN NATURAL **RESOURCES INDUSTRY**

Panel A	Change in Operating	ng Performance to	o Book Value fro	m Year i to Year j	
Natural Resources	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Seasoned Equity Offering					
Mean	0.0014	-0.0257	-0 0042	-0 0054	
Median	-0.0108	-0.0146	-0.0181	-0.0137	
Non Seasoned Equity Offering					
Mean	0 0146	-0.0174	-0 0071	-0 0240	
Median	0.0124	-0.0148°	-0 0079	0 0257	
Matched Seasoned Equity Offenng					
Mean	-0.0132	-0.0084	0.0029	0.0186	
Median	-0 0139	-0.0077	0 0104	-0 0201	

Common Shares & Warrants Including Delisted Companies N=44

Panel B. Change in Operating Performance to Book Value from Year i to Year j					
Natural Resources	-1 to +1				
Seasoned Equity Offering					
Mean	-0 0025				
Median	0 0052				
Non Seasoned Equity Offering					
Mean	-0 0024				
Median	-0 0109				
Matched Seasoned Equity Offering					
Mean	-0 0001				
Median	0 0072				

Common Shares & Warrants N=28

Panei (Ratio of Operating F	Performance to E	Book Value for th	e Year Relative	to the Issue Year	<u> </u>
Natural Resources	-2	-1	0	;	2	3
Seasoned Equity Offering	<u> </u>					
Mean	0 0865***	0 0879***	0 0454	0 0622**	0 0837***	0 0825***
Median	0 0942***	0 1114***	0 0701***	0 0979***	0 1190***	0 1049***
Non Seasoned Equity Offering						
Mean	0 0834***	0 0980***	0 1188***	0 0807***	0 0909***	0 0740*
Median	0 0907***	0 1033***	0 0774***	0 0670***	0 0976***	0 1265***
Matched Seasoned Equity Offering						
Mean	0 0031	-0 0101	-0 0734	-0 0185	-0 0072	0 0085
Median	0 0098	-0 0014	-0 0046	-0 0122	0 0033	-0 0249

Common Shares & Warrants Including Delisted Companies N=44

Panel D. Ratio	of Operating Performance to E	Book Value for the	e Year Relative to the Issue	Year
Natural Resources	-1	0	1	
Seasoned Equity Offening				
Mean	0 1054***	0 0836***	0.1029***	
Median	0 1250***	0.1208***	0 1345***	
Non Seasoned Equity Offering				
Mean	0 0963***	0 1092***	0 0939***	
Median	0 0878***	0 0774***	0 1071***	
Matched Seasoned Equity Offering				
Mean	0 0091	-0.0256	0 0090	
Median	0 0176	0.0109	0 01 12	

^{**}Significance at the 0.05 level

^{*}Significance at the 0.10 level

TABLE 7D. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES AND WARRANTS IN 'OTHERS' INDUSTRY

Panel A	Change in Operatin	g Performance t	o Book Value fro	m Year i to Year j	
Other	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Seasoned Equity Offering					
Mean	-0.0228*	-0.0159	0 0023	-0 0254	
Median	-0.0051	-0 0005	0.0099*	0.0159	
Non Seasoned Equity Offering					
Mean	0.0070	0.0159	0.0337*	0 0175	
Median	0.0071	0.0191	0 0506*	0.0170	
Matched Seasoned Equity Offering					
Mean	-0.0298°	-0 0318	-0 0314	-0 0429	
Median	-0 0189**	0 0021	0 0068	-0 0062	

Common Shares & Warrants Including Delisted Companies N=29

Panel B. Change in Operating Performance to Book Value from Year i to Year j					
Other	-1 to +1				
Seasoned Equity Offening					
Mean	-0 0290				
Median	-0 0022				
Non Seasoned Equity Offering					
Mean	0 0028				
Median	0 0095				
Matched Seasoned Equity Offering					
Mean	-0 0318				
Median	0 0021				

Common Shares & Warrants N=25

Panel C	Ratio of Operating I	Performance to E	Book Value for th	e Year Relative t	to the Issue Year	
Other	-2	-1	0	1	2	3
Seasoned Equity Offering						
Mean	0 1431***	0 1203***	0 1047***	0 1044***	0 1227***	0 0949**
Median	0 1048***	0 1128***	0 1060***	0 1262***	0 1231***	0 1175***
Non Seasoned Equity Offering						
Mean	0 1002***	0 1073***	0 0971***	0 1231***	0 1410***	0 1247***
Median	0 0930***	C 1001***	0 1024***	0 1313***	C 1253***	0 1092***
Matched Seasoned Equity Offering						
Mean	0 0429	0.0131	0 0076	-0 0187	-0 0183	-0 0298
Median	0 0216*	-0 0038	0 0059	-0 0102	-0.0164	-0 0243

	.1	^	Year Relative to the Issue Year	
Other				
Seasoned Equity Offering				
Mean	0 1039***	0 1026***	0 0750**	
Median	0 1128***	0 1123***	0 1262***	
Non Seasoned Equity Offering				
Mean	0 1039***	0 0942***	0 1067***	
Median	0.1001***	0 1024***	0 1264***	
Matched Seasoned Equity Offering				
Mean	0.0001	0 0084	-0 0317	
Median	-0 0038	0 0090	-0 0102	

^{**}Significance at the 0 05 level *Significance at the 0 10 level

TABLE 8A. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES, UNITS, AND WARRANTS IN **CONSUMER PRODUCTS INDUSTRY**

Common Shares, Units & Warrants; N=16

Panel A	. Change in Operatir	ng Performance t	to Book Value fro	m Year i to Year j	
Consumer Products	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Seasoned Equity Offering					
Mean	0 0446	-0.1093	-0 1054	-0 1082	
Median	0.0006	-0.0245	-0 0250	-0 0119	
Non Seasoned Equity Offering					
Mean	-0.0207	0 0169	-0 0300	-0.0159	
Median	-0.0017	0.0046	0 0118	0.0327	
Matched Seasoned Equity Offering					
Mean	0.0653	-0 1262	-0 0754	-0.0923	
Median	0 0068	-0 0118	-0 0385	-0 0332	

Common Shares Including, Units & Warrants; Including Delisted Companies N=18

Panel B Change in Operating Performance to Book Value from Year i to Year j					
Consumer Products	-1 to +1				
Seasoned Equity Offering					
Mean	-0 0659				
Median	-0 0159				
Non Seasoned Equity Offering					
Mean	0 0474				
Median	0 0063				
Matched Seasoned Equity Offering					
Mean	-0 1134				
Median	-0 0118				

Common Shares, Units & Warrants N=16

Pane: C	Ratio of Operating F	Performance to E	Sook Value for th	ie Year Relative	to the Issue Yea	<u> </u>
Consumer Products	.2	-1	0	1	2	3
Seasoned Equity Offering						
Mean	0 0598	0 1044***	0 0457	-0 0050	-0 001	-0 0039
Median	0 1338***	0 1243***	0 1149**	0 1122	C 1188°	0 1222*
Non Seasoned Equity Offering						
Mean	0 0571	0 0364	0 0222	0 0533	0 006≄	0 0205
Median	0 0993***	0 0849***	0 0946*	0 1264*	0 1257*	0 1263**
Matched Seasoned Equity Offering						
Mean	0 0026	0 0679	0 0234	-0 0583	-0 0075	-0 02 4 4
Median	0 0469	0 0324"	0 0096	-0 0099	0 0004	0 0063

Common Shares, Units & Warrants: Including Delisted Companies N=18

Panel D. Ratio	of Operating Performance to E	Book Value for th	e Year Relative to the Issue Ye	a:
Consumer Products	-1	0	1	
Seasoned Equity Offering				
Mean	0 0399	0.0298	-0 0261	
Median	0 1122	0 1092*	0 1089	
Ion Seasoned Equity Offering				
Mean	-0 0297	-0 0063	0 0178	
fedian	0 0812	0 0819	0 1073	
Matched Seasoned Equity Offering				
Mean	0.0696	0 0360*	-0 0438	
Median	0 0520**	0 0458	-0 0099	

[&]quot;Significance at the 0 05 level Significance at the 0 10 level

TABLE 6B. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES, UNITS, AND WARRANTS IN INDUSTRIAL PRODUCTS INDUSTRY

Common Shares, Units & Warrants; N=27

Sommon Shares, Chies & Well and Co.						
Pan	el A. Change in Operatir	ng Performance to	Book Value fro	m Year i to Year j		
Industrial Products	-2 to -1	-1 to +1	-1 to +2	-1 to +3		
Seasoned Equity Offering						
Mean	0 0151	-0.0151	-0.0132	-0 0359		
Median	0 0045	-0.0107	-0.0225	0 0084		
Non Seasoned Equity Offering						
Mean	0.0103	0 0463	0.0146	0.0461		
Median	0 0119	0 0009	0 0198	0.0452		
Matched Seasoned Equity Offering						
Mean	0 0048	-0.0614**	-0 0278	-0 0821°		
Median	-0.0074	-0 0451°°	-0 0208	-0 0241		

Common Shares, Units & Warrants Including Delisted Companies N=34

Panel B. Change in Operating Performance to Book Value from Year i to Year j					
Industrial Products	-1 to +1				
Seasoned Equity Offering					
Mean	-0 0237				
Median	-0 0235				
Non Seasoned Equity Offering					
Mean	0 0590**				
Median	0 0038				
Matched Seasoned Equity Offering					
Mean	-0 0827* **				
Median	-0 0479***				

Common Shares, Units & Warrants N=27

Panel C. Ratio of Operating Performance to Book Value for the Year Relative to the Issue Year						
Industrial Products	.2	-1	0	1	2	3_
Seasoned Equity Offering						
Mean	0 0878***	0 1029***	0 1005***	0 0878***	0 0897***	0.0670
Median	0 1160***	0 1258***	0 0945***	0 0975***	0 1060***	0 1175***
Non Seasoned Equity Offering						
Mean	0 0570	0 0673**	0 0285	0 1136***	0 0819	0 1134***
Median	0 0954***	0 1022***	0 0736	0 0950***	0 100:	0 1060***
Matched Seasoned Equity Offering						
Mean	0 0308	0 0357°	0 0721***	-0 0257	0.0078	-0 0464
Median	0.0173	0 0279*	0 0596***	-0 0094	0.0217	0.0102

Industrial Products		0	e Year Relative to the Issue Yea	
Seasoned Equity Offering				
Mean	0 1122***	0 1077***	0 0885***	
Median	0 1364***	0 1165***	0 1004***	
Non Seasoned Equity Offering				
Mean	0 0496	0 0296	0 1086***	
	• • • • •	0.0637*	0 0950***	
Median	0.1012***	0.0637	0 0330	
Matched Seasoned Equity Offering				
Mean	0.0625**	0 0781***	-0 0201	
Median	0.0310**	0 0643***	-0 0083	

^{*}Significance at the 0 10 level

TABLE &C. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES, UNITS, AND WARRANTS IN NATURAL RESOURCES INDUSTRY

Common Shares, Units & Warrants N=35

Panel A Change in Operating Performance to Book Value from Year i to Year i						
Natural Resources	-2 to -1	-1 to +1	-1 to +2	-1 to +3		
Seasoned Equity Offering		_				
Mean	-0.0087	-0.0242	-0.0076	0 0014		
Median	-0.0101	-0.0149	-0.0194	0 0073		
Non Seasoned Equity Offering						
Mean	0.0183	-0.0225	-0.0471	-0 0346		
Median	0.0073	-0.0111*	-0.0013	0.0228		
Matched Seasoned Equity Offering						
Mean	-0.0270	-0.0018	0.0394	0.0360		
Median	-0 0131	-0.0052	0 0169	0.0079		

Common Shares, Units & Warrants Including Delisted Companies N=55

Panel B. Change in Operating Performance to Book Value from Year i to Year j					
Natural Resources	-1 to +1				
Seasoned Equity Offering					
Mean	-0 0074				
Median	0.0036				
Non Seasoned Equity Offering					
Mean	-0 0056				
Median	-0 0050				
Matched Seasoned Equity Offering					
Mean	-0 0018				
Median	-0 0011				

Common Shares, Units & Warrants N=35

Panel C. Ratio of Operating Performance to Book Value for the Year Relative to the Issue Year						
Natural Resources	-2	-1	0	1	2	3_
Seasoned Equity Offering				·		
Mean	0 0897***	0 0810***	0 0447*	0 0568***	0 0734***	0 0824***
Median	0 0860***	0 1113***	0 0641***	0 0785***	0 0952***	0.0930***
Non Seasoned Equity Offering						
Mean	0 0690***	0 0872***	0 0922***	0 0648***	0 0402	0 0527
Median	0 0811***	0.0679***	0 0629***	0 0489***	0 0477**	0 0874***
Matched Seasoned Equity Offering						
Mean	0.0207	-0 0062	-0 0474	-0 0080	0 0332	0 0297
Median	0 0118	-0 0011	0 0057	0 0095	0 0113	0.0016

Common Shares, Units & Warrants Including Delisted Companies N=55

Panei D. Ratio d	if Operating Performance to B	lock Value for the	e Year Relative to the Issue Year	
Natural Resources	-1	0		
Seasoned Equity Offering				
Mean	0 1044***	0 0839***	0 0970***	
Median	0 1237***	0 1121***	0 1092***	
Non Seasoned Equity Offening				
Mean	0 0912***	0 0913***	0 0856***	
Median	0 0752***	0 0736***	0.0986***	
Matched Seasoned Equity Offening				
Mean	0.0132	-0 0074	0.0114	
Median	0 0174	0.0187*	0 0129	

^{**}Significance at the 0.05 level

^{*}Significance at the 0 10 level

TABLE 8D. CHANGES IN OPERATING PERFORMANCE FOR COMMON SHARES, UNITS, AND WARRANTS IN 'OTHERS ' INDUSTRY

Common Shares, Units and Warrants N=30

Panel A: Change in Operating Performance to Book Value from Year i to Year i					
Other	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Seasoned Equity Offering					
Mean	-0.0184	-0.0096	0.0061	-0.0169	
Median	-0.0024	0 0016	0 0102**	0.0193**	
Non Seasoned Equity Offering					
Mean	0.0050	0 0090	0.0238	0 01 15	
Median	0.0016	0 0143	0.0200	0 0084	
Matched Seasoned Equity Offering					
Mean	-0.0233°	-0.0185	-0.0176	-0.0284	
Median	-0 0108*	0 0056	0 0105	0 0079	

Common Shares, Units and Warrants Including Delisted Companies N=37

Panel B: Change in Operating Performance to Book Value from Year i to Year j					
Other	-1 to +1				
Seasoned Equity Offering					
Mean	-0 0207				
Median	-0 0005				
Non Seasoned Equity Offering					
Mean	0 0007				
Median	-0 0043				
Matched Seasoned Equity Offering					
Mean	-0 0213				
Median	0 0047				

Common Shares, Units, and Warrants N=30

Panel C. Ratio of Operating Performance to Book Value for the Year Relative to the Issue Year						
Other	-2	-1	0	1	_ 2	3
Seasoned Equity Offering						
Mean	0 1270***	0 1086***	0 0984***	0 0991***	0 1148***	0 0918***
Median	0 1011***	0 1009***	0 0894***	0 1101***	0 1100***	0 1036***
Non Seasoned Equity Offering						
Mean	0 0970***	0 1020***	0 0919***	0 1109***	0 1257***	0 1135***
Median	0 0880***	0 0891***	0.0986***	0 1051***	0 1133***	0 1088***
Matched Seasoned Equity Offering						
Mean	0 0300	0 0067	0 0065	-0 0119	-0 0109	-0 0217
Median	0 0092	-0 0038	0 0075	-0 0062	C 0082	-0 0201

Common Shares, Units, and Warrants Including Delisted Companies N=37

Panel D. Ratio	of Operating Performance to B	look Value for the	Year Relative to the Issue Year	ar
Otner	-1	0	1	
Seasoned Equity Offering				
Mean	0.0970***	0.0984***	0 0763***	
Median	0 1009***	0 0907***	0 1052***	
Non Seasoned Equity Offering				
Mean	0 1005***	0.0924***	0 1012***	
Median	0.0965***	0 1009***	0 1036***	
Matched Seasoned Equity Offering				
Mean	-0.0035	0.006	-0.0248	
Median	-0 0038	0.0090	-0 0102	

^{**}Significance at the 0.05 level

^{*}Significance at the 0 10 level

TABLE 9A. CHANGES IN OPERATING PERFORMANCE FOR INITIAL PUBLIC OFFERINGS IN CONSUMER PRODUCTS INDUSTRY

Initial	Public	Offering	N=5

Panel A: Change in Operating Performance to Book Value from Year i to Year j					
Consumer Products	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Initial Public Offenng					
Mean	0.1592*	-0.0635*	-0 0927	-0 0892**	
Median	0.0558*	-0 0469	-0 0284	-0 1244	
Non Initial Public Offering					
Mean	-0.0086	0.0820	0 0694	0 0760	
Median	-0.0035	0.1066	0.0784	0.0862	
Matched Initial Public Offering					
Mean	0.1678**	-0.1455***	-0 1621	-0 1652**	
Median	0.1575*	-0 1541*	-0 0956	<u>-0 2106</u>	

Initial Public Offering Including Delisted Companies N=6

nitial Public Offering Including Delisted Companies N=6				
Panel B. Change in Operating Performance to Book Value from Year i to Year				
Consumer Products	-1 to +1			
Initial Public Offering				
Mean	-O 0556°			
Median	-0 0411*			
Non Initial Public Offering				
Mean	0 0626			
Median	0 0545			
Matched Initial Public Offering				
Mean	-O 1182**			
Median	-0 1236°			

Initial Public Offering N=5

Pa	anel C. Ratio of Operating	Performance to E	Book Value for th	e Year Relative t	o the Issue Yea	<u> </u>
Consumer Products	-2	-1	C	1	2	33
Initial Public Offering						
Mean	-0 0614	0 0978	0 0897	0 0343	0 0005	0 0086
Median	0 0548	0 1453	0 1289	0 1048	0 1263	0 0273
Non Initial Public Offering						
Mean	0 0918	0 0832	0 1219*	0 1652**	0 1526**	0 1593**
Median	0 0563	0 1050	0 1791	0 1638	0 1142*	0 1159*
Matched Initial Public Offering						
Mean	-0 1532	0 0146	-0 0322	-C 1309**	-0 1475	-0 1507*
Median	-0 1583	0 0018	-0 0502	-0 0874*	-0 0278	-0 1611

Initial Public Offering Including Delisted Companies N=6

Panel D. Hat	io of Operating Performance to E	sook value for th	e rear Helative to the issue	e rea:
Consumer Products	1	0	1	
Initial Public Offering				
Mean	0.1091*	0 1108*	0 0535	
Median	0 1485*	0.1305*	0 1074	
Non Initial Public Offering				
Mean	0.0965**	0 1208**	0 1591**	
Median	0 1255	0 1472*	0 1621*	
Mathed Initial Public Offering				
Mean	0 0126	-0 0100	-0 1056 **	
Median	0 0021	-0 0436	-0 0796°	

[&]quot;Significance at the 0 05 level 'Significance at the 0 10 level

TABLE 9B. CHANGES IN OPERATING PERFORMANCE FOR INITIAL PUBLIC OFFERINGS IN INDUSTRIAL PRODUCTS INDUSTRY

t-itief	Dublic	Offering	N-20
TEALERIN	Public	Untering	N=ZU

Mittel Public Offering N=20					
Pan	el A. Change in Operatin	g Performance to	Book Value from	n Year i to Year j	
Industrial Products	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Initial Public Offering					
Mean	0.0578*	-0.0400	-0 0890**	-0 0971 **	
Median	0.0533*	-0.0385	-0 0588**	-0 0535***	
Non Initial Public Offering					
Mean	0.0351**	-0.0985**	-0.0649**	-0.0741***	
Median	0.0304**	-0.0714**	-0.0296**	-0.0986***	
Matched Initial Public Offering					
Mean	0.0227	0 0585	-0 0241	-0 0230	
Median	0 0097	0 0709	0 0017	-0 023	

Initial Public Offering Including Delisted Companies N=24

Initial Public Offering Including Delisted Com	Occupies Bertermanes to Book Value from Veer Lto V	0371
Panel B. Cha	inge in Operating Performance to Book Value from Year i to Ye	ea, j
Industrial Products	-1 to +1	
Initial Public Offering		
Mean	-0 0543	
Median	-0 0385	
Non Initial Public Offering		
Mean	-0 0821 **	
Median	-0 0625 **	
Matched Initial Public Offering		
Mean	0 0278	
Median	0 0346	

Initial Bublic Offering N=20

Initial Public Offering N=20 Par	Panel C Ratio of Operating Performance to Book Value for the Year Relative to the Issue Year					
Industrial Products	·2	-1	0	1	2	3
Initial Public Offering						
Mean	0 1587***	0 2165***	0 1742***	0 1765***	0 1275***	0 1194***
Median	0 1359***	0 1873***	0 1495***	0 1637***	0 1245***	0 1257***
Non Initial Public Offering						
Mean	0 1628***	0 1979***	0 1767***	0 0994**	0 1330***	0 1238***
Median	0 1468***	0 1950***	0 1437***	0 1165**	0 1428***	0 1177***
Matched Initial Public Offering						
Mean	-0 0041	0 0186	-0 0025	0 0771*	-C 0055	-C 00 44
Median	-0 0035	-0 0007	0 0009	0 0242*	-0 0266	0 0039

Initial Public Offering Including Delisted Companies N=24

Panel D Rate	o of Operating Performance to B	ook Value for the	Year Relative to the Issue Year	
ndustnal Products	-1	0	1	
nitial Public Offening				
Mean	0.2016***	0 1792***	0 1473***	
Median	0.1873***	0 1587***	0.1484***	
Non Initial Public Offering				
Mean	0 1796***	0 1661***	0.0975***	
Median	0 1749***	0.1437***	0.1165***	
Mathed Initial Public Offering				
Mean	0.0220	0.0131	0.0498	
Median	0 0111	0 0061	0.0212	

^{**}Significance at the 0 05 level *Significance at the 0 10 level

TABLE 9C. CHANGES IN OPERATING PERFORMANCE FOR INITIAL PUBLIC OFFERINGS IN NATURAL RESOURCES INDUSTRY

Initial Public Offering N=5

Panel A. Change in Operating Performance to Book Value from Year i to Year					
Natural Resources	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Initial Public Offering					
Mean	0.0341	0.0097	0.0143	0.0164	
Median	-0.0461	-0.0341	0.0314	0 0260	
Non Initial Public Offering					
Mean	0.0393	0.0562*	-0 0530	0 0034	
Median	-0.0086	0.0551	0.0006	0.0242	
Matched Initial Public Offering					
Mean	-0.0052	-0.0465	0.0673	0.0131	
Median	-0.0439	-0.0600	0 0672	-0.0029	

Initial Public Offering Including Delisted Companies N=8

Initial Public Offering Including Delisted Com					
	ange in Operating Performance to Book Value from Year i to Yea	ar j			
Natural Resources	-1 to +1				
Initial Public Offering					
Mean	0 0281				
Median	0 0174				
Non Initial Public Offering					
Mean	0 0473**				
Median	0 0368**				
Matched Initial Public Offering					
Mean	-0 0192				
Median	-0 0069				

Initial Public Offering N=5

Pane	C Ratio of Operating F	Performance to E	look Value for the	e Year Relative t	itive to the Issue Year			
Natural Resources	-2	-1	0	1	2	3		
Initial Public Offering								
Mean	0 1610*	0 1950***	0 2446***	0 2047***	C 2093**	0 2115**		
Median	0 1355	0 2088*	0 2640*	0 1816*	0 1424**	0 1809*		
Non Initial Public Offering								
Mean	0.0962***	0 1355*	0 2079***	0 1917***	0 0825	0 1389**		
Median	0 0931*	0 1128	0 2426*	0 1679*	0 0903	0 1162*		
Matched Initial Public Offering								
Mean	0 0647	0 0595	0 0367	0 01 30	0 1269*	0 0726		
Median	0 0685	0 0756	0 0645	-0 0447	0.0931*	0 0810		

Initial Public Offering Including Delisted Companies N=8

Panel D. Ra	tio of Operating Performance to E	Book Value for th	e Year Relative to the Issue Ye	ear
Natural Resources	-1	0	1	
Initial Public Offering				
Mean	0 1471***	0 2026***	0 1752***	
Median	0 1656**	0 2043**	0 1799**	
Non Initial Public Offering				
Mean	0 1101**	0 1651***	0 1574***	
Median	0 0987**	0 1640**	0 1606**	
Mathed Initial Public Offering				
Mean	0.0369	0.0375	0 0178	
Median	0 0280	0.0350	0 0087	

^{***}Significance at the 0 01 level **Significance at the 0 05 level *Significance at the 0 10 level

TABLE 9D. CHANGES IN OPERATING PERFORMANCE FOR INITIAL PUBLIC OFFERINGS IN 'OTHERS' INDUSTRY

Initial	Offerings	N_Q

Pan	el A: Change in Operatir	ng Performance t	o Book Value from	n Year i to Year j	
Other	-2 to -1	-1 to +1	-1 to +2	-1 to +3	
Initial Public Offering					
Mean	0 0392*	-0.0512	-0 0610°	-0.0715**	
Median	0.0184*	-0.0111	-0 0120**	-0.0666**	
Non Initial Public Offering					
Mean	0.0329	-0 0717	-0 1523	-0.0596°	
Median	0.0119*	-0.0233	-0.0264**	-0.0127	
Matched Initial Public Offering					
Mean	0 0063	0 0205	0 0913	-0 0119	
Median	-0.0012	0.0078	0 0182	-0.0029	

Initial Public Offerings Including Delisted Companies N=10

Panel B Ch	ange in Operating Performance to Book Value from Year i to Year	
Other	-1 to +1	
Initial Public Ottering		
Mean	-0 0603°	
Median	-0.0133 **	
Non Initial Public Offering		
Mean	-0 0661	
Median	-0 0194	
Matched Initial Public Offering		
Mean	0 0058	
Median	-0 0033	

Initial Public Offerings N=9

Pa	nel C. Ratio of Operating F	Performance to E	Book Value for th	e Year Relative to	the Issue Year	
Other	-2	-1	0	1	2	3
Initial Public Offering						
Mean	0 1215***	0 1607***	0 1437***	0 01095***	C 0998	0 0892***
Median	0 0939***	0 1390***	0 1375***	0 1235***	0 1162***	0 0636
Non Initial Public Offering						
Mean	0 1006***	0 1335***	0 1309***	0 0618	-0 0188	0 0739**
Median	0 1181***	0 1300***	0 1245***	0 0989	0 0903	0 0954*
Matched Initial Public Offering						
Mean	0 021	0 0272	0 0128	0 0477	0 1185	0.0153
Median	0 0025	0 0168	0 0231	0 0246	G C259	0.0040

Initial Public Offerings Including Delisted Companies N=10

Other	<u>•1</u>	0	1	
Initial Public Offering				•
Mean	0.1581***	0 1374***	0.0977***	
Median	0 1364***	0 1368***	0 1069***	
Non Initial Public Offering				
Mean	0 1337***	0 1278***	0 0676	
Median	0 1326***	0 1188***	0 1071*	
Matched Initial Public Offering				
Mean	0.0244	0.0097	0 0301	
Median	0 0077	0 0201	0 0035	

^{**}Significance at the 0.05 level *Significance at the 0.10 level

TABLE 10A. MULTIVARIATE REGRESSION SAMPLE

	Years - 1 to + 1	<u>Years -1 to +2</u>	Years - 1 to +3
Observations			
Common Shares	99	68	29
Units	24	24	24
Warrants	16	14	14
IPOs	39	37	39
Total Observations	145	143	144

TABLE 10B. MULTIVARIATE REGRESSION SUMMARY STATISTICS

	Change from Year -1 to Year +1 in Matched Seasoned Equity	Change from Year -1 to Year +2 in Matched Seasoned Equity	Change from Year -1 to Year +3 in Matched Seasoned Equity
Intercept	.0.1387 (-1.99)**	-0.1643 (-1.97)*	-0.2134 (-2.69)***
Ratio of Operating Performance to Book Value of Assets in Year -2	-0.1110 (-1.67)*	-0.1913 (-2.38)**	-0.1148 (-1.37)
Change from Year -2 to Year -1 in Matched Seasoned Equity	-0.4013 (-4.79)***	-0.6058 (-5.80)	-0.7091 (-8.06)***
Change from Year -1 to Year -K in Capital Expenditure Divided by Book Value of Assets in Year -1	0.009	0.0501	0.0213 1.12
Ratio of Price to Book in Year -1	0.0006 (0.06)	0.0009 (1.30)	0.0015 1.53
Natural Log of Book Value of Assets in Year -1	0.0109	0.0124	0.0177
Dummy Variable for Common Shares	-0.0146 (-0.45)	0.0068 (0.18)	-0.0182 (-0.50)
Dummy Variable for Units	0.0125 (0.33)	0.0103 (0.23)	-0.0322 (-0.77)
Dummy Variable for Warrants	0.0616	0.0261 (0.62)	0.0134 (0.33)
Ajusted R-squared	0.1477	0.1924	0.3998