Leverage, Growth Opportunities and Stock Price Response to New Financing

Do, Quynh- Nhu

University of Vaasa

Graduate School of Finance

P.O.Box 700, 65101 Vaasa, Finland

Tel: 358-6-324-8257   E-mail: dtqn@uwasa.fi

Abstract

This paper examines the impact of leverage and growth opportunities on stock price reactions to seasoned equity offerings in Finland. The empirical results provide novel evidence of a negative relationship between leverage and stock price decline associated with equity offerings. In addition, the results indicate that growth opportunity is positively related to announcement abnormal return. Furthermore, we examine the effect of leverage and growth opportunities on equity offerings. It is found that high-levered low–growth firms are the worst performers at the announcement and issuance of seasoned equity offerings.

Keywords: Leverage, Growth opportunities, Finnish seasoned equity offerings

1. Introduction

Asquith and Mullins (1986), Healy and Palepu (1990), Hansen and Crutchley (1990), Eckbo and Masukis (1992), Mittoo (1996), Burton et al. (2000), Medeiros and Matsumoto (2005), Barnes and Walker (2006), Chaiporn (2008) have documented the stock price response when the firms announce a new equity issue. Their evidence, regardless of the market concerned, indicated a significant reduction in stock price upon the announcement of new equity. Previous studies have also examined the determinants of the stock price reaction such as time of equity issue (Korajczyk et al. 1991, Baker & Wurgler 2002, Barnes & Walker 2006), purpose of issue (Mann and Sicherman 1991; Barnes & Walker 2006), issuing size (Hansen & Crutchley 1990 and Mann & Sicherman 1991), issuing method choice (Chaiporn 2008), pre-issue gear-stick (Kolodny and Schuler 1985; Asquith and Mullins, 1986; Eckbo et al. 2000) , and pre-announcement positive cumulative excess return ((Masulis and Korwar 1986; Korajczyl et al., 1990; Choe et al., 1993; Denis 1994; Anand 2002).

Leverage and growth opportunities have so far received little attention in empirical studies. This paper empirically examines the stock price reaction to equity issue in the Finnish Stock Market and investigated the impact of leverage and growth opportunities on the market reaction to equity issue. There are several theories hypothesizing that leverage, growth opportunities are related to stock price response to equity issue. Raymar (1993), Dierkerns (1991) theoretically argue that a firm's existing capital structure is a determining factor in predicting stock price response to equity issue. They predict that in the presence of sufficient degree of leverage and default risk, the market reaction to equity issuance is positive. The reaction to equity issuance of a high-levered firm will be more positive than that of a low-levered firm.

In addition, the information asymmetric model of Myer and Mailuf (1984), Ambarish et al. (1987) and Cooney and Kalay (1993) and the free cash flow theory of Jensen (1986) predict that the stock price responses to new financing depend on the growth opportunities of issuing firms. The firms with higher growth opportunities should experience less value loss than firms with lower growth opportunities at the announcement of equity issue.   Earlier studies attempt to test the predictions of "growth theory" yielding the contradictory results. Dierken (1991), Pilotte (1992), Denis (1994), Burton et al. (2001) found a positive relation between market reactions to the announcement of equity issue and various proxies of growth opportunities. On the other hand, Mc Laughlin et al. (1988), Gombola et al. (1998) and Smith et al. (1992) have documented that market response to equity issuing is more negative for high- growth firms than for low-growth firms.

This paper contributes to the empirical literature in several ways. First, it provides new insights into the study of seasoned equity issue by examining the information content of the leverage and growth opportunities of the issuer. Second, most empirical work measures the effect at the time of the announcement, whereas this paper separately examines the effect at both the time of the announcement and the time of issue. Third, to ensure that the results are robust, several alternative proxies are used for the leverage level and for the value of growth opportunities.

First, contrary to the theoretical predictions of Raymar (1993), Dierkerns (1991), this paper found that leverage has a negative effect on the market reaction to equity issuance. High-levered firms perform worse than low-levered firma at the announcement of equity issuance. Moreover, equity issuance effects are non-positive regardless of which level of leverage the issuing firm has. Second, consistent with previous studies (Pilotte 1992, Burton et al. 2001) and the hypothesis that investment opportunities play a role in explaining the market reaction to equity offerings, this study documented a positive relation between growth opportunities and event-day abnormal stock returns. High-growth firms experience less value loss than do low-growth firms. Finally, when the effects of leverage and growth opportunities are examined simultaneously, it is found that the firms with high-leverage low-growth are the worst performers at the announcement and issuance of seasoned equity offerings.

The rest of paper is organized as follows. Section 2 discusses the theoretical background and hypotheses. Section 3 describes the data and methodologies. Section 4 presents and discusses the empirical results. Section 5 concludes with a summary the main findings.

2. Theoretical Background and Hypotheses

There are several theories that predict the relation between growth opportunities, leverage and stock price reaction to equity issue.

Myers and Majluf (1984) and Diekerns (1991) present an "information asymmetry" model in which the potential purchasers of securities have less information about the prospects of the firm than management, and management is more likely to issue securities when the market price of the firms traded securities is higher than management's assessment of their value. In such a case, sophisticated investors will reduce their estimate of the value of the firm when management announces a new security issue. Furthermore, the greater the potential information asymmetry between insiders and investors, the greater the revision in expectations and the greater the negative price reaction to the announcement of a new issue.

According to this model, increasing the net present value of the investment opportunity reduces the adverse selection problem of a new equity offering, thereby reducing the announcement day price drop. In this model, if new investment opportunities are profitable enough, there is no adverse selection problem and, hence, no negative stock price reaction. Thus, Myer and Mailuf predict that the stock price response to securities offerings does indeed vary with investment opportunities.

In support of the theory proposed by Myer and Mailuf (1984), Ambarish et al. (1987) and Cooney and Kalay (1993) found a positive correlation between announcement returns of the issuing firms and their growth opportunities. They also found positive market reactions to the announcement of seasoned equity offering among high growth firms. Brealey and Myers (1991) present a similar result positively relating firm valuation and the present value of corporate growth opportunities. Denis (1994) found a positive relationship between several *ex ante* measures of growth opportunities and announcement period price changes. However, there was no positive relation between announcement effects and alternative measures of *ex post* growth. He suggested that the positive relation between the ex ante proxies for growth opportunities and announcement effects were not monotonic. Rather, the results appeared to be driven by a small subset of high growth firms whose announcement effects were not significantly different from zero. On the other hand, Mc Laughlin et al. (1988), Gombola et al. (1998) and Smith &Watt (1992) have documented that market reaction to seasoned equity offerings is more negative for high growth opportunity firms than for low growth opportunities firms. They argued that high growth opportunities are associated with high level of information asymmetry and are therefore more overvalued than low growth firms, leading to more negative market reaction.

Myer and Mailuf (1984) argue that if the firm possesses high growth opportunities, the value of the firm must be high. But Mc-Laughlin et al. (1988), Gombola et al. (1998) and Smith &Watt (1992) argue that high growth firms have higher information asymmetry and so are more overvalued than low growth firms. In this paper, we find support for the hypothesis that the market's reaction to information on equity issue will depend on its assessment of the likelihood that the funds raised will be invested in positive net present value projects. Therefore, for mature firms with limited profitable investment opportunities but available cash flow, the market assessment is likely to decline in stock price because the raising of funds is perceived to create free cash flow because it is likely to be wasted on organization inefficiencies or invested in negative NPV projects. For the rapidly growing firms with profitable growth opportunities, the price change is likely to be positive because the new funds enable the firms to acquire positive NPV projects. Therefore,

Hypothesis 1: *Firms with high growth opportunities should experience less value loss than firms with low growth opportunities at the announcement and issuance of seasoned equity issue.*

Besides, changes in a firm's capital structure also convey significant new information to the market participants and thus influence stock price. For example, Raymar (1993), Dierkerns (1991) indicate that a firm's existing capital structure is a determining factor in predicting the stock price reaction to external financing. They propose that leverage can improve a firm's investment behavior by reducing the mispricing of new securities. They demonstrated theoretically that in the presence of a sufficient degree of leverage and default risk, positive market reactions to equity issuance is possible. They also predict that the impact of equity issue announcements on securities is significantly more positive for firms with higher leverage than for firms with lower leverage.

However, the seasoned equity offering event not only presents the information that the issuing firm is raising financing for a profitable new investment opportunities, but it also indicates that the issuing firm wants to decrease the leverage ratio, since leverage has a negative association with information asymmetry (Raymar 1993, Dierkerns 1991). Thus, an issuing of equity will lead to an increase in the level of information asymmetry for the issuing firm. Therefore, in this case, the marginal increase in the level of information asymmetry will be greater for the high-levered firm and will be less for the low-levered firm. Therefore,

Hypothesis 2: *A high-levered firm should experience more value loss than a low-levered firm at the announcement and issuance of a seasoned equity offering.*

The combined effect of leverage and growth opportunities of the issuing firm is also explored in this study. The higher the level of existing leverage is, the more the increase in information asymmetry is due to equity issuance, the greater is the value loss at announcement effect. And as growth opportunities theories argue, reaction to equity issuance by the firms with low growth opportunities should be more negative than that by firms with high growth opportunities. Therefore,

Hypothesis 3: *High-levered, low-growth firms should experience maximum value loss at the announcement of seasoned equity issue*

3. Sample Description and Methodology

3.1 Sample description

The sample used in this study included all announcements of common stock issuing by firms listed on the Helsinki Stock Exchange (HEX) during the period 1996-2003. The sample was identified through a search of HEX publications, the database of Daily Helsinki Stock Exchange Security Returns. The announcement day investigated is the day of the first public announcement in the press. To ensure that this was the first day that the information became public, the announcement was confirmed or corrected by reviewing each firm's official records at the HEX.

The announcement is a press release by the board of directors calling a general meeting of shareholders to approve the offering proposal. All proposals included in the sample were subsequently approved by the shareholders. Since the issue can be withdrawn after the announcement, the issue date is also considered in this study. The issue date is the first day of issue period.

During the period under investigation, there were a total of 93 announcements of new share offerings in which 82 announcements went ahead with an issue. Daily returns for these securities were taken from Thomson's database. For each issue, the daily stock returns were obtained for an estimate window of 300 trading days ending 60 days prior to the announcement day and 60 trading days after the announcement.

Table 1 shows the yearly distribution of seasoned equity offering in Finland during the sample period and the industry classifications of SEOs firm in the sample. Panel A of Table 1 shows that the number of Finnish issuing firms increased over the time period, especially the in period 2000-2003. Panel B of Table 1 shows the distribution by sector following the classification of the Helsinki Stock Exchange; we can see that about 26.82% of the Finnish issues in the sample period analyzed correspond to Telecommunication and Electronic, 13.41% to Metal and Engineering and 12.19% to Food Industry.

Table 1 about here

Table 2 presents summary statistics for various characteristics of 82 completed Finnish SEOs during the period 1996-2003. Panel A of Table 2 presents the general characteristics of issuing firms regarding issuer size, proceeds from SEOs, total asset and total debt. The median size of a Finnish issuing firm is 218 million Euros, which is higher than that of the median U.S. offering firm (Soku Byoun 2004) and about the same as that of the median French SEOs (Pierre Jeanneret 2005). Finnish SEOs are associated with low proceeds, the median of offering size being 18.08 million Euros.

Panel B of Table 2 presents the pre-transaction leverage of firms issuing equity. Four measures of leverage are reported. Leverage at market, leverage at book, long-term debt and short-term debt. Mean (median) leverage at market is 41%

(41%). The mean (median) leverage at book is 53% (52%). These numbers are quite high compared to those of the mean (median) U.S offering firm (Armen Hovakimian 2004).

Panel C of Table 2 presents characteristics of the issuing firms' investment opportunities.   They are market/book ratio, dividend yield, return on equity, capital expense/total asset and market value growth rate. The mean market-to-book ratio of issuing firms is 1.55. Like most issuing firms in the USA and Europe, most Finnish issuing firms do not offer dividends in the year ending just prior to SEOs.   The mean of return on equity is 14.11%. The ratio of capital expenditures to total assets over five years preceding the SEOs averages 15%, the mean annually compounded growth rate in market value is a high at 42.68 %. Generally, Finnish issuing firms have high level of debt and investment opportunities at the time they offer new shares.

Table 2 about here

3.2 Methodologies

To examine the stock market reaction to the announcement and the issuance of seasoned equity issues, we employ an event-study methodology. Day 0 was the event day in the time-line. The estimate period was t_{-300} to t_{-60} relative to the event day. The event window was t_{-60} to t_{+60} relative to event day. The daily share returns are estimated as follows:

$$R_{it} = \text{Ln}(P_{it}/P_{it-1})$$

where Ln is the natural logarithm, R_{it} is the return on share i on day t, P_{it} is the closing price of share i on day t, and P_{it-1} is the closing price of the share i on day t-1.

The Market-Model was used to estimate expected returns of common stocks of sample events:

$$E(R_{it}) = \alpha_i + \beta_i(R_{mt}) + \varepsilon_{it}$$

where α_i is the constant term for share i, β_i is the sensitivity (slope coefficient) of the return on the market, R_{mt} is the returns on the HEX-Portfolio Index in time period t and ε_{it} is random error term. The parameter of the Market-Model was estimated over the above-mentioned estimate period.

The abnormal returns for the sample event was the difference between the actual returns on the common stocks and the expected return generated by the Market-Model. The abnormal return (AR_{it}) for each sample event i on day t was calculated as follows:

$$AR_{it} = R_{it} - E(R_{it})$$

where AR_{it} is the abnormal return on share i in time period t; R_{it} is the actual return on share i in time period t and E (R_{it}) is the expected return on share i in time period t

A. Craig Mackinlay (1997) was followed to calculate the z-statistics to test the null hypothesis that the stock price reaction is equal to zero.

The impact of the announcement and the issuance of seasoned equity offerings on stock market are estimated over a 2-day period consisting of event-day zero t_0 and the following trading day t_{+1}. There are two event-days in this study. They are the announcement day and issuance day. The announcement day is the first announced day of equity issue from issuing firms as it was reported on the Helsinki Stock Exchange. Since in the practice the issuance day and announcement day do not coincide but are several weeks apart and not all firms that announced a seasoned equity issue actually issued. Thus, an issuance day is the day on which proposed offerings are completed and equity is actually sold. Thus, in my view, issuance day is the day that actually conveys the information of SEOs.

To examine empirically the effect of investment opportunities and leverage, three alternative measures for investment opportunities of issuing firms are used, namely market/book ratio, capital expense/total asset ratio and dividend yield. The three different proxies for issuing firm's leverage are also calculated, namely market leverage, book leverage and long-term debt/total assets ratio. Then the total sample was sub-grouped by the issuing firms' leverage and investment opportunities into quartiles. Quartile 1 (high) contains the 25 % of issuing firms with the highest leverage or investment opportunities; quartile 4 (low) contains the 25% of issuing firms with the lowest leverage or investment opportunities. A cross sectional regression analysis was also employed in the study to identify the relationship between the variables. The dependent variables are announcement abnormal return. The independent variables are market leverage and market to book ratio.

4. Empirical Results

Market reactions to announcements and issuances of SEOs in Finland are presented in Table 3. In general, the announcement of Finnish SEOs is met with a negative stock price reaction. The 2-day announcement abnormal return was -3.6%, which was significant at the 1% level. This result is consistent with the findings of earlier studies.

Furthermore, more than 80% of the firms in the sample experienced a negative abnormal return in the 2-day announcement period, a rather higher percentage than that reported in Denis (1994) and Burton et al. (2001).

As mentioned earlier, market reaction to the issuance of SEOs on which the equities are actually sold was also investigated in this study. The 2-day issuance abnormal return stock price was -2.4%, which was significant at the 1% level and 85.3% of the sample experienced a negative abnormal return on this issue date. This result supports the Myer and Mailuf (1984) theory and arguments presented earlier. If announcement dates are the dates on which the issuing firms announce to the market that they are going to issue new securities, issuance dates are those on which issuing firms confirm that the proposed offerings are actually being completed, causing market participants to assume that the issuing firms still think the shares are overpriced. As a result, stock prices fall on issuance dates.

Table 3 about here

To test Hypothesis 1, sample firms were classified into quartiles by their growth opportunities. The 25% of issuing firms with the highest- growth opportunities in the sample were classified as the high-growth group, the 25% of issuing firms with the lowest-growth opportunities in the sample were classified as the low-growth group. The event-day abnormal returns for each group were calculated and compared. The difference in their mean abnormal returns between the high-growth group and the low-growth group is also tested for statistical significant.

The results in Table 4 indicate that there are significant differences between the two groups in their abnormal returns for all variables of growth opportunities (market/book ratio, capital expense/total assets and dividend yield). But the most important finding is that high-growth opportunities firm's market reaction was significantly less negative than that for the low-growth sample. Thus, these findings support the prediction in Hypothesis 1 that firms with high growth opportunities should experience less value loss than firms with low growth opportunities at the announcement and issuance of SEOs.

Table 4 about here

To examine empirically the effect of leverage on SEOs, the sample firms were also sub-divided according to their existing leverage level into quartiles. To test the robustness of the results, three alternative proxies are used for the leverage, namely market leverage, book leverage level and long-term debt to total asset ratio. The results from Table 5 showed that the event-day negative reactions were higher for high-levered group than for low-levered groups for all three proxies of leverage. The differences of their mean abnormal returns are statistically significant. Thus, the findings support the negative impact of leverage on seasoned equity issuing because of a marginal increase in the level of information asymmetry (Hypothesis 2). Furthermore, the theories of Raymar (1993) and Dierkerns (1991) both predict that in the presence of a sufficient degree of leverage and default risk, a positive market reaction to equity issuance is possible. However, the observation from Table 5 is that, regardless of the quartiles, the announcement and issuance effects are non-positive. These results do not support Raymar (1993) and Dierkerns (1991).

Table 5 about here

Since the leverage has a negative effect on the market response to equity issue, we further test if the size of the leverage change produced by the new issue could affect the market reaction to equity issuance. The sample firms are further divided into three categories for each of the two variables (Table 6). In particular, the percentage leverage change group is identified as: (1) small change, (2) medium change, (3) large change. Small change represented by 33.33% of firms with the smallest percentage leverage change in the sample,   Large change represented by 33.33% of firms with the largest percentage leverage change in the sample.

Pre-issue leverage-grouped firms are identified as: (1) low, (2) medium, (3) high.

Table 6 presents the announcement (Panel A) / issuance (Panel B) abnormal returns for each of the three sizes of capital structure change, each of the three pre-issue categories, and nine paired categories of the two variables.

The results show that stock return varied inversely with the magnitude of capital structure change as measured by percentage change in leverage (evidence column 4). The findings for the three pre-issue leverage categories are presented in row four of Table 6 suggest that there is a tendency for firms with lower leverage to experience a smaller negative price effect at announcement time as well as at issue time. Finally, to consider the joint impact of capital structure change and the pre-issue leverage level, each pre-existing leverage category is subdivided by percentage change in leverage. The mean portfolio returns on the announcement/issue abnormal return for each of the nine categories is presented in the first three columns of Table 6. With a few exceptions, the data exhibit a consistent pattern. There is an inverse relationship between capital structure and return. Also, there is a tendency for firms with lower leverage to experience smaller negative price effect at announcement time as well as at issue time.

Table 6 about here

In this paper, we also examine the combined effect of leverage and growth opportunities (Hypothesis 3) on SEOs. The samples were sub-grouped by their leverage and growth opportunities. Table 7 presents the event- day abnormal return

for the various sub-samples. The results indicated that low-growth and high- leverage firms are the worst performers at the announcement and issuance of SEOs. The 2-day announcements abnormal return for low-growth, high-leverage was -0.042 and for high-growth, high-leverage -0.013. The difference in their mean abnormal return was statically significant at the 1% level. These findings support the prediction in the Hypothesis 3.

Table 7 about here

Finally, regression analysis was used to determine whether or not leverage and growth opportunities are significantly related to market reactions to SEOs on announcement and issuance dates. Table 8 contains the results of the regression analysis. The coefficients of market leverage in model 1, model 3 and model 4 were consistently negative and significantly at the 1% and 10 % levels. The coefficients of growth opportunities (market-to-book ratio) in model 2, model 3, and model 4 were all positive and statistically significant at 1% level and 5% level. These findings once again affirm previous evidence that leverage and growth opportunities have a significant effect on SEOs (Hypotheses 1 and 2). These results also support theories of information asymmetry (Myer and Mailuf (1984), Choe et al. (1993), Ambarish et al. (1987)) or overinvestment of free cash flow (Jensen (1986)). However, these results contradicted the theories of Raymar (1993) and Dierkerns (1991) predicting that higher levered firms should perform better than lower levered firms at SEOs announcement. When both leverage and growth opportunities were regressed on the event-day abnormal return, the results in model 3 confirmed that leverage and growth opportunities played important roles in explaining the market reaction to SEOs.

Table 8 about here

5. Conclusion

This paper examined the effect of leverage and growth opportunities of issuing firms on the market reaction to SEOs on announcement and issuance dates in Finland. The impact of leverage on SEOs has so far received very little attention in empirical studies. Raymar (1993), Dierkerns (1991) argue theoretically that when the firm has outstanding debt issues equity issue may be a positive event. No support for this theory was found in this study. The evidence in this paper shows that leverage has a significantly negative effect on SEOs. High-levered firms experience more value loss than low-levered firms at the announcement of equity issue and thus support the alternative view of leverage effect presented in this paper. This paper argues that leverage has a negative association with information asymmetry. Thus an equity issuance will lead to an increase in the level of information asymmetry for the issuing firm. Therefore, the level of information asymmetry will be higher for the high-levered firm and lower for the low-levered firm when a firm announces the equity issue and decreases its leverage.

"Growth theories" (Ambarish et al. 1987, Jensen 1986, Choe et al. 1993) argue that if the issuing firms possess growth opportunities, then they should perform positively at event of SEOs. But, Mc Laughlin et al. (1988), Gombola et al. (1998) and Smith &Watt (1992) argue that high-growth firms have higher information asymmetry and so are more overvalued than low-growth firms. Thus, they should experience more value loss at announcement of SEOs. The results of this paper support for "growth theories". The findings from both event studies and regression analysis showed that growth opportunities have a significantly positive effect on SEOs. The high-growth firms perform better than the low-growth firms at the announcement and issuance of SEOs. These findings are also consistent with empirical studies on the other markets such as Pilotte (1992) and Denis (1994) in US, Burton et al. (2001) in the UK, and Corby et al. (1998) in Ireland. When the effects of leverage and growth opportunities are examined simultaneously, it is found that high-levered, low-growth firms are the worst performers at event SEOs. Thus, the results are consistent with the predictions of Hypothesis 3.

Finally, in regression analysis, the coefficients for the leverage are consistently negative and significant in model 1, model 3 and 4, while the coefficients of growth variables are significantly positive in model 2, model 3 and model 4. These observations once again confirm the previous evidence supporting Hypothesis 1 and Hypothesis 2. Overall, this paper provides novel evidence that the leverage and growth opportunities of issuing firms have a significant effect on the market reaction to seasoned equity issue in Finnish stock markets.

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Table 1. Number of Seasoned Equity Offerings (SEOs) by Year and Industry

Panel A: Distribution of the qualified SEOs by calendar year		
Issuing Year	*Number of Announcements*	*Number of Completed Issues*
1996	3	2
1997	6	5
1998	9	8
1999	7	6
2000	15	13
2001	26	24
2002	16	14
2003	11	10
Total	93	82

Panel B: Number of SEOs by industrial classification		
Sector	*Number of Completed Issue Firms*	*% of Sample*
Transport	3	3.66 (%)
	Trade	3 3.66
Metal and Engineering	11	13.41
Forest Industry	6	7.32
Food Industry	10	12.19
Telecommunication &Electronics	22	26.82
Construction	3	3.66
Chemicals	3	3.66
Pharmaceuticals	4	4.88
Media and Publishing	4	4.88
Other industry	6	7.32
Other service	7	8.54
Total	82	100

Table 1 classifies SEOs by year of issuance and industry classifications. The samples consist of 93 announcements of SEOs in which 82 proposed issues going through with the issue and 11 proposed issues withdraw their issue during the period 1996-2003 on the Helsinki Stock Exchange. Bank, insurance, and investment companies are excluded from the sample.

Table 2. Descriptive statistics of the Finnish SEO, 1996-2003

Mean, median, maximum and minimum values for selected variable of 82 completed Finnish SEOs during the period 1996-2003. Issuer size is the market value at the year ending just prior to the sample offering announcement. Market leverage was defined as the ratio of the book value of total debt divided by the sum market value of common stock, book value of current debt, long-term debt and liquidation value of preferred stock. Book leverage was defined as the ratio of book value of total debt divided by total asset. Market/book ratio (M/B) is sum of the market value of equity and book values of long-term debt and preferred stock, all divided by the book value of total assets. M/B is measured as of the year ending just prior to the sample offering announcement. Return on equity (%) is issuing firm's return on equity for the year ending just prior to the offering announcement. Capital expense/total asset is the average ratio of capital expenditures to total assets over five years preceding the issue announcement. Dividend yield of the issuing firms is measured by the year ending just prior to the offering announcement. Growth rates (%) in market value are annually compounded growth rates. The growth rates are measured over the 5 years preceding the issue announcement.

Variables	Mean	Median	Maximum	Minimum
Panel A: Issuers General Characteristics				
Issuer size (*million Euros*)	8,095	218	223,000	10
Proceeds from SEOs (*million Euros*)	83.90	18.08	530	1
Total Assets (*million Euros*)	2,068	300	23,327	18.16
Total Debt (*million Euros*)	850	214	10,181	9.5
Panel B: Issuers Financial Leverage				
Market Leverage	0.41	0.41	0.95	0.009
Book Leverage	0.53	0.52	0.97	0.17
Long- Debt/ Total Assets	0.19	0.19	0.65	0
Short- Debt/ Total Asset	0.34	0.31	0.65	0.11
Panel C: Issuers Investment Opportunities				
Market/Book ratio	1.55	1.12	935	-3.7
Dividend yield	0.03	0.02	1.50	0
Return on Equity (%)	14.11	12.80	110	-414
Capital Expense/Total Asset	0.15	0.08	1.70	0
Market Value Growth rate (%)	42.68	27.70	194	-50

Table 3. Abnormal Returns around Announcement and Issue Days of Finnish Seasoned Equity Offerings 1996-2003

2-day Average Announcement Abnormal Return		
Mean	***-0.036***	
Median	-0.036	
Maximum	0.183	
Minimum	-0.212	
Percentage Negative AR		80.6%
Z-Value (H_0: mean AR=0)	-6.97	
P-value	0.00	
2-day Average Issue Abnormal Return		
Mean		***-0.024***
Median		-0.017
Maximum		0.096
Minimum		-0.141
Percentage Negative IR		85.30%
Z-Value (H_0: mean IR=0)		-4.167
P-value		0.00

Two-day average abnormal returns are estimated using Market Model procedure with parameters estimated over a 300-trading day period ending 60 days prior the sample offering. Significant tests are conducted using standardized abnormal return as in A. Craig Mackinlay 1997.

Table 4. 2-day Average Announcement / Issuance Abnormal Return categorized by Issuing Firm's Growth Opportunities

	2-day Abnormal Return at	
Growth Opportunity Variables	*Announcement Period*	*Issue Period*
Panel A. Market to Book ratio		
High Growth	-0.026	-0.009
2	-0,028	-0.015
3	-0.035	-0.025
Low-Growth	-0.049	-0.064
Differences (High and Low-Growth)	*0.023**	*0.055** **
Panel B. Capital Expense/ total assets		
High Growth	-0.031	-0.03
2	-0.044	-0.029
3	-0.035	-0.022
Low-Growth	-0.075	-0.039
Differences (High and Low-Growth)	*0.043****	*0.007*
Panel C. Dividend Yield		
High Growth	-0.027	0.006
2	-0.043	-0.029
3	-0.042	-0.022
Low-Growth	-0.069	-0.028
Differences (High and Low-Growth)	*0.042***	*0.035****

*** Significant at the 1% level;**   Significant at the 5% level;*   Significant at the 10% level

Two-day average abnormal returns are estimated using Market Model procedure with parameters estimated over a 300-trading day period ending 60 days prior to the sample offering. Issuing firm's growth opportunities in the year before the issue announcement took place are used and categorized into quartiles. Quartile 1 (high) contains the 25 % of issuing firms with the highest growth opportunities; quartile 4 (low) contains the 25% of issuing firms with the lowest growth opportunities.

Table 5. 2-day Average Announcement / Issuance Abnormal Return categorized by Issuing Firm's Financial Leverage

	2-day Abnormal Return at		
Leverage Variables	*Announcement Date*		*Issue Date*
Panel A. Market Leverage			
Total sample	-0.034	-0.021	
Low-Levered	-0.033	-0.012	
High-Levered	-0.053	-0.042	
Differences (Low and High-Levered)	*0.02**		*0.03***
Panel B. Book Leverage			
Total sample	-0.040	-0.021	
Low-Levered	-0.024	-0.009	
High-Levered	-0.041	-0.035	
Differences (Low and High-Levered)	*0.017***		*0.026***
Panel C. Long-term Debt / Total Assets			
Total sample	-0.036	-0.018	
Low-Levered	-0.009	-0.003	
High-Levered	-0.035	-0.023	
Differences (Low and High-Levered)	*0.026***		*0.02***

*** Significant at the 1% level;** Significant at the 5% level;* Significant at the 10%

Two-day average abnormal return are estimated using Market Model procedure with parameters estimated over 300-trading day period ending 60 days prior the sample offering.

Market Leverage was defined as the ratio of the book value of total debt divided by the sum market value of common stock, book value of current debt, long-term debt and liquidation value of preferred stock. Book Leverage was defined as the ratio of book value of total debt divided by total asset. Issuing firm's leverage in the year before the issue announcement took place is used and categorized into quartiles. Quartile 1 (high) contains the 25 % of issuing firms with the highest leverage; quartile 4 (low) contains the 25% of issuing firms with the lowest leverage.

Table 6. Panel A. 2-day Average Abnormal Announcement Return for Subgroups

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		Pre-Issue Leverage Category		
Percentage Change				
In Leverage	Low	Medium	High	*All*
	(1)	(2)	(3)	(4)
(1) Small	-0.006	-0.012	-0.030	*-0.019*
(2) Medium	-0.022	-0.026	-0.032	*-0.026*
(3) Large	-0.054	-0.056	-0.057	*-0.056*
(4) All	*-0.027*	*-0.030*	*-0.041*	

Panel B. 2-day Average Abnormal Issuance Return for Subgroups

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		Pre-Issue Leverage Category		
Percentage Change				
In Leverage	Low	Medium	High	*All*
	(1)	(2)	(3)	(4)
(1) Small	0.010	-0.033	-0.004	*-0.010*
(2) Medium	-0.013	-0.005	-0.042	*-0.021*
(3) Large	-0.026	-0.023	-0.067	*-0.041*
(4) All	*-0.010*	*-0.020*	*-0.039*	

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Table 7. 2-Day Average Announcement/Issue Abnormal Return of the Overall Sample broken down by Leverage Level and Growth Level

Panel A. Announcement Period

	Low-Levered		High-Levered	*Differences*
High-Growth	-0.027	-0.013	*-0.014**	
Low-Growth	-0.037	-0.042	0.005	
Differences	*0.01*	*0.029****		

Panel B. Issuance Period

	Low-Levered		High-Levered	*Differences*
High-Growth	-0.015	-0.007	*-0.008*	
Low-Growth	-0.033	-0.066	*0.033***	
Differences	*0.018**	*0.059****		

*** Significant at the 1% level;**   Significant at the 5% level;*   Significant at the 10% level

Table 8. Two-day announcement abnormal return - Issuer's Financial Leverage and Growth Opportunities. The table reports the estimates of univariate and multivariate versions the regression analysis.

$$AR_{it} = \alpha + \beta_1 Leverage_{it} + \beta_2 Growth_{it} + \beta_3 Leverage_{it} * Growth_{it} + \varepsilon_{it}$$

where AR denotes 2-day announcements abnormal return, leverage was defined as the ratio of the book value of total debt divided by the sum market value of common stock, book value of current debt, long-term debt and liquidation value of preferred stock. Growth was defined as market- to-book ratio.   T-statistics for the coefficient estimates are reported in parentheses.

*** Significant at the 1% level;

**   Significant at the 5% level;

*   Significant at the 10% level

	Model 1	Model 2	Model 3	Model 4
Constant	-0.040*** (-3.32)	-0.033*** (-3.36)	-0.028** (-2.24)	-0.018** (-1.98)
Leverage	-0.057*** (-1.54)	-0.029* (-1.62)	-0.032*	(-2.28)
Growth	(2.21)	0.30** (1.78)	0.042** (2.8)	0.148***
Leverage* Growth			0.282 (1.23)	
Adjusted R^2	-0.25	-0.22	-0.3	-0.32