

T.C.
DOKUZ EYLÜL ÜNİVERSİTESİ
SOSYAL BİLİMLER ENSTİTÜSÜ
İNGİLİZCE İŞLETME ANABİLİM DALI
İŞLETME YÖNETİMİ PROGRAMI
YÜKSEK LİSANS TEZİ

**ANNOUNCEMENT EFFECT
IN SEASONED EQUITY OFFERINGS
IN ISTANBUL STOCK EXCHANGE**

Ş.Ozan BAYER

Danışman
Prof. Dr. Banu DURUKAN

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ÖZET

Yüksek Lisans Tezi

Announcement Effect in Seasoned Equity Offerings in Istanbul Stock Exchange

Ş.Ozan BAYER

Dokuz Eylül Üniversitesi

Sosyal Bilimler Enstitüsü

İngilizce İşletme Anabilim Dalı

Bu araştırmanın sonucunda Türkiye’deki ikincil arzların ilan gününde pozitif abnormal getiri gözlemlenmiştir. Genelde ikincil halka arzlar tahsisli satış yoluyla yapılmakla birlikte, çok az miktarı tahsisiz yapılmaktadır. Bununla birlikte ortakların hisse senedi satışı ve özelleştirme satışları ikincil halka arzlar kapsamındadır. Hertznel ve Smith (1992)’in Bilgi Hipotezi, Miller and Rock (1985)’un Nakit Akışı Sinyali Hipotezi, Jensen (1986)’nin Boşa Harcanan Yatırımlar Hipotezi, Eckbo ve Masulis (1992)’in Arz Methodları Hipotezi ve Modigliani ve Miller(1958)’in Kaldıraç Değişikliği Hipotezi tahsisli halka arzlarda gözlenen pozitif abnormal getiriyi açıklamaktadır. Şirketler hisse senetleri primli olduğu zaman tahsisiz olarak halka arz yapmakta, fakat iskontolu oldukları zaman tahsisli olarak halka arz yapmaktadırlar. Tahsisli halka arzların ilanı şirket değerinin yükselmesine sebep olur. Fakat ihraç edilen nominal hisse senedi miktarı, tahsisli halka arzlarda şirket değerini negatif olarak etkilemektedir. Ayrıca piyasalar yükselirken yapılan tahsisli halka arzların ilanı piyasada pozitif etki yapmaktadır. Bu da tahsisli halka arzlarda fırsat penceresinin bulunduğunu göstermektedir. Vekillerin negatif getirili projelere yapabileceği yatırımlardan kaynaklanan vekil maliyeti tahsisli satışların ilan gününde bir etkiye sahiptir. Ayrıca arz maliyetinin ilan günü getirisi üzerinde negatif etkisi vardır. Son olarak hisse senedi satışından dolayı azalan borç kaldırıcının ilan gününde negatif bir etkisi de bulunmaktadır.

Anahtar Kelimeler 1) İkincil halka arz, 2) İlan etkisi, 3) Abnormal getiri, 4) Tahsisli satış , 5) Ortak satışı, 6) Bilgi hipotezi, 7) Fiyat baskısı hipotezi 8) Fırsat Penceresi

ABSTRACT

The Master Thesis

Announcement Effect in Seasoned Equity Offerings in Istanbul Stock Exchange

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This research shows that positive abnormal return is observed at the announcement day of seasoned equity offerings in Turkey. Although most of the seasoned equity offerings are private placements in Turkey, few of them are public offerings. Privatization offerings and secondary offerings are also in the context of seasoned equity offering in Turkey. Hertz and Smith (1992)'s Information Hypothesis, Miller and Rock (1972)'s Cash Flow Signalling Hypothesis and Wasted Investment Hypothesis of Jensen (1986), Eckbo and Masulis (1992)'s Flotation method hypothesis and Modigliani and Miller (1958)'s Leverage Change Hypothesis explain the positive abnormal return in private placements. The firms make public offerings when they are overvalued but they make private placements when they are undervalued. The announcement of private placement makes firm value increase. However issue size affect firm it negatively when the private placements are announced. Furthermore, when market is rising, the announcement of seasoned equity offering signals good news to the market. This shows that windows of opportunity exist in private placement. The agency cost result from the fact that the manager may waste the investment in negative NPV project has some affect on the announcement day abnormal return. In addition the market capitalizes expected flotation cost on announcement day return. Finally, the decrease in leverage due to seasoned equity offering results in decrease in abnormal return at the announcement day also.

Keywords 1) Seasoned equity offering, 2) Announcement effect, 3) Abnormal return, 4) Private placement, 5) Secondary offering, 6) Information hypothesis, 7) Price pressure Hypothesis 8) Windows of opportunity

ANNOUNCEMENT EFFECT IN SEASONED EQUITY OFFERINGS IN ISTANBUL STOCK EXCHANGE

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ABBREVIATION

SEO Seasoned Equity Offerings

IPO Initial Public Offerings

TTRG Turkish Trade Registry Gazette

CMBT Capital Market Board of Turkey

AD Announcement Day

ID Issuance Decision

CD Cancellation Decision

U.S. United States

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INTRODUCTION

Firms sell new shares through seasoned equity offerings by putting partial or complete restriction on existing shareholders. In addition existing shareholders sell their own shares through seasoned equity offerings. There are two methods for SEOs; public placements or public offerings and private placement. In private placement firms sell their new share to some sophisticated investor group or institutions with sharing their inside information.

There are number of studies in literature about seasoned equity offerings. The main objective of these studies is to explain market anomalies observed in seasoned equity offerings. These market anomalies are announcement effect, hot issue market or window of opportunity, underpricing and long run underperformance. The objective of this thesis is to investigate whether or not there is significant abnormal return at announcement day in Turkey and what are the reasons for that.

The researches show that although the abnormal return at announcement day is significantly negative in U.S. market, it is generally positive in Asia and Europe except England. For example Mikkelsen and Partch (1986) find negative abnormal return of about – 4% in U.S. market but Hietala and Löttyniemi(1991) find positive abnormal return of 3.8% in Finland. This result implies that there are some institutional differences between U.S. market and European market. In addition although negative announcement effect is observed for public offerings, private placements have positive announcement effect. Wruck (1989), Hertz and Smith (1993) and Kato and Schallheim (1993) documents that the announcement effect of private placement of equity is 4% on average.

The researchers try to find why there are significant abnormal returns at announcement day. Myers and Majluf (1984)-information hypothesis is based on the idea that there is information asymmetry between managers and investors. Managers who have superior information try to sell new shares when the stocks are overvalued because they have the will of increasing existing shareholder value. Investors knowing this decision rule react negatively. Another hypothesis which is cash flow signalling hypothesis developed by Miller and Rock (1985) mention that the announcement of seasoned equity offerings signal that the firm has inadequate cash flow to finance its investment. In addition Jensen (1986) present that the announcement of seasoned

equity offering signal that the capital raised may be spend by managers in negative net present value project. Price pressure hypothesis developed by Scholes (1972) explains that in the absence of perfect substitute, firms face downward sloping demand curve. Therefore an increase in the quantity of shares results in decrease in the stock price. Another hypothesis of Scholes (1972) point out that the stock price decline following an announcement reflects a discount that must be offered to compensate investors for the transaction costs they bear in adjusting their portfolios to absorb the new shares. Modigliani and Miller (1958) present that new equity issues cause an unanticipated decrease in financial leverage but Merton (1974) mentions that an unexpected decrease in leverage makes a firm's debt less risky. Therefore bondholder experience an increase in the value at the expense of the shareholders. Eckbo and Masulis (1992) figure out that the announcement period abnormal return reflects the capitalized value of the flotation cost and the proportion of equity that is purchased and held by current shareholders. Chammanur and Jiao (2006) show that the availability of soft information about firms in a market significantly affect the equity issue behavior of firms and therefore announcement effect. If sufficiently precise information about a firm exist, firm issue stock even when it is undervalued. This hypothesis explains difference between U.S. and Europe or Asian.

Hertzel and Smith (1993) argue that with private placement, managers can put intensive effort into negotiating with and convincing a small group of investors and institutions that the firm is undervalued and has good prospects. In addition, Wruck (1989) mentions that the positive stock price reaction to private equity placements reflects reductions in agency costs that result from improved alignment of incentives between managers and stockholders. Such reductions could be due to increased monitoring provided by an additional single, or possibly several, large nonmanagerial shareholders. Leland and Pyle (1977) developed a hypothesis for secondary SEOs. It implies that sales of shares by better informed investors signal that the shares are overvalued. As Houston and Ryngaert (1997), Akhigbe and Harikumur (1996), Sant and Ferris (1994) present, the hypotheses mentioned above are mutually exclusive and explain part of the announcement effect.

In the sample of this thesis, there are 34 offerings between the year 1996 and 2005. The event study described in Brown and Warner (1985) is used. According to the result of this study, the positive announcement effect is observed in Turkey and its magnitude is 1.6%. Main reason for this positive reaction of the Turkish market is that most of the seasoned equity

offerings are primary private placement. Information asymmetry hypothesised by Myers and Majluf (1984) affects the abnormal return at announcement day of seasoned equity offerings in Turkey. It is also found that price pressure hypothesis developed by Scholes (1972) and wasted investment hypothesis of Jensen (1986) explain part of the announcement day effect in private placements.

The remainder of the research is organized as follows. In chapter 1, the importance of seasoned equity offerings is discussed by comparing it with initial public offerings. Afterwards the decisions of seasoned equity offerings, issuance process, principals on the sales of equity, intermediation in seasoned equity offerings are explained and finally market anomalies observed are presented. In chapter 2, one of the market anomalies, announcement effect is examined in detail. The competing hypotheses are discussed. Empirical studies in literature are given and the proxies for testing these hypotheses are mentioned in the section named as factor affecting announcement effect. In chapter 3, the sample characteristic and methodology used is explained. Furthermore the empirical results are reported and finally the thesis is concluded with a brief summary of the main results.

CHAPTER I

SEASONED EQUITY OFFERINGS

The objective of this chapter is to develop a general understanding of seasoned equity offerings (SEOs). The chapter begins with the discussion of the importance of SEOs by comparing the characteristics of SEOs and initial public offerings (IPOs) on the basis of average first day returns, proceeds, and the money left on the table. Also the signalling hypothesis of IPO underpricing is used to point out the importance of SEOs. After this discussion, the question of how the firms make seasoned equity offerings decisions is answered. Three-date model of Myers and Majluf (1984), pecking order and dynamic pecking order hypothesis are used to answer this question. The description of the issuance process, sales methods and intermediation activities in Turkey follow and finally market anomalies; windows of opportunity, announcement effect, underpricing and long run underperformance are explained.

1.1 Initial Public Offerings and Seasoned Equity Offerings

An initial Public Offering (IPO) occurs when a security is sold to the general public for the first the time, with the expectation that a liquid market will develop. As Ritter (1998) point out, when a firm goes public, pre-issue shareholders are able to sell their share in the future, allowing them to cash out if they so desire. If a firm has a large need for capital, public markets may be a cheaper source of funds. Although these are the advantages of IPO, there are some disadvantages. It has been repeatedly shown that for most of IPOs, shares start trading well below their market value, allowing huge profit opportunities to be exploited by investors. Table 1 shows the average first day return observed around the world. It can be seen that the amount of underpricing changes in different countries. Kiyamaz (2000) and Durukan (2002) present that the first day returns of IPOs is 13% on average, indicating that systematic underpricing is largely observed in the ISE. Kiyamaz (2000) find that these initial returns are related with the size of issuer, rising stock market between the date of public offering and first trading day, institutional ownership and self issued offering. Durukan (2002) finds that these initial returns are related with the size of issuer, gross proceeds, age of firm, debt level in the firm capital structure in the year prior to IPO, institutional ownership and self issued ownership.

Table 1 Average first day return observed around world

| Country | Source | Sample Size | Time period | Avg. Initial Return |
|-----------|-------------------------------------|-------------|-------------|---------------------|
| Australia | Lee, Taylor & Walter; Woo | 381 | 1976-1995 | 12.1 |
| Austria | Ausseneg | 83 | 1984-2002 | 6.3 |
| Belgium | Rogiers, Manigart & Ooghe; Manigart | 86 | 1984-1999 | 14.6 |
| Brazil | Aggarwal, Leal & Hernandez | 62 | 1979-1990 | 78.5 |
| Canada | Jog & Riding; Jog & Srivastava | 500 | 1971-1999 | 6.3 |
| China | Datar & Mao; Gu and Qin | 432 | 1990-2000 | 256.9 |
| Denmark | Jakobsen & Sorensen | 117 | 1984-1998 | 5.4 |
| Finland | Keloharju; Westerholm | 99 | 1984-1997 | 10.1 |
| Germany | Ljungqvist | 407 | 1978-1999 | 27.7 |
| Indonesia | Hanafi; Ljungqvist & Ju | 237 | 1989-2001 | 19.7 |
| Malaysia | Isa; Isa & Yong | 401 | 1980-1998 | 104.1 |
| Nigeria | Ikoku | 63 | 1989-1993 | 19.1 |
| Turkey | Kıymaz & Durukan | 163 | 1990-1996 | 13.1 |
| USA | Ibbotson, Simdelar and Ritter | 14840 | 1960-2001 | 18.4 |

Source: Ritter (2003; 20)

Most of the theoretical and empirical studies hold that initial underpricing is undertaken deliberately. Welch (1989) explain that high quality issuers may attempt to signal their quality by underpricing to separate themselves from low quality firms. As Ritter (2002: 1804) mentions that these issuers then recover the money left on the table by better prices or less underpricing in seasoned equity offerings.

Listed firms raise capital through seasoned equity offerings (SEO) to make investments in projects or to change their capital structure by repaying their debt. In addition, after the initial public offering of the firm's stocks, the liquid market establishes to enable existing shareholders to sell their shares through seasoned equity offerings. Therefore SEOs can be classified as primary offerings which include new share issuance; secondary offerings, which is sale of existing shares and mixed offerings (both primary and secondary). The capital raised through primary offerings is generally used for new investments and capital structure changes but in the case of secondary offerings since existing shareholders sell their equity, money raised cannot be used for the firm's benefit. In primary seasoned equity offerings, firms raise capital by putting partial or complete restrictions on existing shareholders for buying new shares (pre-emptive right) (www.ISE.gov.tr).

In addition primary and secondary SEOs can be public offering or private placements. As the name implies in private placements, managers or informed insiders (existing shareholders)

sell new shares or their own shares privately to small group of sophisticated investors and institutions such as mutual funds, investment companies, insurance companies (www.wikipedia.com).

Seasoned equity offerings are as important and usual way as initial public offerings to raise capital. As it can be seen from Table 2, between 1986 and 2004, total number of initial public offerings in the US is 6004, while the number of seasoned equity offerings during the same time period is 5849. In addition, as Figure 1 shows that the number of IPOs and SEOs fluctuate similarly between 1986 and 2004. When the number of IPOs decreases, the number of SEOs decreases or when the number of IPOs increases, the number of SEOs increases too. The period between the October 1987 market crash and the February 1991 Gulf war and the period of market recession between 2000 and 2001 were the periods of lowest issuing volume for both IPOs and SEOs. This observed clustering of equity issues is consistent with the widely belief of the investment community that certain periods offer a window of opportunity in which equity is more likely to be misvalued by the market (Koop, Li, 2001: 329).

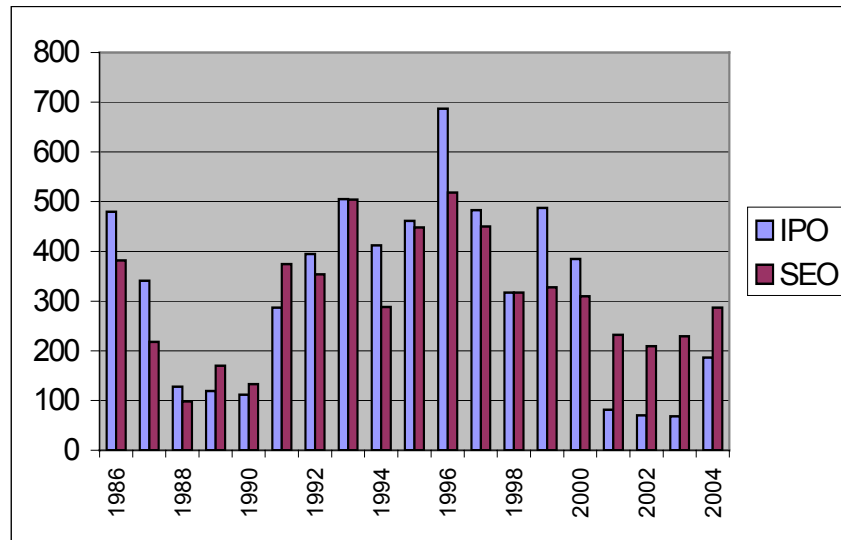
Table 2 Number of SEOs and IPOs, average proceed from IPOs and SEOs, average first day return of IPOs and SEOs and average money left on the table for IPOs and SEOs between 1986 and 2004 in the U.S. (The offerings of financial companies were excluded). First day return is defined as the percentage change from the offer price to the closing price. Money left on the table is calculated by multiplying gross proceed with first day return or underpricing.

| Period | Number of Offering | | Average Proceed (million \$) | | Average first day return(%) | | Average Money left on the table(million \$) | |
|-----------|--------------------|------|------------------------------|--------|-----------------------------|------|---|------|
| | IPO | SEO | IPO | SEO | IPO | SEO | IPO | SEO |
| 1986-2004 | 6004 | 5849 | 82.3 | 102.92 | 19.97 | 2.79 | 16.44 | 2.87 |
| 1986 | 480 | 382 | 32.95 | 34.62 | 5.9 | 1.62 | 1.94 | 0.6 |
| 1987 | 341 | 218 | 37.86 | 45.37 | 5.6 | 0.88 | 2.12 | 0.4 |
| 1988 | 128 | 98 | 32.23 | 49.03 | 5.4 | 0.91 | 1.74 | 0.4 |
| 1989 | 119 | 170 | 43.32 | 42.79 | 7.9 | 0.92 | 3.42 | 0.4 |
| 1990 | 112 | 133 | 37.72 | 54.89 | 10.5 | 2.76 | 3.96 | 1.5 |
| 1991 | 287 | 374 | 53.65 | 64.35 | 11.7 | 2.5 | 6.28 | 1.6 |
| 1992 | 395 | 354 | 55.13 | 72.96 | 10.1 | 2.43 | 5.57 | 1.8 |
| 1993 | 505 | 504 | 57.23 | 68.47 | 12.7 | 2.64 | 7.27 | 1.8 |
| 1994 | 412 | 288 | 43.17 | 69.32 | 9.8 | 2.42 | 4.23 | 1.7 |
| 1995 | 461 | 448 | 62.35 | 83.73 | 21.1 | 2.71 | 13.16 | 2.3 |
| 1996 | 687 | 518 | 61.97 | 69.02 | 17 | 3.24 | 10.53 | 2.2 |
| 1997 | 483 | 450 | 67.24 | 98.66 | 13.9 | 2.62 | 9.35 | 2.6 |
| 1998 | 317 | 317 | 109.1 | 118.27 | 20.1 | 2.71 | 21.93 | 3.2 |
| 1999 | 487 | 328 | 133.61 | 169.28 | 69.6 | 3.3 | 92.99 | 5.6 |
| 2000 | 385 | 310 | 170.46 | 242.71 | 55.4 | 3.42 | 94.43 | 8.3 |
| 2001 | 81 | 232 | 424.3 | 190.13 | 13.7 | 6.88 | 58.13 | 13.1 |
| 2002 | 70 | 209 | 316.23 | 157.75 | 8.6 | 3.02 | 27.2 | 4.8 |
| 2003 | 68 | 229 | 148.85 | 149.22 | 12.4 | 4.07 | 18.45 | 6.1 |
| 2004 | 186 | 287 | 174 | 165.89 | 12.2 | 2.8 | 21.23 | 4.6 |

Source: Chiu, 2006

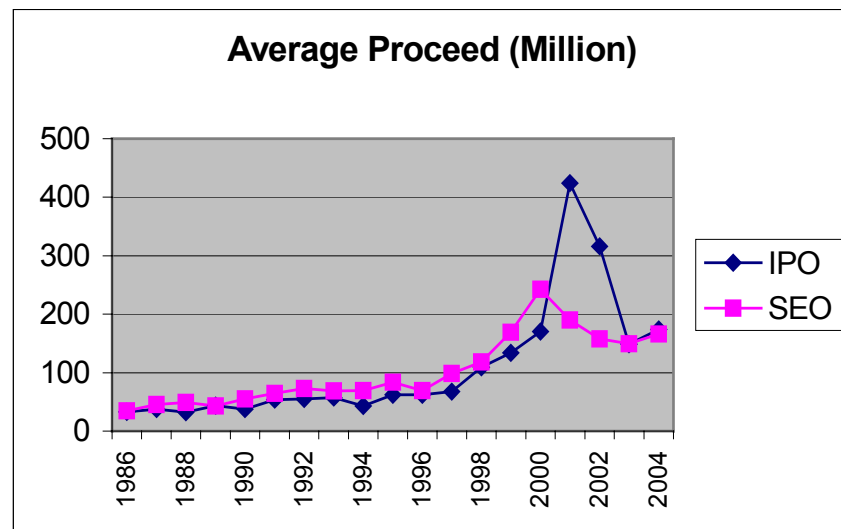
As it can be seen from Figure 2, average proceeds from SEOs is always bigger than average proceeds of IPOs except year 2001 and 2002 during which the US was in recession.

Figure 3 presents that on average issuers underprice IPOs more than SEOs. However the level of underpricing of IPOs shows greater variation than SEOs. It also reaches the highest points in 1999 and 2000. As Figure 4 shows, issuers leave more money on the table for IPO than SEO. Because of the big increase in level of underpricing, average money left on the table reaches the highest values in 1999 and 2000.



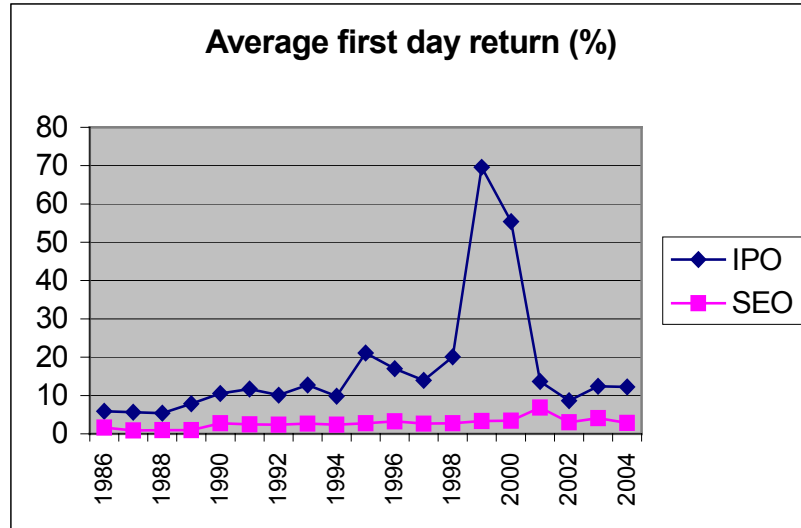
Source: Chiu, 2006

Figure 1 The number of IPOs and SEOs in U.S. between 1986 and 2004



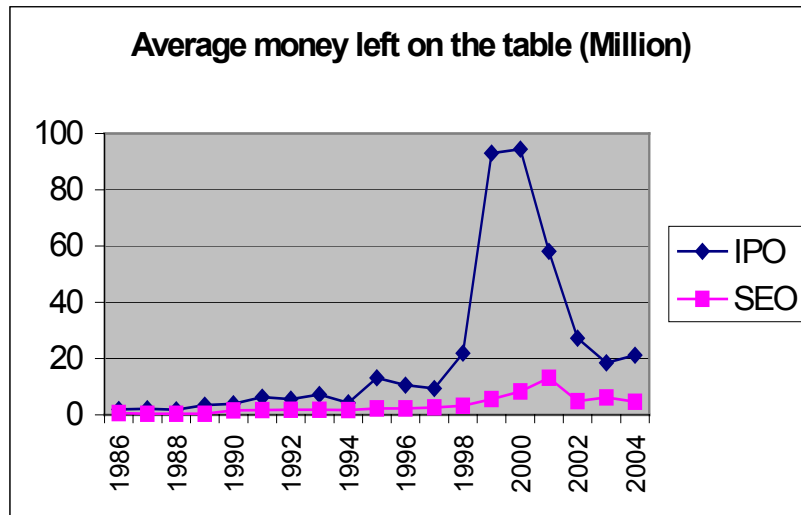
Source: Chiu, 2006

Figure 2 Average proceed from IPOs and SEOs in U.S. between 1986 and 2004



Source: Chiu, 2006

Figure 3 Average first day return of IPOs and SEOs in U.S. between 1986 and 2004



Source: Chiu, 2006

Figure 4 Average money left on the table for IPOs and SEOs in U.S. between 1986 and 2004

Table 2 also presents that average first day returns of IPOs is % 20 but average first day return of SEOs is % 3 between 1986 and 2004. Furthermore average money left on the table for SEOs is 2.9 million-dollars while for IPOs that is 16 million-dollars and average proceeds for SEOs is 102.92 million-dollars whereas average proceeds for IPO is 82.3 million-dollars between 1986 and 2004. These results are consistent with the signalling hypothesis that issuers voluntarily desire to leave money on the table in IPOs to create “a good taste in investors’ mouths (Welch, 1989). According to this hypothesis, underpriced new issues allow the firms and insiders to sell future offerings at a higher price. As Ritter (2002: 1804) mentions that to distinguish themselves from low quality issuers, high quality issuers attempt to signal their

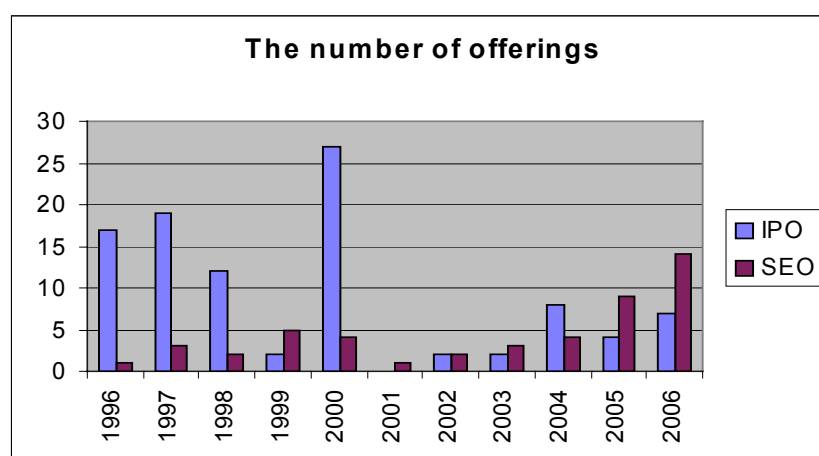
quality by underpricing in initial public offerings. These issuers then recover the money left on the table by better prices or less underpricing in seasoned equity offerings.

When Turkish market is examined, it can be seen from Table 3 that between 1996 and 2006, the number of IPO is 100 whereas the number of SEO is 49. However average proceed raised from SEO is bigger than that raised from IPOs. The privatization of some big companies lead to increase in gap between IPO proceed and SEO proceed. Average first day return for IPOs is 7,02 % but it is 2,81 % for SEOs. Finally on average the firms have left more money on the table for IPOs than that for SEOs in Turkey. These results are also consistent with signalling hypothesis. In other words, the issuers leave good taste by underpricing in IPOs and recover the money left on the table in IPOs by better price or less underpricing in seasoned equity offerings.

Table 3 The number of offerings, average first day return, average proceed and average money left on the table in Turkey between 1996 and 2006 (The financial firms are excluded from the sample). First day return is defined as the percentage change from the offer price to the closing price. Money left on the table is calculated by multiplying gross proceed with first day return or underpricing.

| | Number of offerings | | Average first day return | | Average proceed (YTL) | | Average money left on the table (YTL) | |
|-----------|---------------------|-----|--------------------------|--------|-----------------------|-------------|---------------------------------------|-----------|
| | IPO | SEO | IPO | SEO | IPO | SEO | IPO | SEO |
| 1996-2006 | 100 | 48 | 7.02 | 2.81 | 33,837,837 | 60,604,314 | 2,375,416 | 1,702,981 |
| 1996 | 17 | 1 | 11.42 | 25.71 | 558,761 | 1,837,500 | 63,832 | 472,421 |
| 1997 | 19 | 3 | 3.33 | 12.38 | 1,651,039 | 3,797,718 | 54,967 | 470,294 |
| 1998 | 12 | 2 | 11.89 | 1.72 | 1,512,458 | 12,900,000 | 179,880 | 221,880 |
| 1999 | 2 | 5 | 22.16 | -4.38 | 1,853,500 | 3,414,365 | 410,719 | -149,549 |
| 2000 | 27 | 4 | 6.83 | 1.03 | 55,021,568 | 193,008,493 | 3,755,464 | 1,982,197 |
| 2001 | 0 | 1 | 0.00 | -12.68 | 0 | 7,100,00 | 0 | -900,000 |
| 2002 | 2 | 2 | -4.44 | 6.38 | 17,086,983 | 116,638,130 | -759,008 | 7,438,751 |
| 2003 | 2 | 3 | 11.57 | 5.97 | 9,197,671 | 18,317,378 | 1,063,849 | 1,093,577 |
| 2004 | 8 | 4 | -0.22 | 5.06 | 58,233,666 | 90,173,695 | -126,172 | 4,562,968 |
| 2005 | 4 | 9 | 6.14 | 0.92 | 90,111,348 | 121,445,860 | 5,534,907 | 1,112,847 |
| 2006 | 7 | 14 | 5.15 | 2.18 | 136,656,029 | 27,760,095 | 7,044,052 | 604,539 |

Source: www.imkb.gov.tr



Source: www.imkb.gov.tr

Figure 5 The number of IPOs and SEOs in Turkey between 1996 and 2006

As it can be seen from figure 5, the number SEOs decrease in 2001, while there is no IPO in 2001 because of economic crises.

Furthermore, it is observed that the number of SEOs increases after 2001. As mentioned before, one of the factors that affect this increase is the privatization and other factor is increasing trend of Istanbul Stock Exchange. In addition fluctuations show that there are windows of opportunity for initial public offerings and seasoned equity offerings in Turkey also.

1.2 The Decision of Seasoned Equity Offerings

Myers and Majluf (1984) provide a theoretical model for the firm's decision to issue additional new equity. Their model is based on asymmetric information between managers and external investors about the potential investment opportunities and the market value of the firm. The external investors do not have the private information that the managers have. This asymmetric information creates a pooling equilibrium between those firms that actually have good investment opportunities and those firms that do not. Assuming that management's decision to issue new equity is based on the existing shareholders' interest, the managers of the firms that do not have good investment opportunities will issue new equity only if they believe that the firm is currently overvalued. When the firm is currently overvalued, issuing new shares creates a wealth transfer from new shareholders to existing shareholders. However rational investors cannot differentiate between bad firms that do not have good investment opportunities and good firms when the firms announce to issue new equity because of information asymmetry. Therefore external investors tend to put a downward revision on the firm's equity value when the managers announce an SEO. When the downward revision becomes severe, the managers may decide to pass up good investment opportunities. Furthermore, Jim, Kim and Stulz (1996) find that the firm's investment opportunities play a significant role in the new issue decision.

Another important explanation about the decision of equity offerings is based on pecking order theory (Myers, 1984: 581). According to this theory, asymmetric information results in information costs that are of sufficient magnitude to force firms into a financing "pecking order" in which new equity is used only after internal funds and debt capacity have been

exhausted. According to Myers and Majluf (1984), since the act of issuing conveys a negative signal that the firm's market share is overvalued, the stock price will fall down.

However as Myers and Majluf (1984: 193) present, because of this falling price, the firm is willing to give up good investment opportunity when its shares are undervalued. As Kim and Purnanandam (2006: 2) mention, this underinvestment problem adds extra costs to equity financing and hence makes it the financing choice of last resort.

However Loughran and Ritter (1995) point out that firms issue equity when they are overvalued. In other words, the market sometimes misvalues the share price. Stein (1996) find that because of that misvaluation, unlike pecking order financing, sometimes the ranking choices can be external equity, external debt and internal equity.

The last section of Myers and Majluf (1984) and the conclusion of Myers (1984) describe a "modified" pecking order. According to them, firms may issue equity in place of debt or internal financing to maintain both liquid assets (financial slack) and debt capacity for future investments, thereby avoiding potential underinvestment problems.

Hertzel and Smith (1993) argue that private equity placements by undervalued firms with little financial slack can decrease the underinvestment problem also and they resolve asymmetric information in such a way to take advantage of profitable investment opportunities. With private placement, managers can put intensive effort into negotiating with and convincing a small group of investors and institutions that the firm is undervalued and has good prospects. This process allows a small group of investors to access more precise information about the value of the firm

1.3 Issuance Process

As Communique serial I no. 26 (Capital Market Board of Turkey, 1998) on principles regarding registration with The Capital Markets Boards and sale of shares mentions that two kinds of seasoned equity offerings exist; offering of existing shares (Secondary Offerings) and offering of publicly held corporations through capital increase (Primary Offerings).

For secondary offerings, the existing shareholders make a decision about selling their own shares. The board of directors prepares an amendment to the Articles of Association of a publicly held joint stock company applies to the Board. After the approval of the Board, sales and amendment to the articles of association shall be approved at the general shareholders meeting.

For primary offerings, the board of directors makes a decision determining the amount of capital to be increased and principles of sale. Then the board of directors prepares the amendment in the article concerning the change in capital in Articles of Association and decision on capital increase is taken at the shareholders' meeting following the approval of the Board on amending the article. If the limitation of pre-emptive rights partially or entirely was presented at the shareholders' meeting, the board of directors would prepare a report which explain the reasons of limitation of pre-emptive rights and the price offered to existing shareholders.

The decision of board of directors to limit the pre-emptive rights is registered at the Trade Registry and announced in Turkish Trade Registry Gazette (TTRG) in 5 working days. After this procedure, an application is made to the Board requesting the registration of shares.

For private placements by limiting the pre-emptive rights, the related principles are decided at the shareholders' meeting or by the board of directors authorised with the Articles of Association. After that, application for the registration with the Board is done. If the buyers are known prior to registration, the documents stating who will buy and nominal values of the shares to be bought by those along with the sales price are sent to the board. In domestic private placements, the sales should start within fifteen days following the date of registration with the Board and should be completed in one week.

Prior to registration of the shares with the Board, demand of investors, without creating any obligation or commitment for them, by a certain margin can be collected by the intermediary institutions through book building.

It is obligatory to have sufficient number of preliminary prospectus submitted to the Board and signed by the authorities of the company, intermediate institutions and independent auditor

in cases where book building shall be carried out, and to provide it to the persons requesting. Book building period does not exceed 30 days.

The applications to the Board shall be evaluated by taking into consideration whether the prospectus and the circular contain the information required by the legislation on corporations and the shares to be offered to the public within the framework of public disclosure. As a result of the evaluation, if the explanations are found insufficient, not reflecting the truth and causing public abuse, the Board may refrain from registration of related shares by submitting justification. Otherwise, the shares are registered.

After the registration of the shares with the Board, the prospectus approved by the Board is registered at the Trade Registry where the corporation is registered and it is announced in TTRG in 15 days following the date of the Board's registration document.

The prospectus consists of the general descriptive information about the corporation, information about current shares and shares that is sold, sales condition, financial situation, operational situation and persons who signed and approved the prospectus.

If the shareholders are entitled to exercise pre-emptive rights in capital increases, "Pre-emptive Rights Circular" is announced in 15 days following the registration of the prospectus. The pre-emptive rights shall be exercised in return of pre-emptive right coupons in accordance with the period and principles laid down in the circular, within at least 15 and at most 60 days. The shareholders in that period shall deposit the total value of the shares at a special bank account and thus participate in capital increase or sell pre-emptive right coupons.

Circular for investors shall be published in 15 days after the end of the period for exercising pre-emptive rights or after the registration of the prospectus if pre-emptive rights have not been exercised. The shares shall be offered to public afterwards. After exercising the pre-emptive rights, the remaining shares shall be offered to public in 2 days at most.

If the total demand exceeds the total number of shares offered to the public, the shares belonging to the existing shareholders can be added to the amount of the shares to be offered to public. Additional sales (Green Shoe) could be exercised by the sale of existing shareholders' shares and also could be exercised by the brokerage firm that operates in the public offering by

borrowing shares from current shareholders. The obligations of the brokerage firm due to the sales transaction with borrowed shares from existing shareholders are fulfilled in 30 days after the date that the shares begin being traded on the stock exchange. After new stocks start to be traded, the brokerage firm may buy the related shares from the stock exchange and deliver to existing shareholder or pay worth of shares to fulfill its obligation. The amount of shares subject to the additional sales can not exceed %15 of the amount of shares offered to the public before the additional sales.

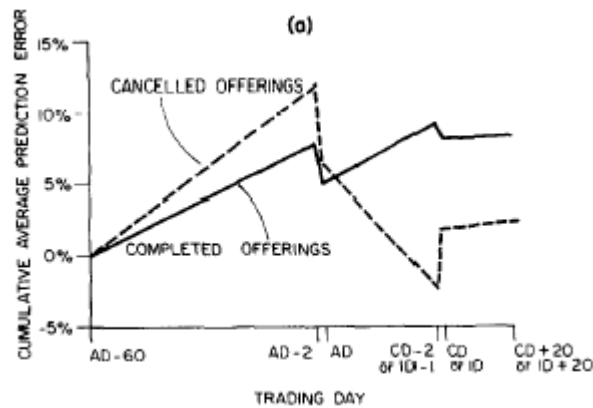
After the shares begin to be traded on the stock exchange, the brokerage firm acting in the public offering could buy shares in order to maintain price stabilization. Transactions providing price stability after the public offering are applicable at most for 30 days after the first date of trade on the stock exchange. The brokerage firm acting in the public offering could buy shares as long as the price gets below the offering price.

1.3.1 Relationship between the Issuance Process and Share Prices

As Giammarino, Heinkel and Hollifield (2004: 86) mention, a seasoned equity offering involves two distinct decisions separated in time. The offering begins with the decision to register the securities. At this date, the firm announces its intention to float a seasoned equity offering. The period immediately prior to this date is referred to as the pre-announcement period. After the issue is registered the firm declare that it will either go ahead with the issue or withdraw it. The date when this declaration occurs is referred to as the decision date. The time between the announcement date and the decision date is referred to as the decision interval. The period after the decision date is referred to as the post-decision period.

Mikkelson and Partch (1986: 49) point out that the decision to announce offerings of common stock is made after a period of positive and significant average returns on share prices. Managers attempt to sell securities when they are overvalued. In other words positive abnormal returns tend to reflect a period in which the market price exceeds managers' assessment of the share price. However Myers and Majluf (1984) show that share prices fall in response to news of new equity issuance. The announcement of the offering conveys to market participants that in managers' view the shares are overvalued. In response, the market lowers its valuation of the shares.

Mikkelson and Partch (1986: 50) also mention that at the issuance, news that the proposed offering is actually being completed leads the market to infer that the managers still think the shares are overpriced. As a result, stock prices fall further. On the other hand, news of a cancellation indicates that the managers now view the market price as too low. Consequently, the share price increases in response to the news of a cancellation as shown in Figure 6.



Source: Mikkelson and Partch, 1986, pp. 48

Figure 6 Plots of the cumulative average common stock prediction errors around the announcement(AD) and issuance decision (ID) or cancellation decision (CD) for SEOs between 1972 and 1982 in theU.S.

1.3.2 Principles on the Sale of Capital Market Instruments

According to the communique serial VIII. No. 22 (Capital Market Board of Turkey, 1993) on principles regarding sales methods of capital market instruments through public offering, in sales of capital market instruments through public offering, there are three sales method; bookbuilding, sales on stock exchange and sales without bookbuilding.

In bookbuilding method, the demands of investors for the capital market instruments offered to the public is collected and with the evaluation of these demands, the capital market instruments offered for sale are subject to distribution among investors. Sales through bookbuilding is undertaken through “fixed price”, “price bids” or “price range”.

In bookbuilding through fixed price, a fixed price by the issuer or shareholder is determined. Bookbuilding period starts in at least three, at most five days following the announcement of the circular. Investors willing to purchase the capital market instruments offered for sale deposit the payment for the amount demanded to the bank account. The intermediary institutions collecting the demand distribute capital market instruments among investors at the end of the bookbuilding period. If the demand is lower than the amount of capital market instruments offered for sale, then the entire demand is met.

If the demand exceeds the amount of capital market instruments offered for sale, then the distribution is as such: Except for the portion reserved for a certain investor group, if any, the total amount offered for sale is divided by the number of investors demanding the capital market instrument and the resulting amount and the amounts lower than this is met. The rest is divided by the number of investors whose demand can not be met completely and distributed likewise. Distribution continues until the capital market instruments offered for sale are completely distributed. The amounts found in each distribution shall be taken into consideration for the investors with lower limits. If the amount is lower than this limit, the investor is taken out of the distribution list upon his will and this amount is subject to distribution again. In calculation of the amounts, the fractions are rounded up and distribution among investors, whose demand can not be met, is done in accordance with the method approved by the board of directors or shareholders. Distribution among investors for whom a certain amount of shares is reserved, is done in accordance with the principles taken into consideration in bookbuilding announcement, the prospectus and the circular. In the case of price range, demand is collected from the maximum price.

In the price bid method, the issuer or the shareholder in bookbuilding determines a minimum offer price and collect the exceeding price bids in sales of shares. Bookbuilding period starts at least three, at most five days following the announcement of the circular. Investors willing to buy the shares offered for sale deposit the payments calculated in accordance with the price bids and the amounts demanded to a bank account. If they wish to, the investors may indicate on the demand form a lower limit of the amount they want to purchase. The intermediary institution collecting the demand forms distributes shares among investors at the end of bookbuilding period.

Accumulated bids are tabulated to indicate the amount demanded and accumulated amounts at each price level starting from the highest bid to the lowest. The price, at which the highest accumulated amounts of shares are sold, is determined as the sale price. Bids covering this price shall be considered in distribution of shares. If the total amount of shares demanded at the determined price level exceeds the amount offered for sale, the distribution is done by starting from the demand with the highest bid price. If there is more than one investor whose demand are not met at the determined price level, distribution among investors is done in proportion to the amount demanded. The amount found as a result of the distribution is taken into consideration for the investors with lower limits. If the amount is lower than this limit, the investor shall be taken out of the distribution list upon his will and this amount is subject to distribution again. In the calculation of the amounts, the figures are rounded up and distribution among investors whose demand can not be met, is done in accordance with the method approved by the board of directors or shareholders.

Capital market instruments can also be offered to the public on Stock Exchange within the framework of the Regulation of Istanbul Stock Exchange upon the approval of the Board. In sales without the bookbuilding method, the capital market instruments are sold through public offering at a fixed price directly by the issuer or indirectly by the intermediary institution without collecting any demand from investors.

1.3.3 Intermediation

According to Communique serial V no. 46 on principles regarding intermediary activities and intermediary institutions (Capital Market Board of Turkey, 2000) intermediation in public offering means intermediation in the sale through public offering of capital market instruments registered with the Board.

Intermediation in public offerings is described as;

- a) Best effort intermediation,
- b) Underwriting.

“Best effort intermediation” means sale of capital market instruments registered with the Board within the sale period stated in the prospectus, return of the unpaid portion to the seller or sale of these to third parties that have committed to purchase before.

“Underwriting” consists of the following commitments:

a) To purchase the entire unsold portion of the capital market instruments to be registered with the Board after the public offer, with full payment in cash at the end of the sale period (Standby),

b) To purchase the capital market instruments to be registered with the Board with full payment in cash before the public offer (Firm Commitment),

c) To purchase part of the unsold portion of the capital market instruments to be registered with the Board after the public offer, with full payment in cash at the end of the sale period (Partial Standby) or to purchase part of the capital market instruments to be registered with the Board with full payment in cash before the public offer (Partial Firm Commitment)

With regard to the public offer of capital market instruments, intermediation includes

- determining the public offer period,
- determining the amount and issue price together with the issuer or/and shareholder,
- application to the Board after drawing up the prospectus and other documents and information necessary for the registration application,
- making use of consultancy services for the accuracy of the information in the registration application documents,
- establishment of a sales group providing teller services (demand collection, collection of the cash paid by customers for the related capital market instrument or repayment),
- organization of domestic and international campaigns for the sales and promotion of capital market instruments to be offered to the public,
- undertaking of institutional finance activities such as organization of sale or similar activities,
- undertaking activities such as financial and economic analyses with regard to the corporation whose capital market instruments shall be offered to the public and market research,
- harmonization of the financial statements of the related corporation with the capital market legislation and

- determination of the documents and information to be disclosed to the public.

According to this communique, organizations with certificates of authorization for intermediation in public offerings must pay maximum attention so that the public offering price reflects the real value of the capital market instrument.

1.4 Market Anomalies

In the SEO literature, four market anomalies are observed. These are i) announcement effect of offering on stock prices, ii) hot issue markets or windows of opportunity, iii) underpricing and iv) long run underperformance.

1.4.1 Announcement Effect

Announcements of new issue of common stock have been found to meet with abnormal market price reaction. A number of hypotheses have been advanced to explain this phenomenon. These hypotheses include the information hypothesis, the price pressure hypothesis and the leverage hypothesis, the soft information hypothesis and the pure signalling hypothesis.

The information hypothesis is based on the idea that the information sets of managers and insiders do not perfectly overlap with those of investors. There are three hypotheses based on this information asymmetry. According to Miller and Rock (1985), a firm's decision to issue equity signals poor earnings and cash flow. Therefore, they predict a negative price reaction to the announcement of an equity issue. According to Jensen (1986), there is an agency cost associated with the separation of ownership from control. Managers tend to overinvest, accepting even negative net present value projects. Therefore equity issuance signals this wasted investment so the firm and equity value decrease. Myers and Majluf (1984) hypothesize that issuance of equity signals information about managers' valuation of the firm's assets and investment opportunities. When managers view the stock to be undervalued, they will not issue equity in order to prevent dilution of existing shareholders' equity. Conversely managers will tend to issue equity when stock prices appear to be overpriced. A rational market, anticipating this value-maximizing behavior, will consequently lower the price of the issuing firm's stock.

However, Mikkelson and Partch (1986: 46) present that the statistically significant average abnormal returns following the announcement of common stock exist among completed offerings as illustrated in Table 4. This suggests that there is a difference between managers' and the market's assessment of share price and that the difference is not eliminated entirely by the price response to the announcement.

Table 4 Average abnormal return around the announcement day (AD) and issuance day (ID) between 1972 and 1982 in the U.S.

| Interval of trading day | Abnormal return |
|-------------------------|-----------------|
| AD-60 through AD-2 | 6,2%* |
| AD-1 through AD | -3,44%** |
| AD+1 through ID-1 | 5,51%* |

*, ** significant at 0,10 and 0,05 level

Source: Mikkelson and Partch ,1986, pp.46

Scholes (1972) developed the price pressure hypothesis. According to this hypothesis, at any given instant, the demand curve for a firm's share is downward sloping and an increased supply of shares decreases their price. As he mentions, the demand is downward sloping since close substitutes for the firm's shares do not exist.

According to the leverage hypothesis, equity issuance leads to two possible effects. First, as Merton (1974) shows, an equity issue may result in less risky debt which represents a wealth transfer from stockholders to bondholders. Second as Modigliani and Miller (1958) point out, reduced leverage may result in a higher cost of capital, which will lower firm and equity value.

Positive announcement effect appears when investors or institutions get sufficiently precise information about the firm according to soft information hypothesis developed by Chemmanur and Jiao (2005). Investors can distinguish undervalued firm from overvalued firm because of that precise information. Therefore this will decrease information asymmetry faced by undervalued firm. As a result undervalued firm offer seasoned equity.

According to pure signalling hypothesis developed by Leland and Pyle (1977), sale of shares by better informed shareholders signal that the shares are overvalued. In other words,

secondary offerings by inside shareholders signal bad news. Because of that, firm value decreases.

1.4.2 Hot Issue Market or Windows of Opportunity

Myers and Majluf (1984) suggest that firms may be able to time their equity issue for periods when the level of asymmetric information is low, so that they can reduce information costs. The extremes in equity issue volume that result from the clustering of equity issues in certain time periods has been well documented in a study of Choe, Masulis and Nanda (1993). The observed clustering of equity issues is consistent with the widely held belief of the investment community that certain periods offer a window of opportunity in which capital can be raised at favorable terms (Koop, Li, 2001: 329).

Several empirical studies examine whether managers choose the timing of an SEO when the firm is at maximum value. Korajczyk, Lucas and McDonald (1991) find that firms tend to conduct an SEO closely following a favorable earnings announcement, which usually occurs in the fourth quarter. They argue that an earnings disclosure reduces information asymmetry between managers and outside investors. They claim that their findings are consistent with the fact that a window of opportunity arises for managers to conduct an SEO when information asymmetry between private information of managers and public information available to outside investors is at minimum.

Other studies such as Choe, Masulis and Nanda (1993), Bayless and Chaplinski (1996) have conducted further investigation of whether such a window of opportunity really exists. Most of the empirical studies confirm that the firm's decision to issue new equity is commonly preceded by stock price run-ups and favorable earnings releases, then followed by downward revision at the SEO announcement dates and there after. However also others such as Rangan (1998) and Teoh, Welch and Wong (1998) have considered whether managers have the ability to manage their earnings (such that negative price reaction brought by the announcement of an SEO can be minimized).

As Mikkelson and Partch (1986: 46) present that the decision to announce offerings of common stock is made after a period of positive and significant average abnormal returns.

These positive abnormal returns reflect a period in which the market price exceeds managers' assessment of share price.

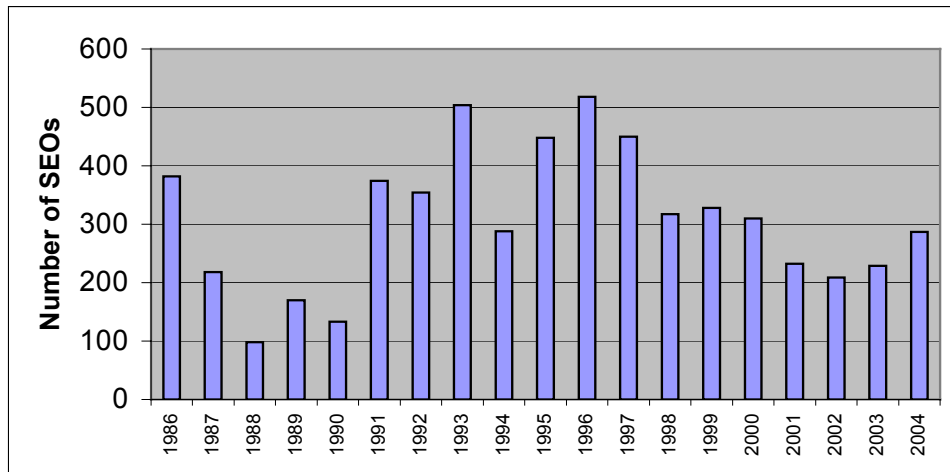
Macroeconomic conditions might contribute to windows of opportunity is reported in Choe, Masulis and Nanda (1993) where announcement date price reactions are less negative for equity issues announced during business cycle expansions. This result is consistent with investors being less concerned about overvaluation and firms having more valuable projects during these periods of expansions.

Bayless and Chaplinski (1996: 254) define windows of opportunity to be the time periods when information costs are reduced for all firms. In their study, they find that the price reaction to equity issue announcements in high equity issue volume (hot) periods is lower on average than in low equity issue volume (cold) periods. Also their results show that the observed variation in the market reaction is not due to differences in firm or market and macroeconomic characteristics across hot and cold market. Their evidence supports the existence of windows of opportunity for equity issues that result at least partially from reduced level of asymmetric information. In other words, their result is consistent with time varying asymmetric information and supports the existence of windows of opportunity for seasoned equity issues.

In addition they find that investors react differently to firm and market characteristics in hot and cold markets in ways that suggest great concern for firm specific information, and indirectly asymmetric information in cold markets. In other words, investors appear to place more weight on firm specific factors in cold markets when asymmetric information could make discriminating between bad and good firm more important and more difficult. However, investors appear to be less influenced by firm specific information in hot markets, because the level of asymmetric information in hot markets is less than cold markets. Bayless and Chaplinski (1996: 274) explain that the level of asymmetric information is low in hot market because a greater proportion of firm or project valuation is derived from the information shared by both management and investors during this period.

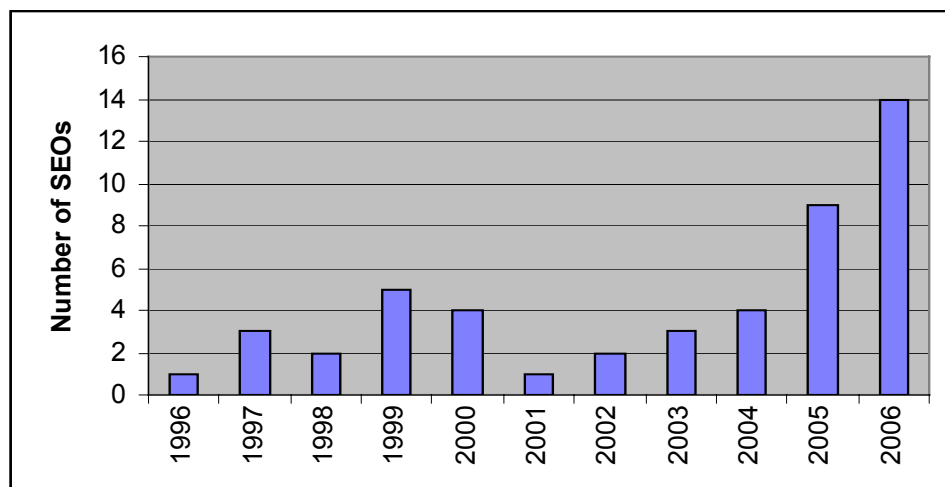
Loughran and Ritter (1995, 47) and Ritter (1991) argue that when companies announce stock issues when their stock is grossly overvalued, the market does not revalue the stock appropriately and the stock is still substantially overvalued when the issue occurs. Therefore perceived misvaluation affects the timing of seasoned equity offerings. The ability to sell

grossly overvalued equity, where the degree of misvaluation varies through time, is also consistent with the large swings in SEO volume as shown in Figure 7 and 8. Graham and Harvey (2001) also present that perceived misvaluations and recent stock price run-ups are among the most important determinants for decisions of equity issuances.



Source: Chiu, 2006

Figure 7 Annual sales volume of SEOs in the U.S. between 1986 and 2004



Source: www.imkb.gov.tr

Figure 8 Annual sales volume of SEOs in Turkey between 1996 and 2006

1.4.3 Underpricing

Numerous empirical studies have documented significant underpricing for seasoned equity offerings in the United States. While the level of underpricing is much smaller than that observed for IPOs, it represents a substantial cost to issuing firms. Chiu (2006: 36) present that

SEO underpricing averaged 1.08 percent for offers from 1986 to 1989, increased to 2.73 percent for offers from 1990 to 1998 and then went up to 4.04 percent for offers from 2000 to 2004.

Many of the theories advanced to explain underpricing are based on uncertainty and differences in information between the parties involved in the offer. For example, Rock (1986) develops a model in which underpricing is necessary to compensate uninformed investors and thereby ensure their participation in the new issue market. This compensation is required because informed investors will participate only in good issues, leaving uninformed investors with a disproportionate share of bad issues. Beatty and Ritter (1986) further demonstrate that this winner's curse problem results in a positive relation between underpricing and ex ante uncertainty about the value of the issue.

Previous studies report significant temporary price declines in the days prior to seasoned offers. Gerard and Nanda (1993) argue that these preoffer returns may reflect manipulative trading by investors who attempt to depress the offer price by selling in the preoffer secondary market. This manipulation reduces the informativeness of secondary market prices and worsens the winner's curse problem faced by uninformed investors. As a result, a discount is required in order to sell the offered shares.

Underpricing has also been derived in the context of other types of information asymmetries. Under various informational assumptions, Allen and Faulhaber (1989) have shown that underpricing can be used as a mechanism to signal firm quality.

Jegadeesh, Weinstein and Welch (1993: 163) present that issuers are willing to leave some money on the table for investors at earlier offerings because firms want to come back later for additional funding. Their assumption is that investors remember whether they got a good deal or poor one at the time of an earlier stock offering.

As Scholes (1972: 180) points out the underpricing of seasoned offers may also be related to either permanent or temporary price pressures. For example, one could view a seasoned offer as a permanent shift in the supply of existing shares. If the aggregate demand curve for the firm's shares is downward sloping, this increase in supply will result in a permanent decrease in stock price. He also mentions that if investors view a seasoned offer as a temporary liquidity shock that must be absorbed by the market, then a discounted offer price may be necessary to

compensate investors for absorbing the additional shares. Prices return to normal following the distribution of the new shares, resulting in a positive return.

As Mikkelson and Partch (1985) and Scholes (1972) demonstrate, even in the presence of downward-sloping demand, however, a permanent stock price decrease may not occur on the issue day. They mention that according to the efficient market hypothesis, investors will anticipate any price pressure effects related to the shift in supply and adjust their demand accordingly. As a result, any price effects associated with downward-sloping demand should occur on the announcement day rather than the issue day. Evidence of price pressure on the announcement date is mixed. Asquith and Mullins (1986) find a significant relation between announcement day returns and issue size. However, Barclay and Litzenberger (1988) find no evidence of a significant relation between issue size and announcement effects, and Masulis and Korwar (1986) and Korajczyk, Lucas, and McDonald (1991) report only a sporadic effect.

SEO underpricing may also reflect conventional underwriter pricing practices. For example, Lee, Lochhead, Ritter, and Zhao (1996) suggest that SEO underpricing may result from a tendency to round offer prices down to the nearest integer value. Mola and Loughran (2004), who found that seasoned offer prices are clustered at integers support this hypothesis. The study of Harris (1991) provides a potential motivation for this common pricing practice that rounded prices may reflect the underwriter's desire to reduce the costs of negotiating over the offer price.

In private placement, underpricing is also observed. According to Hertz and Smith (1993), discounts or underpricing reflects cost incurred by private investors or institutions to assess firm value (due diligence). They also find that private placement discounts reflect compensation to private investors for expected monitoring services and expert advice.

1.4.4 Long Run Underperformance

As Myers and Majluf (1984: 189) assume that managers act in the interests of current stockholders and attempt to transfer wealth from purchasers of new common stock. However rational market participants will adjust share price in response to news of an offering or a decision to proceed with an offering. According to Mikkelson and Partch (1986: 50) it is

unclear whether managers on average can succeed in effecting such wealth transfers through offerings of common stock. However As Loughran and Ritter (1995: 47) mention, the evidence of long run underperformance present that the firms still issue overvalued equity to the market because there are some time periods during which the market may misvalue the equity.

Numbers of studies examine the long run performance of seasoned equity offerings. These studies such as Loughran and Ritter (1995), Ritter (2003), Spiess and Affleck- Graves (1995) and Eckbo, Masulis and Norli (2000) find that firms conducting SEOs typically have high returns in the year before issuing. However, during five years after issuing, the returns are below normal. Ritter (2003) finds that for 7760 SEOs from 1970-2000 in the U.S., the average annual return in the five years after issuing is 10.8 %. Nonissuing firms of the same size (market capitalization) have average annual returns of 14.4 %. Therefore relative to a size-matched benchmark, issuers underperform by 3.6 % per year for five years. However, as Ritter (2003: 266) presents that the conclusions regarding abnormal performance are sensitive to the methodology used, time periods examined and sample selection criteria.

In literature there are two different methodologies used. One of them is comparing buy and hold returns of the firms conducting SEOs and the size matched nonissuing firms. Second one is 3-factor time series regression induced by Fama and French (1993). The intercepts from the regressions are interpreted as abnormal returns.

The literature offers a number of explanations for the low returns that is long run underperformance. According to Eckbo, Masulis and Norli (2000: 253), one explanation is that decreased leverage associated with an equity issue lowers the sensitivity of the stock price to inflation shocks and the extra shares outstanding make the stock more liquid. Because issuing firms have low risk as a result of the equity issue, they should have low returns. However Ritter (2003: 270) presents that SEOs expose investors to a high degree of market risk.

In addition, as Ritter (2003: 274) shows, the long run underperformance can not be just due to chance because over a variety of corporate financing related events, there is a consistent pattern of underreaction.

Another explanation according to Heaton (2002:41) is that managers tend to be too optimistic at the time of issue, which then leads to a tendency to overinvest. In other words,

optimistic managers sometimes want to take negative present value projects because such managers believe that they are positive NPV projects too. This situation results in decreasing profit margins in the years after issuing.

Teoh, Welch and Wong (1998: 82) mention another explanation that issuing firms either intentionally or unintentionally manipulate their earnings prior to the SEO. Consistent with this hypothesis, the issuing firms that are most aggressive in their use of accruals to boost earnings have the worst subsequent performance. According to Loughran and Ritter (1997: 1841) some firms try to manage earnings with the idea of issuing equity, other merely opportunistically take advantage of windows of opportunity that are largely outside of their own control.

In the windows of opportunity framework, advanced by Ritter (1991) and Loughran and Ritter (1995: 47), firms issue equity when they are overvalued. This explains a phenomenon that Myers and Majluf (1984) asymmetric information model can not explain; long run underperformance of seasoned equity offerings.

Asymmetric information models for the timing of seasoned equity issues do not predict the poor post-issuing performance. In these models an equity issue announcement is associated with the market revaluing the firm so that, on average, it is no longer overvalued or undervalued. Loughran and Ritter (1995)'s evidence is consistent with a market in which companies announce stock issues when their stock is grossly overvalued, the market does not revalue the stock appropriately and the stock is still substantially overvalued when the issue occurs.

In private placements, long run underperformance is observed. Hertz, Lemmon and Rees (2002) find that positive announcement period returns are followed by abnormally low post announcement period returns of -23.8 percent. This finding is inconsistent with the underreaction hypothesis. According to this hypothesis, the market impounds only part of the information content in the share price at the announcement of corporate event (Kang, Kim and Stulz, 1999). Therefore there should have been positive post abnormal return. However they point out that investors may be overoptimistic about the future operating performance and the future payoffs from the firms' current investments and growth opportunities when private placements take place.

CHAPTER II

ANNOUNCEMENT EFFECT

In this chapter, one of the market anomalies discussed in chapter 1; the announcement effect in seasoned equity offerings is examined in detail. There are two types of seasoned equity offerings; primary and secondary offerings. The hypotheses, which explain the announcement effect of primary offerings, are different from the hypothesis for secondary offerings because the money raised through secondary offerings is not used for the firm. Although some empirical studies present negative announcement effect, some others point out positive announcement effect. In addition, the empirical studies section of this chapter shows that the hypotheses for negative announcement effect (information, price pressure, leverage hypotheses and flotation method hypotheses) are mutually exclusive. In other words, they explain part of the announcement effect. Furthermore, environmental factors and the firm characteristics affect the announcement effect generally through influencing information asymmetry between managers and investors.

2.1 Announcement Effect of Primary Seasoned Equity Offerings

Most of the studies in the SEO literature show that there is a announcement effect of seasoned equity offerings on stock prices. These studies are theoretical which explain this effect through their models and empirical which explain this negative effect by using proxies.

As the name implies, primary seasoned equity offerings are the offerings by which new shares are sold to outside investors and institutions by restricting pre-emptive rights of existing shareholders partially or completely. Primary seasoned equity offerings involve two types of offerings; public offerings and private placements. In public offerings, the firms sell new shares to public whereas in private placement the firms sell new shares to small group of sophisticated investors and institutions privately. Generally negative announcement effect is observed in public offerings but positive announcement effect appears in private placement (Wruck, 1989; Hertz and Smith, 1992; Kato and Schallheim, 1993).

2.1.1 Public Offerings

For the announcement effect of primary seasoned equity offerings, there exist number of hypothesis in literature. The factors affecting magnitude of the announcement effect verify some of these hypotheses. However, as mentioned latter in empirical studies section, the hypotheses are mutually exclusive and each of them explains part of the announcement effect. Therefore while building up a model, sufficient number of factors should be put to observe the contribution of each factor and hypothesis.

2.1.1.1 Information Hypotheses

Information hypothesis is based on the idea that there is information asymmetry between managers and investors. The act of issue signals the true state of the firm to the market. There exists number of reasons that explain the existence of information asymmetry between managers and investors. Myers and Majluf (1984: 195) explain those reasons in their article.

“The costs of supplying, absorbing and verifying the information about the true state of a firm are significant. Making it public will in most cases tell the firm’s competitors all they want to know. This will consequently reduce either the value of its value in place and the NPV of its investment opportunity, or both. There can be also information asymmetries when there is no need to guard information. Educating investors takes time and money. After all, the managers’ information advantage goes beyond having more facts than investors do. Managers know better what those information mean for the firm. They have an insider’s view of their organization. This organizational knowledge is part of managers’ capital. They acquire it as they work. As a result, the separation of ownership from professional management naturally creates asymmetric information.”

Information Hypotheses include three mutually exclusive hypotheses for primary and mixed offerings; 1) Existing asset value signalling hypothesis, 2) Cash flow signalling hypotheses, 3) Wasteful investment Hypothesis

Existing asset value signalling hypothesis

Myers and Majluf (1984) first developed this hypothesis. It is based on the idea that managers have better information than investors do about the intrinsic value of the firm's asset. When there is need for external financing, managers issue new equity if they believe the firm's market value exceeds its intrinsic value (overvalued). Rational investors, knowing this decision rule, therefore interpret an equity issue announcement as conveying management's opinion that the stock is overvalued and the stock price falls.

Myers and Majluf (1984) developed a model named as three-date model based on information asymmetry about the true state of the firm between managers and the investors. Their model is exhibited in Table 5. They assume in their model that existing shareholders are passive and management acts in existing shareholders' interest. Existing shareholders sit tight if stock is issued and the issue goes to a different group of investors. However in reality existing shareholders also can buy new shares on prorata basis (Eckbo and Masulis, 1992).

Table 5 Three date model

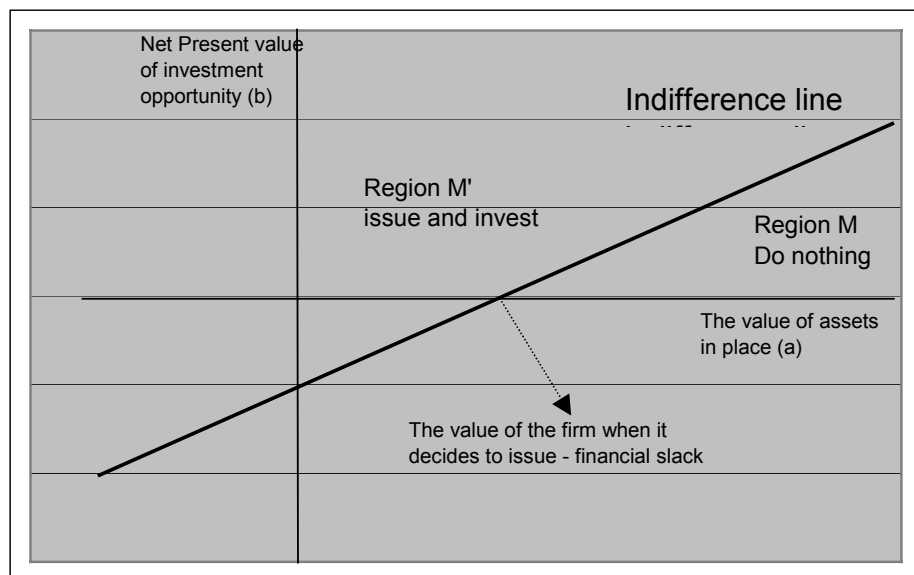
| | t=-1 Symmetric information | t=0 information advantage to managers | t=1 symmetric information |
|-----------------|---|---|--|
| Managers | Distribution of the value of asset in place and the net present value of the project; financial slack | True value of asset in place, NPV and financial slack | True value of asset in place, NPV and remaining financial slack if any |
| Market | Distribution of the value of asset in place and the net present value of the project; financial slack | Distribution of the value of asset in place and the net present value of the project; financial slack and also required amount of issue, either it is zero or positive number | True value of asset in place, NPV and remaining financial slack if any |

Source: Myers and Majluf, 1984: 191

As can be followed from Table 5, at $t=-1$, there is symmetric information so that both investors and managers do not know the true state of the firm. They only know the distribution of the value of assets in place and NPV. At $t=0$, there is asymmetric information. Although the managers know the true value of assets in place and NPV, the investors still know only the distributions. However at this time, the firm decides to issue or not issue. This decision signals the true state of the firm (the value of assets in place and NPV) to the market. Because the firm

acts in existing stockholders' interest, the decision to issue depends on the intrinsic value of existing shares that will be realized after issuing. If the intrinsic value of existing shares increases after issuing, the firm decides to issue. However if it decreases, the firm will decide not to issue.

As it can be seen from Figure 9, The point on the line shows the true value of asset in place and NPV with which the intrinsic value of existing stockholders' shares does not change when the firm decides to issue. The line divides the distribution of the value of assets in place and NPV into two regions; region M' and M.



Source: Myers and Majluf, 1984: 199

Figure 9 Decision to issue

When the true value of the asset in place and NPV fall in region M', the firm decides to issue and invest due to increase in the value of existing stockholders' shares, but if the true values fall in region M, the firm does nothing because there would be a decrease in the value of existing stockholders' shares if it issued. In other words, the firm is willing to give up the NPV of its investment opportunity rather than sell shares for less than they are really worth. The firm is most likely to issue when the true value of the project NPV is high and the true value of the asset in place is low. The higher the value of the project NPV is, the more existing stockholders gain from issuing and investing. The lower the value of asset in place is, the more attractive is the issue price.

According to this model the share price when the firm does not issue will always be higher than the share price when firm issues. Therefore when the firm decides to issue, the stock prices fall under the assumption that existing stockholders are passive and management acts in existing shareholders' interest. When firm decides to issue and invest, the investors interpret this decision as bad news because they understand that the firm's stock is overvalued. When firms decides not to issue, the investors interpret this decision as good news because this decision signals that the stock is undervalued.

Cash Flow Signalling Hypothesis

Miller and Rock (1985) developed this hypothesis. It assumes asymmetric information about the magnitude of the firm's current internal cash flow but symmetric information about both the level of planned investment and the value of the firm's asset conditional on current cash flow. Unanticipated announcements of new security issues signal that the firm has inadequate internally generated funds to finance its planned investments. Equity issues used to finance new investment cause negative stock returns and the absolute value of the percentage price decline is directly related to the size of the issue.

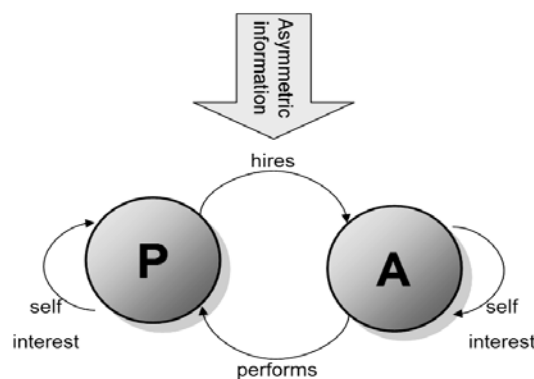
Wasteful Investment Hypothesis

The wasteful investment hypothesis developed by Jensen (1986) is based on the premise that one of the agency costs associated with the separation of ownership from control of the operation is the tendency for managers to overinvest, accepting negative net present value projects (non-pecuniary activities). Unexpected new security issues signal a higher level of planned investment. If the net present value of this investment is negative, the stock price will fall and the magnitude of the percentage decline will be both directly related to the size of the issue and inversely related to the gross present value of the investment.

Jensen and Merckling (1976) mention that there is an agency relationship when the actions of one individual affect both his welfare and that of another person in a contractual relationship. The individual who undertakes the actions is the agent and the person whose welfare (utility),

measured in monetary terms, is affected by the agent's actions is called the principal. A typical case of agency relationship is the one that exists between an employer (the principal) and his employee (the agent).

In an agency relationship, the principal wants the agent to act in the principal's interest. However, the agent is expected to have his own interests and consequently, he may not act in the principal's best interests (Figure 10):



Source: www.wikipedia.com

Figure 10 Principal-Agent Problem

“We define an agency relationship as a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent. If both parties to the relationships are utility maximizers, there is a good reason to believe that the agent will not always act in the best interests of the principal.” (Jensen and Meckling, 1976: 5).

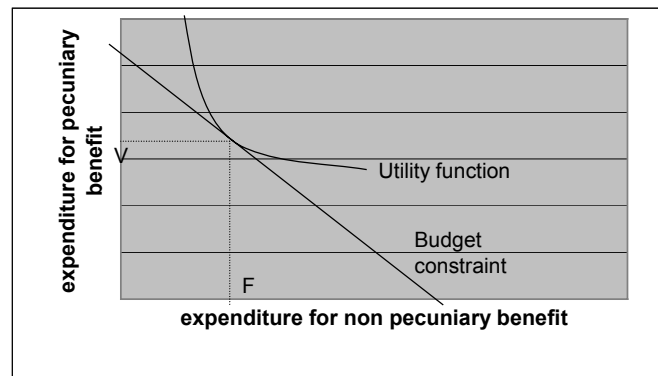
As Holmstrom (1979) presents, a moral hazard problem arises when the principal cannot observe agent's actions because (1) there is a positive cost of monitoring agent's actions and (2) he is not even able to perfectly infer agent's actions by observing the outcome because the agent's actions do not completely determine the outcome. Government policies, economic climate, competitor actions, technological change may cause variations in the outcome.

“Moral hazard may be defined as actions of economic agents in maximizing their own utility to the detriment of others, in situations where they do not bear the full consequences or,

equivalently, do not enjoy the full benefits of their actions due to uncertainty and incomplete or restricted contracts which prevent the assignment of full damages (benefits) to the agent responsible.” (Kotovitz 1987: 549).

As Fama (1980) states that an adverse selection problem appears because the principal cannot completely verify the skills or abilities either at the time of hiring or while the agent is working because the principal cannot perfectly and costlessly possess all the information and expertise that the agent possesses.

In their study, Jensen and Merckling (1976: 316) also present that the agent will make operating decisions, which maximize his utility. Those decisions will involve the benefits from pecuniary returns that increase firm value and the utility generated by non-pecuniary activities such as physical appointments of the office, the attractiveness of the secretarial staff, the level of employee discipline, a larger than optimal computer to play with. However the expenditures for pecuniary benefits and non-pecuniary benefits are made under budget constraint. Therefore optimum level of expenditures are at the point where the budget line and the utility curve of the agent intersect (Figure 11). However at this point the principal also bears the costs of the non-pecuniary activities of the agent.



Source: Jensen and Merckling, 1976: 316

Figure 11 Equilibrium expenditure for nonpecuniar benefits and pecuniar benefits

Eisenhandt (1989: 62) mentions that the principal can limit this divergence from his interest by establishing appropriate incentives for the agents and by incurring monitoring costs designed to limit the non-pecuniar activities of the agents. The principal may invest in information technologies to discover the agent’s behavior such as budgeting systems, reporting procedures,

board of directors and additional layers of management. In addition in some situations as Jensen and Merckling (1976: 308) mention, the principal pays the agent to expend resources (bonding costs) to guarantee that the agent will not take certain actions which would harm the principal or to ensure that the principal will be compensated if he takes such actions. However they also present also that it is not possible to align the agent behavior fully.

2.1.1.2 Price Pressure Hypothesis

Price pressure hypothesis (Scholes 1972) constitutes two hypotheses: 1) Downward sloping demand curve hypothesis and 2) Transaction cost hypothesis

The downward sloping demand curve hypothesis assumes that perfect substitutes for a firm's securities do not exist in the market. In the absence of perfect substitutes, firms face downward sloping demand curves for their securities. When the price of a commodity falls, it becomes relatively cheaper than other substitute commodities. This induces the consumer to substitute the commodity whose price has fallen for other commodities, which have now become relatively expensive. As a result of this substitution effect, the quantity demanded of the commodity, whose price has fallen, rises. According to this hypothesis, an increase in the quantity caused by a new issue results in a permanent decrease in the stock price. Therefore percentage decline in the stock price is positively related to the size of the issue (Scholes, 1972: 180).

The transaction cost hypothesis on the other hand predicts a temporary price pressure effect associated with new issues even if near perfect substitutes for the firm's securities exist. According to this hypothesis, the stock price decline following an announcement reflects a discount that must be offered to compensate investors for the transaction costs they bear in adjusting their portfolios to absorb the new shares. After the underwriter markets the new issues, the price recovers to the its original value (Scholes, 1972, 181).

2.1.1.3 Leverage Hypothesis

Leverage Hypothesis includes two mutually exclusive hypotheses; 1) Tax advantage of debt hypothesis and 2) Redistribution hypothesis.

Tax Advantage of debt hypothesis developed by Modigliani and Miller (1958: 281) assumes that new equity issues cause an unanticipated decrease in financial leverage. Because of the tax advantage of debt financing, a decrease in financial leverage causes the stock price to decline and the percentage decline is directly related to the size of the issue. Stock issues intended to retire existing debt have an even larger negative effect than issues intended to finance new investments because they have a greater effect on financial leverage.

According to Merton (1974), the *redistribution hypothesis* implies that with a fixed investment policy, an unexpected decrease in leverage makes a firm's debt less risky. If the total market value of the firm remains unchanged, bondholders experience an increase in the value at the expense of the shareholders. According to this hypothesis, new equity issue announcements will have a negative effect on stock prices. The magnitude of the effect will be directly related to the size of the issue and will be larger for issues intended for pure capital structure changes than for those intended for new investments.

2.1.1.4 Flotation Method Hypothesis

Myers and Majluf (1984) model assumes that current shareholders do not participate in the issue and they rule out an informational role for underwriters. According to Eckbo and Masulis (1992: 310), the real world equivalent to the flotation method implicit in the Myers and Majluf model is a direct issue to outside investors (possibly distributed by a simple best-effort agreement with an investment bank), with no alternative flotation methods available.

To explicitly recognize the complex flotation methods in the U.S., Eckbo and Masulis (1992) allow for shareholder participation in the issue sale and give underwriters an informational role (certification) to play. They mention that underwriter certification narrows the information asymmetry between the firm and the market. If the underwriter's investigation indicates that the issue is overvalued, the firm is given the choice of lowering the offer price or withdrawing the issue.

According to their model, the market reaction to an equity issue announcement is a function of the proportion of the equity rights issue that is purchased and held by current

shareholders (k) and the flotation method chosen. In other words, the announcement period abnormal return reflects the capitalized value of the flotation cost and market reassessment of the stock's adverse selection problem. It depends on " k " because " k " affects the market's reassessment of stock's adverse selection potential. When " k " increases, the firm value is less affected by the adverse selection problem because current shareholders that have inside information will be willing to invest in the firm or the project. This will signal good news to the market (Leland and Pyle, 1977: 371).

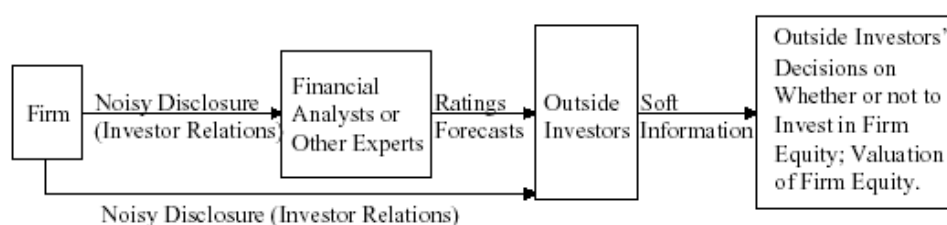
The value of " k " is determined by factors largely beyond managerial control, such as personal consumption and wealth constraint, diversification benefits and portfolio rebalancing costs, benefits from maintaining a shareholder's current voting and dividend rights. Information about " k " is revealed to the market through the announcement of subscription precommitment, through the volume of rights traded in the secondary market during a rights offer where a high volume indicates a low " k " and through the announcement of actual subscription levels at the end of the rights offer period (Eckbo and Masulis, 1992: 311).

The total subscription precommitment consists of two components; one referring to the pro-rata allocation of rights distributed and the other covering over-allotment guarantees. The latter represent precommitments to exercise rights beyond one's pro-rata allocation while other shareholders do not fully exercise theirs. (Eckbo and Masulis 1992: 316)

Eckbo and Masulis (1992) present that the announcement of firm commitment offers are met with significantly -3.34% average abnormal return in U.S. However for standby category and uninsured rights, the two-day announcement period abnormal returns are -1.03% and -1.39% respectively. Because the offer announcement causes the market to capitalize expected flotation costs, they add realized flotation costs as a percentage of preannouncement equity capitalization back into the estimated abnormal stock return. This adjusted abnormal return provides a measure of the extent to which market reaction to an offer announcement reflects the effect of information asymmetries. They find that the adjusted abnormal return is -2.29% for industrial firm-commitment offers, up from -3.36% . Therefore, over and above flotation costs, the offer announcement conveys negative information that causes the market to lower the share price by 2% . They also find that the market reaction to rights and standby offers appear to be economically negligible after the effect of flotation costs is adjusted for.

2.1.1.5 Soft Information Hypothesis

Chammanur and Jiao (2006: 6) present that a significant fraction of firms (30.41%) issuing equity exhibit positive announcement effect, with the mean positive announcement effect being equal to 4.28% in the U.S. They have developed a model of seasoned equity issues under symmetric information where, in addition to observing the firm's issue/no issue decision, investors obtain soft information signals about firms through noisy voluntary disclosure. As shown in Figure 12, outsiders may be able to get such additional information made available by firms through their investor relation departments or information production by outsiders such as analysts' ratings of a firm's stock or analysts' forecast about its future earnings or other accounting variables.



Source: Chemmanur and Jiao, 2005: 2

Figure 12 How soft information signals may be generated

Chammanur and Jiao (2006) use soft information to denote information, which is difficult to quantify or verify immediately, and impossible to convey credibly, as against hard information which is quantifiable and often verifiable. As Chemmanur and Jiao (2005: 2) mention, the availability of such soft information not only affects the extent of asymmetric information facing firms in the equity market, but also significantly affects the equity issue behavior of firms themselves. When sufficiently precise soft information about the firm is realized, overvalued firms as well as undervalued firms choose to issue equity. These precise soft information help investors distinguish undervalued firm from overvalued firm to a significant degree. This will significantly reduce information asymmetry facing the undervalued firm, in turn altering their equity issue decision. As a result, this will alter the announcement effect of an equity issue dramatically.

2.1.2 Private Placements

The positive announcement effect is observed mostly in private placement of equity. In private placement, the firms issue new shares to a small group of investors and institutions privately. In their study with private placements of equity, Wruck (1989), Hertz and Smith (1993) and Kato and Schallheim (1993) documents that the announcement effect of private placement of equity is 4% on average.

Hertz and Smith (1993) argue that private equity placements by undervalued firms with little financial slack can decrease the underinvestment problem and resolve asymmetric information in such a way to take advantage of profitable investment opportunities. With private placement, managers can put intensive effort into negotiating with and convincing a small group of investors and institutions that the firm is undervalued and has good prospects. This process allows a small group of investors to access more precise information about the value of the firm. According to their model, firms that choose to issue equity privately should be perceived as being more likely to have favorable future prospect.

In addition, Wruck (1989) reasons that the positive stock price reaction to private equity placements reflects reductions in agency costs that result from improved alignment of incentives between managers and stockholders. Such reductions could be due to increased monitoring provided by an additional single, or possibly several, large nonmanagerial shareholders.

However Goh et al. (1999: 21) mention that a private placement can also increase agency problems through managerial entrenchment. In other words, management places stocks with friendly investors. Obviously, under this view the private placements will no longer be favorable. Wruck (1989) finds some evidence consistent with entrenchment. For instance, the stock market reacts negatively when a private placement leads to a controlling ownership position.

2.2 Announcement Effect of Secondary Seasoned Equity Offerings

Unlike primary offerings of newly issued shares that provide funds to issuing firms, secondary offerings are shares sold by corporate insiders and block holders. The negative reaction to secondary offerings is consistent with the pure signalling hypothesis (Leland and Pyle, 1977). This hypothesis implies that sales of share by better informed investors signal that the shares are overvalued (Leland and Pyle, 1977: 371). In addition, according to this hypothesis, the willingness of persons with inside information to invest in a project or a firm serves as a positive signal to the lending market of the true quality of the project or firm. However the willingness of inside persons to sell their shares will signal bad news.

This negative reaction can not be attributed to the Myers and Majluf (1984) hypothesis, because the proceeds are not subject to managerial discretion. Agency problem can explain the negative reaction partly because secondary offerings may reduce managerial equity stakes and block ownership concentration, making investors more concerned with the misalignment of manager- shareholder interests and with the diminished monitoring by blockholders and institutional investors (Kim and Purnanandam, 2006: 5).

Privatization offerings are also secondary seasoned offerings because government sell their shares in state owned enterprises. According to Megginson, Nash and Randenborgh (1994), after being privatized, firms increase real sales, become more profitable, increase their capital spending. Therefore privatization offerings will signal good news about the future prospects of the companies.

In addition as Jensen and Merckling (1976) mention, managers of private firms are discipline by a number of external control mechanisms such as the market for managers and also by internal control mechanisms such as compensation and rewards incentives. Furthermore, the threat of bankruptcy and takeover does not allow managers in private firms to seek their own benefit. However as Bozec, Breton and Cote (2002, 384) mention that the managers in State Owned Enterprises are not constrained by these type of control. Therefore they are less inclined to maximize profit. As they further point that managers of the state owned firm are more concerned to maximize their own power, their prestige and the amount of resources under their control, whereas politicians care more about re-election than for

monitoring the managers of the state owned enterprises. Therefore privatization offerings signal good news about the company.

2.3 Factors Affecting the Announcement Effect

In general, models of asymmetric information suggest that the price reaction to equity issues is dependent on the ability of firms to signal their value and intent. For example, firm specific characteristics such as high level of capital spending may signal the presence of strong capital investment opportunities while other characteristics such as high operating risk may indicate low debt capacity. These characteristics therefore can condition investors to believe that equity is a rational funding choice (Ambarish, John and Williams, 1987: 323).

Myers and Majluf (1984) argue that the price reaction to equity issues and therefore information costs will be lower for firms with characteristics that lead investors to believe the issue is motivated for reasons other than overvaluation of the issuer's shares.

According to the wasteful investment hypothesis, one of the agency costs associated with the separation of ownership from control of the operation is a tendency for managers to overinvest, accepting negative net present value. Because of that, new issuance signal that the money raised may spend in negative NPV projects.

Jensen and Merckling (1976: 328) mention that the existence and the size of the agency costs depend on the ease with which managers can exercise their own preferences, the cost of monitoring and bonding activities, the tastes of managers and the supply of potential managers who are capable of financing the entire venture out of their personal wealth.

Furthermore they point out that the agency costs will also depend on the market for managers. Competition from other potential managers reduces the cost of replacing and obtaining managerial services. Also if the manager's responsibility in a firm require very little knowledge and if it is easy to evaluate his performance and if the replacement cost is modest, the agency cost will be relatively small.

However, Jensen and Merckling (1976: 330) find no support for the hypothesis that the existence of competition in the product and factor markets will constrain the behavior of managers. For example the existence of monopoly does not increase agency cost.

In their study, Jung, Kim and Stulz (1996) find that when managerial self interests are misaligned with shareholder value maximisation, managers may pursue value destroying growth strategies when there are no positive NPV investment opportunities, increasing their private benefits of control at the expense of shareholders. Investor awareness of such potential misuse of funds raised in equity offerings causes negative reaction.

Kim and Purnanandam (2006) also find that investors react negatively when there are insufficient managerial ownership stakes to deter misuse of SEO proceeds and when there are negative signals transmitted through secondary offerings by insiders and blockholders. According to them, agency problems seem to be of less concern to investors when firms are subject to intense monitoring by institutional investors or large investors and the market for corporate control. But when such external force is not very strong, investors pay close attention to equity incentive as a controlling device against misuse of corporate funds.

Jung et al (1996) use market to book ratio (M/B) as the measure of agency problems. They reason that because low M/B ratios imply low growth opportunities, investors are more concerned with the misuse of the proceeds when low growth firms issue equity. They find that firms with high M/B ratios, reflecting good investment opportunities have an announcement effect that is insignificantly different from zero. Akhigbe and Harikumur (1996) do not find support for the wasteful investment hypothesis as there is no significant relationship between abnormal returns and the variable M/B. Barclay and Litzenberger (1988) also find that the estimated profitability of the firm's incremental investments measured by M/B ratio has an insignificant effect on the magnitude of the price decline following new equity announcements. Therefore these results are inconsistent with the wasteful investment hypothesis too.

Bertrand and Mullainathan (2003) suggest that firms with high growth opportunities may suffer more agency problems than low growth firms. They present convincing evidence that managers' desire for a quiet life discourages corporate investments. The manager may avoid such investments because it requires too much effort to manage or to learn about new technologies. Since high growth firms have more growth options, such managerial shirking may

have more negative impact on high growth firms than low growth firms. If investors believe the quiet life problem exists, investors might be concerned with the improper use of SEO proceeds by high M/B ratio firms then by low growth firms.

Leverage change hypothesis (Modigliani and Miller, 1958) implies that the intended uses of proceeds (capital structure change or capital investment) affect the announcement day abnormal return. According to this hypothesis stock issues intended to retire existing debt have an even larger negative effect than issues intended to finance new investments because they have a greater effect on financial leverage. However, Barclay and Litzenberger (1988) find that market responds similarly to both capital structure change and new investment spending.

According to the cash flow signalling hypothesis, issue size conveys information that the firm has inadequate internally generated funds to finance its planned investments. When issue size increases, announcement day abnormal return decreases. Furthermore wasted investment hypothesis present that issue size signal bad news about the possibility of new investment in negative NPV project. Therefore, when issue size increases, announcement day abnormal return decreases. Furthermore, according to price pressure hypothesis, in the absence of perfect substitute, the increase in the number of shares causes the market price to drop. However, there are conflicting results of earlier studies about the effect of offering size on the common stock return.

Mikkelson and Partch (1986) find that the size of the issue is not a significant explanatory variable while Asquith and Mullins (1986) find the same variable to be statistically significant in multiple regression including the preannouncement return as a second explanatory variable. Masulis and Korwar (1986) indicate that the size of the offering is statistically significant. Akhigbe and Harikumur (1996) find negative relationship between the size and abnormal returns. In addition Eckbo and Masulis (1989), Barclay and Litzenberger (1987), Akhigbe and Harikumur (1996), Sant and Ferris (1994), Chemmanur and Jiao (2005) find no relationship between the number of shares offered and the announcement day abnormal return.

Choe, Masulis and Nanda (1993) show that the announcement effect is less negative when the economy is in an expansionary segment of the business cycle, when there may be less adverse selection. Korajczyk, Lucas and McDonald (1991) present that the announcement effect

is less negative if it follows shortly after an earnings report, at which time there is presumed to be less asymmetric information.

Akhigbe and Harikumur (1996) show that the frequency of offerings is significantly positively related to the abnormal returns. Firms that issue stock more frequently may exhibit unique financial characteristics that could distinguish them from infrequent issuers. According to Franklin and Faulhaber (1989), a firm may gain reputation by signalling favorable asymmetric information through significant underpricing of its IPO. Such a firm can then issue subsequent seasoned offerings at favourable terms. Therefore, frequent issuer's reputation of not exploiting new shareholders reduces the unfavorable market response to equity issues. In their study on seasoned equity offerings, McDaniel, Madura and Ackhigbe (1994) find that the abnormal returns for firms that issue common stock more frequently is less unfavorable than typical reaction for infrequent issuers.

Jensen (1986) and Stulz (1990) show that leverage restricts management's discretion and reduces agency costs; hence outside investors may be less concerned with the misuse of funds when firms are highly leveraged.

Myers and Majluf (1984) present that financial slacks such as cash and cash equivalents reduces adverse selection problem which may lead to less negative announcement effect on stock prices. Slack does not allow the firm to take advantage of investors only when stock is overvalued.

Furthermore as Bayless and Chaplinski (1996) find that because of the time window of opportunity, the market reaction to announcement of seasoned equity offerings is different between hot issue market and cold issue market. Due to the time varying asymmetric information, the announcement effect on average is less in hot issue markets than cold issue markets.

In addition Chammanur and Jiao (2006) mention that realization of soft information around announcement day affect the magnitude of announcement effect of seasoned equity offerings because the availability of soft information affects the extent of asymmetric information facing firms in the equity market.

Eckbo and Masulis (1992) present that the flotation method chosen and the proportion of the equity rights issue that is purchased and held by current shareholders affect announcement day abnormal return because the flotation cost that is different among flotation methods is capitalized in announcement day abnormal return. In addition the proportion of the equity rights issue that is purchased and held by current shareholders while influence market assessment of adverse selection problem of the equity (Leland and Pyle, 1977).

Schadler and Manuel (1994) find that the abnormal returns upon announcement of an equity offering are more negative for issues marketed by prestigious investment bankers after controlling for different firm and issue characteristics. However, their result is contradicted with the certification hypothesis introduced by Booth and Smith (1986). According to this hypothesis, because the offer prices of seasoned issues placed by prestigious investment bankers more fully reflect adverse inside information, the percentage price decline associated with an issue underwritten by a prestigious investment banker will be smaller than the returns associated with issues underwritten by non-prestigious investment bankers. This expectation arises because the prestigious investment banker has a potentially larger loss of reputational capital and thus will more precisely certify the fair price of the issue. Schadler and Manuel (1994: 53) explain their contradicted result with the fact that the higher negative abnormal return may occur because of the higher issue costs charged by prestigious bankers.

Finally Chiu (2006) implies that announcement effect is lower when the investor sentiment is high. According to him, higher valuation arises when investors are optimistic about the fundamental value of certain equities and are therefore willing to pay a price higher than the fundamental value. Loughran and Ritter (1995, 47) and Ritter (1991) also mention that when companies announce stock issues when their stock is grossly overvalued, the market sometimes does not revalue the stock appropriately and the stock is still substantially overvalued when the issue occurs.

2.4 Empirical Studies

Previous studies on the market response to announcement of equity reissuance have focused on the examination of a single effect. The researchers, the dates, the objectives, the variables and the results of the studies can be seen in Table 6.

Table 6 Empirical Research on Seasoned Equity Offerings in the U.S.

| Authors | Publication date | Objective | Variables used | Major Findings |
|---------------------------|-------------------------|--|---|--|
| Scholes | 1972 | Examine impact of an increase in shares outstanding on equity prices | Stock returns relative size of issue Size of secondary distribution | Negative impact on equity failed to support the price pressure hypothesis |
| Asquith and Mullins | 1986 | Effect on stock prices of seasoned equity offerings | Stock returns issue Size | Negative abnormal return about -3% |
| Masulis and Korwar | 1986 | Effect on stock prices of seasoned equity offerings | Leverage change Issue size Firm's industry classification | Negative abnormal returns for industrials of about -3.25%; only -0.50% for utilities |
| Mikkelson and Partch | 1986 | Effect on equity of security offerings | Stock returns relative size of issue | Negative abnormal returns of about -4% to equity upon announcement of common stock |
| Kalay and Shimrat | 1987 | Examine bond price reaction at announcement of new equity issues | Bond prices Stock returns Number of equity issued | Confirms -3% return to equity at time of announcement; finds a negative bond price reaction |
| Barcklay and Litzenberger | 1988 | Examine the intraday response to new equity issue announcement | Transaction by transaction market prices Issue size | Equity prices fall by 1.3% within 15 minutes of announcement. They fall by 2.5% within 3 hours of announcement |
| Sant and Feris | 1994 | Examine the announcement effect of SEO made by all equity firms | The purpose of the issue relative size of issue Stock returns | Capital structure, information hypothesis explain part of the announcement day abnormal return. -1,44% announcement effect |
| Akhigbe and Harikumar | 1996 | Examine the announcement effect of SEO made by all equity firms | Issue size Stock returns Number of times that a firm issued equity M/B ratio | Capital structure, cash flow signalling hypothesis explain part of the announcement day abnormal return. -0,89% announcement effect |
| Houston and Ryngaert | 1997 | Examine the announcement effect of SEO in bank mergers | Issue size Stock returns | Adverse selection explains part of the negative announcement. -3,3% announcement effect for fixed ratio stock offers. -1,1% for conditional stock offers |

One of the earliest studies examining the impact on share prices of an equity reissuance in the U.S. is Scholes (1972). Specifically testing the price pressure hypothesis through an analysis of large equity transactions, he finds a negative equity response. However Scholes is unable to conclude that the price pressure hypothesis accounts for the observed price decline.

Asquith and Mullins (1986) document a -3% abnormal return to equity in the announcement of a seasoned issue offering in the U.S. and conclude that their findings are consistent with cash flow signalling hypothesis. They further argue that there are difficulties in associating equity price effects with changes in capital structure because most equity issues are relatively a small percentage of total capital. Therefore the impact of financial leverage and tax shields is not large relative to the magnitude of the reduction in equity value associated with stock issues. In their view the significant negative price effect of primary as well as secondary issues do not support the capital structure hypothesis.

Masulis and Korwar (1986) document negative abnormal returns of about 3.2 percent for industrial reissuance, but only about 0.5 % for utilities in the U.S. They also find, however, that the announcement period returns for equity issues appear to be positively related to leverage changes and thus corroborate the existence of a capital structure effect.

Mikkelson and Partch (1986) examine the impact on equity of a variety of security offerings in the U.S. They also observe a negative abnormal return to equity upon announcement of a seasoned equity issuance. They find no equity impact, however, in the announcement of a preferred stock or debt offering. They fail to find a relationship between the announcement abnormal returns and the size of the issue, a proxy for price pressure effects. Kalay and Shimrat (1987) investigate abnormal changes in bond prices at the time of new equity issue announcements in the U.S. and conclude that the negative reaction provides support for the information hypothesis rather than a wealth transfer from stockholders to bondholders.

Barclay and Litzenberger (1988) examine the intraday response to new equity issue announcements in the U.S. and find that share prices fall 1.3 % within 15 minutes of the announcement and decline another 1.5 % within the following three hours. In addition they analyze the returns surrounding the issue day. This indicates a significant negative return preceding the issue day and a statistically significant positive return following the issue. This

price recovery is consistent with the transaction cost hypothesis. The results in this study indicate that the hypotheses except transactions cost hypothesis have little or no power to explain the negative announcement effect. However the results are consistent with the hypothesis that a discount must be offered to compensate investors for the transaction costs they bear in adjusting their portfolios to absorb the new issue.

Sant and Ferris (1994) control for the effect of leverage changes while attempting to determine the presence of other effects at the announcement of equity issue in the U.S. They control for financial leverage by restricting their study to the group of firms that had zero or near zero long-term debt in the period surrounding the announcement date of an equity issue. They continue to observe negative excess returns. Such a finding is inconsistent with a capital structure hypothesis. In their study they could not find any relationship between relative size of issue and abnormal return, which does not support price pressure hypothesis.

However, this study finds evidence indicating an information content of new equity announcement. They observe a measurable difference in the magnitude of abnormal returns surrounding the announcement after controlling for the purpose of the issue. Also they find that the market's negative response to new issue announcement is driven by changes in the expectation of future cash flows, which indicates that there is informational content in such announcement.

Akhigbe and Harikumur (1996)'s study also controls for capital structure related affects by examining the announcement effect of seasoned equity offerings made by all equity firms in the U.S. Their results show that the average two day common stock abnormal return is -0.82% although previous studies without controlling capital structure related effects document an average two day abnormal return of -3% . These results suggest that capital structure related effects constitute a major portion of the announcement effect. Also their results indicate that the negative abnormal returns cannot be attributed entirely to capital structure related effect.

Houston and Ryngaert (1997) also show that adverse selection explains part of the negative announcement effect. They study bank mergers, where common stock is the dominant means of payment to the shareholders of target banks in the U.S. Some merger agreements specify that the target shareholders will receive a fixed number of shares (a fixed ratio stock offer) and other merger agreements specify a variable number of shares that add up to a fixed dollar amount (a

conditional stock offer). If target shareholders are concerned that the acquirer is offering overvalued stock, the conditional stock offer provides protection against price drops. Consistent with adverse selection concerns, the announcement effect is -3.3% for fixed ratio stock offers, but only -1.1% for conditional stock offers.

Although these studies were made in U.S., there are studies for other markets. Table 7 shows the results of non-U.S. studies on the announcement effect of seasoned equity offerings. With the exception of the early UK study by Marsh (1979), all other studies report positive average abnormal returns. As a result, the announcement effect of seasoned equity offerings in the U.S. has significantly negative market reactions, but abnormal announcement returns in other national markets are weakly positive (e.g. Italy, Japan, Switzerland) or even significantly positive (e.g. Australia, Finland, Greece and Korea). These results imply that the market reactions across countries can be attribute to differences in institutional factors.

Table 7 Results of Non-U.S. studies on the announcement effect of seasoned equity offerings

| Country | Study | Sample Size | Average Abnormal Return |
|----------------|-----------------------------|--------------------|--------------------------------|
| Australia | Suchard (1998) | 90 | 2.96* |
| Finland | Hietala, Löttyniemi (1991) | 63 | 3.80* |
| Greece | Tsangakaris (1996) | 59 | 3.97* |
| Italy | Bigelli (1998) | 82 | 1.20 |
| Japan | Kang, Stulz (1996) | 185 | 0.51 |
| Korea | Dhatt, Kim, Mukherji (1996) | 341 | 2.26* |
| Switzerland | Loderer, Zimmermann (1988) | 76 | 2.01 |
| United Kingdom | Marsh (1979) | 254 | -2.00 |

* significant at 0.05 level

CHAPTER III

Announcement Effect of Seasoned Equity Offerings in Turkey

The objective of this chapter is to examine the announcement effect of seasoned equity offerings in Turkey if there is. In addition, the reasons for the announcement effect are investigated by taking sample from Turkish Seasoned Equity Market to explain this anomaly. Sample is studied in detail to understand general characteristics of seasoned equity offerings in Turkey. Event study method is used to observe abnormal return at announcement day and regression method is used to explain these abnormal returns. The result is presented after these methods are applied and finally the conclusion is given according to the results of these methods.

3.1 Sample

The sample is taken from the seasoned equity offering database of Istanbul Stock Exchange (ISE) web site (www.imkb.gov.tr). In this sample, there are 34 offerings between the year 1996 and 2005. It is observed that generally there are two types of seasoned equity offerings. One of them is primary SEOs and other one is secondary SEOs. As it can be seen from Table 8, there are 19 primary SEOs, which constitute 56% of the sample, and 15 secondary SEOs, which is 44% of the sample. In other words, the companies make 19 primary SEOs by increasing their capital and by restricting preemptive right of existing shareholders. Other 15 secondary offerings are the offerings in which existing shareholders or informed insiders sell their own equities. However primary SEOs also includes private placements and public placements or public offerings. From Table 8, it can be seen that there are 17 primary private placements (89% of primary SEO) while there are only 2 primary public offerings (11%). In addition secondary SEOs have 10 private placements (67% of the secondary SEOs) and 5 privatization offerings (33%).

Table 8 shows that 65% of the total number of SEOs appear in the year 1998, 1999, 2004 and 2005. Especially the year 2005 has the highest number of seasoned equity offerings. Although all the years except 2004 have primary private placements, there are 2 primary public offerings only in 1999. Privatization offerings are increasing after 2000 and secondary private placements are also increasing after 2003.

Table 8 Distribution of different kinds of SEOs across the year. The financial companies are excluded

| year | Primary SEO | | Secondary SEO | | Total | Percentage |
|-------|----------------------------|--------------------------|------------------------------|---------------|-------|------------|
| | Primary Private Placements | Primary Public Offerings | Secondary Private Placements | Privatization | | |
| 1996 | 1 | | | | 1 | 3 |
| 1997 | 3 | | | | 3 | 9 |
| 1998 | 1 | | 1 | | 2 | 6 |
| 1999 | 1 | 2 | 2 | | 5 | 15 |
| 2000 | 3 | | | 1 | 4 | 12 |
| 2001 | 1 | | | | 1 | 3 |
| 2002 | 1 | | | 1 | 2 | 6 |
| 2003 | 3 | | | | 3 | 9 |
| 2004 | | | 3 | 1 | 4 | 12 |
| 2005 | 3 | | 4 | 2 | 9 | 26 |
| Total | 17 | 2 | 10 | 5 | 34 | 100 |
| | Total primary SEO | 19 | Total secondary SEO | 15 | | |

In this sample, 15% of the offerings are made in petroleum industry. 9% are in textile industry and 12% and 18% are made in retailing and food industry respectively. 54% of the total offerings are made in these industries according to Table 9 and Figure 13. In petroleum industry there are 4 privatization offerings and 1 secondary private placement. In textile industry, 2 primary private placements and 1 primary public offering are observed. Retailing industry has 2 primary private placements and 2 secondary private placements. Finally food industry shows the highest number offerings. 5 of them are primary private placements and 1 of them is secondary private placement.

Table 9 The distribution of industries in SEO between year 1996 and 2005

| Industry | Number of offering | percentage |
|-------------------|--------------------|------------|
| cement | 2 | 6% |
| electronic | 2 | 6% |
| textile | 3 | 9% |
| retailing | 4 | 12% |
| food | 6 | 18% |
| paper product | 1 | 3% |
| jewelery | 2 | 6% |
| steel | 2 | 6% |
| health | 1 | 3% |
| hotel | 1 | 3% |
| publishing | 2 | 6% |
| ormation technolo | 1 | 3% |
| petroleum | 5 | 15% |
| transportation | 1 | 3% |
| medicine | 1 | 3% |
| Total | 34 | 100% |

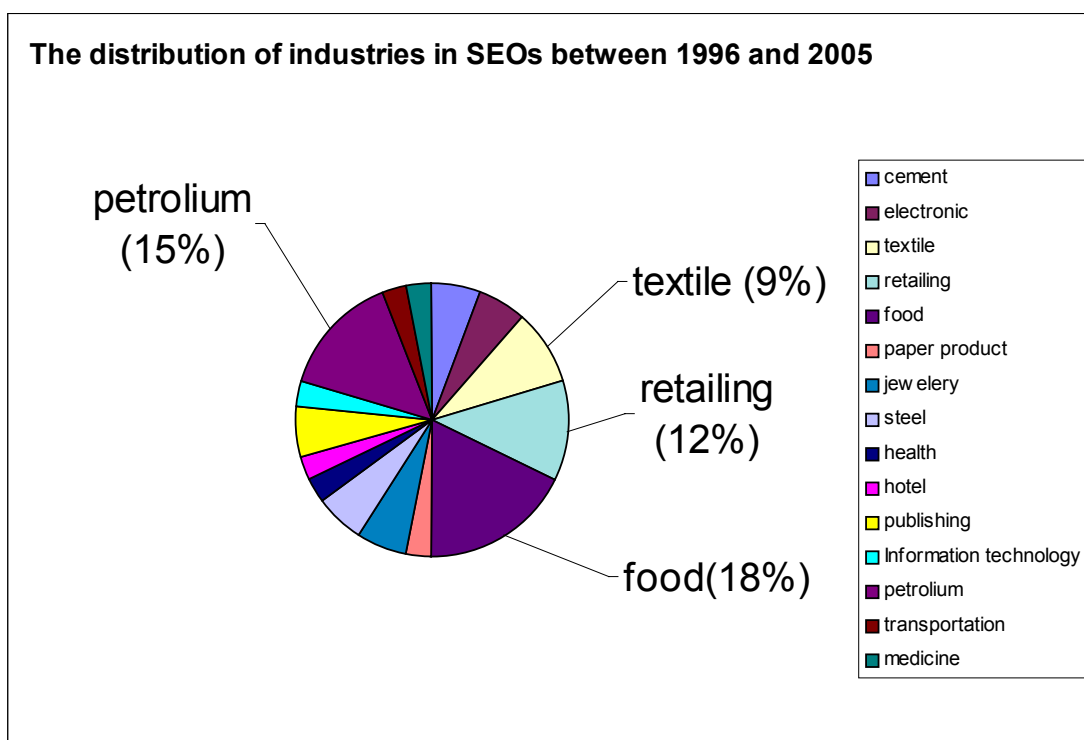


Figure 13 Pie Chart of distribution of industries

Table 10 shows the companies, their industries, the nominal value of share sold, the percentage of capital raised or sold and the issue date of the offerings. The companies have sold 61 million YTL nominal share and got 214 million YTL in primary private placements. In primary public offerings 10 million YTL nominal share have been sold and 11 million YTL gross proceed have been obtained. 56 million nominal shares have been sold by existing shareholders in secondary private placements and they got 264 million YTL gross proceed. Finally, Privatization Committee has sold 179 million YTL nominal shares and from these offerings they obtained 2 billion YTL gross proceed.

While on average 3.5 million YTL nominal shares is sold and mean increase in capital is 25 % in primary private placements, 5 million YTL nominal share is sold and average increase is 45% in primary public offerings. However, average gross proceed from primary private placements (12.6 million YTL) is bigger than average gross proceed from primary public offerings (5.8 million YTL).

Existing shareholders sell on average 5.6 million YTL nominal shares, which mean approximately 6% of the average capital in secondary private placements. Average proceed raised from these offerings is 26 million YTL. Furthermore Privatization Committee sells on average 35 million YTL nominal shares and this amount corresponds to 18% of the average capital. Average gross proceed that Privatization Committee get is 417 million YTL.

The highest number of seasoned equity offering is in first quarter. 35% of the SEOs appear in this quarter. 24% of the SEOs are in 2. Quarter, 18% are in 3. Quarter and finally 24% are in 4. Quarter.

Table 10 The companies, their industries, nominal value of share sold, the percentage of capital raised or sold, gross proceed and issue date of the seasoned equity offerings. The financial companies are excluded.

| PRIMARY PRIVATE OFFERINGS | | | | | |
|---|------------------------|------------------------------------|--|----------------------|-------------------|
| Companies | Industry | nominal value of share sold | percentage of capital raised/sold | Gross proceed | issue date |
| Batıçim | cement | 262,500 | 0.2134 | 1,837,500 | 12.17.96 |
| Vestel | electronic | 750,000 | 1.3397 | 5,700,000 | 06.05.97 |
| Göлтаş | cement | 91,800 | 0.3600 | 2,524,500 | 08.19.97 |
| Köytaş | textile | 309,137 | 0.4470 | 3,168,653 | 12.16.97 |
| Migros | retailing | 75,000 | 0.0794 | 19,500,000 | 08.18.98 |
| Merko | food | 129,050 | 0.0791 | 425,412 | 04.22.99 |
| Mudurnu | food | 300,000 | 0.2000 | 301,359 | 01.11.00 |
| Işıklar | paper product | 365,550 | 0.1511 | 6,132,101 | 03.30.00 |
| Vestel | electronic | 545,711 | 0.1186 | 92,770,880 | 06.07.00 |
| Goldaş | jewelery | 1,000,000 | 0.1429 | 7,100,000 | 08.14.01 |
| Penguen | food | 714,286 | 0.1717 | 5,992,860 | 01.18.02 |
| Goldaş | jewelery | 17,600,000 | 0.2800 | 8,925,189 | 04.25.03 |
| Tansaş | retailing | 22,302,379 | 0.1000 | 43,601,151 | 12.02.03 |
| Kardemir | steel | 2,425,793 | 0.0554 | 2,425,793 | 12.10.03 |
| Arat | textile | 7,000,000 | 0.2592 | 7,000,000 | 01.18.05 |
| Unal | food | 4,000,000 | 0.1754 | 4,000,000 | 03.24.05 |
| Unal | food | 3,200,000 | 0.1200 | 3,200,000 | 08.23.05 |
| MEAN | | 3,592,424 | 0.2525 | 12,623,847 | |
| PRIMARY PUBLIC OFFERINGS | | | | | |
| Gimsan | textile | 35,000 | 0.4100 | 1,037,750 | 07.05.99 |
| Kardemir | steel | 10,000,000 | 0.5000 | 10,670,000 | 11.23.99 |
| MEAN | | 5,017,500 | 0.4550 | 5,853,875 | |
| SECONDARY PRIVATE PLACEMENTS | | | | | |
| Çarşı | retailing | 45,000 | 0.1500 | 6,300,000 | 04.28.98 |
| Merko | food | 90,900 | 0.0557 | 425,412 | 02.01.99 |
| Tansaş | retailing | 48,931 | 0.0652 | 4,012,342 | 03.02.99 |
| Acıbadem Sağlık | health | 974,000 | 0.0812 | 11,688,000 | 04.16.04 |
| Altınyunus | hotel | 260,885 | 0.0473 | 777,437 | 11.01.04 |
| Hürriyet | publishing | 27,615,244 | 0.0663 | 78,427,293 | 11.12.04 |
| Dogan Burda | publishing | 770,130 | 0.0421 | 3,581,104 | 01.14.05 |
| Logo yazılım | information technology | 60,375 | 0.0125 | 289,800 | 01.17.05 |
| Petrol Ofisi | petroleum | 11,638,221 | 0.0422 | 104,743,989 | 02.11.05 |
| Eczacıbaşı ilac | medicine | 14,600,000 | 0.0799 | 54,312,000 | 09.22.05 |
| MEAN | | 5,610,369 | 0.0642 | 26,455,738 | |
| SECONDARY PRIVATIZATION OFFERING | | | | | |
| Tüpraş | petroleum | 23,546,880 | 0.1500 | 673,130,989 | 04.12.00 |
| Petrol Ofisi | petroleum | 8,250,000 | 0.1500 | 227,283,400 | 03.20.02 |
| Türk Hava Yolları | transportation | 40,250,000 | 0.2000 | 269,802,051 | 12.08.04 |
| Tüpraş | petroleum | 36,969,698 | 0.1476 | 569,333,349 | 03.04.05 |
| Petkim | petroleum | 70,725,000 | 0.3000 | 346,552,500 | 04.20.05 |
| MEAN | | 35,948,316 | 0.1895 | 417,220,458 | |

3.2 Methodology and Data

In literature, usually announcement day is taken as the date at which shares are registered in Board. However, for this thesis, the announcement day is determined by looking up the news of decision of companies or existing shareholder to sell the shares. Because announcement effect will appear once the public hears the decision of them. To find out the announcement day, the company news database of ISE is used.

A standard event study is employed using the methodology as described in Brown and Warner (1985). As Figure 14 shows, The market model is estimated by regression, using data from a 150 trading day estimation period ending 20 trading days before the announcement date. The event period is defined as 10 days before through 10 days after the announcement date.

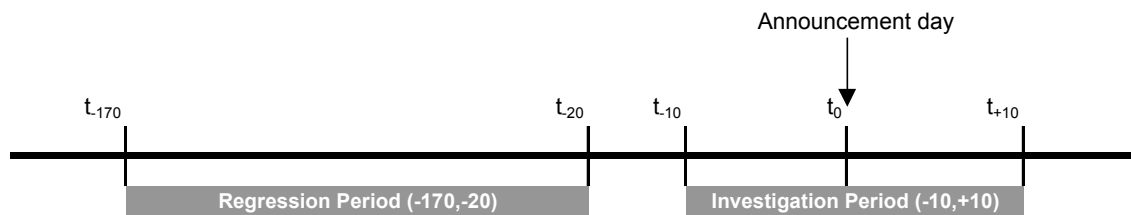


Figure 14 Regression period, investigation period around announcement day

Expected returns are estimated as follows:

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

where R_{it} and R_{mt} are the period- t returns on security i and the market portfolio, respectively, and ε_{it} is the zero mean disturbance term. The parameters of the market model are α_i , β_i , and σ_{ε_i} .

Abnormal return for a firm at period- t is measured by:

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

where AR_{it} and R_{it} are the period- t abnormal returns on security i and the actual returns, respectively.

Average abnormal return at period t is calculated as

$$AAR_t = (\sum AR_{it})/N$$

where N is the number of firms in the sample.

Cumulative abnormal returns are computed as:

$$CAR(t1, t2) = \sum AARt.$$

T test is used to test whether or not average abnormal return at period t is different than zero. Finally the regression method is used to understand the reason for announcement effect. Because sample sizes are small, the regression method is only used for primary private placements, which have size of 17. To test the hypotheses, 6 proxies are used. These are cumulative abnormal return 10 days prior to announcement day (CAR (-10, -1)), nominal share sold (Issue size), cumulative market return (CMR), cumulative market return (CMR), market to book ratio (M/B-1), and leverage change (LC). CAR(-10,-1) is used for testing asset in place signalling hypothesis. Issue size is for price pressure hypothesis. For windows of opportunity hypothesis, CMR is included in to the model. To test wasted investment hypothesis, M/B is used and finally for leverage hypothesis LC is added in to the model. For flotation cost 3rd day average abnormal return (AAR(+3)) is used. Finally issue size relative to capital (RIS) is used to test price pressure hypothesis Table 11 shows the descriptive statistics for these proxies.

Table 11 Descriptive statistics for AAR(0), LC, AAR(+3) , CAR, CMR, Size, M/B-1 and RIS

| LC | | AAR(+3) | | CAR | | | |
|----------------|--------|----------------|----------------|----------------|--------|----------------|--------|
| Ortalama | -0.548 | Ortalama | -0.014 | Ortalama | -0.003 | | |
| Standart Hata | 0.335 | Standart Hata | 0.006 | Standart Hata | 0.022 | | |
| Ortanca | -0.099 | Ortanca | -0.015 | Ortanca | -0.013 | | |
| Standart Sapma | 1.382 | Standart Sapma | 0.023 | Standart Sapma | 0.092 | | |
| Örnek Varyans | 1.911 | Örnek Varyans | 0.001 | Örnek Varyans | 0.009 | | |
| Basıklık | 15.585 | Basıklık | -0.065 | Basıklık | 2.834 | | |
| Çarpıklık | -3.891 | Çarpıklık | 0.149 | Çarpıklık | 0.636 | | |
| Aralık | 5.799 | Aralık | 0.089 | Aralık | 0.416 | | |
| En Büyük | -5.816 | En Büyük | -0.060 | En Büyük | -0.171 | | |
| En Küçük | -0.017 | En Küçük | 0.029 | En Küçük | 0.245 | | |
| Toplam | -9.308 | Toplam | -0.242 | Toplam | -0.046 | | |
| Say | 17.000 | Say | 17.000 | Say | 17.000 | | |
| CMR | | SIZE | | M/B-1 | | RIS | |
| Ortalama | 0.039 | Ortalama | 3592424 | Ortalama | 2.805 | Ortalama | 0.252 |
| Standart Hata | 0.037 | Standart Hata | 1571432 | Standart Hata | 0.729 | Standart Hata | 0.073 |
| Ortanca | 0.015 | Ortanca | 714286 | Ortanca | 2.293 | Ortanca | 0.172 |
| Standart Sapma | 0.151 | Standart Sapma | 6479179 | Standart Sapma | 3.007 | Standart Sapma | 0.299 |
| Örnek Varyans | 0.023 | Örnek Varyans | 41979764823514 | Örnek Varyans | 9.041 | Örnek Varyans | 0.090 |
| Basıklık | 3.742 | Basıklık | 5 | Basıklık | -0.865 | Basıklık | 12.282 |
| Çarpıklık | 1.695 | Çarpıklık | 2 | Çarpıklık | 0.487 | Çarpıklık | 3.337 |
| Aralık | 0.602 | Aralık | 22227379 | Aralık | 9.883 | Aralık | 1.285 |
| En Büyük | -0.117 | En Büyük | 75000 | En Büyük | -1.556 | En Büyük | 0.055 |
| En Küçük | 0.484 | En Küçük | 22302379 | En Küçük | 8.327 | En Küçük | 1.340 |
| Toplam | 0.669 | Toplam | 61071206 | Toplam | 47.686 | Toplam | 4.288 |
| Say | 17.000 | Say | 17 | Say | 17.000 | Say | 17.000 |

3.3 Results

As it is mentioned before, in this sample, there are 19 primary SEOs and 15 secondary SEOs. 17 of primary SEOs are private placements and 2 of them are public offerings. In secondary offerings, there are 10 private placements and 5 privatization offerings. Table 12 shows the announcement day, alpha and beta values. None of the alpha values are significant whereas for all companies except for Dogan Burda, beta values are significant at 99% confidence level.

Table 13 presents the average abnormal returns, cumulative abnormal returns and *t* statistics of primary and secondary SEOs. Because the samples are very small for primary public offerings and privatization offerings, statistical tests can not be used. In other words, the results for these offerings can not be generalized.

According to this table, at day (0), announcement effect for primary private placements is 3% and this result is significant at 0,95 confidence level. There exists also -1,4% abnormal return at day (3). For primary public offerings, negative announcement effect of 7% is observed, although it can not be generalized.

Negative market reaction appears for secondary private placements but it is not significant at 5%. However, when cumulative abnormal return is examined, it can be seen that cumulative abnormal return of 6 days after announcement day is -4% and significant at 5%. There are also significant returns at day (-3), (3) and (6). Although it cannot be generalized due to small size of the sample, for privatization offerings 3,7 % announcement effect is observed

For all of seasoned equity offerings, announcement day (day 0) has 1,6% average abnormal return and it is significant at 10% level. In addition day (-10) and day (3) have some abnormal return. Significant abnormal returns before announcement day show that there is an information leakage about financing decision of the companies through media or by other means. However significant abnormal return after announcement day indicate that while the detail of financing such as underwriter, discounting, pre-emptive rights, number of share sold, flotation method is specified by the companies, the market react those information.

Table 12 Announcement day, alpha and beta values of the companies

| Primary Private Placement | | | | |
|------------------------------------|-------------------|-------------------------|----------------|--------------|
| Companies | issue date | announcement day | alpha | Beta |
| Batıçım | 12.17.96 | 11.05.96 | -0.0033 | 1.13*** |
| Vestel | 06.05.97 | 04.15.97 | 0.0043 | 0.63*** |
| Göлтаş | 08.19.97 | 03.31.97 | 0.0003 | 0.37*** |
| Köytaş | 12.16.97 | 10.06.97 | -0.0014 | 0.76*** |
| Migros | 08.18.98 | 08.06.98 | 0.0009 | 0.72*** |
| Merko | 04.22.99 | 02.11.99 | 0.0019 | 0.53*** |
| Mudurnu | 01.11.00 | 04.08.99 | 0.0017 | 0.74*** |
| Işıklar | 03.30.00 | 12.14.99 | -0.0006 | 0.64*** |
| Vestel | 06.07.00 | 02.25.00 | 0.0016 | 0.97*** |
| Goldaş | 08.14.01 | 09.12.00 | 0.0021 | 0.73*** |
| Penguen | 01.18.02 | 08.16.01 | -0.0008 | 0.68*** |
| Goldaş | 04.25.03 | 01.08.03 | -0.0010 | 0.78*** |
| Tansaş | 12.02.03 | 10.16.03 | 0.0003 | 1.02*** |
| Kardemir | 12.10.03 | 09.01.03 | 0.0033 | 1.62*** |
| Arat | 01.18.05 | 11.12.04 | -0.0006 | 0.58*** |
| Unal | 03.24.05 | 02.04.05 | -0.0008 | 0.47*** |
| Unal | 08.23.05 | 05.23.05 | -0.0007 | 0.79*** |
| MEAN | | | 0.0004 | 0.775 |
| Primary Public Offering | | | | |
| Gimsan | 07.05.99 | 03.26.99 | -0.0016 | 0.46*** |
| Kardemir | 11.23.99 | 09.15.99 | -0.0036 | 0.86*** |
| MEAN | | | -0.0026 | 0.662 |
| Secondary Private Placement | | | | |
| Çarşı | 04.28.98 | 04.13.98 | 0.0016 | 0.56*** |
| Merko | 02.01.99 | 12.22.98 | 0.0007 | 0.54*** |
| Tansaş | 03.02.99 | 02.24.99 | 0.0034 | 0.93*** |
| Acıbadem Sağlık | 04.16.04 | 04.09.04 | 0.0058 | 0.35*** |
| Altinyunus | 11.01.04 | 10.12.04 | 0.0013 | 0.24*** |
| Hürriyet | 11.12.04 | 11.05.04 | -0.0037 | 0.99*** |
| Dogan Burda | 01.14.05 | 01.06.05 | 0.0015 | -0.100 |
| Logo yazılım | 01.17.05 | 12.22.04 | 0.0026 | 0.40*** |
| Petrol Ofisi | 02.11.05 | 02.08.05 | -0.0015 | 0.70*** |
| Eczacıbaşı ilac | 09.22.05 | 09.15.05 | 0.0031 | 0.68*** |
| MEAN | | | 0.0015 | 0.527 |
| Privatization | | | | |
| Tüpraş | 04.12.00 | 01.21.00 | -0.0020 | 0.91*** |
| Petrol Ofisi | 03.20.02 | 07.25.01 | 0.0033 | 0.89*** |
| Türk Hava Yolları | 12.08.04 | 10.15.04 | 0.0002 | 0.58*** |
| Tüpras | 03.04.05 | 03.01.05 | 0.0011 | 0.74*** |
| Petkim | 04.20.05 | 03.11.05 | 0.0017 | 0.74*** |
| MEAN | | | 0.0009 | 0.771 |

Table 13 Average Abnormal Returns and Cumulative Abnormal Returns of Primary and Secondary SEOs.
T statistics are in parenthesis.

| day | Primary SEOs | | | | Secondary SEOs | | | | All SEOs | |
|-----|-----------------------------|--------------|--------------------------|---------------|-----------------------------|----------------|------------------------|---------------|-------------------------|--------------|
| | Private Placement (N=17) | | Public Offering (N=2) | | Private Placement (N=10) | | Privatization (N=5) | | All SEOs (N=34) | |
| | AAR | CAR | AAR | CAR | AAR | CAR | AAR | CAR | AAR | CAR |
| -10 | 0.007 (-0,85) | 0.007 | 0.014 | 0.014 | 0.008 (0,61) | 0.008 | 0.040 | 0.040 | 0,012* (2,02) | 0.012 |
| -9 | 0.003 (0,38) | 0.009 | -0.021 | -0.007 | -0.007 (-0,76) | 0.001 | 0.006 | 0.046 | -0.001 (-0,21) | 0.011 |
| -8 | -0.004 (-0,49) | 0.005 | 0.014 | 0.007 | 0.005 (0,62) | 0.006 | -0.030 | 0.016 | -0.004 (-0,76) | 0.007 |
| -7 | 0.004 (0,33) | 0.009 | 0.026 | 0.033 | 0.005 (0,49) | 0.011 | 0.014 | 0.031 | 0.007 (1,10) | 0.014 |
| -6 | 0.003 (0,80) | 0.012 | -0.004 | 0.029 | -0.001 (-0,06) | 0.010 | 0.001 | 0.032 | 0.001 (0,27) | 0.015 |
| -5 | -0.009 (-1,65) | 0.003 | 0.039 | 0.067 | 0.005 (0,52) | 0.015 | -0.003 | 0.029 | -0.001 (-0,23) | 0.014 |
| -4 | 0.002 (0,28) | 0.005 | 0.040 | 0.107 | -0.002 (-0,19) | 0.013 | -0.008 | 0.021 | 0.002 (0,36) | 0.016 |
| -3 | -0.002 (-0,19) | 0.003 | -0.032 | 0.075 | 0,02** (3,08) | 0.033 | -0.031 | -0.009 | -0.001 (-0,22) | 0.014 |
| -2 | -0.007 (-1,14) | -0.004 | -0.022 | 0.053 | 0.010 (1,88) | 0.043 | -0.020 | -0.029 | -0.005 (-1,14) | 0.009 |
| -1 | 0.001 (0,14) | -0.003 | 0.007 | 0.060 | 0.007 (0,51) | 0.051 | -0.019 | -0.048 | 0.000 (0,07) | 0.010 |
| 0 | 0,03** (2,22) | 0.028 | -0.069 | -0.009 | -0.002 (-0,35) | 0.048 | 0.037 | -0.012 | 0,016* (1,71) | 0.026 |
| 1 | 0.009 (0,94) | 0.037 | -0.040 | -0.049 | -0.013 (-0,94) | 0.036 | -0.021 | -0.033 | -0.005 (-0,56) | 0.021 |
| 2 | 0.005 (0,53) | 0.042 | 0.010 | -0.039 | 0.006 (0,67) | 0.042 | -0.002 | -0.034 | 0.005 (0,87) | 0.026 |
| 3 | -0,014** (-2,54) | 0.028 | -0.020 | -0.059 | -0,02** (-3,98) | 0.021 | 0.002 | -0.032 | -0,014** (-4,01) | 0.012 |
| 4 | 0.013 (1,49) | 0.041 | 0.069 | 0.010 | -0.005 (-0,68) | 0.016 | 0.001 | -0.031 | 0.009 (1,48) | 0.021 |
| 5 | 0.006 (0,40) | 0.047 | -0.017 | -0.007 | -0.006 (-0,60) | 0.011 | -0.014 | -0.045 | -0.002 (-0,19) | 0.020 |
| 6 | -0.012 (-1,83) | 0.034 | -0.021 | -0.028 | 0,014** (2,35) | 0.025 | 0.035 | -0.010 | 0.002 (0,30) | 0.021 |
| 7 | 0.001 (0,08) | 0.035 | -0.017 | -0.045 | -0.010 (-1,49) | 0.015 | 0.007 | -0.003 | -0.002 (-0,41) | 0.019 |
| 8 | -0.004 (-0,37) | 0.032 | -0.024 | -0.069 | -0.006 (-0,97) | 0.009 | -0.013 | -0.016 | -0.007 (-1,17) | 0.012 |
| 9 | -0.004 (-0,52) | 0.028 | -0.015 | -0.084 | -0.002 (-0,41) | 0.007 | -0.002 | -0.018 | -0.004 (-0,89) | 0.008 |
| 10 | -0.010 (-1,14) | 0.018 | 0.011 | -0.073 | -0.002 (-0,06) | 0.006 | -0.007 | -0.025 | -0.006 (-1,19) | 0.003 |
| | | | | | CAR(0,5) | -0,04** | | | | |

** Significant at 0.05 level

Figure 15, 16, 17, 18 show cumulative abnormal return for different seasoned equity offerings. For primary private placements, before the announcement day, cumulative abnormal return slightly decreases. This shows that the firms that announce private placement are undervalued. However for primary public offerings, cumulative abnormal return increases before announcement day. In other words, when the firms announce public offerings, they are overvalued. In addition to that, Figure 17 shows cumulative abnormal return for secondary private placement. According to this figure, cumulative abnormal return increases before the announcement day. This suggests that when secondary private placement is announced, the firm be overvalued. Finally it can be seen from figure 18, cumulative abnormal return for privatization offerings decreases before announcement day. Because of that it can be inferred that state owned enterprises are undervalued when government announces the privatization offerings. For all seasoned equity offerings, managerial assessment and market assessment about firm value differ before the announcement day due to the information asymmetry between managers and investors.

To find out whether or not these difference about firm value before announcement day affect the announcement day abnormal return, regression method is used. One-day average abnormal return is regressed on 10-day cumulative abnormal return (CAR (-10, -1)). As it can be seen from Table 14, the coefficient of CAR (-10, -1) is $-0,22$ and it is significant at 0,05 level. In other words, 1 unit decrease in cumulative abnormal return increases announcement day average abnormal return by 0,22. The model explains 18% of the variation in announcement day average abnormal return. This shows that there should be more variables included in this model.

When issue size is included, its coefficient is negative but insignificant at 10% level. R square of the model does not change. For primary private placements (N=17) when only CAR variables is included, its coefficient is negative and significant at 5% level. The model is explaining 35% of the variation in announcement day abnormal return. However when issue size is also added into the model, R square of the model becomes 47%. Furthermore the coefficient of CAR and issue size are negative and significant at 1% and 5% level respectively.

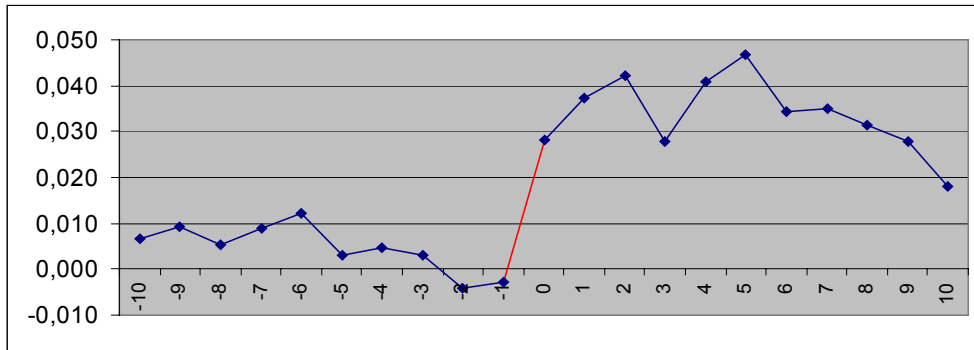


Figure 15 Cumulative Abnormal Return(CAR) for Primary Private Placements

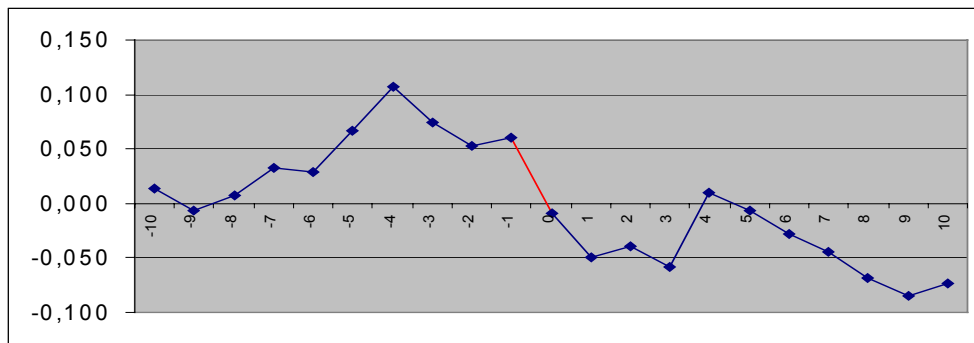


Figure 16 Cumulative Abnormal Return (CAR) for Primary Public Offerings

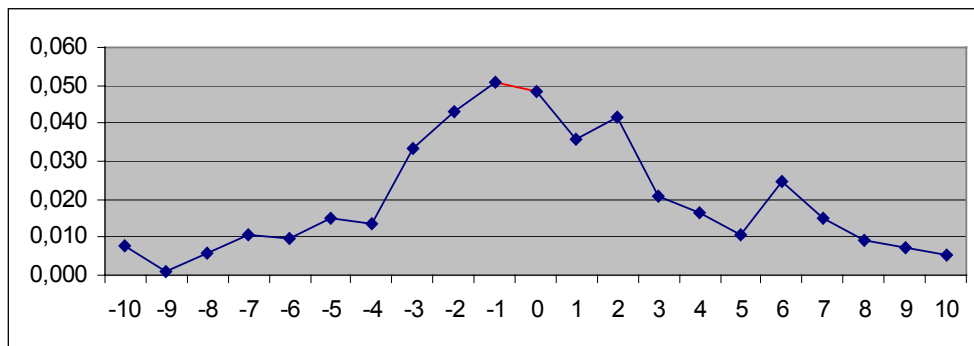


Figure 17 Cumulative Abnormal Return (CAR) for Secondary Private Placements

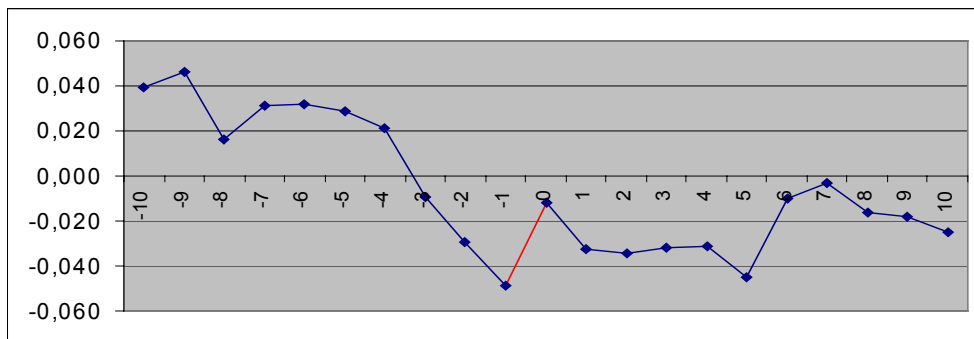


Figure 18 Cumulative Abnormal Return (CAR) for Privatization Offerings

Table 14 Regression of announcement day abnormal return on cumulative return of 10 day prior to announcement day (CAR(-10,-1)), issue size, cumulative market return (CMR), average abnormal return at 3th day (AAR(+3), market to book ratio (M/B-1) and leverage change (LC). Issue size is nominal value of shares sold. CMR is ten days cumulative return of ISE 100 index. LC is leverage change and it is calculated from subtracting leverage ratio after offering from the leverage ratio before offering. RIS is the issue size relative to capital. It is issue size over capital prior to offering.

| | Sample size | Coefficient | | | | | | | R square | F statistic | |
|---------------------------|-------------|-------------|-------------|------------|--------|---------|-----------|--------|----------|-------------|-------|
| | | Intercept | CAR(-10,-1) | Issue size | CMR | AAR(+3) | M/B-1 | LC | | | RIS |
| All SEOs | 34 | 0.02** | -0.23** | | | | | | | 0.2 | 7.34 |
| | 34 | 0.02** | -0.25** | -4.2E-10 | | | | | | 0.2 | 3.83 |
| Primary Private Placement | 17 | 0.03** | -0.37** | | | | | | | 0.35 | 7.93 |
| | 17 | 0.04*** | -0.4*** | -3.2E-9* | | | | | | 0.47 | 6.31 |
| | 17 | 0.035** | -0.3** | -2.9E-9 | 0.13 | | | | | 0.57 | 5.76 |
| | 17 | 0.044** | -0.50*** | -3.7E-9*** | 0.13** | 1.42*** | 0.0049* | | | 0.84 | 11.80 |
| | 17 | 0.043** | -0.55*** | -3.4E-9*** | 0.13** | 1.61*** | 0.0077*** | 0.011* | | 0.88 | 12.87 |
| | 17 | 0.044** | -0.55*** | -3.4E-9*** | 0.13** | 1.61*** | 0.0077*** | 0.011* | 0.001 | 0.88 | 9.93 |

*, **, *** significant at 10%, 5% and 1% respectively

To understand whether or not there is a window of opportunity, another variable is also included in regression, which is cumulative market return (CMR). When 10 days cumulative market return prior to announcement day is included in the model for private placement, it can be seen that the coefficient of CMR is 0,13 but not significant at 10% level.

As it is mentioned before, in event study of primary private placements, there are also significant abnormal returns after announcement day. These abnormal returns may occur because the details of an issue such as the name of the underwriter are announced. For example after 3 days from announcement day, on average abnormal return of -1,4% is observed for primary private placement. At this day, the listed companies apply to board with prospectus to register their shares. The prospectus gives general information about the companies such as the industry that the company operates in, the ownership, and the name of underwriters. The name and the number of the underwriters signal the level of flotation cost to the market. If these abnormal returns happen due to the announcement of underwriters, the market may capitalize expected flotation cost according to flotation method hypothesis (Eckbo and Masulis; 1992). For example the market may value the share price at the announcement day considering expected underwriting fee and underpricing. Therefore average abnormal return for 3th day can also be added in to the model.

To test Wasted Investment Hypothesis (Jensen, 1986), Market to Book ratio can be added also. M/B ratio signals the growth opportunities of a company. When M/B increases, the firm may face with more positive NPV project and the probability that the manager waste the proceed raised from primary placement will be low. Therefore when M/B ratio increases, it will be expected that the announcement day return increase. This parameter is added as M/B-1.

In addition the change in leverage ratio is added in to the model to test the leverage hypotheses which are tax advantage of debt hypothesis (Modigliani and Miller; 1958) and redistribution hypothesis (Merton; 1974). According to Tax Advantage of debt hypothesis, new equity issues cause an unanticipated decrease in financial leverage. Because of the tax advantage of debt financing, a decrease in financial leverage causes the stock price to decline. The redistribution hypothesis implies that with a fixed investment policy, an unexpected decrease in leverage makes a firm's debt less risky. If the total market value of the firm remains unchanged, bondholders experience an increase in the value at the expense of the shareholders. According to this hypothesis, new equity issue announcements will have a negative effect on stock prices.

As it can be seen from Table 14, whenever new factor is added in to the model, the model becomes explaining more variation in announcement day return. Last model after leverage change is included explains 88% of the variation and all the coefficients are significant at 10%. However when relative issue size is included in to the model, it can be seen that the coefficient of this variable is insignificant and the F value of the model is decreasing.

3.4 Conclusion

As a conclusion, the positive announcement effect is observed in Turkey and its magnitude is 1.6%. Main reason for this positive reaction of the Turkish market is that most of the seasoned equity offerings (64%) are primary private placement (50%) and privatization offerings (14%). On average primary private placements have 3% announcement effect whereas primary public placements have -6.9%. However Hertz and Smith (1992) find 4% announcement effect for private placements and Asquith and Mullins find -3% announcement effect for primary public offering in the U.S. In addition, the market react by -4% to the

announcement of secondary private placements but 3.7% to the announcement of privatization offerings although sample size is small.

In public offerings, the information asymmetry between market and firms affect the issuance decision. Under information asymmetry, only overvalued firms will participate in public offerings. Managers who have superior information try to transfer wealth from new investors to existing stockholders. However investors who know this, react negatively and stock price decreases. The result is consistent with Myers and Majluf 's existing asset value signalling hypothesis .

In private placements the firms share their inside information with new investors or institutions that it choses and tries to convince them that they are undervalued. Therefore the firms make private placement when they are undervalued. Because of that when a firm announces its decision of private placements, investors perceive that the stock is undervalued and the stock price increases. As it is mentioned in chapter 2, undervalued firms pass some good NPV project because of adverse selection problem due to information asymmetry. This underinvestment problem is resolved by private placement.

However issue size affects the announcement day abnormal return in private placement. When issue size increases in primary private placement, the announcement day abnormal return decreases. Therefore it can be concluded that cash flow signalling hypothesis is true for primary private placements. In other words, the announcement of seasoned equity offering signal bad news about the cash flow of the company.

Furthermore, cumulative market return affects the announcement day abnormal return in private placement positively. When cumulative market return increases, abnormal return at the announcement day of seasoned equity offering increases also. It can be concluded that there is windows of opportunity for private placements. There may be two explanations for that fenomenan. One explanation is that during the time when cumulative market return is positive, in otherwords when market is rising, agency cost will be less than the agency cost when the market is going down. Because the market is rising, the companies will face with a lot of project with positive NPV. Therefore the probability that the managers waste the money for negative NPV project will be the least likely. Another explanation is that during expansinary

business cycle the investor may be over optimistic about future performance of the companies and the market misvalue the share price.

Market to Book ratio affect announcement day abnormal return for primary private placement positively. When M/B ratio increases, the announcement day abnormal return increases too. M/B ratio signal the agency cost of a company. A firm with high M/B ratio have good growth opportunities and face with a lot of positive NPV project and the probability that the manager waste the investment in negative NPV project will be low. Therefore a private placement of the firm with high M/B ratio signals good news to the market.

Furthermore at 3th day after announcement day, average abnormal return correlates positively with announcement day return. This shows that the market capitalise expected flotation cost at the announcement day.

In addition leverage change due to equity offering affects announcement day abnormal return negatively. There are two theoretical explanations for that. Because of the tax advantage of debt financing, a decrease in financial leverage causes the stock price to decline or an unexpected decrease in leverage makes a firm's debt less risky. Therefore bondholders experience an increase in the value at the expense of the shareholders. Finally price pressure hypothesis does not explain abnormal return at the announcement day of seasoned equity offering.

Secondary private placement is announced after stock run up. This means that existing shareholders try to sell their equities when they are overvalued. However the market reacts negatively to this announcement because this announcement signals that the stock is overvalued. On the other hand in privatization offerings government tries to sell the shares of state owned enterprises when they are undervalued because government gives information about these enterprises during issuance period (www.öib.gov.tr). This makes the information asymmetry narrow. By these information government tries to convince the market that these enterprises are undervalued and good future prospect. The announcement of privatization signals good news about the state owned enterprises. After that announcement, stock price increases.

CONCLUSION

Many companies are founded in today's world. These companies try to seize the investment opportunities to make a profit and keep growing. However they are not faced with these investment opportunities whenever they want. Because of that the companies may be caught unprepared in terms of capital. To raise enough capital, they turn to equity markets. When they issue and offer shares to the public through equity markets for the first time, it is called initial public offering (IPO). The offerings following the initial public offering are named as seasoned equity offerings (SEO). After the IPO, the companies' shares are traded in the equity market and investors value them. The listed companies, which need new capital, may raise it in the equity market with the price at the time of the offering decision. However as the researches which were made in other countries show that this is not possible. As the decision of seasoned equity offerings is made and announced to the market, the share price of the companies changes considerably. Researchers call it the announcement effect of Seasoned Equity Offering on share prices. The phenomenon affect many functional unit decisions that one finance manager has to make such as the type, timing, intermediate institution, flotation method of the offering. In addition it influences the corporate strategies such as corporate governance initiative.

The objective of this thesis is to investigate the existence of the announcement effect in seasoned equity offerings on share prices in the Turkish Equity Market and to examine the reasons of this effect. This thesis includes three chapters. In the first chapter, general information about seasoned equity offering has been given. The description of IPO and SEO and its types, the comparison of SEO and IPO, the introduction of intermediation in seasoned offerings, sales principles and market anomalies observed are made. In the second chapter, the objective of the thesis, which is the announcement effect, has been described and the hypothesis explaining the reasons for this effect has been pointed out by surveying the literature. In addition the proxies used to prove these hypotheses in literature has been mentioned. Finally empirical studies in Europe and U.S. and their results have been discussed. The empirical studies show that there is an announcement affect but these studies focus on the examination of single hypothesis to explain this anomaly. Few recent studies put forward a model by considering all of the hypotheses. It must have been critical to think all of the factors. However

before that the existence of the announcement effect in the Turkish Equity Market must have been proved.

For doing that, the sample has been chosen from the ISE database of Seasoned Equity Offering. Exact announcement day of these offerings has been found in companies' news database of ISE. The announcement day is determined as the day in which companies announce their decision of offerings for the first time. The market model is estimated by regression, using data from a 150 trading day estimation period ending 20 trading days before the announcement date. Taking this long time period is crucial because estimation of the market model should be accurate. The event period is defined as 10 days before through 10 days after the announcement date. The event period has been chosen because the decision of SEO may have reached to the market before or after the announcement day. With this market model, the abnormal returns have been calculated for the event period. After that the abnormal return is regressed on the proxies to test the hypotheses.

The major finding in this thesis is that statistically significant abnormal return of 3% is observed for primary private placements at the announcement day in Turkey. However in the U.S. it is 4%. Not only one hypothesis but also 6 hypotheses together explain this announcement effect. These hypotheses are asset signalling hypothesis, wasted investment hypothesis, cash flow signalling hypothesis, windows of opportunity hypothesis, flotation cost hypothesis and leverage change hypothesis. The results show that the companies, which place their equities privately, are undervalued and this undervaluation affects announcement day return positively. Also agency cost consideration influence it negatively and it is correlated with market to book ratio. Cash flow signalling hypothesis explains the variation in abnormal return and the announcement day return is negatively correlated with issue size. Furthermore the market sometimes provide windows of opportunity to the companies and the market return prior to announcement day affect abnormal return positively. In addition the market capitalizes expected flotation cost at the announcement day and when expected flotation cost rise, the abnormal return at announcement day decreases. And finally the decrease in leverage due to equity offering affects abnormal return at the announcement day negatively.

The results of this thesis have many managerial implications on functional and corporate level. For finance managers, the timing of private placement is an important decision to make. While faced with investment opportunities, the company should be undervalued to make a

private placement because the finance manager will share inside information such as current assets in place and new investment opportunities with private investors and institutions. In these undervalued companies, finance manager should examine the market which may be increasing or decreasing. Because the investor optimism is high in an increasing market, the manager may think of compensating the cost of flotation, the effect of cash flow signalling and leverage change with this misvaluation of the market. Therefore the best time for private placement is at rising market. In addition choosing intermediate institution and underpricing are very important decisions and the market conditions should be taken into consideration while making these decision. As market increases, more prestigious investment banks and more underpricing can be chosen.

At a corporate level, companies should put some corporate governance initiatives in place because the agency cost increases the cost of rising capital. To align senior managers' decisions with corporate strategies, some stock options can be offered. In addition the code of business ethics can be imposed. The culture of accountability, working with dignity, honesty and openness can be created. New information system, new hierarchy level can be formed. Independent directory committee can audit the operation of the company. Finally these initiatives and the results can be shared with the market.

There are some limitations of this research. First of all, the sample size is very small and fragmented. In other words, there are four types of SEOs, which are primary private placements, primary public offerings, secondary private placements and privatization offerings. Sample size allowed making a statistical inference for only primary private placements of whose sample size is 17. Furthermore it is possible that exact announcement day may not have been found. Probably because of that, the model of this thesis explains only 88% of the variation in announcement day abnormal return. However this may also show that there may be other factors also affecting abnormal return. In addition because of small sample, the validation of the model could not be made. In other words, it should be shown that same results would be obtained when a different sample has been taken. Although there are some limitations, the results of this thesis will shed light on the research that will be done in the future.

As it is mentioned in the previous section, the model explains only 88% of the variation in announcement day abnormal returns. Although this may be due to some inaccuracy in the

data, it is possible to think that there may be other factors also affecting abnormal return. In the future these factors can be investigated.

In addition, it can be examined that whether the windows of opportunity due to investor optimism about the firm or the varying degree of agency cost? Surveying the market through questionnaire can be used as a method.

According to the result of this thesis, one important question should be answered also. Even though the managers may compensate the cost of flotation, the effect of cash flow signalling and leverage change with timing of SEO, are they succeeding in offering overvalued stocks? This question can be answered after investigating long run performance of the shares after seasoned equity offerings. If the underperformance is observed, it can be concluded that the companies are offering overvalued stocks.

Another important question is whether or not the existence of windows of opportunity and agency cost considerations in the market affect the capital structures of companies. The result shows that the decrease in leverage due to share offering causes the abnormal return to decrease. However the companies with good corporate governance may take the advantage of windows of opportunity while offering seasoned equity. Therefore they may prefer share offering to debt. Loughran and Ritter (1995) point out that firms issue equity when they are overvalued. In other words, the market sometimes misvalues the share price. Stein (1996) finds that because of that misvaluation, sometimes the ranking choices can be equity and then debt. According to this thesis, this ranking choice may depend on the degree of misvaluation that offset the decrease in firm value due to the cost of flotation, the effect of cash flow signalling and leverage change.

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