

The IPO share lockup agreements in Greece

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2004

Acknowledgments

I would like to thank Mr. Nikolaos Tsangarakis, Assistant Professor, Department of Banking and Financial management, University of Piraeus, for his great contribution in the fulfillment of this study.

Also, the comments of Dr. Nicholas Tessaromatis, Senior Fellow in Finance, ALBA and Timotheos Aggelidis, Phd Candidate, University of Piraeus and Research Assistant, ALBA, are widely acknowledged.

Finally, I would like to thank my family for its great support and patience without of it this study could not have been completed.

Ioanna Serafim

June 2004

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I. Introduction

In the recent years, IPO share lockup agreements have raised the interest of many academics and practitioners due to the increased trading activity and stock reaction around the expiration of the lockup agreement. In the U.S. and the U.K., a lockup agreement is an arrangement between the existing shareholders of the issuing firm and the underwriter, whereby the shareholders agree not to sell their shares for a specific period of time after the IPO. This period is called the lockup period whereas the lockup expiry date refers to the date when the pre IPO shareholders are allowed to sell their shares. It must be noted that the lockup period is not imposed neither in the U.S. or in the U.K. by the legislation but it is an agreement between the issuing firm and the underwriter. Nonetheless, most of the issuing firms enter into a lockup agreement, where the lockup period and the percentage of shares locked is agreed between the underwriter and the major pre IPO shareholders. In the U.K. until January 2000, mineral and scientific based companies with less than three years of life were subject to compulsory lockup agreements of up to two years. After a change in the listing rules in January 2000, lockup periods are no longer mandatory for the above mentioned firms, but they are required to include in their prospectuses a statement on whether they have entered into a lockup agreement.

In the U.S. the typical lockup period lasts for 180 days but there is much greater variability in lockup periods in the U.K. Information related to lockup agreements is disclosed in the IPO prospectus¹. Most of the U.K. lockup contracts do not specify a clear calendar date for the lockup expiration but instead they are related to some other event of the company, such as the announcement of its financial statements. This creates an informational asymmetry between company insiders and outsider shareholders, as the first are better informed about the company events. In fact, Espenlaub et al. (2001) found that only 54 out of 188 firms that went public in the U.K. during the period 1992-1998 gave clear lockup expiration dates in their IPO prospectuses. Espenlaub et al. (2002) using a subsample of director's agreements that define the lockup expiry in terms of an absolute calendar date, found that the average lockup period in the U.K. is 561 days. Also, many U.K. lockup agreements often specify different lockup periods for directors and other shareholders something which is not met in the U.S. lockup agreements. Moreover, in the U.S. on the unlock day, insiders are allowed to sell their shares up to the volume limits of Rule 144².

¹ In the U.K. lockup agreements are mentioned as lock in agreements.

² Rule 144 applies to selling restricted and control securities. Such shares can only be sold in the marketplace if they have been held for at least one year. After the one year holding period, the number of shares that can be sold during any three month period can not exceed the greater of 1% of the outstanding shares of the same class being sold or if the class is listed on a stock exchange or quoted on Nasdaq, the greater of 1% or the average reported weekly trading volume during the four weeks preceding the filing a notice of the sale on Form 144. More information can be found at www.Sec.gov

Another study, which has been published lately by Goergen, Renneboog & Khurshed (2004), regards the lock in agreements in French Nouveau Marche and German Neuer Markt IPOs. This is the only study made so far for the European stocks. According to the authors, the French regulation provided firms with a choice between locking in 100% of the shares for 6 months and locking in only 80% of the shares for 1 year. In Germany, all the initial shareholders are locked in for 6 months with 100% of their shares. In addition, in Germany, the lock in rule of 6 months also applies to the company itself.

The main characteristic of a lockup agreement is that pre IPO shareholders can sell their shares with the written consent of the underwriter. In other words, the underwriter has the ability to break the lockup period upon request of a shareholder. According to Bartlett (1995), a typical lockup agreement is as the following:

“The Selling Securityholders agree that, without your (the investment bank’s) prior written consent, the Selling Securityholders will not, directly or indirectly, sell, offer, contract to sell, make any short sale, pledge or otherwise dispose of any shares of Common Stock or any securities convertible into or exercisable for or any rights to purchase or acquire Common Stock for a period of 180 days following the commencement of the public offering of the Stock by the Underwriters.”

Empirical findings show that all the U.S. and U.K. IPOs present negative returns around the expiration of the lockup period. Given that the lockup period is included in the IPO prospectus and therefore it is public information, it is rather surprising why shares present negative, statistically significant returns. It contradicts the semi strong version of the efficient markets hypothesis. According to Espenlaub et al. (2001), it might even represent a fourth “IPO anomaly” besides the underpricing, the long term underperformance and the hot issue periods³.

The main reasons for the lockup agreement, although not imposed by the law, is that underwriters ensure that the pre IPO shareholders, who own the largest proportion of the shares, will maintain a significant economic interest in the company after the IPO, thereby aligning the interest of old and new shareholders. In addition, lockup agreements limit the proportion of available shares for selling, therefore supporting the share price after the IPO. In other words, the lockup agreement can be viewed as a mean for delaying the flood of sales and therefore delays the possible price decline. All the above increase the marketability of the IPO and increase the success of the IPO. Moreover, as indicated by Brau et al. (2001), lockup agreements are a mean of

³ Hot and cold markets are defined based on the equity volume of the last three months.

signaling the firm's quality as in Welch's model insiders signal the firm's quality by underpricing⁴. Further to the aforementioned, Courteau (1995) built a model in which insiders use the IPO lockup to signal their firm's quality. High quality firms signal their quality by entering into longer lockup agreements. Because insiders hold undiversified portfolios, restricting the sale of stock for longer periods of time imposes a cost on them. Insiders at low quality firms would be unwilling to bear the cost of entering into long lockup agreements. Finally, Aggarwal et al. (2002) conclude that managers tend to underprice IPOs in order to maximize their wealth after the expiration of lockup agreements. In particular, the authors claim that the large run up of stocks in the first days of trading, due to underpricing, attracts the interest of research analysts, therefore shifting the demand curve upwards. The owner-managers exploit this upward shifting of demand curve by selling their shares at the expiration of the lockup agreement.

In the Greek market has not been conducted any research in the trading activity and the stock reaction after the expiration of the lockup agreement in the Athens Stock Exchange. Therefore, this study examines the behavior of Greek stocks listed in the Athens Stock Exchange after the expiration of the lockup agreement (one year after the first trading day). We, also, examine the behavior of stocks not only after the lockup expiration agreement, as imposed by the Greek legislation, but also six months after the first trading day. We have noticed that in all the prospectus major stockholders mention whether they will sell a certain percentage of their shares in the second six months or not. It must be noted that it is not mandatory by the Greek legislation to mention whether they will sell or not but it rather an agreement between the major stockholders and the underwriters in an attempt to improve the IPO success. The interesting will be to examine the behavior of Greek shares after the first six months of trading and especially to examine the stock reaction of companies whose major shareholders have stated that they will not sell and those companies whose the major shareholders have stated that they will sell. In other words, we will examine whether the market compensates companies where the major shareholders remain loyal to their company.

This study is organized in the following sections: section II is literature review, section III is institutional setting in Greece, section IV is data and methodology, section V is empirical findings and section VI is summary and conclusions.

⁴ One of the most popular explanations about the underpricing of IPOs was offered by Allen & Faulhaber (1989), Grinblah & Hwang (1989), Welch (1989) and Chemmanur (1993), the "signaling hypothesis". According to that hypothesis, managers are better informed about the true value of the firm than the other investors and they use the offering price as a signal of positive information. In other words, underpricing is a signal of the firm's quality. But signaling is costly as it results in a wealth transfer from initial to new investors. This signaling cost is compensated for by the fact that the subsequent equity offering will be made at a higher price. Ibbotson (1975) suggests that underpricing is a mean for the company to have a subsequent equity offering in the future.

II. Literature Review

In this section the most recent findings of the academic research on IPO lockup agreements are presented.

Brav and Gompers (2003) examined three potential explanations why pre IPO shareholders agree to long lockup periods: i) lockups act as a signal of quality, ii) as a commitment device to alleviate moral hazard problems, and iii) as a means for investment banks to extract additional compensation from issuing firms. They tested a sample of 2,871 IPOs during the period 1988-1996 and their analysis support the commitment hypothesis. They found no support for the idea that insiders signal their quality by locking their shares for longer period than insiders at lower quality firms, opposed to the model of Courteau (1995). Accordingly, they found little evidence to support the possibility that investment bankers impose longer lockup periods as a compensation from the firm's insiders. Like Harper et al. (2004) and Field and Hanka (2001), Brav and Gompers found that lockup period is negatively related to venture capital backing. Same results were found for the underwriter ranking, that is when the transparency of the IPO is enhanced by a renowned underwriter the lockup period is shorter. Also, studying the buy and hold daily returns of 2,794 IPOs from January 1st,1988 to December 31st,1996, over a 10 day period before and after the lockup expiration date, they found that on the expiration date ($t=0$) firms suffered a loss of -1.08%, statistically significant.

Harper et al. (2004) presented a new dimension in lockup agreements, the follow-on offering process. Follow-on offerings are additional shares registered for sale after the IPO. Follow-on offerings take three forms. In the first form, these offerings can represent new shares issued in order to raise new capital. In the second form, offerings represent sales of shares by existing shareholders. The last form is a combination of the two previous mentioned forms. If a firm enters into a follow-on offering within the lockup period insiders who are engaged into a lockup agreement can sell a proportion of their shares before the lockup period expires. This type of follow-on offering is called 'piggyback deal'. Harper et al. (2004) suggest that follow-on offerings allow insiders to sell their shares before the expiration of the lockup period. Therefore the effects at the lockup expiration date may be reduced. The authors suggest that follow-on offerings may signal asymmetric information between the insiders and the investors. If investors interpret follow-on offering as a mean of insiders to circumvent lockup provisions then this offering would be perceived as a negative signal. Therefore, as Brav and Gompers (2001) argue, negative signal from follow-on offering provides additional selling pressure at the lockup expiration. This suggestion is verified by Harper et al. (2004) as they find that the abnormal return

at the time of lockup expiration is 3.75% lower for IPOs with follow-on offerings than for IPOs without follow-on offerings. Also, using the three day event window (-1,+1) the authors found that the CAR of lockup expiration for firms with follow-on offering is -3.66% whereas CAR for firms without follow-on offerings is -1.50%, both statistically significant at the 1% level. Harper et al. (2004) using a sample of 227 firms going public during the period 1990-2000 found that the Cumulative Average Return (CAR) of lockup expiration was -2.12% at day 0 (t=0), statistically significant at the 1% level. Consistent with Field and Hanka (2001) and others, they found venture capital backing to have a statistically significant negative effect on the firm's value. Moreover, the duration of the lockup period favors the abnormal returns.

Espenlaub et al. (2002) using a sample of 186 U.K. IPOs during the period 1992-1998 examined the impact of venture capital backing and the effect of industry on the abnormal returns around the expiration of lockup agreements. Venture backing is a very common way of equity financing in the U.S. Most companies begin with investments from the founders and by venture capitalists. According to Gilson and Schizer (2002), in most cases venture capitals offer support to firms in the form of convertible preferred stock. Preferred stock is then inverted to common stock if a firm engages in an IPO. It must be noted that these investments constitute a private placement of equity since they are publicly traded subject to Rule 144. Espenlaub et al. (2002) found that venture capital backed firms in the high tech industry suffer the largest negative abnormal returns during the three day period around the lockup expiration. Also, lockup periods are longer for venture backed high tech companies compared to other companies. Moreover, venture capital backed firms lockup a higher proportion of shares. The authors claim that the higher proportion may be because the underwriters of venture capital backed IPOs expect heavy sales after the lockup period in an effort to limit the downward pressure on stock prices. The heavier price pressure for venture capital backed IPOs can be explained by the fact that venture capitals are not long term investors and their goal is to present capital gains. In that aspect, it is normal to expect heavy sales after the lockup period, especially when the IPOs experience significant positive returns. According to Espenlaub et al. (2002), lockup agreements can have substantial cost to founders and venture capitalists. In particular, if venture capitalists and insiders believe that the IPO offer price is high enough they would want to sell their shares after the IPO. However, the lockup agreement prohibits them from selling their shares over a specified period.

As Harper et al. (2004), Field and Hanka (2001), Espenlaub et al. (2002) and Bradley et al. (2001) found that firms with venture capital backing in the high tech sector suffer more losses than other firms. The authors examined a sample of 2,529 U.S. firms from 1988 to 1997. They found that the largest losses in value occur for firms with larger post IPO stock price increase, greater

abnormal trading volume in the period around the lockup expiration, greater pre-expiration stock price volatility and higher quality underwriters. They found that the average abnormal return on day 0 for the entire sample is -0.74% whereas the CAR in the three day period (-1,+1) is -1.39%, both statistically significant. They, also, found that venture capital backed firms experience an increased volume which peaks on day +1. For these firms, average volume remains approximately 30% higher after the lockup expiration date.

Espenlaub et al. (2001) using a sample of 188 U.K. IPOs during the period January 1992 to December 1998 found that the abnormal returns around the expiry date is between -0.5% to -2.5%, based on a sample of firms with absolute expiry dates but statistically insignificant. The authors emphasized on the lockup agreements of high tech firms as they suggest that information asymmetries between insiders and investors are greater. They found that high-tech firms are more likely to choose absolute expiry dates than other firms and the directors of high-tech firms are likely to agree to longer lockup periods.

According to Field and Hanka (2001), lockup agreements may serve several purposes such as that they reassure investors that managers will keep on trying for at least the lockup period (in order to maximize their wealth by selling at higher stock prices). They minimize the possibility that there are bad news concerning the firm; otherwise the insiders would not agree to enter into a lockup agreement. Lastly, they may aid the underwriters' effort for price stabilization by constraining the flood of shares. Field and Hanka (2001) examined a sample of 1,948 U.S. share lockup agreements in the period 1988-1997. They found that when lockup expires there is a 40% increase in average trading volume and a statistically significant abnormal return of -1.15%.

Brau et al. (2001) using a sample of 4,013 U.S. IPOs between 1988 and 1999 found that small and young firms have longer lockup periods compared to larger and older counterparts. They also found that lockup period decreases when a third party, such as a renowned investment bank, venture capital backing and the choice of the Big Four auditor, increases the transparency by certifying the firm's value. Like Carter and Manaster (1990), Brav and Gompers (2000) suggest that high quality firms go public with high quality underwriters and therefore underpricing is expected to be lower. Moreover, underwriters agree to lockup agreements that reflect their reputation. In particular, if an underwriter agrees to a short lockup period the more reputation is at stake as there are many chances for adverse information after the IPO which will imply that the underwriter did not evaluate the firm properly. In equilibrium, high quality underwriters would enter into shorter lockup agreements with high quality firms. The authors suggest that profitable firms, firms with more tangible assets and with venture capital-backers who bring firms to market, have more options for choosing an underwriter and therefore negotiate shorter lockups. On the

other hand, underwriters would want to impose longer lockup periods in order to gain greater rents. Like Teoh, Welch and Wong (1998), Brav and Gompers (2000) found evidence that insiders may choose to release favorable information prior to the lockup expiration date in order to favor analyst's recommendations. In addition, Brav and Gompers (2000) show that analysts tend to issue more optimistic earnings forecasts around the lockup expiration.

Leland and Pyle (1977) showed that insiders signal the firm's value by "putting their money where their mouth is" when they do not sell shares in the IPO. However, according to Brau et al. (2001) this signal is rather weak without lockups as insiders may proceed in stock sales shortly after the IPO. Brau et al. (2001) suggest that with lockup agreements or "keeping their money where their mouth is" insiders send a second signal regarding the true value of the firm.

Mohan and Chen (2001) regard the lockup agreement as a proxy of firm's risk. Specifically, examining 729 U.S. IPOs from January 1990 to December 1992, the authors found that, indeed, the lockup period signals the issuer's riskiness. Any deviation from the 180 day lockup period, which seems to be the norm, suggests more risky firm and thus results in deeper IPO underpricing. They also found that heavy trading after the lockup period is regarded as bad news about the firm's value while thin trading is perceived by the market as good news. Furthermore, Mohan and Chen (2001) like Field and Hanka (2001) suggest that lockup provisions prevent large sales of stock; therefore helping underwriters in their price stabilization effort. Moreover, they suggest that lockup provisions prevent insiders from overstating the firm's future outlook by managing the firm's fundamentals. Teoh, Welch and Wong (1998) and Teoh, Wong and Rao (1994) suggest that an IPO firm may manage earnings and cash flows before going public in order to attract more investors. In that aspect, lockup provisions reduce the chance of earnings management and investors have more time in resolving the true value of the firm without the adverse effect of insider selling.

Brav and Gompers (2000) examined a sample of 1,948 U.S. IPOs during the period 1988-1996. As in the previous mentioned studies, the authors found that prices around the lockup expiration (-2,+2) decline by 1.2% on average. Moreover, there is a significant increase in abnormal value after the lockup expiration period which peaks at day +1 (54.6% with t-stat. 9.82)⁵. They also found that underpricing is higher for firms that have longer lockup periods or lockup a larger fraction of shares. Moreover, Brav and Gompers (2001) suggest that when there is information asymmetry between insiders and investors, longer lockup period is needed so that the firm can persuade the investors for its credibility before insiders begin to sell their shares. In addition, the authors found that 60% of firms have insider selling prior to the expiration of the

⁵ Abnormal value is the daily volume in an event day minus the mean daily volume.

lockup period. Furthermore, underwriters have an incentive to release locked up shares in order to generate new fees in the follow-on offering.

Ofek and Richardson (2000) examined a sample of 1,662 firms conducting IPO during the period 1996-1998. They found that at the end of the lockup period, there is a permanent drop in the stock price in the range of 1.15% to 3.29% with a corresponding 38% increase in the volume trading. These findings contradict the efficient market hypothesis as the lockup period is known with certainty. Therefore, there should be no statistically significant price movement as the expected price drop should have been reflected into the share price well before the lockup expiration. One should expect that if all the participants in the market know about the lockup effect, that is the pressure on share prices, why do they do not arbitrage it? According to the authors, the lockup effect is not arbitrageable. Trading costs, the difficulty of shorting newly issued stocks and short term capital gains of original shareholders are some of the barriers of arbitrage.

Many studies have been conducted regarding the stabilization efforts by underwriters. Schultz and Zaman (1994) concluded that underwriters intervene to the market when the stock price declines below the offer price over the first three days of trading. Nonetheless, Ruud (1993) found that underwriter's intervention is only temporary as many IPOs suffer substantial losses following stabilization efforts. Regarding the stabilization efforts, Schultz and Zaman (1994) found that underwriters provide support but this support is not enough to encompass the 180-day lockup. Hanley, Kumar and Seguin (1993) found that firms suffer severe negative returns for five trading days after the end of stabilization efforts. Based on SEC regulations of 1934 and Rule 10b-7 stabilization efforts are not allowed for periods beyond two weeks. Keasler (2001) found evidence that support the hypothesis that unrestricted investors sell prior to the expiration of the lockup agreement. In particular the selling is strong if the stock has appreciated after the IPO.

All the above mentioned results are presented in table 1:

Table 1: Empirical findings on day '0'				
Author	Country	Sample	Period	Return on day 0*
Brav & Gompers (2003)	U.S.	2,794	1988 – 1996	-1.08%
Harper et al. (2004)	U.S.	227	1990 – 2000	-2.12%
Bradley et al. (2001)	U.S.	2,529	1988 – 1997	-0.74%
Field & Hanka (2001)	U.S.	1,948	1988 – 1997	-1.15%
Ofek & Richardson (2000)	U.S.	1,662	1996 - 1998	-1.15% to -3.29%

** all statistically significant at the 1% level*

III. Institutional Setting in Greece

The Athens Stock Exchange constitutes of three markets; Main, Parallel and New market. Each market has different rules that a company must comply with before it can be listed. The Hellenic Market Committee is the regulator that examines whether companies can proceed their initial public offering.

In Greece, according to the law, 2843/2000, major pre-IPO shareholders hold at least 20% of the company shares are not allowed to sell more than 10% of their stake in the company during the first year of trading. In addition, they are not allowed to sell more than 20% of their shares during the second year of trading, taking into account any unsold shares left during the first year of trading in the Athens Stock Exchange. This law was set in effect for companies listed in the Athens Stock Exchange after the 18/10/2000, according to the National Printing House. Based on the Greek legislation a new law is set in effect after its publishement in the Gazette (FEK).

It is noted that the above holds only for those companies traded in the Main and the Parallel market of the Athens Stock Exchange. Companies traded in the New market have different legislation and in particular, major pre IPO shareholders who own 5% of the company before the initial public offering, are not allowed to sell the 80% of their shares during the first three years of trading. Moreover, in the New market it is mandatory each company to employ a market maker who is responsible for the marketability and the stability of the share price.

Greek legislation imposes to pre IPO shareholders to retain their shares unlike in the U.S. and the U.K. where lockup agreements are not imposed by the law but rather they are agreements between the major pre IPO shareholders and the underwriter. However, in many Greek prospectuses major pre IPO shareholders (that is shareholders with more than 20% of the company's shares) declare that they will not sell any shares during the first six months of trading. This is not imposed by the Greek legislation but it is a statement made by the major shareholders in order to increase the marketability and the success of the IPO. In other cases, major shareholders state whether they will sell a specific amount of shares during the first or second six months of trading, but no more than 10%.

A typical lockup agreement in a prospectus is as the following:

“The major shareholder, XXX, with his/her letter to the management of the Athens Stock Exchange, agrees that: during the first six months of trading he/she will not sell any shares had before the initial public offering. During the next six months and therefore during the first year of trading, according to the law 2843/2000, article 7, paragraph 9, he/she will not sell more

than 10% of the shares had before the initial trading of the company's shares. During the second year of trading, the major shareholder XXX agrees not to sell more than 20% of the shares had before the initial trading of the company's shares, taking into account any unsold shares during the first year of trading''.

In cases where the major shareholder states that he/she will sell during the first or second six months of trading the statement alters to the following:

''The major shareholder, XXX, with his/her letter to the management of the Athens Stock Exchange, agrees that: during the first six months of trading he/she will sell XXX shares had before the initial public offering, equivalent to the XXX% of the stock capital. During the next six months and therefore during the first year of trading, according to the law 2843/2000, article 7, paragraph 9, he/she will not sell more than 10% of the shares had before the initial trading of the company's shares. During the second year of trading, the major shareholder XXX agrees not to sell more than 20% of the shares owned before the initial trading of the company's shares, taking into account any unsold shares during the first year of trading''.

The above statements are mentioned in the prospectus only for the major shareholders that is for each insider that holds more than 20% of the firm's stocks before the IPO.

IV. Data and Methodology

The sample consists of 87 IPOs during January 2000 to December 2002. Because of the fact that the law 2843/2000 was imposed on 18/10/2000, we limited the sample to 44 IPOs during 18/10/2000 until 31/12/2002. The following table presents the number of IPOs per year and per market. Among those 44 companies there are 9 investment companies (8 investment companies in the Main market and 1 investment company in the Parallel market). The sample also comprises of 5 public companies, all listed in the Main market.

	18.10.00 – 31.12.00	2001	2002	Total
Main	2	10	7	19
Parallel	3	8	9	20
New	-	1	4	5
Total	5	19	20	44

The date of first trading, the prices and the volume of stocks were obtained from Effect Finance database. The ownership situation before and after the IPO were obtained from the prospectus. The coefficients of the regressions were estimated with the econometric package EVIEWS version 3.1.

Based on the standard event study methodology the minimum returns required are 40 trading days. The abnormal returns surrounding the lockup expiry date were estimated using standard event-study methodology. The hypothesis we test is the following:

$$H_0: CAAR \neq 0$$

$$H_1: CAAR = 0$$

According to Brown and Warner (1985) there are the following measures in order to calculate excess returns:

- *Mean adjusted returns*

$$A_{i,t} = R_{i,t} - \bar{R}_i$$

$$\bar{R}_i = \frac{1}{N} \sum_i R_{i,t}, \text{ where } N=i-t \text{ and } \bar{R}_i \text{ is the simple average of security's } i \text{ daily return}$$

- *Market adjusted returns*

$$A_{i,t} = R_{i,t} - R_{m,t}, \text{ where } R_{m,t} \text{ is the return on the selected index for day } t$$

- *OLS market model*

$$A_{i,t} = R_{i,t} - \hat{\alpha}_i - \hat{\beta}_i R_{m,t}, \text{ where } \hat{\alpha}_i \text{ and } \hat{\beta}_i \text{ are OLS estimators}$$

In this study we have used the market adjusted returns as this is the common practice in all research papers using event study methodology and the other two models have not given different results. In addition the most appropriate method for the Greek stock exchange is the market adjusted return methodology based on its characteristics. The main reasons that enhance the use of the market adjusted returns methodology is the instability of the parameters of the OLS market model and the fact that the stock prices many times present large changes with no particular reason⁶. Based on the above the use of the mean adjusted returns methodology is not appropriate. In addition and contrary to the mean adjusted returns methodology, the methodology we have chosen takes into account any changes that have been made at the same time that the sample experiences the influence of the expiration of the lockup agreement.

Although we expect the same results using the different methods of measuring abnormal returns, we have calculated the market adjusted returns, the market model returns and Fama – French three factor model in order to measure abnormal (excess) returns.

iv1. Market Adjusted Returns

The returns are daily total returns, including dividends, and they were calculated using the following formula:

$$R_t = \frac{RI_t - RI_{t-1}}{RI_{t-1}} \times 100$$

The abnormal return (AR) is calculated by subtracting the market return:

$$AR_{it} = R_{it} - R_{mt}$$

where R_{mt} is the daily return on the General Index of the Athens Stock Exchange and the R_{it} is the total return on the stock of the firm i on day t . The average abnormal return (AAR) is calculated as:

⁶ Karathanassis & Philippos (1992) have found the existence of heteroscedasticity with the use of the market model supporting the use of the market adjusted returns model. Brown & Warner (1980) refer that: ‘‘The strength of the tests was not reinforced by the use of the C.A.P.M.’’. Marsh (1979) refers that: ‘‘The market model does not present satisfactory the statistical effectiveness since the parameter α includes any unpredictable behaviour during the examined period with result the increase of the noise when we calculate excess returns. In addition, the parameter α may be biased by a wrong selection of the estimated period.

$$AAR_t = \frac{1}{n_t} \sum_{i=1}^{n_t} AR_{it}$$

where n_t represents the number of stocks in the sample on day t (that is from day -40 until day +40).

The Cumulative Abnormal Return (CAAR) from start day, t_s , until the end day, t_e , is calculated as:

$$CAAR_{i(t_e, t_s)} = \sum_{t=t_s}^{t_e} AAR_{it}$$

In order to evaluate the statistical significance of the CAAR over the 81 days, we use cross sectional t-statistics with standard errors from cross section data of the sample firm's cumulative abnormal returns according to the following formula:

$$t - test = \frac{CAAR_t}{S.D._t / \sqrt{N}}$$

where N is the number of firms in the sample.

In addition, we test the null hypothesis that the mean day '0' excess return, that is the simple average excess returns is equal to zero. The test statistic is the ratio of the day '0' mean excess return to its estimated standard deviation. The standard deviation is estimated from the time-series of mean excess returns. The test statistic for the event day '0' is:

$$\bar{A}_t / \hat{S}(\bar{A}_t)$$

where

$$\begin{aligned} \bar{A}_t &= \frac{1}{N_t} \sum_{i=1}^{N_t} A_{i,t} \\ \hat{S}(\bar{A}_t) &= \sqrt{\left(\sum_{t=-6}^{t=-40} (\bar{A}_t - \bar{A})^2 / 34 \right)} \\ \bar{A} &= \frac{1}{35} \sum_{t=-6}^{t=-40} \bar{A}_t \end{aligned}$$

where N_t is the number of sample securities whose excess returns are available at day t .

If the \bar{A}_t are independent, identically distributed, and normal, the test-statistic is distributed Student-t. By using a time-series of average excess returns, the test statistic takes into account cross-sectional dependence in the security-specific excess returns. However, according to Brown and Warner (1985) the test statistic used ignores any time-series dependence in excess returns.

The reason we have used 35 days in order to examine the statistical significance of the event day is that most of the research made in this area refers that there are statistically significant

abnormal returns from day -5 as we move on to event day '0'.⁷ Also and based on the fact that all the investors know the exact date of the lockup expiration agreement, we expect that as we approach day '0' there will be significant abnormal returns. These abnormal returns may be caused from heavy sales from private investors who already know that in day '0', the major stakeholders may sell more than 20% of their shares.

The use of daily stock returns in event studies involves a number of problems that can be summarized as followed as were presented by Brown and Warner (1985):

- *Non normality*

The evidence shows that the distribution of daily returns is fat tailed compared to a normal distribution. The same holds for the excess returns.

- *Non synchronous trading and market model parameter estimation*

Market model parameters are biased and inconsistent with ordinary least squares (OLS) when the return over a security and the return over the market are estimated in different trading intervals. The bias can be important with the use of daily data.

- *Variance estimation*

It is rather important to estimate variance of the sample mean excess return with the use of daily and monthly data. First, as a consequence of non synchronous trading daily excess return can present serial dependence. The second issue is the cross-sectional dependence of the stock's excess return. The third issue is the stationarity of daily variances. According to the authors, there is evidence that the variance of the stock's returns increases for the days around event days.

- *Important properties captured by simulation*

One of the basic parameters in event study methodology is the t-statistic which is the ratio of the mean excess return to its estimated standard deviation. A complication is that variables such as the degree of non synchronous trading can affect both mean and variance estimators.

iv2. Market Model

The market model is defined by the following equation:

$$R_{it} - R_f = a_i + b_i(R_{mt} - R_f) + u_{it}$$

⁷ Field and Hanka (2001) refer that there is statistically significant at the 1 percent level abnormal return during the period -5 to -1.

where R_f is the daily return on the risk free asset. In order to estimate the R_f we use the daily equivalent of the annualised rate of return on the 3 month Euribor (obtained from Datastream). The estimated a_i is interpreted as the daily abnormal return on stock i during the period around the lockup expiry date that is between the day -40 and day +40.

In order to calculate the excess returns over the 81 day event period (Day -40 to Day +40) for each company included in the sample, we have calculated the market factor b for each firm. We have calculated the rolling betas over the 81 event period, as market factors vary over time and do not remain stable. In particular, we have used the one year daily returns of the stock and of the General Index in order to calculate betas. For example, in order to estimate the beta for the day -40 for the firm i in the sample, we have used the one year returns up to day -41, for the day -39 the one year daily returns up to date -40, etc.

iv3. Fama – French Three Factor Model

Fama and French (1992a) found that when used alone or in combination with other variables, b has little information about average returns. For that reason they studied the joint roles of b , size, E/P, leverage and book-to-market equity in the cross-section of average stock returns. Used alone, size, E/P, leverage, and book-to-market equity have explanatory power. They have found that in combinations, size (ME) and book-to-market equity (BE/ME) seem to absorb the apparent roles of leverage and E/P in average returns. In other words, they concluded that two empirically determined variables, size and book-to-market equity do a good job explaining the cross-section of average returns on NYSE, AMEX and Nasdaq stocks for the 1963-1990 period.

Fama and French used the time-series regression approach of Black, Jensen, and Scholes (1972). They regressed monthly returns on stocks on the returns to a market portfolio of stocks and mimicking portfolios for size, book-to-market equity (BE/ME). Also, according to Fama and French, the time-series regressions are also convenient for studying two important asset-pricing issues: First, one of their central themes is that if assets are priced rationally, variables that are related to average returns, such as size and book-to-market equity, must proxy for sensitivity to common risk factors in returns. The time-series regressions give direct evidence on this issue. In particular, the slopes and R^2 values show whether mimicking portfolios for risk factors related to size and BE/ME capture shared variation in stock and bond returns not explained by other factors. Second, the time-series regressions use excess returns (monthly stock returns minus the monthly risk free rate as proxied by monthly Euribor) as dependent variables and either excess returns or returns on zero-investment portfolios as explanatory variables.

The estimated intercepts provide a simple return metric and a formal test of how well different combinations of the common factors capture the cross-section of average returns. According to Fama and French, portfolios constructed to mimic risk factors related to size and BE/ME capture strong common variation in returns, no matter what else is in the time-series regressions. This is evidence that size and book-to-market equity indeed proxy for sensitivity to common risk factors in stock returns.

Regarding the interpretation of the time-series regressions, according to Fama and French, the time-series regressions say that the size and book-to-market factors can explain the differences in average returns across stocks. But these factors alone cannot explain the large differences between the average returns on stocks and the risk free rate. This is explained by the market factor. In regressions including the size and the book-to-market factors, Fama and French found that stock portfolios produce slopes on the market factor that are close to 1. The risk premium for the market factor then links the average returns on stocks and risk free rate.

The Fama – French factors are constructed using the six value-weight portfolios formed on size and book to market and for each calendar month we have calculated the returns on the portfolio in order to estimate the following regression:

$$R_{p,t} - R_{f,t} = \alpha_p + \beta_{p,i}(R_{m,t} - R_{f,t}) + \gamma_p SMB_t + \delta_p HML_t + u_{p,t}$$

where $R_{p,t}$ is the simple monthly return, $R_{f,t}$ is the monthly return on Euribor, $R_{m,t}$ is the return on the General Index,

SMB (Small minus Big) is the average return on the three small portfolios (S/L, S/M, S/H) minus the average return on the three big portfolios (B/L, B/M, B/H).

$$SMB = 1/3(\text{Small Value} + \text{Small Neutral} + \text{Small Growth}) - 1/3(\text{Big Value} + \text{Big Neutral} + \text{Big Growth})$$

In order to form the portfolios we rank the stocks of the Athens Stock Exchange based on size (price times shares). The median size is then used to split stocks into two groups, small and big (S and B).

HML (High minus Low Growth) is the average return on the two high BE/ME portfolios (S/H, B/H) minus the average return on the two low BE/ME portfolios (S/L, B/L).

$$HML = 1/2 (\text{Small Value} + \text{Big Value}) - 1/2 (\text{Small Growth} + \text{Big Growth})$$

We ranked the stocks of the Athens Stock Exchange based on the BE/ME values. We broke the stocks into three book-to-market equity groups based on the breakpoints for the bottom 30% (Low), middle 40% (Medium) and top 30% (High). The portfolios formed on size (ME) and book to market (BE/ME) are formed at the end of each June. In particular for the portfolios formed on ME we have used the June market value whereas for the portfolios formed on BE/ME we have

used the BE in June of year t for the last fiscal year. ME is the market capitalization at the end of December of the last fiscal year. We have not included negative BE firms.

In their methodology, Fama and French have included only firms with ordinary common equity, which means that ADRs and REITs and units of beneficial interest are excluded. This does not apply to the Athens Stock Exchange as listed firms have common stocks and there are no cases of ADRs or REITs listed in the Athens Stock Exchange.

Their decision to sort firms into three groups on BE/ME and only two on ME followed the evidence in Fama and French (1992a) that book-to-market equity has a stronger role in average returns than size. However, the splits in categories are arbitrary as they argue that the tests are not sensitive to these choices.

V. Empirical Findings

We are going to examine the behaviour of the following variables:

- a) CAAR six months and one year after the first trading day
- b) average volume one year after the first trading day
- c) CAAR six months and one year after the first trading day for those companies whose their major stakeholders have stated in the prospectus that they may sell a certain percentage of their stocks during the second semester after the first trading day
- d) CAAR six months and one year after the first trading day based on the market (Main, Parallel, New market)
- e) CAAR six months and one year after the first trading day for those companies that were venture backed prior to the initial public offering

In this section we present the market adjusted CAAR. The same results for the market model and the Fama – French CAAR are presented in the Appendix.

Table 3 presents the AAR, CAAR and its respective t-statistics for the whole sample, 40 days prior and after the lockup expiration date.

Table 3: CAAR for the whole sample – 81 days around the lockup expiration day

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	0.04%	0.2222	0.04%	0.2222
-39	0.24%	0.7190	0.28%	0.6525
-38	0.00%	0.0125	0.29%	0.5173
-37	-0.13%	-0.3771	0.16%	0.2561
-36	0.18%	0.6613	0.34%	0.5121
-35	-0.07%	-0.2673	0.26%	0.3872
-34	-0.07%	-0.2006	0.20%	0.2763
-33	-0.10%	-0.3012	0.09%	0.1182
-32	-0.13%	-0.3238	-0.03%	-0.0357
-31	-0.21%	-0.5282	-0.25%	-0.2205
-30	0.00%	0.0161	-0.24%	-0.2065
-29	-0.65%	-2.2448	-0.89%	-0.6940
-28	-0.33%	-0.8455	-1.22%	-0.8974
-27	-0.05%	-0.1410	-1.27%	-0.9495
-26	-0.41%	-1.2282	-1.68%	-1.3353
-25	-0.18%	-0.3982	-1.86%	-1.3637
-24	0.25%	0.7897	-1.62%	-1.1592
-23	0.22%	0.6608	-1.40%	-1.0240
-22	0.01%	0.0271	-1.39%	-0.9508
-21	0.91%	1.4635	-0.48%	-0.3384
-20	-0.63%	-1.1416	-1.11%	-0.6536
-19	0.25%	0.7384	-0.87%	-0.4906
-18	-0.02%	-0.0367	-0.89%	-0.5165
-17	0.36%	0.8767	-0.53%	-0.3056
-16	0.71%	1.8697	0.18%	0.0973
-15	0.37%	1.1595	0.55%	0.2827
-14	-0.07%	-0.2697	0.48%	0.2484
-13	0.02%	0.0549	0.50%	0.2553
-12	0.35%	0.6086	0.84%	0.4167
-11	-0.18%	-0.5014	0.66%	0.3153
-10	0.01%	0.0219	0.67%	0.3199
-9	-0.19%	-0.4883	0.48%	0.2354
-8	-0.27%	-0.8903	0.21%	0.1003
-7	0.21%	0.4146	0.42%	0.1837
-6	0.01%	0.0290	0.43%	0.1857
-5	0.48%	1.2448	0.91%	0.3866
-4	-0.10%	-0.3548	0.80%	0.3358
-3	-0.20%	-0.5451	0.60%	0.2504
-2	1.14%	2.6873	1.74%	0.7080
-1	-0.32%	-0.6650	1.42%	0.5527
0	-0.15%	-0.2530	1.27%	0.4933
+1	-0.04%	-0.0782	1.23%	0.4569
+2	0.24%	0.7248	1.47%	0.5611
+3	-0.06%	-0.1533	1.41%	0.5472
+4	-0.28%	-0.8067	1.13%	0.4272
+5	-0.14%	-0.3483	0.99%	0.3719
+6	-0.08%	-0.1873	0.91%	0.3428
+7	-0.30%	-1.0737	0.61%	0.2290
+8	-0.52%	-1.5320	0.09%	0.0336
+9	-0.10%	-0.2579	-0.01%	-0.0030
+10	-0.01%	-0.0252	-0.02%	-0.0064
+11	0.05%	0.1126	0.04%	0.0131
+12	0.02%	0.0611	0.06%	0.0217
+13	-0.23%	-0.6958	-0.17%	-0.0687
+14	0.42%	1.3546	0.25%	0.0995
+15	-0.01%	-0.0373	0.24%	0.0910
+16	-0.10%	-0.2472	0.14%	0.0498
+17	-0.34%	-1.3742	-0.20%	-0.0721
+18	0.34%	0.6753	0.14%	0.0480
+19	-0.34%	-1.0964	-0.20%	-0.0680
+20	0.02%	0.0465	-0.18%	-0.0584
+21	-0.18%	-0.4991	-0.36%	-0.1181
+22	0.46%	1.2351	0.10%	0.0336
+23	-0.28%	-1.0052	-0.18%	-0.0612
+24	0.14%	0.4023	-0.04%	-0.0125
+25	-0.26%	-0.7178	-0.29%	-0.0950
+26	0.19%	0.6654	-0.11%	-0.0341
+27	0.77%	1.6044	0.66%	0.2206
+28	0.33%	0.9185	0.99%	0.3282
+29	-0.26%	-0.7373	0.73%	0.2333
+30	-0.32%	-1.0227	0.41%	0.1331
+31	-0.40%	-0.7693	0.02%	0.0047
+32	0.06%	0.1751	0.07%	0.0214
+33	-0.03%	-0.1234	0.04%	0.0116
+34	0.11%	0.3544	0.15%	0.0472
+35	-0.02%	-0.0427	0.13%	0.0416
+36	0.39%	0.9227	0.52%	0.1616
+37	0.26%	0.6850	0.78%	0.2398
+38	0.21%	0.5268	1.00%	0.3041
+39	0.17%	0.4208	1.17%	0.3551
+40	0.68%	1.3460	1.85%	0.5745

We can see from table 3 that neither the AAR nor the CAAR is statistically significant different from zero on event day '0'. Same result for the AAR gives test statistic of Brown and Warner (1985) as it is equal to -0,4695.

In table 4 we present the CAAR and the corresponding t-statistic for different sub-periods of the total 81 day event period.

Table 4: CAAR in sub-periods around the lockup expiration day – All firms						
All firms in event study – 1 year after the IPO	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-0.47%	-0.19%	-0.51%	0.56%	-1.25%	1.87%
Median CAAR	-0.40%	-0.07%	-0.48%	-0.59%	-0.42%	1.90%
t-stat	-0.5368	-0.1980	-0.4316	0.4230	-1.0418	0.8144

Based on the t-statistics none of the above cumulative abnormal returns, are statistically significant, therefore are equal to zero..

We examine the same variables but for a different period. In particular, as we have already mentioned, major stakeholders used to mention in the prospectus whether they are willing to sell during the second six months of trading or not. This is not obliged by the Greek legislation but it is assumed that enhances the marketability of the IPO. Therefore, we think that the expiration of the first six months of trading is much more similar to the lockup expiration of agreements in the U.S. and in the U.K. Therefore, each variable will be examined for six months and one year after the first day of trading. It must be noted that those companies in the sample that state in the prospectus that the major stock holders will proceed in stock sales, these are referred to the second six months of trading.

Table 5 presents the CAAR and the measures of significance for the whole sample forty days before and after the expiration of the six months after the first day of trading.

Table 5: CAAR for the whole sample – 81 days around the expiration of the first six months

Date	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	0.31%	1.3527	0.31%	0.5330
-39	-0.33%	-0.2707	-0.02%	-0.0322
-38	-0.95%	0.0828	-0.97%	-1.6227
-37	-0.63%	-0.6857	-1.61%	-2.1445
-36	0.39%	-1.1362	-1.21%	-1.1898
-35	0.15%	0.5179	-1.07%	-0.9323
-34	0.45%	0.2248	-0.61%	-0.5223
-33	-0.28%	-1.0800	-0.89%	-0.6828
-32	0.18%	1.9594	-0.72%	-0.5341
-31	-0.39%	2.6813	-1.11%	-0.6617
-30	-0.25%	-0.1986	-1.36%	-0.7443
-29	-0.45%	1.0945	-1.81%	-0.9280
-28	0.06%	1.2282	-1.75%	-0.8956
-27	-0.47%	0.9633	-2.23%	-1.1084
-26	-0.66%	-0.4044	-2.88%	-1.3405
-25	0.38%	-1.2009	-2.50%	-1.1550
-24	0.24%	1.3155	-2.26%	-1.0424
-23	0.05%	0.3572	-2.22%	-0.9568
-22	0.33%	1.1385	-1.89%	-0.7580
-21	-0.15%	-0.2016	-2.04%	-0.8233
-20	0.87%	0.5664	-1.16%	-0.4801
-19	0.34%	0.7567	-0.83%	-0.3485
-18	0.24%	-1.3352	-0.59%	-0.2405
-17	-0.25%	3.1060	-0.84%	-0.3228
-16	0.56%	-0.8843	-0.28%	-0.1116
-15	-0.85%	1.2054	-1.13%	-0.4625
-14	-0.06%	-1.1872	-1.19%	-0.4717
-13	-0.54%	-0.1579	-1.74%	-0.6458
-12	-0.11%	0.1609	-1.85%	-0.6740
-11	0.12%	0.9647	-1.73%	-0.6286
-10	-0.27%	0.2505	-2.00%	-0.7047
-9	-0.16%	1.7906	-2.16%	-0.7518
-8	0.50%	-0.7234	-1.65%	-0.5736
-7	0.05%	0.1001	-1.61%	-0.5409
-6	-0.62%	-0.8167	-2.23%	-0.7347
-5	-0.06%	0.1047	-2.29%	-0.7706
-4	0.18%	0.0626	-2.11%	-0.7284
-3	-0.17%	0.5694	-2.28%	-0.7678
-2	-0.08%	1.3527	-2.35%	-0.7941
-1	-0.04%	-0.2707	-2.39%	-0.7697
0	-1.23%	0.0828	-3.62%	-1.2364
+1	-0.28%	-0.6857	-3.90%	-1.2912
+2	0.73%	-1.1362	-3.17%	-1.0656
+3	0.78%	0.5179	-2.39%	-0.8111
+4	-0.11%	0.2248	-2.50%	-0.8646
+5	0.03%	-1.0800	-2.47%	-0.8382
+6	-0.37%	1.9594	-2.84%	-0.9709
+7	-0.70%	2.6813	-3.53%	-1.1849
+8	0.21%	-0.1986	-3.32%	-1.1343
+9	0.09%	1.0945	-3.24%	-1.0804
+10	-0.31%	1.2282	-3.54%	-1.1587
+11	0.66%	0.9633	-2.88%	-0.9542
+12	1.10%	-0.4044	-1.77%	-0.5684
+13	-0.07%	-1.2009	-1.85%	-0.5723
+14	0.30%	1.3155	-1.55%	-0.4745
+15	0.40%	0.3572	-1.15%	-0.3475
+16	0.28%	1.1385	-0.86%	-0.2656
+17	-0.14%	-0.2016	-1.00%	-0.3044
+18	-0.35%	0.5664	-1.35%	-0.4110
+19	0.65%	0.7567	-0.70%	-0.2111
+20	0.12%	-1.3352	-0.59%	-0.1732
+21	0.36%	3.1060	-0.23%	-0.0663
+22	-0.10%	-0.8843	-0.32%	-0.0916
+23	0.27%	1.2054	-0.05%	-0.0140
+24	0.23%	-1.1872	0.18%	0.0522
+25	-0.40%	-0.1579	-0.22%	-0.0620
+26	0.95%	0.1609	0.73%	0.2044
+27	-0.50%	0.9647	0.24%	0.0663
+28	0.52%	0.2505	0.75%	0.2074
+29	-0.48%	1.7906	0.27%	0.0739
+30	-0.06%	-0.7234	0.21%	0.0568
+31	0.06%	0.1001	0.27%	0.0726
+32	0.46%	-0.8167	0.72%	0.1960
+33	0.11%	0.1047	0.83%	0.2210
+34	0.76%	0.0626	1.59%	0.4122
+35	-0.30%	0.5694	1.29%	0.3253
+36	0.06%	1.3527	1.35%	0.3236
+37	-0.44%	-0.2707	0.91%	0.2081
+38	0.04%	0.0828	0.95%	0.2131
+39	0.03%	-0.6857	0.98%	0.2256
+40	0.23%	-1.1362	1.20%	0.2824

Again, we do not observe any statistical significant abnormal returns. Therefore, CAAR is equal to zero on event day '0'.

In table 6 we present the CAAR and the corresponding t-statistic for different subperiods of the total 81 event period, six months after the first day of trading.

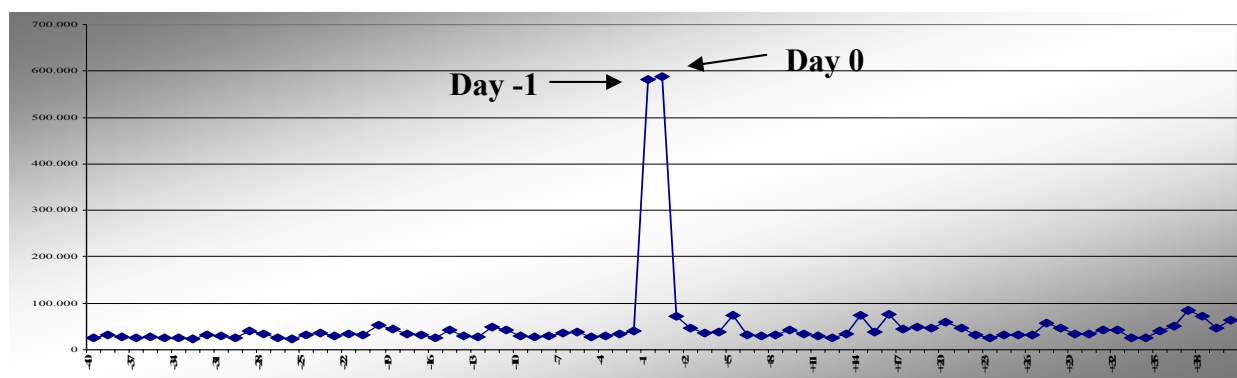
All firms in event study – six months after the IPO	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-1.27%*	-1.51%*	-1.55%	-0.24%	0.35%	4.75%
Median CAAR	-0.16%	-0.29%	-0.81%	-0.91%	-0.81%	3.88%
t-stat	-2.2133	-2.3362	-1.9569	-0.1944	0.2868	1.8020

**Statistically significant at the 5% level*

Based on table 6, we can see that there is statistically significant negative CAAR equal to -1.27% during the period from day -1 to day 0. This could be explained by the fact that private investors already know from the prospectus whether the major stockholders will proceed in stock sales during the second six months or not. Therefore and in order to avoid suffering losses in their portfolio, they start to sell their own shares one day prior to the expiration of the first six months. Also, there is statistically significant negative CAAR equal to -1.51% immediately after the event day 0, as this could be interpreted as sales from the major stakeholders.

Concerning the volume, we can see from the following diagram that one day before and on the day of the lockup expiration agreement, there is a substantial increase in the average volume for the whole sample of 44 companies. In particular, on event day 0 there is an increase of average volume of 1727% compared to the average volume of the period -40, -2 and there is a substantial decrease of 92.44% in the average volume of the period +1, +40. Analogous increase in the average volume there is on day -1, one day prior to the event day. The substantial increase in the average volume on day -1 could be explained by the heavy sales of private investors, as they know in advance that on the next day the lockup agreement will expiry and they expect sales from the major stockholders. In their attempt to avoid suffering substantial losses in their portfolio, they sell their stocks one day before.

Figure 1: Average volume 81 days around the lockup expiration day



In addition, we have examined the behaviour of the CAAR for the 81 days six months after the first trading day. As we have mentioned above, many major stakeholders declare in the IPO prospectus whether they are willing to sell or not during the first six months of trading in the Athens Stock Exchange. In table 7 we can see that out of the 44 companies in the sample, 25 companies state in their prospectus that they will proceed in share sales during the second six months of trading where the rest 19 companies state in their prospectus that they will not proceed in share sales in the second six months of trading. It must be noted that all the firms state that they will not proceed in share sales during the first six months of trading. As it is known the prospectus is available for all the potential investors and it is being published before the commencement of the IPO procedure, which lasts normally three days. Therefore, the information whether the major shareholders are willing to sell during the second six months of trading is well known before the IPO. Those who participate in the IPO and acquaint shares of the newly listed company are aware of the fact whether during the second six months the major stakeholders will proceed in sales of stock and therefore they sell their own stocks that have bought from the IPO in order to capture the capital gains.

Table 7: Number of firms stated selling and no selling in the second six months of trading			
	Selling⁽¹⁾	Not selling⁽²⁾	Total
Main	6	13	19
Parallel	15	5	20
New	4	1	5
Total	25	19	44

⁽¹⁾ **Selling:** it refers to the number of companies that have conducted an IPO during the period 18.10.2000 – 31.12.2002 and in the prospectus the major stakeholders state that they will proceed in share sales during the second six months of trading.

⁽²⁾ **Not Selling:** it refers to the number of companies that have conducted an IPO during the period 18.10.2000 – 31.12.2002 and in the prospectus the major stakeholders state that they will not proceed in share sales during the second six months of trading.

Table 8: CAAR 81 days around the lockup expiration day – Companies stated selling

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	0.04%	0.1785	0.04%	0.1785
-39	0.49%	0.9557	0.53%	0.8313
-38	-0.38%	-1.1966	0.15%	0.1990
-37	-0.30%	-0.6509	-0.15%	-0.1929
-36	-0.27%	-0.8587	-0.43%	-0.5491
-35	-0.12%	-0.3574	-0.54%	-0.7813
-34	-0.11%	-0.2389	-0.65%	-0.7678
-33	0.39%	0.7656	-0.26%	-0.2224
-32	0.16%	0.3129	-0.10%	-0.0747
-31	0.10%	0.1710	-0.01%	-0.0036
-30	0.28%	0.7136	0.27%	0.1603
-29	-0.49%	-1.3111	-0.22%	-0.1158
-28	-0.75%	-1.3285	-0.97%	-0.4909
-27	-0.29%	-0.5485	-1.25%	-0.6924
-26	-1.24%	-2.7613	-2.49%	-1.4732
-25	-0.09%	-0.1142	-2.58%	-1.3510
-24	0.51%	1.0423	-2.06%	-1.0337
-23	0.24%	0.4461	-1.83%	-0.9991
-22	0.05%	0.1093	-1.78%	-0.9299
-21	1.27%	1.3174	-0.51%	-0.2547
-20	-0.33%	-0.4261	-0.84%	-0.3333
-19	0.15%	0.3160	-0.68%	-0.2657
-18	0.20%	0.2120	-0.49%	-0.1904
-17	-0.11%	-0.2062	-0.59%	-0.2462
-16	0.70%	2.1121	0.10%	0.0410
-15	0.40%	0.8372	0.51%	0.1924
-14	-0.42%	-1.0889	0.09%	0.0325
-13	0.51%	1.1591	0.59%	0.2326
-12	0.69%	0.7516	1.28%	0.4710
-11	-0.23%	-0.4945	1.05%	0.3723
-10	-0.06%	-0.1209	0.99%	0.3420
-9	0.09%	0.1816	1.07%	0.3722
-8	-0.21%	-0.5313	0.86%	0.2776
-7	0.29%	0.3545	1.16%	0.3305
-6	-0.21%	-0.3416	0.95%	0.2707
-5	-0.13%	-0.3135	0.82%	0.2335
-4	-0.19%	-0.4259	0.63%	0.1748
-3	-0.34%	-0.6703	0.29%	0.0793
-2	1.49%	2.4260	1.77%	0.4973
-1	-0.18%	-0.2999	1.59%	0.4269
0	0.08%	0.0865	1.68%	0.4386
+1	0.49%	0.5896	2.17%	0.5221
+2	0.19%	0.4153	2.35%	0.6042
+3	-0.42%	-0.7398	1.94%	0.5241
+4	-0.96%	-2.0731	0.97%	0.2659
+5	-1.16%	-2.3666	-0.19%	-0.0529
+6	0.61%	0.9805	0.42%	0.1172
+7	-0.04%	-0.0941	0.38%	0.1035
+8	-0.89%	-1.9670	-0.51%	-0.1407
+9	0.33%	0.6889	-0.18%	-0.0499
+10	0.16%	0.2572	-0.02%	-0.0057
+11	0.47%	0.6292	0.45%	0.1215
+12	0.16%	0.3191	0.61%	0.1734
+13	-0.68%	-1.3863	-0.07%	-0.0207
+14	0.31%	0.6732	0.24%	0.0721
+15	-0.02%	-0.0555	0.22%	0.0647
+16	-0.50%	-0.8346	-0.28%	-0.0777
+17	-0.36%	-0.8788	-0.64%	-0.1697
+18	0.50%	0.6810	-0.13%	-0.0350
+19	-0.29%	-0.7349	-0.42%	-0.1063
+20	1.07%	1.6074	0.65%	0.1581
+21	-0.46%	-0.8500	0.19%	0.0460
+22	0.04%	0.0810	0.23%	0.0553
+23	-0.48%	-1.1244	-0.24%	-0.0607
+24	0.56%	1.1635	0.32%	0.0784
+25	-0.16%	-0.2873	0.16%	0.0361
+26	0.46%	1.1908	0.62%	0.1406
+27	0.24%	0.5442	0.86%	0.1885
+28	0.21%	0.4268	1.07%	0.2317
+29	-0.22%	-0.4435	0.85%	0.1780
+30	-0.41%	-0.9387	0.44%	0.0941
+31	-0.07%	-0.0847	0.37%	0.0772
+32	0.21%	0.5404	0.58%	0.1206
+33	0.07%	0.1921	0.65%	0.1355
+34	0.20%	0.4544	0.85%	0.1781
+35	-0.78%	-1.6352	0.07%	0.0146
+36	0.16%	0.3779	0.23%	0.0478
+37	0.15%	0.3816	0.39%	0.0774
+38	0.31%	0.7370	0.69%	0.1387
+39	0.12%	0.2226	0.82%	0.1620
+40	0.53%	0.7430	1.34%	0.2698

Table 9: CAAR 81 days around the lockup expiration day – Companies stated selling						
Firms stated selling – 1 year after the IPO	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-0.10%	0.57%	0.39%	-1.14%	-2.19%	1.37%
Median CAAR	-0.40%	0.27%	-0.18%	-1.46%	-2.35%	0.58%
t-stat	-0.0715	0.3611	0.1999	-0.6875	-1.2121	0.3627

The above results do not differ from the results in table 1, as CAAR are not statistically significant and therefore equal to zero.

In table 10, we present the CAAR and the statistical measures for companies stated selling, forty days before and after the first six months of trading.

Table 10: CAAR for firms stated selling - 81 days around the expiration of the first six months

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	0.68%	0.7468	0.68%	0.7468
-39	-0.36%	-1.0659	0.32%	0.3514
-38	-1.32%	-3.6979	-1.00%	-1.1477
-37	-0.84%	-1.5153	-1.84%	-1.7289
-36	0.29%	0.5272	-1.54%	-1.2121
-35	-0.11%	-0.2636	-1.66%	-1.1017
-34	0.67%	1.5277	-0.99%	-0.6138
-33	-0.47%	-0.8283	-1.46%	-0.8470
-32	0.11%	0.2672	-1.35%	-0.7504
-31	-0.65%	-0.8099	-2.00%	-0.8285
-30	-0.91%	-1.8094	-2.90%	-1.2018
-29	-1.08%	-1.5353	-3.98%	-1.6995
-28	0.02%	0.0300	-3.97%	-1.6329
-27	-0.80%	-1.2683	-4.77%	-1.8181
-26	-1.19%	-1.7520	-5.96%	-2.1476
-25	1.12%	1.7168	-4.85%	-1.7834
-24	0.93%	1.8266	-3.91%	-1.3976
-23	0.22%	0.4514	-3.69%	-1.2528
-22	0.01%	0.0125	-3.68%	-1.1321
-21	-0.06%	-0.1158	-3.75%	-1.1720
-20	1.23%	1.5895	-2.52%	-0.8718
-19	0.36%	0.6341	-2.16%	-0.7766
-18	0.14%	0.2757	-2.02%	-0.7120
-17	-0.69%	-2.5966	-2.71%	-0.9467
-16	0.74%	1.2916	-1.98%	-0.7616
-15	-0.58%	-1.9684	-2.56%	-0.9741
-14	-0.16%	-0.4056	-2.72%	-0.9845
-13	-0.98%	-1.5913	-3.70%	-1.2550
-12	-0.50%	-1.1329	-4.21%	-1.3588
-11	0.42%	0.8415	-3.79%	-1.2047
-10	-0.19%	-0.5507	-3.98%	-1.2434
-9	-0.02%	-0.0515	-4.00%	-1.2159
-8	0.40%	0.7216	-3.59%	-1.0646
-7	0.08%	0.1775	-3.51%	-1.0347
-6	-0.19%	-0.4069	-3.70%	-1.0690
-5	-0.69%	-1.5325	-4.39%	-1.1860
-4	0.03%	0.0513	-4.36%	-1.1830
-3	-0.30%	-0.6224	-4.67%	-1.2661
-2	0.09%	0.2177	-4.57%	-1.2714
-1	0.30%	0.3754	-4.27%	-1.0997
0	-1.07%	-1.6932	-5.34%	-1.4009
+1	0.13%	0.2218	-5.21%	-1.2805
+2	0.92%	1.4954	-4.29%	-1.0536
+3	1.43%	1.5286	-2.86%	-0.7365
+4	-0.04%	-0.0619	-2.90%	-0.7683
+5	0.34%	0.5922	-2.56%	-0.6726
+6	-0.56%	-1.2745	-3.11%	-0.7731
+7	-0.68%	-1.0350	-3.79%	-0.8844
+8	0.13%	0.2533	-3.66%	-0.8747
+9	-0.57%	-1.2594	-4.23%	-0.9971
+10	-0.14%	-0.4975	-4.36%	-1.0162
+11	0.97%	2.0007	-3.39%	-0.8133
+12	1.89%	3.0074	-1.50%	-0.3405
+13	-0.24%	-0.4386	-1.74%	-0.3789
+14	0.46%	1.4163	-1.28%	-0.2798
+15	0.47%	0.9331	-0.81%	-0.1740
+16	-0.29%	-0.7423	-1.10%	-0.2348
+17	0.07%	0.1533	-1.03%	-0.2170
+18	-0.20%	-0.4877	-1.23%	-0.2610
+19	1.08%	1.3079	-0.15%	-0.0306
+20	0.44%	0.9133	0.30%	0.0606
+21	-0.10%	-0.2157	0.20%	0.0410
+22	-0.07%	-0.0953	0.13%	0.0254
+23	0.11%	0.2121	0.24%	0.0474
+24	0.84%	2.3116	1.07%	0.2156
+25	-0.32%	-0.8234	0.75%	0.1487
+26	0.91%	2.0348	1.66%	0.3312
+27	-0.69%	-1.4218	0.97%	0.1917
+28	0.26%	0.4794	1.23%	0.2337
+29	-0.20%	-0.4603	1.02%	0.1915
+30	-0.53%	-1.0755	0.49%	0.0928
+31	-0.31%	-0.6847	0.19%	0.0352
+32	0.96%	1.4869	1.15%	0.2140
+33	0.37%	0.5104	1.51%	0.2777
+34	0.70%	1.6595	2.21%	0.3943
+35	-0.88%	-1.5228	1.33%	0.2310
+36	-0.58%	-0.9818	0.75%	0.1225
+37	-0.80%	-1.2121	-0.05%	-0.0078
+38	-0.13%	-0.2348	-0.18%	-0.0274
+39	-0.04%	-0.0893	-0.21%	-0.0332
+40	0.27%	0.4499	0.05%	0.0087

Table 11: CAAR in sub-periods around the expiration of the first six months						
Firms stated selling – 6 months after the IPO	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-0.77%	-0.94%	-0.64%	1.15%	0.85%	4.42%
Median CAAR	-0.15%	-0.34%	-0.55%	-0.12%	-0.94%	3.71%
t-stat	-1.1455	-1.6058	-0.6015	0.6043	0.6330	1.1887

After the expiration of the first six months of trading, the stocks of firms whose the major stakeholders had stated in the prospectus that they will proceed in sales of stocks during the second six months, present on event day 0 negative cumulative abnormal returns, but it is not statistically significant. What we expected on the event day was negative return as the investors would presale their stocks before the end of the six months, in order to avoid suffering losses in their portfolio. It must be noted that most of the companies mention that the selling of shares will take place during the second six months after the first day of trading. This pattern may be explained by the fact that the announcement of possible selling during the second six months after the trading is mentioned in the prospectus. This means that all the investors are aware of the fact that the company may proceed to sales of shares. Furthermore, investors start to sell their own shares that may have purchased through the IPO during the first six months of trading, in order to avoid suffering losses in the second six months of trading, as they are aware of the fact that major stakeholders may sell. This behaviour is noted in markets where there is thin trading of trading stocks as if the market had depth then the pressure by the sales of shares would be absorbed easily by the participants. However, the fact that CAAR are equal to zero and therefore we do not observe any statistical significant abnormal return, may imply that stock prices already reflect this publicly known information.

In table 12, abnormal returns are presented for the firms in the sample whose stakeholders have stated that they will not sell in the second six months of trading.

Table 12: CAAR 81 days around the lockup expiration day – Companies stated no selling

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	0.04%	0.1342	0.04%	0.1342
-39	-0.09%	-0.2549	-0.05%	-0.0911
-38	0.51%	1.0258	0.46%	0.5571
-37	0.10%	0.1997	0.57%	0.5691
-36	0.78%	1.7526	1.34%	1.2013
-35	-0.02%	-0.0421	1.32%	1.0431
-34	-0.02%	-0.0347	1.30%	1.1008
-33	-0.75%	-2.0074	0.56%	0.5340
-32	-0.50%	-0.7876	0.06%	0.0511
-31	-0.62%	-1.1030	-0.56%	-0.3768
-30	-0.35%	-0.8051	-0.91%	-0.5792
-29	-0.86%	-1.8570	-1.77%	-1.0481
-28	0.22%	0.4425	-1.55%	-0.8427
-27	0.25%	0.4235	-1.30%	-0.6342
-26	0.68%	1.7289	-0.62%	-0.3256
-25	-0.30%	-0.8830	-0.93%	-0.4711
-24	-0.10%	-0.3285	-1.03%	-0.5325
-23	0.20%	0.5584	-0.83%	-0.3957
-22	-0.04%	-0.0702	-0.87%	-0.3777
-21	0.43%	0.6247	-0.44%	-0.2176
-20	-1.03%	-1.2951	-1.47%	-0.6637
-19	0.37%	0.8329	-1.11%	-0.4659
-18	-0.30%	-0.7405	-1.41%	-0.6444
-17	0.97%	1.5318	-0.44%	-0.1757
-16	0.73%	0.9336	0.29%	0.0998
-15	0.31%	0.8404	0.60%	0.2054
-14	0.39%	1.2822	1.00%	0.3413
-13	-0.63%	-1.1416	0.37%	0.1200
-12	-0.10%	-0.1914	0.27%	0.0862
-11	-0.12%	-0.2030	0.15%	0.0457
-10	0.10%	0.1754	0.25%	0.0800
-9	-0.56%	-0.8273	-0.31%	-0.1106
-8	-0.33%	-0.7304	-0.65%	-0.2360
-7	0.09%	0.2282	-0.56%	-0.2121
-6	0.30%	0.5277	-0.25%	-0.0906
-5	1.28%	1.9220	1.02%	0.3437
-4	0.01%	0.0186	1.03%	0.3476
-3	-0.01%	-0.0197	1.02%	0.3381
-2	0.69%	1.2165	1.70%	0.5083
-1	-0.51%	-0.6255	1.19%	0.3429
0	-0.45%	-0.8931	0.74%	0.2219
+1	-0.74%	-2.2157	0.00%	0.0009
+2	0.30%	0.6235	0.31%	0.0917
+3	0.41%	0.8284	0.72%	0.2012
+4	0.61%	1.3155	1.33%	0.3432
+5	1.21%	2.2306	2.54%	0.6156
+6	-0.98%	-2.1240	1.55%	0.3852
+7	-0.65%	-2.4132	0.91%	0.2319
+8	-0.04%	-0.0728	0.87%	0.2206
+9	-0.65%	-1.1171	0.22%	0.0579
+10	-0.23%	-0.6037	-0.01%	-0.0031
+11	-0.49%	-1.0438	-0.50%	-0.1224
+12	-0.17%	-0.3752	-0.67%	-0.1678
+13	0.36%	0.9420	-0.31%	-0.0789
+14	0.57%	1.4249	0.26%	0.0669
+15	0.00%	0.0034	0.26%	0.0624
+16	0.42%	0.7985	0.68%	0.1543
+17	-0.32%	-1.4440	0.36%	0.0822
+18	0.13%	0.1901	0.49%	0.1109
+19	-0.40%	-0.7991	0.09%	0.0212
+20	-1.36%	-2.8162	-1.27%	-0.2747
+21	0.17%	0.3535	-1.09%	-0.2387
+22	1.02%	1.7558	-0.07%	-0.0155
+23	-0.03%	-0.0881	-0.10%	-0.0221
+24	-0.40%	-0.7695	-0.50%	-0.1102
+25	-0.38%	-0.9833	-0.88%	-0.1984
+26	-0.17%	-0.4324	-1.06%	-0.2377
+27	1.47%	1.5590	0.41%	0.1102
+28	0.48%	0.9164	0.89%	0.2450
+29	-0.31%	-0.6245	0.59%	0.1509
+30	-0.21%	-0.4502	0.38%	0.0980
+31	-0.83%	-1.4583	-0.45%	-0.1099
+32	-0.15%	-0.2813	-0.60%	-0.1388
+33	-0.16%	-0.3997	-0.77%	-0.1748
+34	0.00%	0.0031	-0.77%	-0.1889
+35	0.98%	1.8287	0.22%	0.0549
+36	0.69%	0.8522	0.91%	0.2272
+37	0.40%	0.5593	1.31%	0.3320
+38	0.08%	0.1102	1.39%	0.3554
+39	0.24%	0.3778	1.63%	0.4172
+40	0.89%	1.2154	2.51%	0.6784

We do not observe any different pattern compared to what we have noticed for the full sample of companies.

Table 13: CAAR 81 days around the lockup expiration day – Companies stated no selling						
Firms stated not selling – 1 year after the IPO	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-0.96%	-1.19%	-1.70%	2.79%	-0.01%	2.53%
Median CAAR	-0.40%	-0.87%	-0.83%	0.13%	-0.38%	3.83%
t-stat	-0.9717	-1.8818	-1.8973	1.3241	-0.0102	1.2395

Based on table 13 we see no statistical significant CAAR in the examined subperiods and therefore we accept $H_1: CAAR=0$. However, based on the market model CAAR (Appendix – table 6), we see that companies who have stated no selling of shares during the second six months of trading present statistical significant positive CAAR (4.45%) in the eleven day period (-5, +5). This could be interpreted as a compensation of these firms by the private investors for the non selling of their shares.

We have also studied the behaviour of firms based upon their market of trading (Main, Parallel, New), six months and one year after the first day of trading. The results are presented in tables 13-24, based on the market adjusted returns.

Table 14: CAAR for companies in the Main Market – 81 days around the lockup expiration day

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	0.01%	0.0237	0.01%	0.0237
-39	0.11%	0.4077	0.12%	0.2601
-38	0.08%	0.1912	0.20%	0.2839
-37	-0.43%	-0.8512	-0.23%	-0.3803
-36	0.55%	1.4744	0.32%	0.5980
-35	0.29%	0.7694	0.61%	1.0498
-34	0.47%	0.9565	1.07%	1.4703
-33	-0.32%	-0.9332	0.75%	0.9499
-32	-0.35%	-0.8210	0.40%	0.4480
-31	0.35%	0.8924	0.74%	0.7182
-30	0.58%	1.2776	1.32%	1.2585
-29	-0.58%	-1.4481	0.74%	0.7440
-28	-0.32%	-0.8072	0.43%	0.4972
-27	-0.60%	-1.6142	-0.17%	-0.2225
-26	-0.13%	-0.4605	-0.30%	-0.4446
-25	1.10%	1.5148	0.80%	0.7870
-24	0.36%	0.6936	1.16%	0.8098
-23	0.28%	0.8730	1.45%	1.0894
-22	-0.33%	-0.9309	1.12%	0.7872
-21	0.12%	0.3903	1.24%	0.8054
-20	-0.36%	-0.3612	0.88%	0.3736
-19	0.40%	1.7185	1.28%	0.5341
-18	-0.08%	-0.2046	1.20%	0.5474
-17	0.13%	0.4184	1.33%	0.5800
-16	0.26%	0.6025	1.59%	0.6722
-15	0.44%	1.6746	2.03%	0.8286
-14	-0.31%	-0.7423	1.72%	0.7536
-13	-0.70%	-1.3734	1.02%	0.4350
-12	-0.17%	-0.5058	0.86%	0.3559
-11	0.57%	1.3168	1.42%	0.5519
-10	0.36%	0.9656	1.78%	0.6738
-9	0.27%	0.4802	2.05%	0.8136
-8	0.28%	0.8086	2.33%	0.8791
-7	0.78%	1.0177	3.11%	0.9964
-6	-0.32%	-1.1603	2.80%	0.8722
-5	0.63%	0.9975	3.43%	1.0818
-4	0.32%	1.1508	3.75%	1.2020
-3	-0.05%	-0.1141	3.70%	1.2303
-2	0.47%	1.6130	4.17%	1.3089
-1	-0.44%	-1.3094	3.73%	1.1340
0	0.48%	1.3176	4.21%	1.2700
+1	-0.36%	-0.9242	3.85%	1.0728
+2	-0.03%	-0.1321	3.81%	1.0988
+3	0.17%	0.4464	3.98%	1.2007
+4	0.01%	0.0112	3.99%	1.3396
+5	0.51%	1.0595	4.50%	1.6132
+6	-0.01%	-0.0148	4.49%	1.5878
+7	-0.46%	-1.5054	4.03%	1.4016
+8	-0.47%	-1.0809	3.56%	1.2348
+9	0.02%	0.0463	3.58%	1.2673
+10	-0.06%	-0.1935	3.51%	1.2453
+11	0.00%	0.0095	3.52%	1.2867
+12	0.10%	0.1881	3.61%	1.4641
+13	-0.24%	-0.4132	3.37%	1.5028
+14	0.24%	0.6508	3.61%	1.5868
+15	0.29%	0.6681	3.90%	1.7954
+16	0.22%	0.4713	4.13%	1.8544
+17	-0.24%	-0.9095	3.88%	1.7462
+18	-0.63%	-1.2019	3.25%	1.4572
+19	-0.01%	-0.0137	3.25%	1.4202
+20	0.16%	0.1753	3.41%	1.2630
+21	0.37%	0.5795	3.77%	1.4845
+22	0.62%	1.1191	4.39%	1.7071
+23	-0.14%	-0.4106	4.25%	1.7136
+24	0.92%	1.8026	5.17%	1.9334
+25	-0.25%	-0.6424	4.93%	1.8246
+26	0.08%	0.1893	5.01%	1.7481
+27	0.44%	0.9238	5.45%	1.8550
+28	0.43%	0.9389	5.88%	1.9123
+29	0.08%	0.2832	5.96%	1.9360
+30	-0.04%	-0.0946	5.92%	1.9760
+31	0.11%	0.3691	6.03%	2.1060
+32	-0.33%	-0.7728	5.70%	2.0216
+33	0.12%	0.2830	5.82%	1.9937
+34	-0.20%	-0.5899	5.63%	1.9083
+35	0.41%	0.8973	6.04%	2.0191
+36	0.08%	0.1670	6.12%	2.0480
+37	-0.10%	-0.1559	6.02%	2.0362
+38	1.03%	2.3176	7.05%	2.3850
+39	0.04%	0.0627	7.09%	2.3401
+40	-0.06%	-0.1566	7.03%	2.3457

From table 14 we see that companies in the Main Market present positive cumulative abnormal returns, but not statistically significant. What we also observe is that companies in the Main Market continue to present positive CAAR during the whole period, that is forty days after the day 0 and especially during the days +35 to +40, companies present the higher CAAR during the 81 event period and are statistically significant. This could be interpreted by the fact that in the Main Market, listed companies are characterized by good fundamentals and prospects. Therefore, as the time passes by, more information about these companies is known and become more mature and in that way they attract more investors, who see the purchase of these companies as a long term investment.

Table 15: CAAR in sub-periods around the lockup expiration day – Companies in the Main Market						
Main Market – 1 year after the IPO	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	0.04%	0.12%	-0.32%	1.70%	-0.33%	3.52%
Median CAAR	0.31%	0.27%	-0.25%	0.62%	-0.27%	4.10%
t-stat	0.1034	0.2152	-0.5954	1.3690	-0.2989	1.2828

The same variables are examined for the expiration of the first six months of trading.

Table 16: CAAR for companies in the Main Market – 81 days around the expiration of the first six months

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	-0.22%	-0.9126	-0.22%	-0.9126
-39	-0.19%	-0.4438	-0.40%	-0.8053
-38	-0.58%	-1.3928	-0.98%	-1.9018
-37	-0.41%	-1.2258	-1.39%	-2.3449
-36	0.42%	0.8054	-0.97%	-1.2434
-35	0.00%	0.0077	-0.97%	-1.0959
-34	-0.23%	-0.7052	-1.20%	-1.2342
-33	0.67%	1.9452	-0.52%	-0.4806
-32	0.81%	2.0088	0.29%	0.2467
-31	0.32%	0.9736	0.61%	0.5323
-30	-0.54%	-1.3497	0.07%	0.0623
-29	-0.48%	-1.5754	-0.42%	-0.3584
-28	0.19%	0.5081	-0.23%	-0.1981
-27	0.19%	0.4275	-0.04%	-0.0272
-26	0.13%	0.3318	0.09%	0.0621
-25	-0.15%	-0.3431	-0.06%	-0.0336
-24	-0.07%	-0.2051	-0.13%	-0.0793
-23	0.17%	0.3929	0.05%	0.0250
-22	0.49%	1.2123	0.54%	0.2808
-21	-0.07%	-0.2010	0.47%	0.2306
-20	0.30%	0.6761	0.77%	0.3616
-19	0.40%	1.5726	1.16%	0.5565
-18	0.59%	1.1362	1.75%	0.8208
-17	0.36%	0.9787	2.11%	0.9652
-16	0.60%	0.7671	2.71%	1.2302
-15	-0.13%	-0.4586	2.57%	1.1921
-14	-0.01%	-0.0120	2.57%	1.1491
-13	0.14%	0.3998	2.71%	1.1476
-12	-0.08%	-0.1526	2.63%	1.1336
-11	-0.44%	-1.1817	2.19%	0.9195
-10	-0.09%	-0.2370	2.10%	0.8706
-9	-0.12%	-0.3049	1.99%	0.8238
-8	1.14%	2.7092	3.12%	1.3931
-7	0.05%	0.1160	3.17%	1.4280
-6	-0.55%	-0.9398	2.62%	1.2364
-5	-0.17%	-0.3743	2.45%	1.1903
-4	-0.35%	-1.0147	2.10%	0.9847
-3	-0.18%	-0.3793	1.92%	0.8923
-2	-0.20%	-0.4724	1.72%	0.8456
-1	-0.18%	-0.6096	1.54%	0.7456
0	-0.70%	-1.1309	0.84%	0.3995
+1	0.00%	-0.0138	0.84%	0.4019
+2	0.27%	0.8307	1.10%	0.5111
+3	-0.02%	-0.0656	1.08%	0.4845
+4	0.81%	1.2603	1.89%	1.0028
+5	-0.58%	-1.4604	1.31%	0.7526
+6	0.69%	1.9172	2.00%	1.1736
+7	0.08%	0.1563	2.08%	1.1328
+8	-0.43%	-1.1295	1.65%	0.8407
+9	0.07%	0.2582	1.72%	0.8607
+10	-0.60%	-1.2532	1.12%	0.5133
+11	0.81%	1.7391	1.94%	0.9556
+12	0.49%	1.2285	2.42%	1.1546
+13	0.22%	0.4409	2.65%	1.1527
+14	0.12%	0.2690	2.77%	1.1835
+15	0.38%	1.0094	3.15%	1.4344
+16	0.45%	1.2226	3.60%	1.5754
+17	-0.34%	-0.6480	3.26%	1.4916
+18	-0.17%	-0.4418	3.09%	1.3663
+19	-0.06%	-0.1812	3.03%	1.3006
+20	-0.07%	-0.1861	2.96%	1.2869
+21	0.52%	1.1700	3.48%	1.5092
+22	0.00%	-0.0124	3.47%	1.4652
+23	-0.59%	-1.1059	2.89%	1.1319
+24	-0.42%	-0.9024	2.47%	1.0022
+25	0.12%	0.3225	2.59%	0.9990
+26	0.63%	1.5898	3.22%	1.1947
+27	-1.39%	-2.1467	1.82%	0.6149
+28	0.64%	0.8173	2.46%	0.7898
+29	-0.83%	-2.1591	1.63%	0.5410
+30	-0.18%	-0.4323	1.45%	0.4709
+31	-0.26%	-0.5766	1.20%	0.3609
+32	-0.18%	-0.3964	1.02%	0.3060
+33	0.13%	0.3580	1.15%	0.3254
+34	0.49%	1.3023	1.64%	0.4670
+35	0.38%	1.0493	2.02%	0.5556
+36	-0.03%	-0.0468	1.99%	0.5197
+37	-1.03%	-2.1314	0.96%	0.2359
+38	0.34%	0.5900	1.30%	0.3192
+39	0.46%	1.7361	1.77%	0.4377
+40	-0.49%	-0.9065	1.28%	0.3031

Table 17: CAAR in sub-periods around the expiration of the first six months – Companies in the Main Market

Main Market – 6months after the IPO	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-0.88%	-0.71%	-0.89%	-1.32%	0.29%	0.15%
Median CAAR	-0.02%	0.27%	0.12%	-0.92%	-0.58%	2.21%
t-stat	-1.2735	-1.0839	-1.1730	-1.2587	0.2349	0.0563

During the event period of 81 days of the first six months of trading, there is positive CAAR on event day 0, but it is not statistically significant. In addition, we do not observe the same, in magnitude, positive CAAR as those at the expiration of the lockup agreement. This could be attributed to the fact that as the time passes by more information is revealed for these companies and more investors trust them and see them as a long term investment.

As far as the Parallel Market, the CAAR and the t-statistic are presented in the following tables.

Table 18: CAAR for companies in the Parallel Market – 81 days around the lockup expiration day

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	0.15%	0.6398	0.15%	0.6398
-39	0.42%	0.9298	0.57%	1.1281
-38	0.03%	0.0551	0.60%	0.7472
-37	0.34%	0.6420	0.94%	0.9995
-36	0.03%	0.0684	0.97%	0.8922
-35	-0.23%	-0.5348	0.74%	0.6103
-34	-0.88%	-2.0681	-0.14%	-0.1189
-33	-0.61%	-1.1106	-0.75%	-0.5739
-32	-0.06%	-0.0813	-0.80%	-0.5576
-31	-0.91%	-1.2024	-1.71%	-0.9603
-30	-0.47%	-1.0652	-2.18%	-1.1375
-29	-0.55%	-1.1434	-2.73%	-1.2488
-28	-0.29%	-0.3717	-3.02%	-1.2259
-27	0.82%	1.1272	-2.20%	-0.8991
-26	-0.39%	-0.5822	-2.59%	-1.1122
-25	-0.67%	-1.7857	-3.25%	-1.3887
-24	0.01%	0.0260	-3.24%	-1.4657
-23	0.47%	0.7476	-2.78%	-1.2657
-22	0.09%	0.1259	-2.68%	-1.0958
-21	0.78%	0.9140	-1.91%	-0.7690
-20	-0.34%	-0.5347	-2.25%	-0.8553
-19	0.64%	1.0725	-1.60%	-0.5659
-18	-0.59%	-0.8236	-2.20%	-0.8057
-17	0.94%	1.2873	-1.26%	-0.4384
-16	0.78%	1.1411	-0.47%	-0.1429
-15	0.24%	0.3716	-0.23%	-0.0681
-14	0.23%	0.5395	0.00%	-0.0011
-13	0.68%	1.3024	0.68%	0.1938
-12	1.20%	1.0283	1.88%	0.5190
-11	-0.25%	-0.4575	1.63%	0.4495
-10	-0.06%	-0.0900	1.57%	0.4399
-9	-0.50%	-0.9367	1.07%	0.3073
-8	-0.46%	-0.9396	0.60%	0.1711
-7	-0.44%	-0.5552	0.16%	0.0448
-6	0.11%	0.1343	0.28%	0.0729
-5	0.47%	0.9027	0.75%	0.1879
-4	-0.46%	-0.8213	0.29%	0.0712
-3	-0.07%	-0.1331	0.23%	0.0537
-2	1.41%	1.7152	1.64%	0.3740
-1	0.26%	0.2622	1.89%	0.4177
0	-0.85%	-0.8048	1.05%	0.2343
+1	0.10%	0.0998	1.15%	0.2486
+2	0.24%	0.3598	1.38%	0.3039
+3	-0.02%	-0.0239	1.36%	0.3028
+4	-0.74%	-1.2372	0.63%	0.1275
+5	-0.36%	-0.5142	0.27%	0.0536
+6	0.08%	0.1042	0.35%	0.0709
+7	-0.21%	-0.4418	0.14%	0.0285
+8	-0.43%	-0.7332	-0.29%	-0.0594
+9	-0.26%	-0.3638	-0.55%	-0.1155
+10	-0.10%	-0.1345	-0.66%	-0.1291
+11	0.02%	0.0205	-0.64%	-0.1224
+12	-0.02%	-0.0401	-0.66%	-0.1300
+13	-0.16%	-0.3405	-0.82%	-0.1659
+14	0.86%	1.5886	0.04%	0.0088
+15	-0.33%	-0.5601	-0.29%	-0.0567
+16	-0.78%	-1.0487	-1.07%	-0.1958
+17	-0.37%	-0.7864	-1.44%	-0.2553
+18	1.27%	1.3585	-0.17%	-0.0294
+19	-0.53%	-1.0098	-0.70%	-0.1200
+20	-0.28%	-0.5105	-0.99%	-0.1651
+21	-0.59%	-1.3206	-1.58%	-0.2609
+22	0.50%	0.9357	-1.08%	-0.1820
+23	-0.74%	-1.6303	-1.82%	-0.3120
+24	-0.30%	-0.5141	-2.12%	-0.3689
+25	-0.39%	-0.5708	-2.50%	-0.4172
+26	0.62%	1.5351	-1.88%	-0.3154
+27	1.20%	1.2733	-0.68%	-0.1205
+28	0.21%	0.3348	-0.47%	-0.0833
+29	0.02%	0.0319	-0.45%	-0.0761
+30	-0.45%	-0.9388	-0.90%	-0.1549
+31	-2.02%	-2.5674	-2.93%	-0.4613
+32	0.24%	0.4570	-2.69%	-0.4109
+33	-0.26%	-0.6729	-2.95%	-0.4550
+34	0.57%	0.9493	-2.38%	-0.3827
+35	-0.09%	-0.1388	-2.48%	-0.3966
+36	0.75%	0.9451	-1.73%	-0.2751
+37	0.57%	1.0803	-1.16%	-0.1807
+38	-0.53%	-0.8738	-1.68%	-0.2645
+39	0.18%	0.2677	-1.51%	-0.2359
+40	1.64%	1.6227	0.13%	0.0209

On the event day 0, companies in the Parallel Market present positive, not statistically significant, CAAR. However, as we move on to the forty days after the event day, companies present negative, not statistically significant, CAAR. In the Parallel Market, companies are small compared to companies in the Main Market, regarding to total equity and market capitalization, and most of them have rather small free float, that is the number of major stakeholders is small and in most cases the people in the management are the major stakeholders. In most of these cases, stakeholders of companies in the Parallel Market want to start trade their company in the stock exchange in order to capture capital gains by the selling of their shares. In other words, they see the trading as a mean of profitable selling of their stake in the company. Usually, these companies do not have positive future prospects and in these cases there is information asymmetry between the management and the investors. Based on the above we expect negative CAAR.

Parallel Market – 1 year after the IPO	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-0.59%	-0.75%	-0.49%	-0.01%	-1.80%	0.79%
Median CAAR	-0.99%	-1.29%	-1.21%	-0.43%	-2.62%	1.65%
t-stat	-0.3306	-0.3959	-0.2001	-0.0041	-0.8135	0.1822

The same variables are examined for the expiration of the first six months of trading.

Table 20: CAAR for companies in the Parallel Market – 81 days around the expiration of the first six months

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	1.18%	0.9918	1.18%	0.9918
-39	-0.28%	-0.7824	0.90%	0.8221
-38	-1.10%	-3.2305	-0.21%	-0.1885
-37	-1.17%	-1.7260	-1.38%	-0.9393
-36	0.59%	0.6178	-0.79%	-0.3776
-35	0.65%	1.0382	-0.14%	-0.0605
-34	0.95%	1.4997	0.81%	0.3439
-33	-1.71%	-2.7696	-0.90%	-0.3369
-32	-0.29%	-0.5592	-1.18%	-0.4383
-31	-0.70%	-0.7468	-1.88%	-0.5530
-30	0.10%	0.0949	-1.78%	-0.4729
-29	-0.63%	-0.7345	-2.40%	-0.5829
-28	-0.03%	-0.0493	-2.43%	-0.5896
-27	-1.09%	-1.3051	-3.53%	-0.8438
-26	-1.22%	-1.3355	-4.75%	-1.0711
-25	0.61%	0.7194	-4.14%	-0.9284
-24	0.65%	0.9307	-3.49%	-0.7732
-23	-0.03%	-0.0535	-3.52%	-0.7380
-22	0.48%	0.6721	-3.05%	-0.5927
-21	-0.40%	-0.6712	-3.45%	-0.6841
-20	1.64%	1.6828	-1.81%	-0.3698
-19	0.25%	0.3677	-1.56%	-0.3266
-18	-0.29%	-0.4722	-1.85%	-0.3717
-17	-0.77%	-1.4876	-2.62%	-0.4986
-16	0.43%	0.5622	-2.18%	-0.4373
-15	-1.84%	-3.7146	-4.03%	-0.8259
-14	-0.33%	-0.8119	-4.36%	-0.8648
-13	-1.49%	-2.0271	-5.85%	-1.1043
-12	-0.24%	-0.5118	-6.10%	-1.1257
-11	0.65%	1.0839	-5.44%	-0.9979
-10	-0.59%	-1.3698	-6.04%	-1.0745
-9	-0.08%	-0.2526	-6.11%	-1.0743
-8	-0.10%	-0.1517	-6.21%	-1.0751
-7	0.06%	0.1163	-6.15%	-1.0246
-6	-0.95%	-1.9001	-7.10%	-1.1543
-5	0.16%	0.1515	-6.95%	-1.1590
-4	0.78%	1.0585	-6.17%	-1.0713
-3	-0.18%	-0.3192	-6.36%	-1.0798
-2	-0.06%	-0.0948	-6.41%	-1.0908
-1	-0.20%	-0.4654	-6.62%	-1.0893
0	-1.41%	-1.4407	-8.03%	-1.4135
+1	-1.24%	-2.8591	-9.27%	-1.6090
+2	0.90%	1.2689	-8.36%	-1.5201
+3	1.50%	1.2743	-6.86%	-1.2789
+4	-0.59%	-1.2333	-7.46%	-1.3695
+5	0.27%	0.4581	-7.18%	-1.2604
+6	-2.03%	-2.1463	-9.21%	-1.6657
+7	-1.87%	-1.6181	-11.09%	-2.0039
+8	0.98%	1.8839	-10.11%	-1.8590
+9	-0.28%	-0.4949	-10.39%	-1.9083
+10	0.19%	0.5015	-10.20%	-1.8124
+11	0.80%	1.3506	-9.40%	-1.6709
+12	2.00%	2.6216	-7.41%	-1.2461
+13	-0.54%	-1.0247	-7.95%	-1.2770
+14	0.20%	0.4904	-7.75%	-1.2273
+15	0.69%	1.2132	-7.06%	-1.0944
+16	0.61%	1.2913	-6.45%	-1.0287
+17	0.13%	0.2375	-6.32%	-0.9876
+18	-0.21%	-0.4297	-6.53%	-1.0343
+19	0.41%	0.6769	-6.12%	-0.9736
+20	0.38%	0.6474	-5.73%	-0.8938
+21	0.51%	1.2046	-5.22%	-0.7968
+22	0.54%	0.7817	-4.68%	-0.6752
+23	1.44%	1.6856	-3.24%	-0.4722
+24	1.19%	3.3966	-2.05%	-0.2976
+25	-0.57%	-1.1401	-2.62%	-0.3714
+26	0.89%	1.8918	-1.73%	-0.2476
+27	-0.08%	-0.0819	-1.82%	-0.2650
+28	0.70%	1.2248	-1.12%	-0.1601
+29	-0.13%	-0.1617	-1.25%	-0.1749
+30	-0.21%	-0.2705	-1.46%	-0.2062
+31	0.23%	0.3374	-1.23%	-0.1751
+32	1.36%	1.5316	0.13%	0.0188
+33	0.19%	0.2043	0.32%	0.0442
+34	0.74%	0.9233	1.06%	0.1428
+35	-0.92%	-1.1158	0.14%	0.0183
+36	-0.11%	-0.0906	0.03%	0.0041
+37	-0.21%	-0.2128	-0.18%	-0.0219
+38	-0.23%	-0.3917	-0.41%	-0.0476
+39	-0.38%	-0.4720	-0.79%	-0.0966
+40	0.80%	1.1735	0.00%	0.0005

From table 20, we can see that companies in the Parallel Market present negative CAAR, which are not statistically significant. Based on table 12, we can see that from the 25 companies in the sample that state in the prospectus that the major shareholders will proceed in share sales, 15 companies are in the Parallel Market. Therefore, we expected negative returns before and after the expiration of the first six months, due to sales from private investors and from the major shareholders. However, we accept $H_1: CAAR=0$

Table 21: CAAR in sub-periods around the expiration of the first six months – Companies in the Parallel Market

Parallel Market – 6months after the IPO	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-1.62%	-2.65%*	-2.85%*	-0.08%	-0.93%	10.20%*
Median CAAR	-2.47%	-3.17%	-3.52%	-1.78%	-1.29%	10.14%
t-stat	-1.6344	-2.1366	-2.3179	-0.0456	-0.4261	2.1325

**Statistically significant at the 5% level*

What we expected, that is the negative returns for the companies in the Parallel Market, is verified by table 21. We can see that for the two day period (0,+1) and for the three day period (-1,+1) there are statistically significant negative CAAR, as 15 out of 25 companies in the Parallel Market state in the prospectus that the major stockholders will proceed in stock sales after the first six months of trading. In addition, in the thirty day period (+11, +40) we observe positive, statistical significant, CAAR. There is no obvious explanation of these statistical significant positive CAAR, unless there are some other facts that may have influenced the stock behaviour. Also, the statistical significant negative CAAR around the event day may be have been absorbed and this positive CAAR may be explained as a reaction.

In tables 22 - 25, CAAR and t-statistics are presented for the companies in the New Market forty days before and after the lockup expiration date.

Table 22: CAAR for companies in the New Market – 81 days around the lockup expiration day

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	-0.27%	-0.3483	-0.27%	-0.3483
-39	0.01%	0.0052	-0.26%	-0.0853
-38	-0.39%	-0.5976	-0.65%	-0.2351
-37	-0.85%	-1.0633	-1.50%	-0.4455
-36	-0.62%	-1.2975	-2.11%	-0.6124
-35	-0.83%	-0.8418	-2.95%	-1.0948
-34	1.15%	0.7995	-1.80%	-0.5718
-33	2.76%	3.2502	0.96%	0.2444
-32	0.46%	0.3711	1.42%	0.2792
-31	0.43%	0.4179	1.85%	0.3148
-30	-0.27%	-0.5406	1.58%	0.2734
-29	-1.31%	-1.6146	0.27%	0.0419
-28	-0.55%	-0.8660	-0.28%	-0.0437
-27	-1.48%	-2.6605	-1.76%	-0.2643
-26	-1.59%	-2.3764	-3.34%	-0.5513
-25	-3.09%	-1.6254	-6.43%	-1.0073
-24	0.74%	0.9942	-5.69%	-0.8804
-23	-1.01%	-1.0725	-6.70%	-1.0881
-22	0.97%	1.3913	-5.73%	-0.9034
-21	4.41%	1.0624	-1.32%	-0.2461
-20	-2.84%	-1.5922	-4.16%	-0.6563
-19	-1.92%	-1.6064	-6.08%	-1.0627
-18	2.50%	0.6612	-3.58%	-0.5182
-17	-1.11%	-0.6354	-4.68%	-0.8679
-16	2.15%	2.3033	-2.54%	-0.4499
-15	0.57%	1.6520	-1.97%	-0.3294
-14	-0.36%	-1.0453	-2.32%	-0.3817
-13	0.11%	0.1144	-2.21%	-0.3943
-12	-1.14%	-1.0683	-3.35%	-0.5721
-11	-2.75%	-2.2407	-6.10%	-0.9714
-10	-1.06%	-0.7419	-7.15%	-1.2107
-9	-0.72%	-0.3880	-7.87%	-1.4435
-8	-1.56%	-1.5747	-9.43%	-1.6338
-7	0.61%	0.7981	-8.83%	-1.5130
-6	0.86%	0.7100	-7.97%	-1.5424
-5	-0.09%	-0.0692	-8.06%	-1.8240
-4	-0.32%	-0.4107	-8.38%	-1.8090
-3	-1.29%	-0.6446	-9.67%	-2.3946
-2	2.63%	1.9785	-7.04%	-2.0270
-1	-2.20%	-2.4942	-9.24%	-2.3619
0	0.27%	0.0929	-8.98%	-1.6889
+1	0.63%	0.5524	-8.35%	-1.4099
+2	1.27%	1.5195	-7.08%	-1.3620
+3	-1.10%	-1.6412	-8.18%	-1.6105
+4	0.46%	0.6429	-7.72%	-1.5777
+5	-1.74%	-1.7523	-9.47%	-2.1338
+6	-1.00%	-1.4210	-10.47%	-2.6553
+7	-0.08%	-0.0614	-10.55%	-3.3192
+8	-1.05%	-1.0858	-11.60%	-3.0921
+9	0.15%	0.1450	-11.45%	-3.9359
+10	0.57%	0.6567	-10.88%	-3.3275
+11	0.37%	0.3500	-10.50%	-2.9687
+12	-0.09%	-0.0976	-10.59%	-3.2577
+13	-0.47%	-0.8268	-11.06%	-3.3300
+14	-0.63%	-0.7043	-11.69%	-3.0406
+15	0.12%	0.1268	-11.57%	-2.7097
+16	1.38%	2.5094	-10.19%	-2.3820
+17	-0.60%	-0.9467	-10.79%	-2.2390
+18	0.30%	0.3073	-10.49%	-2.0827
+19	-0.80%	-1.8679	-11.29%	-2.2161
+20	0.74%	0.8212	-10.55%	-1.9842
+21	-0.64%	-0.4760	-11.19%	-1.8987
+22	-0.30%	-0.1959	-11.49%	-1.7009
+23	1.01%	1.0668	-10.48%	-1.7396
+24	-1.04%	-2.1642	-11.52%	-1.8556
+25	0.23%	0.2706	-11.29%	-1.9465
+26	-1.14%	-1.6035	-12.43%	-2.1227
+27	0.31%	0.3703	-12.12%	-2.0630
+28	0.38%	0.4806	-11.74%	-2.0490
+29	-2.65%	-4.5310	-14.39%	-2.5902
+30	-0.86%	-0.6010	-15.25%	-3.2934
+31	4.17%	2.1203	-11.09%	-3.1512
+32	0.80%	0.8993	-10.29%	-3.0935
+33	0.29%	0.5039	-10.00%	-3.0583
+34	-0.53%	-0.9808	-10.53%	-2.9395
+35	-1.34%	-2.0986	-11.87%	-2.9152
+36	0.14%	0.1691	-11.73%	-2.6782
+37	0.39%	0.4265	-11.34%	-2.6036
+38	0.05%	0.0278	-11.29%	-2.8735
+39	0.65%	0.9401	-10.64%	-2.8946
+40	-0.32%	-0.3510	-10.96%	-3.3381

From table 22 we can see that companies in the New Market present negative and statistically significant CAAR before the day 0. This can be interpreted that investors believe that the major stakeholders of these companies will start sell after the first year of trading. In order to avoid suffering losses, they sell their shares prior to the expiration. This is verified as after the event day, companies in the New Market present statistical significant negative CAAR. It must be noted that many of these companies are venture backed prior to their IPO in order to find the necessary funds to start up the business. This will be explained in more detail when we will examine the returns of venture backed companies.

Table 23: CAAR in sub-periods around the lockup expiration day – Companies in the New Market						
New Market – 1 year after the IPO	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-1.94%	0.89%	-1.31%	-1.50%	-2.52%	-0.09%
Median CAAR	-2.38%	-1.29%	-3.11%	-1.46%	2.17%	-0.12%
t-stat	-0.6248	0.2694	-0.3502	-0.6901	-0.5616	-0.0317

The same variables are examined for the expiration of the first six months of trading.

Table 24: CAAR for companies in the New Market – 81 days around the expiration of the first six months

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	-1.19%	-0.8415	-1.19%	-0.8415
-39	-1.03%	-2.2415	-2.22%	-1.3630
-38	-1.79%	-3.0131	-4.01%	-2.1453
-37	0.65%	0.8547	-3.36%	-1.4419
-36	-0.50%	-1.0080	-3.86%	-1.9475
-35	-1.29%	-1.9037	-5.15%	-2.4052
-34	1.05%	1.5518	-4.10%	-2.3821
-33	1.80%	1.0666	-2.30%	-0.8724
-32	-0.36%	-0.4841	-2.66%	-1.0084
-31	-1.90%	-1.1387	-4.56%	-1.0755
-30	-0.59%	-0.6469	-5.15%	-1.0453
-29	0.40%	0.1621	-4.75%	-1.4586
-28	-0.07%	-0.1260	-4.83%	-1.4424
-27	-0.52%	-4.7306	-5.35%	-1.6433
-26	-1.36%	-3.6378	-6.71%	-2.0262
-25	1.46%	2.5052	-5.26%	-1.7297
-24	-0.24%	-0.6062	-5.50%	-1.8833
-23	-0.08%	-0.1943	-5.58%	-1.8388
-22	-0.90%	-0.6697	-6.48%	-2.0677
-21	0.57%	0.4909	-5.91%	-1.5267
-20	-0.01%	-0.0235	-5.92%	-1.5045
-19	0.45%	1.0773	-5.47%	-1.3320
-18	1.03%	0.6433	-4.45%	-1.2815
-17	-0.46%	-1.4528	-4.91%	-1.3157
-16	0.91%	2.8484	-4.00%	-1.1129
-15	0.37%	1.6580	-3.63%	-1.0480
-14	0.81%	1.3482	-2.82%	-0.7776
-13	0.65%	0.6809	-2.17%	-0.4804
-12	0.30%	0.3442	-1.87%	-0.3781
-11	0.11%	0.1936	-1.76%	-0.3640
-10	0.35%	0.4342	-1.42%	-0.2715
-9	-0.64%	-0.4556	-2.06%	-0.3702
-8	0.49%	0.4589	-1.57%	-0.3200
-7	-0.01%	-0.0123	-1.57%	-0.3248
-6	0.38%	0.2532	-1.19%	-0.2191
-5	-0.49%	-0.4118	-1.68%	-0.2707
-4	-0.15%	-0.0935	-1.84%	-0.2570
-3	-0.06%	-0.0394	-1.89%	-0.2438
-2	0.31%	0.3599	-1.58%	-0.1909
-1	1.17%	0.2702	-0.42%	-0.0410
0	-2.48%	-1.0067	-2.90%	-0.3192
+1	2.50%	1.1405	-0.40%	-0.0390
+2	1.81%	0.9905	1.41%	0.1236
+3	0.94%	0.7884	2.35%	0.1913
+4	-1.69%	-0.9343	0.66%	0.0599
+5	1.37%	0.9190	2.03%	0.1921
+6	2.25%	1.4478	4.28%	0.4243
+7	1.07%	0.6412	5.35%	0.5472
+8	-0.42%	-0.1576	4.93%	0.5003
+9	1.61%	0.7026	6.54%	0.6015
+10	-1.19%	-1.9020	5.35%	0.4969
+11	-0.43%	-1.0338	4.92%	0.4707
+12	-0.12%	-0.1356	4.80%	0.4458
+13	0.69%	0.4606	5.49%	0.5847
+14	1.39%	2.7210	6.87%	0.7684
+15	-0.73%	-0.7987	6.14%	0.6262
+16	-1.64%	-2.0328	4.50%	0.4311
+17	-0.48%	-0.6688	4.02%	0.3685
+18	-1.54%	-2.8815	2.48%	0.2194
+19	4.27%	1.3206	6.75%	0.5507
+20	-0.23%	-0.3152	6.52%	0.5086
+21	-0.85%	-0.5561	5.67%	0.4786
+22	-2.97%	-1.0885	2.70%	0.2458
+23	-1.13%	-1.3340	1.57%	0.1418
+24	-1.16%	-1.2703	0.41%	0.0376
+25	-1.73%	-2.2287	-1.32%	-0.1180
+26	2.45%	2.0766	1.13%	0.0944
+27	1.27%	1.7200	2.41%	0.2023
+28	-0.65%	-0.9198	1.76%	0.1459
+29	-0.55%	-1.0809	1.20%	0.1010
+30	0.94%	0.8282	2.14%	0.1859
+31	0.58%	0.9939	2.72%	0.2346
+32	-0.76%	-0.6790	1.96%	0.1589
+33	-0.27%	-0.3664	1.69%	0.1404
+34	1.84%	1.3388	3.53%	0.2897
+35	-0.42%	-0.5109	3.12%	0.2434
+36	1.08%	1.4599	4.20%	0.3112
+37	0.88%	0.4703	5.08%	0.3549
+38	-0.03%	-0.0237	5.04%	0.3666
+39	0.00%	-0.0023	5.04%	0.3516
+40	0.70%	0.8323	5.74%	0.4026

What is interesting from table 24 is the fact that after the expiration of the first six months of trading, companies in the New Market present positive, not statistically significant, CAAR. It must be noted that 4 out of the 5 companies in the New Market have stated in their prospectus that the major stockholders will proceed in stock sales during the second six months of trading. Therefore, one would expect negative CAAR after the expiration of the first six months of trading. It must be noted that the results are subject to the sample size (5 companies).

Table 25: CAAR in sub-periods around the expiration of the first six months – Companies in the New Market

New Market – 6 months after the IPO	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-1.31%	0.02%	1.19%	3.23%	5.75%	0.39%
Median CAAR	-2.45%	-0.47%	-2.74%	0.21%	6.02%	1.54%
t-stat	-0.6695	0.0350	0.2927	0.4207	1.3887	0.0587

Last, we have examined the behaviour of venture backed stocks after the expiration of the lockup agreement. There are 16 venture backed companies in the sample.

Table 26: CAAR for Venture backed Companies – 81 days around the lockup expiration day

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	0.29%	0.9635	0.29%	0.9635
-39	0.52%	0.6925	0.80%	0.8231
-38	0.32%	0.7097	1.12%	1.0752
-37	-0.93%	-1.4212	0.19%	0.1687
-36	-0.65%	-3.1708	-0.46%	-0.4154
-35	-0.58%	-1.4323	-1.04%	-1.0408
-34	0.51%	0.8983	-0.53%	-0.4584
-33	0.80%	1.7163	0.27%	0.1982
-32	-0.28%	-0.5351	-0.01%	-0.0044
-31	0.33%	0.9241	0.33%	0.1701
-30	1.05%	2.2533	1.37%	0.7409
-29	-0.87%	-2.1289	0.50%	0.2526
-28	-0.72%	-2.2975	-0.22%	-0.1084
-27	-0.36%	-0.9687	-0.58%	-0.2782
-26	-0.69%	-1.8560	-1.27%	-0.6641
-25	-0.95%	-1.3993	-2.22%	-1.0518
-24	-0.09%	-0.3041	-2.31%	-1.0997
-23	0.30%	0.6430	-2.02%	-0.9584
-22	-0.20%	-0.3868	-2.21%	-1.0089
-21	2.48%	1.6417	0.27%	0.1322
-20	-1.48%	-1.9496	-1.21%	-0.4825
-19	0.12%	0.1647	-1.09%	-0.4396
-18	0.89%	0.6320	-0.20%	-0.0788
-17	-1.08%	-1.8317	-1.29%	-0.5611
-16	0.50%	0.9841	-0.79%	-0.3280
-15	1.06%	1.7272	0.27%	0.1123
-14	-0.24%	-0.4490	0.03%	0.0130
-13	0.36%	0.6136	0.39%	0.1454
-12	-0.50%	-0.8207	-0.11%	-0.0391
-11	-0.95%	-1.5489	-1.06%	-0.3445
-10	-0.21%	-0.3523	-1.28%	-0.4015
-9	0.87%	1.0361	-0.41%	-0.1338
-8	0.01%	0.0109	-0.40%	-0.1225
-7	0.13%	0.2928	-0.27%	-0.0827
-6	0.18%	0.3647	-0.09%	-0.0276
-5	0.61%	0.7392	0.52%	0.1665
-4	0.08%	0.2367	0.60%	0.1889
-3	-0.72%	-1.1243	-0.12%	-0.0383
-2	0.78%	1.4274	0.65%	0.2170
-1	-1.01%	-2.1027	-0.36%	-0.1075
0	0.40%	0.4213	0.04%	0.0132
+1	-0.09%	-0.2214	-0.04%	-0.0128
+2	0.40%	1.0573	0.36%	0.1167
+3	-0.01%	-0.0443	0.35%	0.1110
+4	0.09%	0.2357	0.44%	0.1469
+5	-0.24%	-0.3621	0.19%	0.0652
+6	-0.01%	-0.0252	0.18%	0.0602
+7	-0.14%	-0.2652	0.04%	0.0147
+8	-0.56%	-1.1129	-0.52%	-0.1757
+9	0.33%	0.5408	-0.18%	-0.0621
+10	0.85%	0.9655	0.67%	0.2015
+11	-0.87%	-1.0114	-0.20%	-0.0654
+12	0.25%	0.5510	0.05%	0.0188
+13	-0.44%	-1.1449	-0.38%	-0.1282
+14	0.04%	0.0991	-0.34%	-0.1046
+15	0.23%	0.4978	-0.10%	-0.0326
+16	-0.23%	-0.4090	-0.33%	-0.1089
+17	-0.43%	-1.6400	-0.76%	-0.2399
+18	0.10%	0.2681	-0.66%	-0.2049
+19	-0.39%	-1.4094	-1.06%	-0.3265
+20	0.03%	0.0442	-1.03%	-0.3145
+21	0.23%	0.3649	-0.80%	-0.2365
+22	-0.34%	-0.6551	-1.14%	-0.3194
+23	0.38%	0.8609	-0.76%	-0.2265
+24	0.04%	0.0660	-0.72%	-0.2023
+25	0.04%	0.1052	-0.68%	-0.1947
+26	-0.67%	-1.6926	-1.35%	-0.3692
+27	0.15%	0.3465	-1.20%	-0.3313
+28	-0.05%	-0.0981	-1.25%	-0.3627
+29	-0.90%	-1.6625	-2.15%	-0.5846
+30	-0.17%	-0.3247	-2.32%	-0.6350
+31	1.59%	2.1047	-0.72%	-0.2250
+32	0.04%	0.0826	-0.68%	-0.2191
+33	0.00%	-0.0051	-0.68%	-0.2152
+34	-0.32%	-0.8542	-1.01%	-0.3045
+35	-0.78%	-1.6819	-1.78%	-0.5171
+36	0.47%	0.9222	-1.32%	-0.3719
+37	0.86%	1.7941	-0.46%	-0.1281
+38	0.21%	0.3198	-0.25%	-0.0710
+39	-0.26%	-0.8116	-0.51%	-0.1468
+40	-0.05%	-0.1389	-0.56%	-0.1568

Based on table 26, venture backed companies present negative, not statistically significant, CAAR after the expiration of the lockup agreement. What we expected was statistical significant negative CAAR as the main goal of venture capitals is the capture of capital gains. Therefore, in the first chance, which is the expiration of the lockup agreement, venture capitals would proceed in stock sales.

Table 27: CAAR in sub-periods around the lockup expiration day – Venture backed companies						
Venture backed Companies – 1 year after the IPO	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-0.61%	0.31%	-0.70%	0.28%	0.71%	-1.23%
Median CAAR	-0.40%	0.52%	-0.28%	-0.09%	1.55%	0.23%
t-stat	-0.6090	0.2925	-0.6003	0.1678	0.4501	-0.4564

The same variables are examined for the expiration of the first six months of trading.

Table 28: CAAR for Venture backed Companies – 81 days around the expiration of the first six months

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	0.29%	0.2875	0.29%	0.2875
-39	-0.59%	-1.7251	-0.30%	-0.2942
-38	-1.23%	-2.5392	-1.53%	-1.4393
-37	0.35%	0.9089	-1.18%	-0.9277
-36	0.01%	0.0152	-1.17%	-0.9268
-35	-0.56%	-1.6631	-1.73%	-1.2307
-34	0.89%	1.7194	-0.84%	-0.6154
-33	0.83%	1.2986	-0.01%	-0.0040
-32	0.57%	1.0633	0.57%	0.3511
-31	-0.45%	-0.6496	0.12%	0.0636
-30	-1.25%	-1.7057	-1.13%	-0.5597
-29	-0.67%	-0.8107	-1.80%	-0.9903
-28	-0.60%	-1.6022	-2.41%	-1.2777
-27	-0.55%	-1.5645	-2.95%	-1.5382
-26	-0.07%	-0.1102	-3.02%	-1.5575
-25	0.19%	0.4477	-2.84%	-1.6023
-24	0.38%	0.7600	-2.46%	-1.4223
-23	-0.06%	-0.1470	-2.52%	-1.4083
-22	0.20%	0.3940	-2.32%	-1.2298
-21	0.54%	0.9749	-1.78%	-0.8434
-20	-0.19%	-0.3008	-1.97%	-0.8538
-19	0.24%	1.0496	-1.72%	-0.7571
-18	0.13%	0.1800	-1.60%	-0.7361
-17	-0.07%	-0.1724	-1.66%	-0.7759
-16	0.88%	0.9804	-0.78%	-0.3421
-15	0.21%	0.6675	-0.58%	-0.2487
-14	-0.54%	-0.9183	-1.12%	-0.5074
-13	0.35%	0.8528	-0.77%	-0.3150
-12	0.02%	0.0326	-0.76%	-0.2801
-11	-0.17%	-0.2656	-0.92%	-0.3827
-10	-0.35%	-0.7845	-1.27%	-0.4949
-9	-0.66%	-1.4161	-1.93%	-0.7152
-8	0.90%	1.2996	-1.03%	-0.3560
-7	0.19%	0.4903	-0.84%	-0.3016
-6	-0.49%	-0.6961	-1.33%	-0.4714
-5	-0.08%	-0.1225	-1.40%	-0.4656
-4	0.30%	0.5178	-1.10%	-0.3640
-3	0.03%	0.0481	-1.07%	-0.3394
-2	0.22%	0.4754	-0.86%	-0.2598
-1	0.00%	-0.0016	-0.86%	-0.2287
0	-1.29%	-1.2729	-2.15%	-0.6011
+1	0.72%	0.9813	-1.43%	-0.3711
+2	1.08%	1.7714	-0.35%	-0.0838
+3	-0.03%	-0.0480	-0.38%	-0.0856
+4	-0.35%	-0.5404	-0.72%	-0.1776
+5	0.26%	0.4221	-0.46%	-0.1157
+6	0.68%	1.0136	0.22%	0.0554
+7	0.23%	0.3671	0.45%	0.1133
+8	-0.06%	-0.0678	0.39%	0.0977
+9	0.42%	0.5614	0.80%	0.1903
+10	-0.92%	-1.8892	-0.11%	-0.0260
+11	0.10%	0.2507	-0.01%	-0.0020
+12	1.23%	1.8805	1.22%	0.2725
+13	0.23%	0.3378	1.45%	0.3294
+14	0.58%	1.3443	2.03%	0.4809
+15	0.09%	0.2272	2.12%	0.4764
+16	-0.79%	-1.7632	1.33%	0.3009
+17	0.10%	0.1863	1.43%	0.3142
+18	-0.70%	-1.6663	0.73%	0.1558
+19	1.45%	1.3311	2.18%	0.4449
+20	-0.23%	-0.5439	1.95%	0.3902
+21	0.27%	0.4296	2.22%	0.4683
+22	-0.50%	-0.5072	1.73%	0.3821
+23	-1.15%	-2.2359	0.58%	0.1266
+24	-0.09%	-0.1822	0.49%	0.1083
+25	-0.70%	-1.9613	-0.22%	-0.0469
+26	1.24%	2.3399	1.02%	0.2121
+27	-1.08%	-1.1813	-0.06%	-0.0109
+28	1.13%	1.2740	1.08%	0.2121
+29	-0.83%	-1.8366	0.25%	0.0482
+30	0.16%	0.3441	0.41%	0.0814
+31	0.64%	1.0576	1.05%	0.2065
+32	-0.72%	-1.0279	0.33%	0.0650
+33	-0.07%	-0.1469	0.27%	0.0514
+34	0.78%	1.3763	1.05%	0.1995
+35	0.08%	0.1584	1.13%	0.2084
+36	-0.50%	-0.8524	0.63%	0.1099
+37	-0.44%	-0.6643	0.19%	0.0314
+38	0.03%	0.0644	0.22%	0.0381
+39	0.06%	0.1207	0.28%	0.0471
+40	-0.32%	-0.7210	-0.04%	-0.0076

The opposite results compared to the one year are observed after the expiration of the first six months of trading. Again, we observe no statistical significant CAAR and therefore we accept H_1 . What would expect was negative CAAR before the expiration of the first six months that could be explained as followed: most of the firms in the sample that are venture backed state that the venture capitals will sell during the second six months as we have already mentioned that venture capitals are short term rather than long term investors. Therefore, private investors know in advance the major stakeholders of a new company and they can see whether a company is venture backed or not. Also, through the prospectus they can see whether the venture capital is willing to proceed in share sales or not. In that way, private investors proceed in share sales in the first six months of trading in order to avoid capital losses during the second six months.

Table 29: CAAR in sub-periods around the expiration of the first six months – Venture backed companies

Venture backed Companies – 6months after the IPO	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-1.29%	-0.57%	-0.58%	0.87%	1.32%	0.07%
Median CAAR	-0.19%	0.32%	-0.61%	0.20%	-0.07%	1.24%
t-stat	-1.3668	-0.8025	-0.4055	0.3734	0.8408	0.0251

VI. Summary and Conclusions

In this study we examined the behavior of Greek stocks, listed in the Athens Stock Exchange, around the expiration of the lockup agreement, that is one year after the listing of the companies. Contrary to the U.K. and U.S. legislation, the Greek legislation imposes to the major stakeholders who own more than 20% of the company's stocks prior to the IPO to not proceed to shares sales by more than 10% in the first year of trading. On the other hand, lockup agreements in the U.S. and in the U.K. are agreed between the company and the underwriter and they are not imposed by the law. Usually, the lockup period in the U.S. is 180 days whereas in the U.K. is 561 days. Therefore, there is a major difference between the Greek and the U.K. and U.S. IPOs in the sense of legislation. Also, in many cases in the U.S. and in the U.K., the lockup expiration day is determined in relation to some company event, such as the announcement of quarterly earnings, and therefore in those cases, the lockup expiration day is not publicly known in advance. However, in Greece it is clearly stated in the law that the lockup expiration day would be one year after the first trading day of the company.

Nonetheless, in Greece there is another, not imposed by the law, lockup expiration day, that is similar to the one in the U.K. and in the U.S.; the expiration of the first six months of trading. In all the Greek prospectus, major stakeholders state whether they will sell a certain proportion of their shares, no more than 10%, in the second six months of trading. This is something not imposed by the Greek legislation but it is decided between the company and the underwriter in order to enhance the success of the IPO. Therefore, we could interpret the expiration of the six months as the expiration of the lockup agreement in the U.S. and in the U.K.

All the studies have presented statistically significant negative cumulative average abnormal returns on the day 0 and around the event day, which is the expiration day of the lockup agreement except from one study concerning the U.K. stocks in which the authors did not find statistically significant abnormal returns. Examining the Greek IPOs we have found not statistically significant average cumulative abnormal returns on day 0, nor one year after the IPO neither six months after the first day of trading. However, we found statistically significant negative average abnormal returns in the period (-1, 0) and (0, +1) six months after the listing of the company. These results are similar to the one found in the U.S. studies because as we have already mentioned, the expiration of the first six months of trading is similar to the expiration of the lockup agreement in the U.S. in the sense that both are not imposed by legislation.

We have also studied the behavior of the Greek stocks based on several criteria over an event period of 81 days (Day -40 to Day +40 around the event day 0, which is the expiration of the

lockup agreement). All the results were examined using three models; the market adjusted returns, the market model returns and the Fama – French three factor model. We found no significant variations in the results between the three models.

On the contrary to what we expected, we found positive CAAR over the period Day 1 to Day +40, one year after the first trading day, which is the period after the expiration of the lockup agreement as imposed by the Greek legislation. On the other hand, we found negative CAAR for the period from Day -40 to Day 0 prior to the expiration of the first six months of trading. However, both they were not statistically significant and equal to zero.

Also, based on the market of trading (Main, Parallel, New) we found that one year after the first trading day, firms in the Main Market present positive CAAR over the 81 period. Companies in the Parallel and New Market present negative CAAR during the 81 event period. However, the CAAR were statistically insignificant and equal to zero. In addition, we found statistically significant negative CAAR for the companies listed in the Parallel Market during the two days return (0,+1) and three days return (-1,+1).

Like the studies in the U.S. and in the U.K., we found negative CAAR for the venture backed firms after the event day. However, they were not statistically significant and equal to zero. On the other hand, we found statistically significant negative CAAR for the non-venture backed companies, for the three day period (-1,+1), after the first six months of trading.

Finally, we split the firms into two categories, based on whether the major stakeholders have stated in the prospectus that they will sell or not and we examined the behavior of firms six months and one year after the first trading day. We found that companies stated in their prospectus that the major stakeholders will proceed in stock sales present negative CAAR prior to the expiration of the first six months of trading and positive CAAR for the next forty days. However, both CAAR are not statistically significant and equal to zero.

In conclusion, companies listed in the Athens Stock Exchange present not statistically significant average cumulative abnormal returns around the expiration of the lockup agreement, that is one year after the listing of the company, contrary to the findings of the U.S. studies and similar to the findings of the study in the U.K. However, Greek companies present statistically significant negative average cumulative abnormal returns around the expiration of the first six months of trading, which is similar to the findings of the U.S. studies.

A P P E N D I X

MARKET MODEL ABNORMAL RETURNS

Abnormal returns have been calculated using rolling betas, using daily data of one year. The different variables were estimated only for the lockup expiration period, that is one year after the IPO.

Table 1: CAAR for the whole sample – 81 days around the lockup expiration day					
Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic	
-40	0.00%	0.0251	0.00%	0.0251	
-39	0.36%	1.1035	0.37%	0.9157	
-38	-0.04%	-0.1427	0.33%	0.6787	
-37	-0.10%	-0.3195	0.23%	0.4162	
-36	0.11%	0.4435	0.34%	0.5980	
-35	-0.14%	-0.5918	0.20%	0.3427	
-34	-0.21%	-0.6176	-0.01%	-0.0081	
-33	0.05%	0.1499	0.04%	0.0576	
-32	-0.13%	-0.3444	-0.09%	-0.1001	
-31	-0.16%	-0.4222	-0.25%	-0.2365	
-30	-0.05%	-0.1637	-0.30%	-0.2646	
-29	-0.55%	-2.1218	-0.85%	-0.7187	
-28	-0.25%	-0.6743	-1.10%	-0.8834	
-27	-0.02%	-0.0497	-1.12%	-0.8971	
-26	-0.49%	-1.5850	-1.61%	-1.3513	
-25	-0.07%	-0.1554	-1.68%	-1.3227	
-24	0.17%	0.5622	-1.52%	-1.1431	
-23	0.27%	0.8457	-1.24%	-0.9813	
-22	0.08%	0.2146	-1.16%	-0.8445	
-21	0.99%	1.5861	-0.17%	-0.1376	
-20	-0.57%	-1.1930	-0.75%	-0.5049	
-19	0.24%	0.7750	-0.50%	-0.3237	
-18	-0.04%	-0.0666	-0.54%	-0.3659	
-17	0.32%	0.8061	-0.22%	-0.1478	
-16	0.81%	2.2631	0.58%	0.3567	
-15	0.44%	1.4536	1.02%	0.6004	
-14	0.04%	0.1346	1.06%	0.6350	
-13	0.01%	0.0436	1.07%	0.6274	
-12	0.36%	0.6312	1.43%	0.8253	
-11	-0.13%	-0.3887	1.30%	0.7260	
-10	-0.07%	-0.1962	1.23%	0.6944	
-9	-0.11%	-0.2715	1.12%	0.6625	
-8	-0.29%	-1.0207	0.83%	0.4726	
-7	0.18%	0.3846	1.00%	0.5334	
-6	0.10%	0.2357	1.10%	0.5659	
-5	0.29%	0.7434	1.39%	0.7092	
-4	-0.08%	-0.2552	1.32%	0.6474	
-3	-0.21%	-0.5624	1.11%	0.5401	
-2	1.28%	3.1057	2.40%	1.1511	
-1	-0.34%	-0.7118	2.05%	0.9381	
0	-0.19%	-0.3185	1.87%	0.8414	
+1	0.07%	0.1446	1.94%	0.8092	
+2	0.13%	0.4140	2.06%	0.8861	
+3	0.00%	0.0088	2.07%	0.9139	
+4	-0.18%	-0.5354	1.89%	0.8060	
+5	-0.17%	-0.4369	1.72%	0.7225	
+6	-0.11%	-0.2809	1.61%	0.6812	
+7	-0.26%	-0.9663	1.35%	0.5702	
+8	-0.42%	-1.2687	0.93%	0.3942	
+9	0.06%	0.1716	0.99%	0.4373	
+10	-0.07%	-0.1867	0.92%	0.3862	
+11	0.01%	0.0171	0.93%	0.3891	
+12	-0.05%	-0.1334	0.88%	0.3859	
+13	-0.18%	-0.5698	0.70%	0.3219	
+14	0.51%	1.6724	1.21%	0.5587	
+15	0.00%	-0.0143	1.21%	0.5311	
+16	-0.09%	-0.2409	1.12%	0.4690	
+17	-0.35%	-1.4185	0.77%	0.3124	
+18	0.35%	0.6919	1.12%	0.4482	
+19	-0.33%	-1.0732	0.79%	0.3065	
+20	0.05%	0.1284	0.85%	0.3140	
+21	-0.19%	-0.5103	0.65%	0.2431	
+22	0.34%	0.9754	0.99%	0.3732	
+23	-0.41%	-1.5697	0.58%	0.2219	
+24	0.19%	0.5708	0.77%	0.2898	
+25	-0.27%	-0.7524	0.50%	0.1791	
+26	0.25%	0.9303	0.76%	0.2668	
+27	0.78%	1.5868	1.54%	0.5583	
+28	0.10%	0.2872	1.64%	0.5915	
+29	-0.23%	-0.6870	1.41%	0.4846	
+30	-0.24%	-0.7949	1.17%	0.4021	
+31	-0.30%	-0.5901	0.87%	0.2886	
+32	0.15%	0.4944	1.02%	0.3341	

+33	0.14%	0.5393	1.17%	0.3844
+34	0.11%	0.3785	1.28%	0.4351
+35	-0.16%	-0.4375	1.12%	0.3775
+36	0.37%	0.8685	1.49%	0.5017
+37	0.23%	0.6028	1.72%	0.5659
+38	0.07%	0.1689	1.79%	0.5816
+39	0.15%	0.3513	1.93%	0.6285
+40	0.65%	1.2975	2.58%	0.8726

Table 2: CAAR in sub-periods around the lockup expiration day – All firms

All firms	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-0.53%	-0.11%	-0.46%	0.62%	-1.02%	1.66%
Median CAAR	-0.33%	-0.11%	-0.31%	-0.08%	-0.49%	0.17%
t-stat	-0.6055	-0.1215	-0.3938	0.4725	-0.8629	0.7880

Table 3: CAAR 81 days around the lockup expiration day – Companies stated selling

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	0.06%	0.3201	0.06%	0.3201
-39	0.73%	1.3849	0.79%	1.3069
-38	-0.30%	-0.9771	0.50%	0.7138
-37	-0.16%	-0.3821	0.34%	0.4632
-36	-0.26%	-0.9335	0.08%	0.1102
-35	-0.27%	-1.0743	-0.19%	-0.2848
-34	-0.32%	-0.7290	-0.51%	-0.6272
-33	0.48%	1.0479	-0.03%	-0.0258
-32	0.06%	0.1093	0.03%	0.0210
-31	0.17%	0.3195	0.20%	0.1236
-30	0.17%	0.4807	0.37%	0.2241
-29	-0.45%	-1.2249	-0.08%	-0.0472
-28	-0.57%	-1.0347	-0.65%	-0.3521
-27	-0.30%	-0.5877	-0.95%	-0.5520
-26	-1.21%	-2.9113	-2.16%	-1.3543
-25	0.07%	0.0958	-2.09%	-1.1770
-24	0.41%	0.8565	-1.68%	-0.8831
-23	0.31%	0.6140	-1.37%	-0.8195
-22	0.23%	0.4961	-1.13%	-0.6310
-21	1.37%	1.4242	0.24%	0.1342
-20	-0.20%	-0.3099	0.04%	0.0165
-19	0.14%	0.3287	0.18%	0.0790
-18	0.07%	0.0756	0.25%	0.1118
-17	-0.16%	-0.3161	0.09%	0.0418
-16	0.69%	2.3381	0.78%	0.3521
-15	0.42%	0.9680	1.21%	0.5154
-14	-0.31%	-0.7679	0.90%	0.3915
-13	0.42%	1.0860	1.32%	0.5839
-12	0.73%	0.7870	2.05%	0.8765
-11	-0.25%	-0.5788	1.79%	0.7563
-10	-0.10%	-0.2135	1.69%	0.6880
-9	0.29%	0.6021	1.98%	0.7983
-8	-0.34%	-0.8544	1.64%	0.6156
-7	0.23%	0.2998	1.87%	0.6276
-6	-0.08%	-0.1341	1.78%	0.5946
-5	-0.38%	-0.8584	1.41%	0.4730
-4	-0.09%	-0.1965	1.32%	0.4218
-3	-0.38%	-0.7351	0.93%	0.2967
-2	1.56%	2.6515	2.50%	0.8150
-1	-0.26%	-0.4414	2.23%	0.6858
0	0.01%	0.0063	2.24%	0.6595
+1	0.61%	0.7384	2.85%	0.7486
+2	-0.01%	-0.0301	2.84%	0.7842
+3	-0.46%	-0.8294	2.38%	0.7001
+4	-0.86%	-2.0316	1.52%	0.4469
+5	-1.15%	-2.3152	0.38%	0.1140
+6	0.50%	0.8313	0.88%	0.2644
+7	-0.08%	-0.1771	0.80%	0.2368
+8	-0.78%	-1.7186	0.02%	0.0054
+9	0.48%	1.0089	0.50%	0.1534
+10	0.15%	0.2564	0.65%	0.1876
+11	0.41%	0.5494	1.07%	0.3181
+12	0.15%	0.2994	1.21%	0.3779
+13	-0.60%	-1.3152	0.61%	0.2003

+14	0.39%	0.8728	1.00%	0.3318
+15	0.14%	0.3273	1.14%	0.3725
+16	-0.50%	-0.8756	0.64%	0.1999
+17	-0.39%	-0.9738	0.25%	0.0747
+18	0.58%	0.7890	0.83%	0.2373
+19	-0.33%	-0.8220	0.50%	0.1346
+20	1.01%	1.6912	1.51%	0.3897
+21	-0.42%	-0.7875	1.10%	0.2796
+22	-0.05%	-0.0993	1.05%	0.2697
+23	-0.46%	-1.1896	0.59%	0.1558
+24	0.57%	1.3366	1.16%	0.2987
+25	-0.04%	-0.0714	1.12%	0.2673
+26	0.52%	1.3576	1.64%	0.3880
+27	0.25%	0.5299	1.89%	0.4322
+28	0.09%	0.1966	1.98%	0.4489
+29	-0.30%	-0.6517	1.68%	0.3643
+30	-0.34%	-0.7751	1.34%	0.2907
+31	0.00%	-0.0030	1.33%	0.2808
+32	0.30%	0.7487	1.63%	0.3422
+33	0.28%	0.7422	1.91%	0.4047
+34	0.17%	0.4287	2.09%	0.4471
+35	-0.90%	-1.9552	1.18%	0.2500
+36	0.16%	0.3945	1.34%	0.2854
+37	0.15%	0.3644	1.49%	0.3091
+38	0.26%	0.6324	1.76%	0.3571
+39	0.00%	0.0011	1.76%	0.3564
+40	0.59%	0.8393	2.35%	0.4920

Table 4: CAAR 81 days around the lockup expiration day – Companies stated selling

Firms stated in their prospectus selling of stocks during the second six months	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-0.26%	0.62%	0.35%	-1.41%	-2.20%	1.69%
Median CAAR	-0.40%	0.48%	0.40%	-1.05%	-1.94%	-0.51%
t-stat	-0.1916	0.3938	0.1820	-0.8626	-1.2078	0.4847

Table 5: CAAR 81 days around the lockup expiration day – Companies stated no selling

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	0.03%	0.0581	0.03%	0.0581
-39	0.91%	1.6135	0.94%	1.2559
-38	-0.45%	-0.5519	0.49%	0.4914
-37	-0.44%	-0.8269	0.06%	0.0508
-36	-0.64%	-1.6962	-0.58%	-0.5772
-35	0.31%	0.6925	-0.27%	-0.2309
-34	0.61%	1.2408	0.34%	0.2286
-33	0.72%	1.5306	1.05%	0.6417
-32	1.11%	2.2181	2.17%	1.1971
-31	-0.92%	-2.1061	1.25%	0.6328
-30	-0.50%	-2.0073	0.75%	0.3887
-29	0.06%	0.1307	0.81%	0.4530
-28	-0.49%	-0.8501	0.32%	0.1672
-27	-0.37%	-0.9499	-0.05%	-0.0247
-26	-0.53%	-1.4721	-0.57%	-0.2678
-25	-0.30%	-0.6067	-0.87%	-0.4085
-24	0.38%	0.9646	-0.49%	-0.2416
-23	0.67%	1.6596	0.17%	0.0934
-22	-0.20%	-0.3602	-0.02%	-0.0115
-21	0.45%	1.0107	0.42%	0.1895
-20	-0.30%	-1.2606	0.13%	0.0577
-19	0.05%	0.0742	0.18%	0.0763
-18	-0.32%	-0.6718	-0.14%	-0.0592
-17	-1.21%	-2.9937	-1.35%	-0.5227
-16	0.10%	0.1935	-1.25%	-0.5053
-15	0.85%	1.6693	-0.40%	-0.1710
-14	-0.35%	-1.0131	-0.75%	-0.3024
-13	-0.31%	-0.5986	-1.05%	-0.4075
-12	-0.57%	-1.4618	-1.63%	-0.6196
-11	-0.10%	-0.2634	-1.73%	-0.6579
-10	1.48%	1.5609	-0.25%	-0.1147
-9	0.11%	0.2068	-0.14%	-0.0588
-8	-0.12%	-0.2653	-0.26%	-0.1035

-7	-0.12%	-0.2751	-0.38%	-0.1394
-6	-0.68%	-1.2616	-1.06%	-0.3526
-5	-0.03%	-0.0661	-1.10%	-0.3584
-4	-0.04%	-0.1079	-1.14%	-0.3638
-3	0.03%	0.0726	-1.10%	-0.3861
-2	0.82%	1.6154	-0.28%	-0.0929
-1	0.64%	0.7695	0.36%	0.1136
0	0.33%	0.4708	0.69%	0.2085
+1	-0.19%	-0.2548	0.50%	0.1559
+2	0.34%	0.5298	0.84%	0.2619
+3	0.73%	1.0118	1.57%	0.5818
+4	0.61%	1.3155	2.18%	0.8175
+5	1.21%	2.2306	3.39%	1.2709
+6	-0.98%	-2.1240	2.41%	0.8201
+7	-0.65%	-2.4132	1.76%	0.5990
+8	-0.04%	-0.0728	1.72%	0.6301
+9	-0.65%	-1.1171	1.07%	0.3581
+10	-0.23%	-0.6037	0.84%	0.2793
+11	-0.49%	-1.0438	0.35%	0.1074
+12	-0.17%	-0.3752	0.18%	0.0544
+13	0.36%	0.9420	0.54%	0.1646
+14	0.57%	1.4249	1.11%	0.3619
+15	0.00%	0.0034	1.11%	0.3441
+16	0.42%	0.7985	1.53%	0.4523
+17	-0.32%	-1.4440	1.22%	0.3607
+18	0.13%	0.1901	1.34%	0.3718
+19	-0.40%	-0.7991	0.95%	0.2480
+20	-1.36%	-2.8162	-0.42%	-0.1030
+21	0.17%	0.3535	-0.24%	-0.0613
+22	1.02%	1.7558	0.78%	0.2106
+23	-0.03%	-0.0881	0.75%	0.1954
+24	-0.40%	-0.7695	0.35%	0.0844
+25	-0.38%	-0.9833	-0.03%	-0.0082
+26	-0.17%	-0.4324	-0.21%	-0.0509
+27	1.47%	1.5590	1.26%	0.3377
+28	0.48%	0.9164	1.74%	0.4411
+29	-0.31%	-0.6245	1.44%	0.3497
+30	-0.21%	-0.4502	1.23%	0.2825
+31	-0.83%	-1.4583	0.40%	0.0849
+32	-0.15%	-0.2813	0.25%	0.0529
+33	-0.16%	-0.3997	0.08%	0.0176
+34	0.00%	0.0031	0.08%	0.0189
+35	0.98%	1.8287	1.07%	0.2306
+36	0.69%	0.8522	1.76%	0.3573
+37	0.40%	0.5593	2.16%	0.4249
+38	0.08%	0.1102	2.24%	0.4497
+39	0.24%	0.3778	2.48%	0.4969
+40	0.89%	1.2154	3.37%	0.7561

Table 6: CAAR 81 days around the lockup expiration day – Companies stated no selling						
Firms stated in their prospectus no selling of stocks during the second six months	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	0.97%	0.14%	0.78%	4.45%*	0.33%	2.53%
Median CAAR	-0.08%	0.13%	0.48%	3.67%	0.98%	3.83%
t-stat	0.7103	0.1304	0.5442	2.3750	0.3267	1.2395

*Statistically significant at the 5% level

Table 7: CAAR for companies in the Main Market – 81 days around the lockup expiration day

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	-0.30%	-0.9116	-0.30%	-0.9116
-39	0.21%	0.9331	-0.09%	-0.2165
-38	-0.04%	-0.1065	-0.13%	-0.2172
-37	-0.46%	-0.8803	-0.59%	-1.0449
-36	0.36%	1.0757	-0.23%	-0.6050
-35	0.10%	0.2935	-0.13%	-0.2518
-34	0.34%	0.6848	0.21%	0.2939
-33	-0.15%	-0.4848	0.07%	0.0878
-32	-0.11%	-0.2849	-0.04%	-0.0483
-31	0.31%	0.8655	0.26%	0.2515
-30	0.58%	1.3377	0.85%	0.7660
-29	-0.40%	-1.1301	0.45%	0.4350
-28	-0.14%	-0.3599	0.31%	0.3719
-27	-0.62%	-1.8961	-0.31%	-0.3820
-26	-0.19%	-0.7090	-0.50%	-0.6940
-25	1.14%	1.5029	0.63%	0.5959
-24	0.42%	0.8981	1.05%	0.7589
-23	0.19%	0.5140	1.24%	0.9787
-22	-0.43%	-1.3070	0.81%	0.6135
-21	0.12%	0.3584	0.93%	0.6366
-20	-0.47%	-0.5555	0.45%	0.2158
-19	0.44%	2.0896	0.90%	0.4203
-18	-0.10%	-0.2431	0.80%	0.4178
-17	0.16%	0.5376	0.96%	0.4730
-16	0.31%	0.8148	1.27%	0.6116
-15	0.52%	1.8166	1.79%	0.8108
-14	-0.31%	-0.7442	1.47%	0.7219
-13	-0.47%	-0.9824	1.00%	0.4698
-12	-0.01%	-0.0178	1.00%	0.4702
-11	0.54%	1.3398	1.54%	0.6864
-10	0.38%	1.0896	1.92%	0.8226
-9	0.24%	0.4219	2.16%	0.9886
-8	0.22%	0.7104	2.38%	1.0445
-7	0.62%	0.9747	3.00%	1.1107
-6	-0.23%	-1.0442	2.77%	0.9879
-5	0.46%	0.7174	3.24%	1.1765
-4	0.23%	0.7873	3.47%	1.2558
-3	-0.25%	-0.5433	3.22%	1.2245
-2	0.52%	2.4442	3.74%	1.3651
-1	-0.39%	-1.3303	3.36%	1.1825
0	0.37%	0.9536	3.73%	1.3464
+1	-0.14%	-0.2939	3.59%	1.1472
+2	-0.03%	-0.1664	3.56%	1.1633
+3	0.35%	0.9230	3.90%	1.3254
+4	0.32%	0.7985	4.22%	1.5540
+5	0.47%	1.1411	4.69%	1.7913
+6	0.01%	0.0334	4.71%	1.8114
+7	-0.45%	-1.6890	4.25%	1.6419
+8	-0.33%	-0.8015	3.93%	1.4864
+9	0.06%	0.1753	3.98%	1.5260
+10	-0.21%	-0.6925	3.77%	1.4415
+11	-0.31%	-0.9348	3.47%	1.3741
+12	0.09%	0.1879	3.56%	1.5871
+13	-0.07%	-0.1386	3.49%	1.7222
+14	0.43%	1.2786	3.92%	1.9197
+15	0.28%	0.7047	4.20%	2.2043
+16	0.15%	0.3392	4.35%	2.2826
+17	-0.26%	-0.9862	4.09%	2.1786
+18	-0.74%	-1.5469	3.35%	1.8061
+19	0.10%	0.2449	3.45%	1.7745
+20	0.10%	0.1247	3.55%	1.5064
+21	0.25%	0.3851	3.80%	1.7894
+22	0.57%	1.1503	4.37%	2.0532
+23	-0.26%	-1.0590	4.12%	1.9135
+24	0.87%	1.7192	4.99%	2.1373
+25	-0.18%	-0.4843	4.81%	2.0763
+26	0.18%	0.4359	4.99%	2.0044
+27	0.43%	0.8705	5.42%	2.1618
+28	0.16%	0.3594	5.57%	2.1044
+29	0.10%	0.4014	5.67%	2.1319
+30	0.07%	0.1669	5.74%	2.1204
+31	0.20%	0.8632	5.94%	2.2743
+32	-0.18%	-0.4153	5.76%	2.2228
+33	0.15%	0.4293	5.92%	2.1821
+34	-0.35%	-1.2054	5.57%	2.0587
+35	0.25%	0.5429	5.82%	2.2448
+36	0.12%	0.2858	5.94%	2.3378
+37	-0.07%	-0.1031	5.87%	2.3022
+38	0.86%	1.9386	6.73%	2.6167
+39	0.09%	0.1502	6.83%	2.7177
+40	-0.26%	-0.6766	6.57%	2.7661

Table 8: CAAR in sub-periods around the lockup expiration day – Companies in the Main Market

Main Market	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-0.01%	0.23%	-0.15%	1.92%	0.18%	2.80%
Median CAAR	0.09%	0.48%	-0.01%	0.98%	0.13%	0.36%
t-stat	-0.036	0.3974	-0.2635	1.5512	0.1954	1.3380

Table 9: CAAR for companies in the Parallel Market – 81 days around the lockup expiration day

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	0.29%	1.2224	0.29%	1.2224
-39	0.50%	1.1051	0.78%	1.7975
-38	0.08%	0.2150	0.87%	1.2789
-37	0.45%	1.0038	1.31%	1.7888
-36	0.07%	0.1531	1.38%	1.6199
-35	-0.21%	-0.5742	1.17%	1.2316
-34	-1.00%	-2.5296	0.17%	0.1786
-33	-0.43%	-0.8338	-0.25%	-0.2288
-32	-0.31%	-0.4489	-0.57%	-0.4212
-31	-0.81%	-1.1264	-1.38%	-0.8507
-30	-0.61%	-1.5009	-1.98%	-1.1228
-29	-0.48%	-1.1234	-2.46%	-1.2696
-28	-0.35%	-0.4786	-2.82%	-1.2770
-27	0.91%	1.2251	-1.90%	-0.8533
-26	-0.51%	-0.8461	-2.41%	-1.1176
-25	-0.52%	-1.2221	-2.93%	-1.3795
-24	-0.27%	-0.6070	-3.21%	-1.5119
-23	0.66%	1.1372	-2.55%	-1.2450
-22	0.40%	0.5441	-2.14%	-0.9009
-21	0.91%	1.0569	-1.23%	-0.5574
-20	-0.20%	-0.3486	-1.43%	-0.6200
-19	0.59%	1.0244	-0.84%	-0.3309
-18	-0.65%	-0.9116	-1.49%	-0.6365
-17	0.89%	1.2495	-0.59%	-0.2368
-16	0.91%	1.3976	0.32%	0.1115
-15	0.38%	0.6327	0.70%	0.2396
-14	0.42%	1.0048	1.13%	0.3841
-13	0.53%	1.0635	1.65%	0.5438
-12	1.11%	0.9379	2.77%	0.9026
-11	-0.17%	-0.3467	2.59%	0.8450
-10	-0.24%	-0.3816	2.35%	0.8014
-9	-0.26%	-0.4541	2.09%	0.7410
-8	-0.44%	-0.8769	1.65%	0.5805
-7	-0.34%	-0.4207	1.31%	0.4486
-6	0.14%	0.1594	1.45%	0.4609
-5	0.27%	0.4934	1.72%	0.5244
-4	-0.35%	-0.6111	1.37%	0.3970
-3	0.10%	0.2045	1.47%	0.4078
-2	1.70%	2.0454	3.17%	0.8645
-1	0.14%	0.1424	3.31%	0.8676
0	-0.82%	-0.7767	2.50%	0.6410
+1	0.09%	0.0905	2.59%	0.6212
+2	0.05%	0.0841	2.64%	0.6449
+3	-0.06%	-0.0810	2.58%	0.6527
+4	-0.77%	-1.3128	1.80%	0.4163
+5	-0.40%	-0.5707	1.40%	0.3163
+6	-0.01%	-0.0084	1.39%	0.3196
+7	-0.17%	-0.3682	1.22%	0.2771
+8	-0.36%	-0.6014	0.86%	0.1980
+9	0.01%	0.0198	0.87%	0.2102
+10	-0.08%	-0.1053	0.79%	0.1769
+11	0.24%	0.2564	1.03%	0.2268
+12	-0.16%	-0.2751	0.87%	0.1967
+13	-0.17%	-0.3557	0.69%	0.1649
+14	0.78%	1.3979	1.48%	0.3585
+15	-0.39%	-0.6457	1.09%	0.2464
+16	-0.70%	-1.0035	0.40%	0.0838
+17	-0.34%	-0.7386	0.06%	0.0117
+18	1.36%	1.4255	1.42%	0.2813
+19	-0.55%	-1.0419	0.87%	0.1670
+20	-0.14%	-0.2803	0.73%	0.1364
+21	-0.57%	-1.2194	0.16%	0.0291

+22	0.29%	0.5753	0.45%	0.0855
+23	-0.85%	-1.8142	-0.40%	-0.0769
+24	-0.18%	-0.3479	-0.58%	-0.1119
+25	-0.45%	-0.6454	-1.03%	-0.1853
+26	0.59%	1.3860	-0.44%	-0.0794
+27	1.24%	1.2799	0.80%	0.1509
+28	-0.05%	-0.0809	0.75%	0.1418
+29	-0.01%	-0.0213	0.74%	0.1318
+30	-0.42%	-0.9027	0.32%	0.0569
+31	-1.89%	-2.4635	-1.58%	-0.2634
+32	0.30%	0.6010	-1.27%	-0.2065
+33	0.07%	0.1660	-1.20%	-0.1984
+34	0.70%	1.2420	-0.49%	-0.0850
+35	-0.24%	-0.3649	-0.73%	-0.1245
+36	0.65%	0.7716	-0.08%	-0.0142
+37	0.50%	0.9213	0.41%	0.0679
+38	-0.64%	-1.1246	-0.23%	-0.0378
+39	0.08%	0.1174	-0.15%	-0.0241
+40	1.65%	1.6559	1.50%	0.2513

Table 10: CAAR in sub-periods around the lockup expiration day – Companies in the Parallel Market

Parallel Market	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-0.67%	-0.73%	-0.58%	-0.05%	-1.80%	0.71%
Median CAAR	-0.86%	-0.26%	-0.76%	-0.06%	-2.71%	2.85%
t-stat	-0.3770	-0.3876	-0.2426	-0.019	-0.7993	0.1685

Table 11: CAAR for companies in the New Market – 81 days around the lockup expiration day

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	0.03%	0.0519	0.03%	0.0519
-39	0.42%	0.1768	0.45%	0.1534
-38	-0.48%	-0.8669	-0.04%	-0.0131
-37	-0.95%	-1.2248	-0.98%	-0.2931
-36	-0.66%	-1.3467	-1.64%	-0.4696
-35	-0.79%	-0.9004	-2.43%	-0.8543
-34	0.89%	0.6096	-1.54%	-0.4726
-33	2.67%	3.7348	1.13%	0.2903
-32	0.52%	0.3965	1.65%	0.3204
-31	0.64%	0.6042	2.29%	0.3841
-30	-0.18%	-0.3655	2.10%	0.3625
-29	-1.44%	-1.8317	0.67%	0.1070
-28	-0.29%	-0.4416	0.38%	0.0609
-27	-1.48%	-2.4075	-1.10%	-0.1708
-26	-1.51%	-2.4554	-2.61%	-0.4421
-25	-2.87%	-1.5039	-5.48%	-0.8910
-24	0.97%	1.6131	-4.52%	-0.7476
-23	-0.94%	-1.0914	-5.46%	-0.9594
-22	0.73%	1.0490	-4.73%	-0.8136
-21	4.59%	1.1244	-0.14%	-0.0296
-20	-2.47%	-1.6023	-2.60%	-0.4774
-19	-1.89%	-1.8199	-4.49%	-0.9114
-18	2.65%	0.7156	-1.85%	-0.3009
-17	-1.40%	-0.9216	-3.24%	-0.6779
-16	2.30%	2.6838	-0.95%	-0.1970
-15	0.35%	0.7582	-0.59%	-0.1144
-14	-0.19%	-0.5384	-0.79%	-0.1507
-13	-0.19%	-0.2227	-0.97%	-0.2069
-12	-1.27%	-1.2523	-2.24%	-0.4534
-11	-2.53%	-1.9630	-4.78%	-0.9114
-10	-1.11%	-0.7990	-5.88%	-1.1703
-9	-0.80%	-0.4866	-6.68%	-1.4350
-8	-1.67%	-1.9552	-8.35%	-1.7000
-7	0.54%	0.9455	-7.81%	-1.5757
-6	1.18%	0.9926	-6.63%	-1.5228
-5	-0.27%	-0.2041	-6.90%	-1.9810
-4	-0.15%	-0.2097	-7.05%	-1.8929

-3	-1.27%	-0.6365	-8.32%	-2.6719
-2	2.52%	2.3235	-5.81%	-2.1983
-1	-2.13%	-2.2730	-7.94%	-2.4824
0	0.20%	0.0713	-7.74%	-1.7569
+1	0.81%	0.9502	-6.93%	-1.4274
+2	1.03%	1.2551	-5.90%	-1.4126
+3	-1.04%	-1.9562	-6.94%	-1.7181
+4	0.34%	0.5064	-6.60%	-1.6898
+5	-1.69%	-1.7242	-8.29%	-2.2405
+6	-1.02%	-1.5504	-9.31%	-2.7148
+7	0.12%	0.1012	-9.19%	-2.9995
+8	-0.98%	-1.5245	-10.17%	-3.0435
+9	0.28%	0.2489	-9.89%	-3.7816
+10	0.50%	0.5627	-9.39%	-3.2882
+11	0.28%	0.2637	-9.11%	-3.1030
+12	-0.10%	-0.1434	-9.21%	-3.0974
+13	-0.62%	-1.0262	-9.84%	-3.2387
+14	-0.30%	-0.3933	-10.14%	-2.9855
+15	0.42%	0.4595	-9.72%	-2.6101
+16	1.43%	2.7823	-8.29%	-2.2211
+17	-0.71%	-1.0871	-9.00%	-2.0852
+18	0.45%	0.4309	-8.56%	-1.8817
+19	-1.07%	-2.6722	-9.63%	-2.1206
+20	0.66%	0.8543	-8.96%	-1.9454
+21	-0.36%	-0.2777	-9.32%	-1.8436
+22	-0.34%	-0.2233	-9.66%	-1.6839
+23	0.76%	0.8793	-8.90%	-1.7481
+24	-0.95%	-2.3324	-9.85%	-1.8613
+25	0.09%	0.1053	-9.76%	-1.9898
+26	-0.80%	-1.3936	-10.56%	-2.1143
+27	0.30%	0.3724	-10.26%	-2.0955
+28	0.48%	0.5967	-9.78%	-2.0408
+29	-2.31%	-3.9166	-12.09%	-2.5400
+30	-0.72%	-0.5349	-12.82%	-3.2818
+31	4.20%	2.1435	-8.62%	-2.9923
+32	0.84%	0.8951	-7.78%	-3.1966
+33	0.36%	0.5648	-7.42%	-3.1010
+34	-0.50%	-0.8452	-7.92%	-2.9816
+35	-1.39%	-2.4053	-9.30%	-2.9946
+36	0.20%	0.2849	-9.11%	-2.7668
+37	0.27%	0.2660	-8.84%	-2.4749
+38	-0.12%	-0.0582	-8.95%	-2.2967
+39	0.61%	0.7481	-8.34%	-2.2089
+40	0.12%	0.1388	-8.23%	-2.5249

Table 12: CAAR in sub-periods around the lockup expiration day – Companies in the New Market

New Market	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-1.93%	1.01%	-1.12%	-1.66%	-2.46%	1.16%
Median CAAR	-2.81%	-1.74%	-3.45%	-1.66%	-0.56%	-0.51%
t-stat	-0.6292	0.3252	-0.3233	-1.0587	-0.5783	0.4463

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The different variables were estimated only for the lockup expiration period, that is one year after the IPO.

Table 13: CAAR for the whole sample – 81 days around the lockup expiration day					
Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic	
-40	0.02%	0.0713	0.02%	0.0713	0.5958
-39	0.23%	0.7407	0.25%	0.7407	0.7009
-38	0.11%	0.4344	0.36%	0.4344	0.6789
-37	-0.01%	-0.0213	0.35%	-0.0213	0.8878
-36	0.11%	0.4424	0.46%	0.4424	0.8626
-35	-0.04%	-0.1747	0.42%	-0.1747	0.6196
-34	-0.08%	-0.2706	0.34%	-0.2706	0.5832
-33	0.05%	0.1467	0.39%	0.1467	0.2438
-32	-0.20%	-0.6323	0.19%	-0.6323	-0.2235
-31	-0.40%	-0.9904	-0.21%	-0.9904	-0.4537
-30	-0.26%	-0.8698	-0.47%	-0.8698	-0.9360
-29	-0.54%	-2.0841	-1.01%	-2.0841	-1.1452
-28	-0.27%	-0.6811	-1.28%	-0.6811	-1.3363
-27	-0.16%	-0.4417	-1.44%	-0.4417	-1.6820
-26	-0.28%	-0.8149	-1.72%	-0.8149	-1.6499
-25	-0.14%	-0.3023	-1.86%	-0.3023	-1.5051
-24	0.08%	0.2600	-1.78%	0.2600	-1.4679
-23	0.16%	0.5349	-1.62%	0.5349	-1.2827
-22	0.24%	0.5910	-1.38%	0.5910	-0.4737
-21	0.89%	1.5724	-0.50%	1.5724	-1.0033
-20	-0.77%	-1.6251	-1.26%	-1.6251	-0.7129
-19	0.33%	1.1105	-0.94%	1.1105	-0.8609
-18	-0.15%	-0.2654	-1.09%	-0.2654	-0.5305
-17	0.44%	1.0993	-0.64%	1.0993	0.0712
-16	0.73%	1.9410	0.09%	1.9410	0.3541
-15	0.40%	1.2754	0.49%	1.2754	0.5918
-14	0.30%	0.9876	0.79%	0.9876	0.5978
-13	0.05%	0.1410	0.84%	0.1410	0.8651
-12	0.43%	0.7127	1.27%	0.7127	1.0132
-11	0.28%	0.8245	1.55%	0.8245	0.9675
-10	-0.06%	-0.1543	1.50%	-0.1543	0.9056
-9	-0.11%	-0.2860	1.39%	-0.2860	0.7464
-8	-0.19%	-0.7282	1.19%	-0.7282	0.9311
-7	0.41%	0.8452	1.60%	0.8452	1.0487
-6	0.22%	0.4757	1.83%	0.4757	1.2830
-5	0.44%	1.1254	2.27%	1.1254	1.1330
-4	-0.16%	-0.5249	2.11%	-0.5249	1.0380
-3	-0.14%	-0.3718	1.97%	-0.3718	1.5752
-2	1.13%	2.7308	3.10%	2.7308	
-1	-0.12%	-0.2502	2.98%	-0.2502	1.4462
0	-0.14%	-0.2339	2.84%	-0.2339	1.3649
+1	0.19%	0.3723	3.03%	0.3723	1.3524
+2	0.21%	0.7882	3.24%	0.7882	1.4829
+3	-0.02%	-0.0523	3.22%	-0.0523	1.4804
+4	-0.24%	-0.6818	2.98%	-0.6818	1.3537
+5	0.01%	0.0322	3.00%	0.0322	1.3234
+6	0.04%	0.0922	3.04%	0.0922	1.3571
+7	-0.32%	-1.1117	2.72%	-1.1117	1.2137
+8	-0.26%	-0.7623	2.46%	-0.7623	1.1085
+9	0.04%	0.1077	2.50%	0.1077	1.1826
+10	-0.11%	-0.2860	2.39%	-0.2860	1.0564
+11	0.05%	0.0978	2.43%	0.0978	1.0657
+12	0.09%	0.2588	2.53%	0.2588	1.1653
+13	-0.30%	-0.8604	2.23%	-0.8604	1.0582
+14	0.56%	1.6755	2.79%	1.6755	1.2996
+15	-0.03%	-0.0769	2.76%	-0.0769	1.2432
+16	-0.29%	-0.7705	2.48%	-0.7705	1.0466
+17	-0.04%	-0.1558	2.43%	-0.1558	0.9988
+18	0.34%	0.7232	2.77%	0.7232	1.1246
+19	-0.34%	-1.0904	2.43%	-1.0904	0.9470
+20	0.12%	0.2771	2.55%	0.2771	0.9575
+21	-0.22%	-0.5927	2.33%	-0.5927	0.8665
+22	0.29%	0.7540	2.62%	0.7540	0.9919
+23	-0.35%	-1.2472	2.26%	-1.2472	0.8772
+24	0.10%	0.2735	2.36%	0.2735	0.9054
+25	-0.48%	-1.2473	1.88%	-1.2473	0.6907
+26	0.36%	1.2432	2.24%	1.2432	0.8233
+27	0.66%	1.4424	2.90%	1.4424	1.1030
+28	0.01%	0.0368	2.92%	0.0368	1.0871
+29	-0.30%	-0.8834	2.61%	-0.8834	0.9155
+30	-0.24%	-0.7887	2.37%	-0.7887	0.8281
+31	-0.39%	-0.8401	1.99%	-0.8401	0.6636
+32	0.09%	0.2908	2.07%	0.2908	0.6736
+33	0.02%	0.0966	2.10%	0.0966	0.6853
+34	0.34%	0.9934	2.44%	0.9934	0.8230
+35	0.17%	0.4852	2.61%	0.4852	0.8721

+36	0.41%	0.9314	3.02%	0.9920
+37	0.20%	0.4723	3.22%	1.0361
+38	0.30%	0.7969	3.52%	1.1311
+39	0.25%	0.6328	3.77%	1.2019
+40	0.73%	1.4548	4.50%	1.4696

Table 14: CAAR in sub-periods around the lockup expiration day – All firms

All firms	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-0.26%	0.05%	-0.07%	1.17%	-0.64%	2.11%
Median CAAR	-0.73%	-0.18%	-0.30%	0.78%	-0.06%	2.49%
t-stat	-0.3014	0.0524	-0.0615	0.8699	-0.5282	0.9771

Table 15: CAAR 81 days around the lockup expiration day – Companies stated selling

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	0.16%	0.6747	0.16%	0.6747
-39	0.47%	0.9594	0.63%	1.0357
-38	0.04%	0.1362	0.67%	0.9787
-37	-0.13%	-0.3706	0.54%	0.8809
-36	-0.38%	-1.3026	0.16%	0.2614
-35	-0.15%	-0.5601	0.01%	0.0144
-34	-0.17%	-0.4510	-0.16%	-0.2502
-33	0.42%	0.8479	0.25%	0.2801
-32	-0.02%	-0.0379	0.24%	0.2088
-31	-0.08%	-0.1495	0.15%	0.1138
-30	0.06%	0.1602	0.21%	0.1525
-29	-0.40%	-1.0410	-0.19%	-0.1246
-28	-0.37%	-0.6418	-0.56%	-0.3706
-27	-0.54%	-1.1028	-1.09%	-0.7940
-26	-1.07%	-2.5400	-2.16%	-1.8489
-25	-0.06%	-0.0747	-2.22%	-1.5278
-24	0.34%	0.7097	-1.88%	-1.1404
-23	0.29%	0.6065	-1.59%	-1.1263
-22	0.16%	0.3405	-1.43%	-0.9789
-21	1.54%	1.6756	0.11%	0.0768
-20	-0.29%	-0.4461	-0.18%	-0.0945
-19	0.13%	0.2908	-0.05%	-0.0267
-18	0.12%	0.1254	0.06%	0.0325
-17	-0.04%	-0.0795	0.02%	0.0115
-16	0.69%	1.8441	0.72%	0.3694
-15	0.44%	0.9530	1.15%	0.5441
-14	-0.25%	-0.5935	0.90%	0.4365
-13	0.62%	1.6060	1.51%	0.7412
-12	0.94%	0.9827	2.45%	1.1650
-11	-0.11%	-0.2342	2.34%	1.0611
-10	-0.18%	-0.3887	2.16%	0.9482
-9	0.38%	0.8277	2.55%	1.0962
-8	-0.32%	-0.9013	2.23%	0.8983
-7	0.53%	0.6485	2.75%	1.0100
-6	-0.16%	-0.2475	2.59%	0.9517
-5	-0.14%	-0.3222	2.45%	0.9059
-4	-0.17%	-0.3597	2.28%	0.7949
-3	-0.42%	-0.7979	1.87%	0.6406
-2	1.48%	2.6087	3.35%	1.1408
-1	-0.26%	-0.4504	3.09%	0.9975
0	0.24%	0.2546	3.33%	1.0548
+1	0.53%	0.6573	3.87%	1.0842
+2	0.21%	0.5065	4.07%	1.1987
+3	-0.35%	-0.6561	3.72%	1.1599
+4	-0.89%	-1.8038	2.83%	0.9068
+5	-1.10%	-2.0616	1.73%	0.5642
+6	0.70%	1.0444	2.43%	0.7764
+7	-0.16%	-0.3469	2.27%	0.7133
+8	-0.65%	-1.4629	1.62%	0.5189
+9	0.42%	0.8351	2.04%	0.6769
+10	0.27%	0.4311	2.31%	0.7089
+11	0.40%	0.5186	2.71%	0.8574
+12	0.21%	0.3762	2.92%	0.9643
+13	-0.56%	-1.1761	2.35%	0.8110
+14	0.36%	0.8417	2.71%	0.8990
+15	-0.04%	-0.0918	2.67%	0.8887
+16	-0.50%	-0.8794	2.17%	0.6750

+17	-0.26%	-0.6876	1.91%	0.5606
+18	0.55%	0.8321	2.46%	0.7077
+19	-0.35%	-0.8255	2.11%	0.5737
+20	1.11%	1.8579	3.22%	0.8476
+21	-0.46%	-0.8675	2.76%	0.7142
+22	-0.18%	-0.3379	2.59%	0.6778
+23	-0.31%	-0.6582	2.28%	0.6130
+24	0.27%	0.5665	2.55%	0.6782
+25	-0.41%	-0.6542	2.15%	0.5320
+26	0.63%	1.7032	2.77%	0.6818
+27	0.08%	0.1860	2.86%	0.6824
+28	0.22%	0.4368	3.08%	0.7173
+29	-0.54%	-1.0602	2.54%	0.5609
+30	-0.42%	-0.9258	2.12%	0.4649
+31	-0.02%	-0.0218	2.10%	0.4452
+32	0.14%	0.3774	2.24%	0.4670
+33	0.18%	0.5619	2.43%	0.5089
+34	0.50%	1.0756	2.93%	0.6211
+35	-0.52%	-1.1909	2.41%	0.5016
+36	0.13%	0.3143	2.54%	0.5271
+37	0.44%	1.0090	2.98%	0.6080
+38	0.29%	0.6931	3.27%	0.6549
+39	0.19%	0.3662	3.46%	0.6903
+40	0.69%	1.0298	4.15%	0.8431

Table 16: CAAR 81 days around the lockup expiration day – Companies stated selling

Firms stated in their prospectus selling of stocks during the second six months	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-0.01%	0.78%	0.52%	-0.87%	-1.56%	1.84%
Median CAAR	-0.76%	0.28%	-0.44%	-1.31%	-2.33%	2.52%
t-stat	-0.0103	0.4936	0.2703	-0.5115	-0.7886	0.5118

Table 17: CAAR 81 days around the lockup expiration day – Companies stated no selling

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	-0.17%	-0.4155	-0.17%	-0.4155
-39	-0.09%	-0.2694	-0.26%	-0.4842
-38	0.20%	0.4539	-0.06%	-0.0743
-37	0.16%	0.3554	0.11%	0.1164
-36	0.76%	1.8744	0.87%	0.9341
-35	0.09%	0.2014	0.96%	1.1483
-34	0.04%	0.0873	1.00%	1.0795
-33	-0.43%	-0.9038	0.57%	0.5595
-32	-0.45%	-0.9884	0.12%	0.1217
-31	-0.81%	-1.4338	-0.69%	-0.5051
-30	-0.67%	-1.3938	-1.36%	-0.8593
-29	-0.74%	-2.1522	-2.10%	-1.3569
-28	-0.14%	-0.2615	-2.24%	-1.3167
-27	0.34%	0.6357	-1.90%	-1.0805
-26	0.77%	1.6230	-1.14%	-0.6208
-25	-0.25%	-0.6507	-1.38%	-0.7619
-24	-0.27%	-0.9607	-1.65%	-0.9568
-23	-0.01%	-0.0430	-1.66%	-0.9219
-22	0.35%	0.4775	-1.32%	-0.8059
-21	0.02%	0.0539	-1.29%	-0.8403
-20	-1.39%	-2.1080	-2.69%	-1.9109
-19	0.59%	1.6812	-2.10%	-1.3422
-18	-0.49%	-1.0315	-2.59%	-1.7373
-17	1.08%	1.7118	-1.51%	-1.0213
-16	0.79%	1.0675	-0.73%	-0.4574
-15	0.35%	0.8403	-0.38%	-0.2325
-14	1.03%	2.7256	0.65%	0.4138
-13	-0.70%	-1.1548	-0.04%	-0.0232
-12	-0.24%	-0.3870	-0.28%	-0.1414
-11	0.79%	1.6033	0.51%	0.2447
-10	0.11%	0.1876	0.62%	0.3079
-9	-0.75%	-1.2541	-0.14%	-0.0764

-8	-0.03%	-0.0691	-0.17%	-0.0937
-7	0.26%	0.6654	0.09%	0.0524
-6	0.73%	1.0525	0.82%	0.4278
-5	1.22%	1.7959	2.04%	0.9599
-4	-0.16%	-0.4010	1.88%	0.8683
-3	0.22%	0.3908	2.10%	0.9428
-2	0.68%	1.1192	2.78%	1.1038
-1	0.06%	0.0729	2.84%	1.0984
0	-0.64%	-1.2628	2.20%	0.8657
+1	-0.27%	-0.5967	1.93%	0.8350
+2	0.22%	0.6677	2.15%	0.8722
+3	0.42%	0.7809	2.57%	0.9011
+4	0.62%	1.4534	3.18%	1.0189
+5	1.48%	2.9143	4.67%	1.3671
+6	-0.83%	-2.0455	3.84%	1.1854
+7	-0.53%	-1.7591	3.31%	1.0488
+8	0.25%	0.4968	3.56%	1.1286
+9	-0.46%	-0.8201	3.11%	1.0492
+10	-0.62%	-1.4480	2.49%	0.8022
+11	-0.42%	-1.1831	2.07%	0.6156
+12	-0.05%	-0.1083	2.02%	0.6390
+13	0.06%	0.1127	2.07%	0.6608
+14	0.82%	1.5321	2.89%	0.9371
+15	-0.01%	-0.0219	2.88%	0.8516
+16	0.00%	0.0043	2.88%	0.8041
+17	0.25%	0.6149	3.13%	0.8845
+18	0.06%	0.0879	3.18%	0.9032
+19	-0.33%	-0.6930	2.85%	0.8002
+20	-1.19%	-2.7498	1.66%	0.4479
+21	0.09%	0.1786	1.75%	0.4753
+22	0.90%	1.6367	2.65%	0.7385
+23	-0.41%	-1.8349	2.25%	0.6316
+24	-0.13%	-0.2439	2.11%	0.5903
+25	-0.58%	-1.5155	1.54%	0.4336
+26	0.01%	0.0253	1.55%	0.4462
+27	1.42%	1.6482	2.97%	1.0754
+28	-0.26%	-0.4050	2.71%	0.9854
+29	0.01%	0.0234	2.72%	0.8931
+30	-0.01%	-0.0196	2.71%	0.9031
+31	-0.87%	-1.8588	1.84%	0.5670
+32	0.01%	0.0298	1.85%	0.5355
+33	-0.19%	-0.5372	1.66%	0.4826
+34	0.12%	0.2453	1.79%	0.5832
+35	1.09%	1.9863	2.88%	0.9548
+36	0.78%	0.8958	3.65%	1.1290
+37	-0.12%	-0.1529	3.53%	1.0550
+38	0.32%	0.4591	3.86%	1.2230
+39	0.33%	0.5271	4.18%	1.2955
+40	0.77%	1.0072	4.96%	1.6248

Table 18: CAAR 81 days around the lockup expiration day – Companies stated no selling

Firms stated in their prospectus no selling of stocks during the second six months	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-0.58%	-0.91%	-0.85%	3.85%	0.56%	2.47%
Median CAAR	-0.23%	-0.74%	0.00%	2.55%	0.50%	2.27%
t-stat	-0.5679	-1.3305	-0.9831	1.8687	0.5078	1.3986

Table 19: CAAR for companies in the Main Market – 81 days around the lockup expiration day

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	-0.18%	-0.5419	-0.18%	-0.5419
-39	0.14%	0.4727	-0.05%	-0.1115
-38	0.07%	0.1701	0.03%	0.0417
-37	-0.28%	-0.5708	-0.25%	-0.5193
-36	0.43%	1.1646	0.17%	0.5510
-35	0.06%	0.1904	0.23%	0.4308
-34	0.53%	1.1415	0.76%	1.0407
-33	0.11%	0.2550	0.87%	1.0253
-32	-0.09%	-0.2526	0.78%	0.8372
-31	0.23%	0.6595	1.01%	1.0001
-30	0.49%	1.0792	1.50%	1.4537
-29	-0.64%	-1.6815	0.86%	0.9137
-28	-0.29%	-0.7148	0.58%	0.7285
-27	-0.59%	-1.7650	-0.02%	-0.0188
-26	0.02%	0.0629	0.01%	0.0103
-25	1.00%	1.2782	1.01%	1.0067
-24	0.35%	0.6997	1.36%	1.0150
-23	-0.08%	-0.2287	1.28%	1.0275
-22	-0.35%	-1.1229	0.93%	0.7632
-21	0.33%	1.0353	1.26%	0.9258
-20	-0.48%	-0.5666	0.78%	0.4011
-19	0.34%	1.5089	1.12%	0.5794
-18	-0.18%	-0.4677	0.94%	0.5303
-17	-0.01%	-0.0380	0.93%	0.4990
-16	0.21%	0.5641	1.13%	0.6035
-15	0.47%	1.7016	1.61%	0.8136
-14	-0.03%	-0.0555	1.58%	0.9186
-13	-0.39%	-0.8299	1.19%	0.6544
-12	-0.12%	-0.2923	1.08%	0.5791
-11	0.69%	1.5877	1.76%	0.9175
-10	0.16%	0.3613	1.92%	0.9141
-9	0.29%	0.5276	2.22%	1.1039
-8	0.13%	0.4299	2.35%	1.1593
-7	0.82%	1.1708	3.17%	1.3406
-6	-0.01%	-0.0146	3.16%	1.3175
-5	0.57%	0.8224	3.74%	1.5642
-4	0.24%	0.6384	3.97%	1.5940
-3	-0.25%	-0.5218	3.72%	1.5913
-2	0.54%	2.0902	4.26%	1.7363
-1	-0.19%	-0.6007	4.07%	1.6558
0	0.26%	0.7369	4.33%	1.7346
+1	-0.04%	-0.0722	4.30%	1.5155
+2	0.08%	0.4103	4.38%	1.5627
+3	0.29%	0.7469	4.67%	1.7040
+4	0.23%	0.6174	4.90%	1.9398
+5	0.60%	1.4602	5.51%	2.2004
+6	0.06%	0.1336	5.57%	2.3454
+7	-0.39%	-1.4517	5.17%	2.1811
+8	-0.37%	-0.8681	4.80%	1.9308
+9	-0.04%	-0.1412	4.76%	2.0057
+10	-0.33%	-1.0235	4.42%	1.8316
+11	-0.18%	-0.6607	4.24%	1.7579
+12	0.19%	0.3918	4.43%	2.0397
+13	-0.12%	-0.2208	4.31%	2.0803
+14	0.35%	1.0454	4.67%	2.1605
+15	0.25%	0.5886	4.91%	2.4065
+16	0.23%	0.5396	5.14%	2.5987
+17	-0.16%	-0.5459	4.98%	2.5854
+18	-0.76%	-1.5511	4.22%	2.1143
+19	-0.09%	-0.2232	4.13%	2.0293
+20	0.05%	0.0713	4.18%	1.8887
+21	0.30%	0.4882	4.48%	2.1125
+22	0.46%	0.8740	4.94%	2.3594
+23	-0.16%	-0.6535	4.78%	2.2899
+24	1.08%	2.1416	5.86%	2.7524
+25	-0.21%	-0.5128	5.65%	2.5820
+26	0.22%	0.5077	5.88%	2.5155
+27	0.49%	1.0116	6.37%	2.6924
+28	0.33%	0.6954	6.70%	2.6609
+29	0.00%	-0.0060	6.70%	2.6897
+30	0.09%	0.2030	6.79%	2.6482
+31	0.10%	0.3892	6.88%	2.7907
+32	-0.10%	-0.2454	6.78%	2.7619
+33	0.16%	0.4094	6.94%	2.7625
+34	-0.28%	-0.8145	6.66%	2.6318
+35	0.36%	0.8009	7.02%	2.7653
+36	0.17%	0.3976	7.19%	2.8191
+37	-0.10%	-0.1565	7.09%	2.8049
+38	1.03%	2.2085	8.12%	3.1615
+39	0.07%	0.1218	8.19%	3.1853
+40	-0.13%	-0.3080	8.05%	3.1896

Table 20: CAAR in sub-periods around the lockup expiration day – Companies in the Main Market

Main Market	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	0.07%	0.23%	0.04%	2.35%	0.12%	3.63%
Median CAAR	-0.12%	0.28%	0.00%	1.59%	0.11%	0.42%
t-stat	0.2129	0.3647	0.0607	1.6505	0.1276	1.7811

Table 21: CAAR for companies in the Parallel Market – 81 days around the lockup expiration day

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	0.44%	1.6617	0.44%	1.6617
-39	0.26%	0.5831	0.71%	1.2884
-38	0.35%	1.0149	1.06%	1.5189
-37	0.54%	1.4666	1.60%	2.2413
-36	-0.03%	-0.0673	1.57%	1.9554
-35	-0.25%	-0.7310	1.32%	1.6591
-34	-0.71%	-1.9106	0.62%	0.7835
-33	-0.58%	-1.0760	0.04%	0.0346
-32	-0.51%	-0.8569	-0.47%	-0.3952
-31	-1.16%	-1.5273	-1.63%	-1.0683
-30	-0.78%	-2.1300	-2.40%	-1.3843
-29	-0.45%	-1.0406	-2.85%	-1.5181
-28	-0.10%	-0.1305	-2.95%	-1.4652
-27	0.56%	0.8211	-2.39%	-1.2153
-26	-0.22%	-0.3473	-2.62%	-1.4130
-25	-0.66%	-1.6813	-3.27%	-1.7030
-24	-0.35%	-0.8230	-3.63%	-1.9181
-23	0.53%	0.9990	-3.09%	-1.7410
-22	0.14%	0.2169	-2.95%	-1.5720
-21	0.91%	1.0308	-2.04%	-1.1929
-20	-0.49%	-1.0354	-2.53%	-1.4481
-19	0.67%	1.2105	-1.86%	-0.9368
-18	-0.89%	-1.1853	-2.75%	-1.5342
-17	1.02%	1.4072	-1.73%	-0.9597
-16	0.85%	1.2130	-0.88%	-0.4322
-15	0.47%	0.7455	-0.41%	-0.1877
-14	0.74%	1.6180	0.33%	0.1456
-13	0.66%	1.2237	0.99%	0.4146
-12	1.46%	1.2029	2.45%	1.0036
-11	0.24%	0.4187	2.69%	1.0440
-10	-0.15%	-0.2725	2.53%	1.0010
-9	-0.23%	-0.4271	2.31%	0.9211
-8	-0.20%	-0.4618	2.10%	0.7997
-7	0.12%	0.1375	2.22%	0.8133
-6	0.13%	0.1411	2.35%	0.8192
-5	0.47%	0.9522	2.83%	0.9500
-4	-0.41%	-0.7029	2.41%	0.7679
-3	0.25%	0.4674	2.66%	0.8085
-2	1.61%	1.8966	4.27%	1.2359
-1	0.26%	0.2622	4.53%	1.2446
0	-0.72%	-0.6687	3.81%	1.0271
+1	0.07%	0.0706	3.88%	0.9749
+2	0.23%	0.4170	4.11%	1.0569
+3	0.24%	0.3369	4.34%	1.1433
+4	-0.88%	-1.4455	3.46%	0.8617
+5	-0.24%	-0.3002	3.23%	0.7764
+6	0.31%	0.3757	3.54%	0.8607
+7	-0.36%	-0.7451	3.18%	0.7695
+8	-0.35%	-0.6195	2.83%	0.6971
+9	0.00%	0.0002	2.83%	0.7278
+10	0.23%	0.2858	3.06%	0.7273
+11	0.23%	0.2352	3.29%	0.7658
+12	-0.15%	-0.2345	3.14%	0.7613
+13	-0.51%	-0.9307	2.63%	0.6556
+14	0.75%	1.1692	3.38%	0.8289
+15	-0.54%	-0.9253	2.84%	0.6555
+16	-0.93%	-1.3670	1.91%	0.4042
+17	-0.21%	-0.4335	1.69%	0.3437
+18	1.55%	1.8938	3.24%	0.6505
+19	-0.54%	-0.9550	2.70%	0.5176
+20	0.07%	0.1320	2.77%	0.5146
+21	-0.86%	-1.8453	1.91%	0.3476
+22	0.33%	0.5770	2.24%	0.4176

+23	-0.76%	-1.4345	1.48%	0.2822
+24	-0.55%	-0.9713	0.93%	0.1782
+25	-0.67%	-0.8893	0.26%	0.0478
+26	0.56%	1.3152	0.83%	0.1514
+27	1.06%	1.1948	1.88%	0.3622
+28	-0.15%	-0.2113	1.74%	0.3304
+29	-0.17%	-0.2479	1.57%	0.2774
+30	-0.58%	-1.5115	0.98%	0.1737
+31	-1.70%	-2.2368	-0.72%	-0.1199
+32	0.03%	0.0653	-0.69%	-0.1101
+33	-0.18%	-0.5399	-0.88%	-0.1412
+34	1.04%	1.6069	0.17%	0.0278
+35	-0.01%	-0.0216	0.15%	0.0251
+36	0.63%	0.7248	0.78%	0.1268
+37	0.63%	1.0466	1.41%	0.2232
+38	-0.53%	-0.9561	0.88%	0.1417
+39	0.19%	0.2872	1.07%	0.1699
+40	1.69%	1.7150	2.76%	0.4470

Table 22: CAAR in sub-periods around the lockup expiration day – Companies in the Parallel Market

Parallel Market	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (-5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-0.46%	-0.65%	-0.39%	0.88%	-0.82%	-0.30%
Median CAAR	-1.41%	-1.27%	-1.57%	0.88%	-1.37%	2.52%
t-stat	-0.2601	-0.3486	-0.1639	0.3386	-0.3629	-0.0708

Table 23: CAAR for companies in the New Market – 81 days around the lockup expiration day

Day	AAR	AAR t-statistic	CAAR	CAAR t-statistic
-40	-0.95%	-1.0836	-0.95%	-1.0836
-39	0.48%	0.2392	-0.47%	-0.1747
-38	-0.72%	-1.2432	-1.19%	-0.4428
-37	-1.17%	-3.8230	-2.36%	-0.8538
-36	-0.51%	-1.4547	-2.88%	-1.0447
-35	0.38%	0.2854	-2.50%	-1.6844
-34	0.12%	0.1072	-2.38%	-1.0356
-33	2.37%	2.0620	-0.01%	-0.0018
-32	0.58%	0.6963	0.57%	0.1571
-31	0.22%	0.1907	0.80%	0.1755
-30	-1.03%	-0.9498	-0.24%	-0.0552
-29	-0.54%	-0.9407	-0.78%	-0.1676
-28	-0.89%	-0.9319	-1.67%	-0.3355
-27	-1.39%	-2.0014	-3.06%	-0.6574
-26	-1.64%	-2.8488	-4.70%	-1.1041
-25	-2.41%	-1.2395	-7.11%	-1.7775
-24	0.79%	1.2148	-6.32%	-1.5724
-23	-0.45%	-0.6017	-6.77%	-1.9152
-22	2.89%	1.4530	-3.89%	-1.3378
-21	2.88%	0.8273	-1.01%	-0.3033
-20	-2.96%	-1.6583	-3.97%	-0.8977
-19	-1.10%	-1.1781	-5.07%	-1.2914
-18	2.94%	0.8107	-2.13%	-0.3940
-17	-0.13%	-0.0743	-2.26%	-0.6031
-16	2.28%	2.2000	0.03%	0.0066
-15	-0.16%	-0.2746	-0.13%	-0.0300
-14	-0.21%	-0.8884	-0.35%	-0.0776
-13	-0.73%	-0.5676	-1.08%	-0.2338
-12	-1.61%	-1.3169	-2.69%	-0.5165
-11	-1.12%	-1.3485	-3.81%	-0.7800
-10	-0.48%	-0.2896	-4.29%	-0.9921
-9	-1.14%	-0.7485	-5.44%	-1.1888
-8	-1.41%	-1.4616	-6.85%	-1.4714
-7	0.05%	0.0727	-6.80%	-1.4013
-6	1.46%	1.2834	-5.34%	-1.2820
-5	-0.16%	-0.1196	-5.50%	-1.4821

-4	-0.69%	-1.9175	-6.19%	-1.6963
-3	-1.31%	-0.6706	-7.49%	-2.0070
-2	1.50%	1.5472	-5.99%	-1.6368
-1	-1.38%	-1.7318	-7.37%	-1.8363
0	0.69%	0.2520	-6.68%	-1.6391
+1	1.50%	1.4423	-5.18%	-1.2451
+2	0.65%	1.0234	-4.53%	-1.2180
+3	-2.24%	-3.3568	-6.77%	-1.6338
+4	0.52%	0.4483	-6.24%	-1.4766
+5	-1.22%	-1.2557	-7.47%	-1.8417
+6	-1.13%	-1.5681	-8.60%	-2.1860
+7	0.13%	0.0944	-8.46%	-2.1060
+8	0.57%	0.5040	-7.90%	-2.0177
+9	0.51%	0.3939	-7.38%	-2.3036
+10	-0.67%	-0.8692	-8.05%	-2.0924
+11	0.17%	0.1405	-7.88%	-2.2602
+12	0.72%	0.8696	-7.16%	-1.9142
+13	-0.12%	-0.2070	-7.28%	-1.9474
+14	0.56%	0.7169	-6.72%	-1.8496
+15	0.98%	0.7782	-5.73%	-1.4224
+16	0.37%	0.5997	-5.37%	-1.2698
+17	1.07%	1.1040	-4.30%	-0.9901
+18	-0.34%	-0.3425	-4.64%	-1.1050
+19	-0.47%	-1.2579	-5.11%	-1.1818
+20	0.53%	0.4820	-4.57%	-1.0410
+21	0.37%	0.2805	-4.20%	-1.0352
+22	-0.50%	-0.2861	-4.70%	-1.0594
+23	0.53%	0.5825	-4.16%	-1.0227
+24	-1.05%	-2.4278	-5.22%	-1.2352
+25	-0.76%	-1.3668	-5.97%	-1.5656
+26	0.06%	0.0636	-5.91%	-1.7608
+27	-0.27%	-0.3621	-6.18%	-1.7394
+28	-0.54%	-0.4217	-6.72%	-2.1162
+29	-1.99%	-3.0685	-8.71%	-2.6298
+30	-0.11%	-0.0725	-8.82%	-3.1715
+31	3.06%	1.7685	-5.76%	-2.2407
+32	1.02%	1.5832	-4.75%	-2.3371
+33	0.33%	0.4772	-4.42%	-1.7782
+34	-0.12%	-0.2624	-4.54%	-1.8870
+35	0.24%	0.3968	-4.29%	-1.8358
+36	0.44%	0.5151	-3.85%	-1.3183
+37	-0.41%	-0.2478	-4.26%	-1.1605
+38	0.87%	0.5055	-3.39%	-0.6666
+39	1.18%	1.7765	-2.22%	-0.4318
+40	0.17%	0.2836	-2.05%	-0.3883

Table 24: CAAR in sub-periods around the lockup expiration day – Companies in the New Market

New Market	Two day (-1, 0) Return	Two day (0, +1) Return	Three day (-1, +1) Return	Eleven day (- 5, +5) Return	Nine day (+2, +10) Return	Thirty day (+11, +40) Return
CAAR	-0.70%	2.19%	0.81%	-2.12%	-2.86%	6.00%
Median CAAR	-1.27%	0.99%	1.36%	-1.86%	-3.21%	3.62%
t-stat	-0.2594	0.7218	0.2520	-0.9250	-0.5629	1.8302

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