

Θέλω να ευχαριστήσω τον καθηγητή κ. Εμμανουήλ Τσιριτάκη για την αμέριστη στήριξη και καθοδήγηση στην συγγραφή της συγκεκριμένης εργασίας. Ακόμη, θέλω να ευχαριστήσω τον διδακτορικό φοιτητή Ασημακόπουλο Παναγιώτη για την πολύτιμη βοήθεια και τις συμβουλές του.

Πανεπιστήμιο Πειραιώς

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1. Introduction

Academic literature concerning soft corporate announcements impact on firms' securities prices is very limited since academic research has until very recently focused on the investigation of the impact that hard information have on stock prices. But what exactly is soft and hard announcements?

According to **Petersen (2004)**, hard information are those always recorded as numbers. Hence, hard announcements could for example refer to quarterly earnings announcements, dividend announcements, etc. On the other hand he defines soft information as those mostly released in the form of text. He sets the possible forms of soft information as opinions, ideas, rumors, economic projections, statements of management's future plans and market commentary. Possible soft corporate announcements would be, announcements of firms strategic decisions (e.g. formation of alliances, joint ventures etc.), releases of information concerning the trading of insiders etc.

The goal of this paper is to analyze the impact of four distinct categories of soft corporate announcements on the firms' stock price. We studied the impact of such announcements on the stock prices of firms listed in the Athens tock Exchange (ASE). To implement this analysis we used the event study methodology , a common academic tool used to analyze the effect of firms' announcements to stock prices. The effect is measured by subtracting the normal returns for a firm's stock, found through the use of a pricing model, in our case the market model, from the actual returns that the stock posted on the market. The result is the excess or abnormal returns. If those returns are statistically significant for a period around the day of the announcement (called the event window) then the effect of the studied announcement on the stock price is important.

There is no previous academic paper that studies as wide a number of separate categories of soft corporate announcement as we do in this paper. Most of the previous studies that tackled the issue of soft corporate announcements did so by studying one distinct category each time. Of course the literature that deals with the effects of soft corporate announcements on stock prices is miniscule compared to the number of academic papers that address the impact of hard, quantifiable releases on firms' securities

prices. Furthermore, most studies investigate the case of the domestic market of the authors, providing evidence of the reaction of a number of local stock markets, to soft corporate announcements.

Suresh, Thenmozhi and Vijayaraghavan examine the stock price reaction of firms quoted to the Bombay Stock Exchange to the announcement of corporate strategic decisions, one category of soft corporate announcements. They find that investors in the Bombay Stock Exchange (BSE) react negatively to the announcement of corporate strategic decisions for a multitude of possible reasons, one of which is that the BSE follows the rationale of the Institutional Investors Hypothesis, that predicts that the markets react negatively to long term decisions with uncertain results, while they favor short term profit – bearing decisions.

Another case of a local stock market whose reaction to soft announcements was tested is the Spanish Stock Exchange. **Bayona, Corredor and Santamaria** investigate the effect of announcements of technological alliances on the involved firms' stock prices. They produce evidence that the stock price posts negative abnormal returns on the days before and after the announcement while it remains neutral on the announcement day. The results are in line with the Institutional Investors Hypothesis. What makes the study of the Spanish case more interesting for us is its proximity to Greece, not only geographically, but also historically and culturally as well as the fact that they share a number of features that helped in the shaping of their modern economic landscape.

Another group of soft announcements that we investigate is the market's reaction to the trading activity of insiders. **Lakonishok and Lee (2001)**, find that in spite of all the thirst for information about insiders trades, when releases containing such information are issued, investors do not rush to mimic the insiders' trades, as it is indicated by the negligible increase in trading volumes when such events occur (just 0,5%).

Demers and Vega (2008), investigate whether soft information contained in a form of hard announcements, earnings announcements, is utilized by investors in order to trade. They conclude that the signal emitted by soft information is not the same for everyone and the stock price of firms with credible management and increased analyst coverage appears to react more to optimistic signals my management.

By studying the case of the Athens Stock Exchange, we intend to provide evidence of the reaction of a relatively small, regional stock market, with low trading volumes to such a fresh field of study, such as the interaction between soft corporate announcements and stock prices. What makes the case of the Greek stock market more interesting is the fact that the relevant legislation is newly introduced, hence we are able to assess the following the act has gathered among local investing circles in a previously underregulated field, something that makes us believe that local investors are still wary of whether the said act will actually produce concrete results.

The four categories that we divided our sample of soft announcements are:

- (1) Changes in a firm's board of directors
- (2) Releases that provide information about the trading activity of insiders
- (3) Firms' commentary on press writings
- (4) Strategic decisions by firms

Our sample consists of Greek firms quoted in the Athens Stock Exchange during the period 2003 – 2007, the most recent confirmed bull market. We chose a bull market environment since we believe that investors react more sensibly in such a market environment than in a bear market setting when gloom and pessimism have clouded their judgment, making them nervous and unable to interpret the news flow objectively. Hence, our paper is an effort to shed some light onto whether the aforementioned announcements of the relevant corporate events have a notable impact on stock prices.

Academically, we hope that the outcomes of our research will bring to the spotlight a category of announcements that is still under-investigated by academics and lacks the necessary theoretical background. With our work we hope and wish to contribute to the compilation of this background and to probe researchers to investigate soft announcements' impact on securities prices for a larger number of local markets so that the building of a more solid theoretical background becomes possible. Managers may find our conclusions interesting and useful, since they will help them decipher investors' reactions and organize the corporate disclosure policy having in mind their shareholders best interest and the goal of the maximization of the firm's market value. Moreover, we hope that our results will prove to be useful to market practitioners because of the fact

that it will enable them to demystify the market's swings when corporate announcements are made public. Another group who might find conclusions drawn from this paper useful is regulators, since the market's reaction to announcements connected to the fresh corporate governance act is possible to act as a proxy of the acceptance and the following that the said regulation have gained among investing circles. We hope that the feedback that we provide them will help them assess their regulatory work so far and plan their next steps in order to enhance this act which may work as a shield to minority shareholders and retail investors' interests.

We find that the stock prices of firms listed in the Athens Stock Exchange do not react to **announcements of changes in a firm's board of directors**, producing no statistically significant excess returns. This could be read as a sign from market participants that the newly enacted legislation has not acquired the track record that they require so that reacting to events related to its legal field to seem natural to them.

Greek investors seem to pay a lot of attention to press writings, since securities' prices react strongly to **corporate releases commenting on press articles**. Stock prices react negatively to firm's commentary to press articles with a possible negative effect for the concerned firm's stock price. On the other hand, stock prices react even more to firms' releases that comment on press writings that are bound to have a positive effect on the relevant firm's stock price, while we have to note that the market seems to expect or have knowledge of the announcement's content one day before its release.

Market participants in the Athens Stock Exchange seem not to follow the informal investment advice of **insiders**, provided in the form of corporate announcements detailing their **trading activities**. We would like to note that investors' reaction appears to be marginally higher for insiders buying activity than insiders selling activity.

Finally, stock prices of Greek firms appear to react positively to **announcements of strategic decisions**, such as joint ventures formations, the forming of corporate alliances, etc., in line with the Shareholder Value Maximization Hypothesis. Positive abnormal returns are posted not only on the event's day but also one day before and after the announcement. Again the market appears either to have anticipated the signing of such a deal or to have knowledge of it before the actual release. All in all, the Greek Stock Market seems to incorporate newly released information quite fast.

The structure of the paper is the following. Section 2 contains a review of relevant literature; section 3 contains an analysis of our data sample. Section 4 details the methodology we followed

to reach our conclusions, while in section 5 we provide some background information about The Athens Stock Exchange. Section 6 contains the hypotheses that we formed and tested. Section 7 is an analysis of the results that we obtained from the application of the event study methodology and finally section 8 highlights our conclusions.

Πανεπιστήμιο Πειραιώς

2. Review of Literature

According to our methodology, soft announcements can be divided in a number of categories, namely, announcements of insiders trading, changes in a firm's board of directors, announcements about the forming of alliances, companies commenting on press reports and deals in general. There is no paper that directly addresses the effect of a multitude of pure soft corporate announcements on stock prices. By pure soft corporate announcements we mean corporate announcements whose content is solely soft and not hard announcements, like earnings announcements with some soft content. Though, there are a number of studies that address the effects of separate forms of soft announcements, that fall into one of our chosen categories, on stock prices. On the other hand, there is a wealth of papers that study the effect of hard corporate announcements on stock prices.

Empirical results can be characterized as mixed, though a large number of those studies find that some discreet categories of soft corporate announcements do not have an important effect on stock prices. An important portion of them refers to the national stock markets of different countries. We think that each stock market has its own characteristics depending on the regulation about corporate disclosures and insider trading and also, on the nature of the market participants (meaning whether their bulk is institutional investors or retail investors and whether this particular stock market is characterized as a developed market or an emerging market) something that affects the horizon of their investment position as well and hence the volatility of stock prices. Therefore, the results found for one particular national stock market are not conclusive, therefore giving room for more research of other national stock markets, in our case the Athens Stock Exchange.

Petersen (2004), defines hard information as those that are always recorded as numbers. On the other hand he records soft information as those often communicated in text. He sets the possible forms of soft information as opinions, ideas, rumors, economic projections, statements of managements future plans and market commentary.

Almazan, Banerji and De Motta (2007) provide a theoretical framework for the informal communication between firms and investors and how is this possible to contribute to the maximization of the firm's stock price through the connection of top management's compensation with the firm's stock price. Generally, management may see

the sharing of corporate information with investors not favorably in the case that such a thing will reveal poor performance on its side and will have an effect on its earnings.

The authors base their theoretical framework into two separate points :

- first, management is non favorably disposed against revealing corporate information when it is harmful for their track record.
- Second, non – mandatory corporate announcements may have an effect on the firm's stock price, even if they appear not to.

The agency problem becomes more severe when managers are in charge of informing investors about corporate developments and the investors' effort to verify the truthfulness of management's information becomes harder when the information transmitted is soft information, thus not backed by actual numbers and accounting data. A way to force the manager to share valid information with investors would traditionally be to tie its compensation package with the firm's stock performance, but that would work only when the stock would be undervalued and the manager had some positive developments to report. An incentive for managers to transmit valid information about the firm to the investing public is the possible scrutiny of such announcements by speculators generally and knowledgeable investors who have the necessary market intellect to see through possible cheap talk by a firm's top management.

The authors support that :

- (1) When management's compensation is linked to the performance of the firm's stock, managers are more likely to provide further information about corporate performance on their own accord.
- (2) Even corporate announcements that appear not to have any effect on the firm's stock price actually do.
- (3) When it comes to the firm's disclosure policy there is clearly a trade off, the stock price is more efficiently pricing in corporate information, but the firm's stock is an easier target for speculators.
- (4) The authors support that compensation packages linked with the stock's performance actually provide an incentive to managers to release more information in the case that the stock is undervalued. That is different from the view stated by previous literature that such compensation packages put pressure

on managers to drive the stock price upwards, forcing them to release less information or when they do, to release tampered accounting data.

Chan (2002), finds that stocks with corporate news published in newspapers display momentum, while stocks with no published corporate news do not. Chan considers two catalysts of stock price movements, after checking through the archives of news vendors, the first one is public news and the second one is significant price changes, without as it appears any news concerning the company.

Furthermore, Chan divides stocks with news into two categories, those with good news and those with bad news. He finds that stocks with negative public news show negative drift for a period that is up to 12 months, when stocks with positive corporate news show positive drift, although this drift is smaller than that of stocks with bad public news. The author deciphers that investors react more sluggishly to negative public news, something consistent with most behavioral finance theories. On the other hand, stocks with no published corporate news, that showed a significant stock price movement tend to change their trend next month.

Chan, theoretically backs his findings through two thoughts popular among market practitioners. The first one claims that investors react sluggishly to actual corporate news, hence the drift after negative news. The second one says that investors are bound to respond excessively to extreme price movements, causing large trading volumes for these particular stocks, something usually followed by reversal.

To find the news releases, Chan uses the Dow Jones Interactive Publications Library of past newspapers, periodicals and newswires. He uses releases to publications with over 500,000 subscribers to avoid news that got spotted only by a small minority of investors. The resulting set of data includes 4,200 stocks, of which 766 traded at the end of January 1980, while 1500 traded at the end of December 2000.

Lakonishok and Lee (2001) examine whether insider trading has a predictive power, if the scale of such trading has increased over time and finally, if the characteristics of individual firms play an important role on the predictive power of insider trading.

The term insiders applies to managers, top officers of various firm departments, members of the board of directors and also shareholders who own large blocks of a firm's shares.

They data consists of all insider trading activities concerning all the companies listed in NYSE, AMEX and NASDAQ for the period 1975 – 1995.

Investors , whether they are institutional or individual, display a strong interest for insider trading activities. This interest stems for the belief or the fact that insiders know better than any outsider the way their firm is doing business, its financial condition, the pipeline of projects, the timetables for new product releases, etc.

Lakonishok and Lee find that insider trading significantly increased during the 1990s, something that in a large part can be attributed to the ever increasing number of stock option plans used for executives compensation packages and the firms' efforts to overcome agency problems and bridge the gap between shareholders and management's interests. The study indicates that there is insider trading going on in at least 50% of the stocks in the sample.

The study concludes that in spite of all the thirst for information about insiders trades, when such information is made public, investors pay almost no attention at all to it, as it is indicated by the negligible increase in trading volumes when such events occur (just 0,5%).

On the other hand insider trading works as a leading indicator of the direction in which the stocks are going shortly afterwards. In general, insiders are contrarian investors, meaning that the direction of their trades are the opposite of that of the markets. The study results indicate that when insiders are buying the price of the stocks in question edges upwards and when they are on the selling side, these stocks' process decline. Insider trading predictive powers are stronger for small stocks than for large cap stocks, something explained by the fact that large companies stocks are more efficiently priced. Notably, insiders appear to invest more in small undervalued stocks (value investing), an investment style linked with high returns and limited liquidity.

Finally, the study explores how strong are the buy and sell signals of insider trading activity. When at least three insiders are on the buy side, buy signals appear to be particularly strong, backed by the fact that insiders buy stocks only in anticipation of its price going up (although the predictive power of such trades for large cup stocks seems practically non- existent). On the contrary, sell signals have limited predictive ability.

Suresh, Thenmozhi and Vijayaraghavan examine the stock market reaction to corporate strategic decisions, as far as the Indian stock market is concerned. The study divides the corporate strategic announcements into discreet categories and examine the way stock prices reacts to each category.

A first division is between “internal strategies” (referring to arganic growth, strategies that are generally regarded as low risk) and “external strategies” (companies seeking to expand through M&As, formation of joint ventures and strategic alliances, strategies that are generally considered as bearing higher risk than organic growth). The impact of capital expenditures, R&D expenditures, acquisitions, joint ventures and other external strategies on stock prices are separately examined.

A second division of strategic decisions takes into consideration the size of investments (small strategic announcements and large strategic announcements).

Third, the authors distinguish between short term and long term strategic announcements.

Fourth, a further distinction of strategic announcements is between domestic and foreign, depending of the place of the strategies implementation.

The last two categories of strategic announcements considered are those by government owned and private sector companies, a distinction based on the different corporate goals, that companies of these two categories, aim to fulfill.

Furthermore the authors make a number of hypotheses and examine whether empirical evidence validate them. These hypotheses are :

Hypothesis 12 : the stock market will positively react to public announcements of internal strategies and will negatively react to public announcement of external strategies.

Hypothesis 13: the stock market will not differentiate between the size of investments and the term of the announcements of strategic decisions.

Hypothesis 14 : the stock market will positively react to announcements of strategic decisions which are proposed to be implemented within the country and will negatively react to announcements of strategic decisions which are proposed to be implemented outside the country.

Hypothesis 15 : the stock market will positively react to announcements of strategic investment decisions of companies that are governed by “private” ownership and will

negatively react to announcements of strategic investment decisions of companies which are governed by "Government" ownership.

The sample used includes the 250 largest companies quoted in the Bombay Stock Exchange, to make sure that their corporate announcements were noted by the investors community. Furthermore, only announcements made during the time span, 01/01/2004 – 05/31/2005 were included in the sample. Moreover, since matters concerning the same strategic decision may be included in more than one announcement, only the first time the decision was made public is included in the sample. The sample was comprised by 474 announcements made by 122 of the largest companies listed in the Bombay Stock Exchange.

The results indicate that investors react negatively to the announcement of corporate strategic decisions. The authors attribute that to four possible reasons, the first being the Institutional investors Hypothesis (which states that institutional investors react positively to short term profits, while they react negatively to long term strategic decisions). The second possible explanation they offer is that the market participants already had knowledge of these corporate decisions. The third line of reasoning is that investors do not trust the management's ability to put into practice the intended corporate actions. Finally, the investors may be reluctant to trust whether the management intends to implement such strategic decisions and they fear that it's just a way to inflate the firms' stock price.

Demers and Vega (2008) examine whether the soft information contained in hard corporate announcements and more specifically earnings announcements produces useful information for investors.

The sample includes earning announcements for the period of January 1998 to July 2006 obtained from PR Newswire. The sample contains 21,580 earnings announcements by 3,764 firms. The market prices, stock returns and turnover for each stock is obtained through the Center for Research in Security Prices database.

To extract the hidden message behind soft corporate announcements the authors introduce two new dimensions to soft information, net optimism and certainty. They conclude that optimistic managerial talk gives rise to significant short period returns and it also acts as a leading indicator of the post announcement period drift. For the second

dimension of soft information, certainty, the authors find that it displays an inverse relationship with the stock price's increased idiosyncratic volatility. Furthermore, they reach the conclusion that investors pay more attention to soft information when they think that hard information are not adequate, although soft information are more slowly decoded and incorporated into stock prices. That is more common for sectors where prospects and not hard information are regarded as really important, like the software industry and high-tech firms in general.

To measure the level of optimism and certainty in earnings announcements the authors use Diction 6.0 text analysis program.

Since soft information are hard to decipher and are not quantitative, their informational content is not the same for everyone. This is why credibility of the managerial disclosures is of maximum importance and it is enhanced for companies with greater analyst and media coverage. This notion is strengthened by the fact that the stock price of firms with greater analyst coverage is more responsive to managerial optimism, while the stock price of more obscure firms is not as responsive to managerial optimism.

Bayona, Corredor and Santamaria examine the impact of various forms of alliances on the stock prices for companies listed in the Spanish stock exchange. The Spanish case is extremely interesting because of the unique characteristics of the country's business environment and its long tradition in non – collaboration between firms. A further reason that makes the Spanish case interesting for us is that the Greek business environment shares the non – collaborative culture and introversion that Spanish firms exhibit.

Spain; like Greece, has exhibited a late effort to industrialize its economy, being quite late compared with its European peers to make the transformation from an agricultural economy to an industrialized one. Another characteristic that makes the Spanish case unique and interesting to study, is the protectionism that past governments exhibited towards the country's firms (something that also applies for Greece). This led the companies to invest rather scarcely to R&D functions since the protectionist stance of the past governments made sure that they didn't have to struggle with foreign competitors in order to maintain and increase their market shares and client base. The numbers certainly back that inference since only 11% of Spanish Firms are innovative compared to 25% for the European Union and only 4,6% of Spanish SMEs (Small Medium Enterprises) form

technological alliances compared to 11,2% of their European peers. Last but not least, the Spanish public sector is the dominant force not only in the economic activity in general but also in research, being the major employer of researchers (about 80% of the whole, compared to 50% for the rest of Europe).

The authors supply a solid theoretical background to back their findings. The nature of some sectors of the industrial sector makes it necessary for their participants to form alliances in R&D for a number of reasons :

- it is difficult and expensive to pursue several lines of innovation at the same time, while the formation of an alliance allows firms to pool their resources.
- alliances help firms to achieve economies of scale and economies of scope in research
- alliances allow firms to hedge the risk associated with research through sharing the relevant expenditures.
- It is easier for companies to obtain financing for R&D projects through alliances than on a stand alone basis.
- The formation of an alliance allows to the firms involved to exploit each others comparative advantages, whether these are in R&D itself or marketing, sales networks etc.

Of course, alliances have also some disadvantages tied with them mainly connected to :

- the lack of cooperation between the partnering firms
- the lack of communication, something enhanced or made worse by the nationality of the partnering firms
- the way of sharing profits and benefits, something that is easier when the companies involved are operating in different sectors or countries.

The data used for the study contain announcements of technological alliances made public in the Spanish press during the period January 1997 – December 2000. The final sample is made of 120 announcements by 49 firms. The alliances formed are grouped according to the following criteria :

- (1) joint ventures – non joint ventures
- (2) public partner – no public partner

- (3) national partners – foreign partners
- (4) previous relationship between partners
- (5) competing partners – non competing partners
- (6) related alliance activity – non related alliance activity
- (7) number of members
- (8) location of the project

The authors find that the stock price posts negative abnormal returns on the days before and after the announcement while it remains neutral on the announcement day. The results are in line with the Institutional Investors Hypothesis that predicts that the markets react negatively to long term decisions with uncertain results, while they favour short term profit – bearing decisions.

More specifically, the study concludes that the market does not punish joint ventures formations, in line with previous literature, believing that the formality of the arrangement between the firms will make the sharing of the resulting profits easier and more fair. Furthermore, it does not punish partnerships with public research centers, maybe due to the dominant role of the public sector in R&D activities. Moreover, alliances between firms that have a history of cooperating, are viewed more favorably by the Spanish investors, since they have previous experience in operating in such a cooperating environment. Another category of alliances that investors are not negative towards are those involving Spanish partners, something attributed to better opportunities of communication between them. The Spanish market also favors partnerships between competing firms, the possible line of reasoning being that costs of coordination and collaboration are lower for firms with related activities. Finally, Spanish investors react positively to the forming of alliances whose field is related to the main activities of the partnering firms.

The overall conclusion that can be drawn from the reaction of Spanish investors, is their risk aversion, as far as research activities are concerned, something that could be expected from the non collaborating culture of the country's business community and their reluctance for innovation, due to the protectionist past which seems to still have deep roots in firms management.

3.Data

For the formation of our sample, we have collected soft announcements that appeared on the related companies web sites, the web site of Athens Stock Exchange and on the Bloomberg database during the period 01/01/2003 – 31/12/2007. We define the announcement day ($t = 0$) as the day that the press release was uploaded on the firm's web site. All the press releases concern firms listed in the Athens Stock Exchange.

We would like to expand a bit more on the reason why we chose to study the Greek market's response during the period 2003-2007. This period corresponds with the most recent confirmed bull market. We believe that all kinds of corporate announcements are interpreted somewhat differently in the setting of a bull market than in that of a bear market. Investors' reactions during downward trends are overly nervous, not really objective and tend to have more than their fair share of gloomy forecasts about the future incorporated into them. Especially, when it comes to soft corporate announcements, that do not have the solid backing of numbers to add some sense to their interpretation, we can easily see that the conclusions reached are in all probability going to be negatively biased. Another possible way that investors will decipher soft announcements during a bear market is to ignore them and not trade according to them, since they are bound to be reluctant to make trading decisions based on estimates and highly improbable at that. This is due to the fact that the world economic environment is really volatile during economic downturns and visibility about future financial results of companies and the outcomes of projects is reduced. The postponement of projects for periods when the economy is expected to recover seems to be more close to the case. To avoid all this uncertainty and its aforementioned effects on market participants' reactions and hence on stock prices we chose a bull market setting, where investors' reactions seem to be more rational, at least up to a point where irrational exuberance kicks in.

We have decided to use a 5 days event window, a criteria that all soft corporate announcements had to match. In technical terms this means, that if the company released more than that certain announcement during the 5 days before the release date and the 5 days after the release date surrounding the release date, the announcement in question is not suitable for our sample. We did that to isolate the effect of each announcement on the

firm's stock price, something that is not possible with overlapping announcements. If that restriction wasn't in place our final sample would be much larger, but since many firms release announcements even on a daily basis and sometimes more than one each day, the vast majority of press releases couldn't be included in our study and had to be rejected.

The final sample contains 255 announcements made by 60 firms, all of them listed in the Athens stock exchange. We divided the press releases in four distinct categories depending on the common categories of soft announcements found on the archives of each firm's press releases.

It is mandatory for firms listed in the Athens stock Exchange to make public the data contained in some categories of soft announcements, due to the effort of the Greek state to put the values of corporate governance to work. The categories into which we chose to distinguish soft announcements are :

- (1) trading activity concerning the firm's stock made by top executives, members of the board of directors and shareholders that are owners of significant blocks of stocks (the law's definition of significant ownership is 5% and when a shareholder breaks the 5% limit either upwards or downwards it has to notify the investing public. Furthermore, even when the holdings of such shareholders change, but at the same time remain above 5%, they still have to notify the investing public). This category contains 54 press releases.
- (2) Changes in the board of directors. This category contains 54 press releases.
- (3) Comments made by firms on the truthfulness of press articles concerning the firm or its activities. There are 63 releases falling into this category.
- (4) Strategic decisions, covering a wide span of corporate actions, including joint ventures formations, leasing of premises, all forms of alliances, etc. This last category contains 75 press releases.

We tried to collect press releases for one more distinct category of soft announcements, Corporate Presentations, which would include releases stating that the company made a presentation of its activities, financial data and future potential of growth, to analysts, institutional investors or to retail investors. We suspect that this would produce abnormal returns on the grounds of two separate reasons. First, a portion of the investors that

witnessed the presentation would try to trade on the information about the company that they gathered, something that would increase the trading volumes of the stocks. Second, other investors would try to guess the direction of involved investors' trades after the presentation and duplicate them in order to benefit from the interest in the stock and the subsequent movement of its price. Unfortunately, the announcements that matched our sampling criteria were not enough in order to investigate the interaction between this particular soft announcement and the stock price.

The sample of the 60 companies was selected at random without replacement and with no criteria about market capitalization or size of the firms in general being in place.

Sector	Number of Firms
Oil & Gas	2
Chemicals	1
Basic Resources	7
Construction Materials	6
Industrial Goods & Services	4
Food & Beverage	9
Personal & Household Goods	8
Healthcare	2
Retail	3
Media	3
Travel & Leisure	4
Telecommunications	1
Insurance	1
Real Estate	2
Financial Services	2
Technology	5

Table 1: Sectorized distribution of firms comprising the sample

Market Capitalization	Number of Firms
Large Capitalization	33
Small-Mid Capitalization	27

Table 2: Distribution of firms in the sample according to their market capitalization

To obtain returns we have used daily closing prices of the stocks of the firms included in the sample. The closing prices were obtained by the Datastream database. The formula according to which daily returns were calculated is the following $R_{it} = \ln(P_t / P_{t-1})$. Where P_t is the closing price on day t , while P_{t-1} is the closing price on day $t-1$. For the market portfolio, the Athex composite index is used since it fulfils all the requirements for such a task.

The Athex Composite index is the most suitable for representing the market portfolio, since it has a number of desired characteristics:

- it is maintained consistently (historical data about closing prices date back to the 2nd of January 1985)
- it value – weighted
- it is comprised by the 60 largest stocks of the large capitalization sector.
- it is updated twice each year

4. Methodology

To measure and analyze the impact that soft corporate announcements have on the stock price of the firm we use the event study methodology as developed by Brown and Warner at their 1985 paper, "Using daily stock returns, the case of event studies", because it better serves our cause, since we use daily returns as well.

The notion of the **event study methodology** is to try to record any possible impact that a particular event (earnings announcement, dividend announcement, soft announcement) has on the stock price of the involved firm and therefore on the market value of the firm. Moreover, the use of the event study methodology tries to isolate the effect of any such events and to separate it from any other influences on the stock price at that particular time.

The events that interest us are the soft corporate announcements made by firms listed in the Athens Stock Exchange (ASE). To better explore the impact of different types of soft announcements on stock prices we divide them into four distinct categories :

- (1) Trading activity concerning the firm's stock made by top executives or members of the board of directors.
- (2) Changes in the board of directors.
- (3) Comments made by firms on the truthfulness of press articles concerning the firm or its activities.
- (4) Strategic decisions, covering a wide span of corporate actions, including joint ventures formations, leasing of premises, all forms of alliances, etc.

Our goal is to examine whether the informational content of the aforementioned categories of soft announcements are perceived by the market that they affect a firm's capacity to produce earnings and cash flows, therefore if they have an impact on a firm's market value. More specifically:

- Investors take great interest to the trading activity by insiders since, they have better knowledge of the potential of their firm, the actual evolution of sales and cash flows before quarterly or full year earnings announcements are made and finally whether their firms have any skeletons hidden in the closet that the wider investing public is not yet aware of.

- The board of directors is responsible mainly for overseeing the corporate activities and ensuring that the top executives do not act against the shareholders best interest. As a result, a change in the board of directors may cause shareholders to feel more or less assured that the company is run properly and therefore may end up to some buying or selling activity concerning the firm's share which in turn will generate abnormal returns related to that event.
- The press is a really important source of corporate information for retail investors, who for the biggest part have not inside information, or well informed contacts in stock market related outfits, or their place of residence in geographically distanced from the market place. Therefore, firms pay great attention to the content of any published articles concerning them, because of the potentially great impact that it may have on their stock price.
- Strategic decisions directly affect the sales generation activity by firms, since it may concerns a new contract with a large client, the introduction of a new product to the marketplace, the firm's decision to tackle a new market abroad, etc. So, depending on the scope of the investors, such decisions are likely to affect the stock price of the involved firm or firms.

The sample of the 60 companies was selected at random without replacement and with no criteria about market capitalization or size of the firms in general being in place. The final sample contains 255 announcements of which 52 belong to the first category, 59 belong to the second category, 69 fall into the third category, while 75 belong to the fourth category. In event studies where the number of events is not large, any results can be into a disproportionate degree influenced by any special characteristics of a small number of firms. We consider the number of events included in our sample as adequate to eliminate any such influences.

The length of the **observation interval** is set to one day, so we calculate daily returns for all the firms that comprise the sample. As mentioned before, in the data section, the formula according to which daily returns were calculated is the following

$$R_{it} = \ln \left(P_t / P_{t-1} \right)$$

Next, we have to define the **event window**. The event window is the period of time during which we are going to examine the effect of the event on the prices of the

securities of the companies involved. Generally, the event window extends beyond the particular day that the event takes place, moreover it usually includes the day after the event to capture the effect on the stock price of announcements that were released after the closing of the market. In our case the event window is set to 10 days, 5 days before the announcement day and 5 days after the announcement day. We include in the event window 5 days prior to the announcement day to record any possibility that the content of the release was leaked to investing circles, something that will result to abnormal returns.

The length of the **estimation window** is set to be the 150 trading days prior to event window. The estimation window is the period of time over which the parameters of the model that generates the normal returns will be estimated. It is standard practice that the estimation window and the event window do not overlap, in order to make sure that the estimated parameters are free of any possible effects of the movements of the stock price the days surrounding the event. Negligence to take this possibility into account may result to the effects of the event being incorporated into both the abnormal returns during the event window and the parameters of the normal returns model. This would constitute a breach of the event study methodology, since it is set up around the notion that the effect of any event on the stock price are recorded by the abnormal returns.

We choose as the **normal returns producing model** the **market model**. The market model hypothesizes that asset returns follow a normal distribution and links the return of any stock to the return of the market portfolio.

$$R_{it} = a_i + b_i * R_{mt} + e_{it}$$

$$\text{where, } E(e_{it}) = 0 \text{ and } \text{Var}(e_{it}) = \sigma_{ei}$$

denote the period - t return on stock i and the return on the market portfolio respectively and e_{it} is the disturbance term, while a_i and b_i are the parameters of the market model. A further assumption of the market model is that asset returns are IID, meaning that they are independent and identically distributed through time.

The daily returns for individual stocks are not as close to normality as we would like and their distributions are fat-tailed, something also valid for daily excess returns. The

Central Limit theorem suggests that the distribution of excess returns converges to the normal distribution as the sample gets larger. **Brown and Warner, 1985**, note that for samples of 50 securities the mean excess return seems close to normal. Since our sample includes the stocks of 60 listed firms, we can securely assume that this condition to assume normality of excess returns is fulfilled.

In general, a stock market index which is regarded as a broad benchmark is substituting the market portfolio. In our case the Athex Composite index is used as the market portfolio.

Our next step is to **define and measure the abnormal returns**. The period of time corresponding to the **event window** is from t_1 to t_2 , symbolized as $(t_1, t_2]$ while, $t = 0$ is the event date. The **estimation window** spans from t_3 to t_1 , $(t_3, t_1]$. We decided not to use a post event window, since the events studied are not likely to cause the stock prices of the involved firms to drift at the period of time following the event window.

In order to measure the abnormal returns we first have to estimate the normal returns according to the normal returns generating model, which in our case is the market model. We estimate the parameters of the market model through the Ordinary Least Squares methodology (OLS), since OLS estimators are efficient and consistent. For a random firm's stock i from the sample the estimators are:

$$\beta_i = \frac{\sum_{t=t_0+1}^{t_1} (R_{it} - \mu_i) * (R_{mt} - \mu_m)}{\sum_{t=t_0+1}^{t_1} (R_{mt} - \mu_m)^2}$$

$$\alpha_i = \mu_i - \beta_i * \mu_m$$

$$\sigma_{ei}^2 = \frac{1}{(N_i - 2) * \sum_{t=t_0+1}^{t_1} (R_{it} - \alpha_i - \beta_i * R_{mt})^2}$$

$$\mu_i = \frac{1}{N_i * \sum_{t=t_0+1}^{t_1} (R_{it})}$$

$$\mu_m = \frac{1}{N_i * \sum_{t=t_0+1}^{t_1} (R_{mt})}$$

where N_1 is the **length of the estimation window**, $N_1 = t_1 - t_3$

Now we can measure the abnormal returns, which we symbolize as AR_{it} .

$$AR_{it} = R_{it} - \alpha_i - \beta_i * R_{mt} \quad \text{for } t = t_1 + 1, \dots, t_2$$

As we can see from the above expression of abnormal returns, in essence they are the error term of the market model.

The **null hypothesis** (H_0), in our case is that the event has no impact on the stock price of the firm, hence the mean and variance of the returns measure are not affected. Under the null hypothesis, abnormal returns will be jointly normally distributed.

$$AR_{it} \sim N\left(0, \sigma^2(AR_{it})\right)$$

$$\text{Where } \sigma^2(AR_{it}) = \sigma_{ei}^2 + \frac{1}{N_1 * \left[1 + \frac{(R_{mt} - \mu_m)^2}{\sigma_m^2}\right]}$$

The variance is comprised of two parts, the variance of the error terms (σ_{ei}^2) and the additional variance attributed to the sampling error of the market model parameters. The sampling error, which is the same for all the abnormal returns observations leads to autocorrelation of the abnormal returns despite the fact that the error terms are independent. The longer the estimation window the smaller the sampling error, which for large samples tends to be zero. When that happens the variance of the abnormal returns will be equal to the disturbance terms of the market model, hence the abnormal returns observations will become independent. We can choose the estimation window to be large enough so that abnormal returns become independent.

For us to reach conclusions for the effect of soft corporate announcements on stock prices, abnormal return observations must be aggregated, both through time and across stocks. The first stage of aggregation that takes place is through time for a single stock. To achieve that we use **Cumulative Abnormal Returns (CARs)**. CARs are defined as the aggregated abnormal returns from our sample from time T_1 to time T_2 where $t_1 < T_1 \leq T_2 \leq t_2$.

$$CAR_i(T_1, T_2) = \sum_{t=T_1}^{T_2} (AR_{it}) \text{ where } t = T_1 + 1, \dots, T_2$$

As the length of the estimation window increases the variance of CAR_i is given by

$$\sigma_t^2(T_1, T_2) = (T_2 - T_1 + 1) * \sigma_{\varepsilon_i}^2$$

When the length of the estimation window is not large then the estimator for the variance of CARs is given by adding to the expression above the expression

$$\frac{1}{N_1 * [1 + \frac{(R_{mt} - \mu_m)^2}{\sigma_m^2}]}$$

The distribution of CARs under the null hypothesis is $CAR_i(T_1, T_2) \sim N(0, \sigma_i^2(T_1, T_2))$
 The **second stage of the aggregation** of abnormal returns is performed across observations of the event, in our case meaning for announcements of the same category but across stocks. For this aggregation to be performed we have to assume that there is no clustering. **Clustering** is defined as the overlapping of the event windows of the stocks involved in the event study and the absence of such an attribute ensures that abnormal returns and cumulative abnormal returns are independent across different stocks. Aggregating ARs from events of the same category of all the involved firms we compute the sample aggregated abnormal returns:

$$AAR_t = \left(\frac{1}{n}\right) * \left(\sum_{i=1}^n AR_{it}\right) \text{ for } t = T_1 + 1, \dots, T_2 \text{ and for } i = 1, \dots, n$$

$$\text{Var}(AAR_t) = \left(\frac{1}{n^2}\right) * \left(\sum_{i=1}^n \sigma_{\varepsilon_i}^2\right) \text{ for } t = T_1 + 1, \dots, T_2 \text{ and for } i = 1, \dots, n$$

or for smaller estimation windows,

$$\text{Var}(AAR_t) = \left(\frac{1}{n^2}\right) * \left(\sum_{i=1}^n \sigma_{\varepsilon_i}^2 + \frac{1}{N_1 * [1 + \frac{(R_{mt} - \mu_m)^2}{\sigma_m^2}]}\right)$$

Then, we accumulate the average abnormal returns (AARs) for the duration of the event window:

$$CAAR(T_1, T_2) = \sum_{t=T_1+1}^{T_2} AAR_t \text{ for } t=T_1+1, \dots, T_2$$

$$Var(CAAR(T_1, T_2)) = \sum_{t=T_1+1}^{T_2} Var(AAR_t)$$

The assumption that there is no clustering is important because it leads to the covariance terms between the different days of the event window being set to equal to zero.

$$CAAR(T_1, T_2) \sim N\left[0, Var(CAAR(T_1, T_2))\right]$$

In order to test the null hypothesis that abnormal returns are equal to zero we can use the test statistic:

$$k = \frac{CAAR(T_1, T_2)}{Var(CAAR(T_1, T_2))^{1/2}} \sim N(0,1)$$

5. The Athens Stock Exchange

Next, we include a short description of the featured stock market, the Athens Stock Exchange. The Athens Stock Exchange was founded on 1876 and the number of quoted companies is 317. The denomination currency is the Euro.

The Athens Stock Exchange during the previous bull market (2003 – 2007) experienced an unprecedented boom of foreign investors' participation, which transformed the Greek market from a mostly domestic market to a largely internationalized market.

Another result of the boom of foreign participation in ATHEX was that the market capitalization increased substantially and on December 2007 it reached 196.4 billion Euros, while on December 2006 it stood at 156 billion Euros and on September 2006 it was 140.79 billion Euros.

Numbers provide solid backing to the conclusion regarding the internationalization of the Greek stock market. More specifically, on December of 2004 foreign investors' participation stood at 36.4% of total and during the next 3 years the change in participation was spectacular. On December 2005 the foreign investors cut reached 40.3% of total and on December 2006 it stood at 46.6% of total. Near the peak of the previous bull market, on December 2007, foreign investors participation reached 51.8% of total, surpassing that of domestic investors. As a result the role of foreign investors increased exponentially and as the bulk of foreign investors, that traded in the Athens Stock Exchange (ASE), was institutional investors (pension funds, mutual funds, hedge funds, proprietary trading desks of foreign investment banks) we conclude that the performance of the ASE was largely connected with the goals and motives of foreign institutional investors.

According to data for 31/12/2007, the larger part of foreign investors were institutional, their positions accounting for 39.71% of total market capitalization, while a further 3.18% of total market capitalization was attributed to positions assumed by offshore companies, with only 0.44% belonging to foreign retail investors. As far as domestic investors are concerned, 19.35% of total are retail investors, 5.61% are domestic institutional investors while 12.79% of the total market capitalization was attributed to

public sector companies, again providing evidence of the inflated role of the Greek state in the economic affairs of the country.

A geographical breakdown of foreign investors shows that their vast majority (46.81%) come from EU, and USA (24.75%). Investors from Cyprus account for 14.48% (due to the obvious cultural, geographical and economical ties between the two countries), while UK investors comprise 9.36% of total (we expect their positions to belong almost totally to institutional investors, bearing in mind the ever increasing importance of London as an international financial center and the heavy presence of hedge funds and asset management firms). It is interesting that Cayman islands, Marshall islands, British Virgin Islands and Bermuda Islands cumulatively account for 4% of total, evidence of the large participation of hedge funds in the Athens stock Exchange, since these islands, among others countries, offer tax benefits to funds based in their soil.

During the turmoil caused by the financial crisis that started in the summer of 2007 and especially after the collapse of Lehman Brothers, foreign investors departed from the Athens Stock Exchange en masse. Evidence of that is the reduction in their participation from 51.1% on September 2008 to 48.7% on November 2008. This was caused by a number of reasons, to name but a few:

- An instantaneous and spectacular rise of uncertainty regarding the survival of the international financial system with its present form.
- Fears regarding the solvency of emerging Eastern Europe economies, where Greek firms have major exposure, as well as the solvency of the Greek state.
- Mass redemptions for hedge funds forcing them to fire sales of assets, among them their positions in ASE.
- Mass redemptions for foreign mutual funds, causing a sell out that severely affected the capitalization of the Greek market.
- The closing of the Greek proprietary trading desks of foreign investment banks, that resulted in a reduction of their holdings in Greek stocks.

The latest data show that for March 2009, foreign investors hold the 46.8% of the total capitalization of the Greek market, compared to 47.3% on February 2009 and compared with 50.5% on March 2008. Finally, the total capitalization of the Greek market reached

63.1 billion Euros on March 2009, slightly increased from 58.4 billion Euros on February 2009, but posting a dramatic reduction compared to 155,2 billion Euros, where it stood on March 2008.

6. Hypotheses

We briefly explain the reasons why we chose to investigate the effect of these certain categories of soft announcements on a firm's stock price.

The **trading activity of insiders** is considered really important by investors and market participants in general and this is the reason behind the regulation imposed by the Greek state making it mandatory for firms to make data about these trades public. In the case of Greece, the existing legislation consists of law 3340/2005 and subsequently law 3556/2006, which both act to protect the public's interests against persons that are in hold of discretionary information and from trading that will result in the illegal guidance of the market.

A previous study by **Lakonishok** finds that in the case of the NYSE, AMEX and NASDAQ, despite all the attention that insider trading receives, the actual abnormal returns produced by it are not significant. The case where insider trading is more informative of the stock's price direction is small cap firms, whose trading volumes are not that high.

We would like to investigate the effect that the announcement of insiders trades has on the Greek stock market. We further divide announcements of insider trading into two separate sub-groups, buying activity by insiders and selling activity by insiders. We do that because announcements of each category will possibly give rise to abnormal returns with different signs, positive in the case of buy orders by insiders and negative in the case of sell orders by insiders. When separate abnormal returns get accumulated for the Cumulative abnormal returns (CARs) to be calculated an indiscriminate pool of abnormal returns, containing both those of buy orders and sell orders would possibly produce a CAR close to zero or more generally would produce a biased CAR that would not give an accurate picture of real abnormal returns produced.

This matter solved we can move on to an inference of what the results from the application of the event study methodology in the case of insider trading might be. We expect to find that the abnormal returns, generated by the announcement of insiders trades, to be larger in the case of the Athens Stock Exchange, since the trading volumes are much lower here (compared to the USA) and these particular trades effect should me

more pronounced. Finally, we set the null and alternative hypotheses for the tests that we perform when applying the event study methodology.

H_0 : The abnormal returns produce by the announcement of the insiders' buying activity are not statistically significant.

H_1 : The abnormal returns produce by the announcement of the insiders' buying activity are statistically significant.

And as far as announcements of insiders selling activity is concerned the null and alternative hypothesis are:

H_0 : The abnormal returns produced by the announcement of the insiders' selling activity are not statistically significant.

H_1 : The abnormal returns produced by the announcement of the insiders' selling activity are statistically significant.

Next we investigate the effect of **changes in the board of directors** on the firms' stock price. Since the board of directors is responsible for the alignment of shareholders interests and management's interests through supervising the activities of the company, any changes concerning its composition are considered important for a firm. Furthermore, the members of the board sometimes have considerable power when it comes to general assembly meetings and the voting of corporate policies. Nonetheless, we expect the abnormal returns generated by the announcements of such changes not to be significant, because the legislation about corporate governance is relatively fresh in Greece and investors are still skeptical about the effect of the new legislation and whether it will actually make a difference. As time proceeds the new legislation will become incorporated in the Greek investing culture and as a result, investors will start becoming more accustomed with it and the results it actually produced. When this happens, we expect the abnormal returns produced by such announcements to be more significant. Finally, we set the null and alternative hypotheses for the tests that we perform when applying the event study methodology.

H_0 : The abnormal returns produced by the announcement of changes in a firm's board of directors are not statistically significant.

H_1 : The abnormal returns produced by the announcement of changes in a firm's board of directors are statistically significant.

The release of announcements concerning the next category, **firms' commentary on press reports**, is not regulated by the Greek state laws (except in the case that the Stock Market Committee addresses a formal question to the company related to press writings), therefore, firms put out these bulletins in order to prevent undesired effects on the firm's stock price.

Once more, announcements of this certain category have to be distinguished in two sub-samples. One sample for announcements who will or who are expected to have a positive effect on the related firm's stock price and one for announcements that will or at least that are bound to have a negative effect on the firm's stock price. The reason that this division is applied is the same as in the case of insider trading announcements. The excess returns generated by the application of the event study methodology are bound to be of opposite signs. As a result during the calculation of cumulative abnormal returns, the calculated cumulative abnormal returns will probably be biased and will not divulge a truthful and accurate picture of the effect that such releases have on a firm's stock price, should not such a discrimination of the announcements take place.

Information generated by the Greek financial press are taken quite seriously by a large portion of the Greek investors community and mainly retail investors whose access to information is limited compared to institutional investors, who have direct access to firms' management. Hence, we expect announcements of this kind to produce notable abnormal returns, whose direction depends on the content of the announcement. Finally, we set the null and alternative hypotheses for the tests that we perform when applying the event study methodology.

H₀: The abnormal returns produced by the announcement of a firm's commentary on press writings, that is bound to have a negative effect on a firm's stock price, are not statistically significant.

H₁: The abnormal returns produced by the announcement of a firm's commentary on press writings, that is bound to have a negative effect on a firm's stock price, are statistically significant.

And as far as announcements, who will or who are expected to have a positive effect on the related firm's stock price, are concerned the null and alternative hypothesis are:

H₀: The abnormal returns produced by the announcement of a firm's commentary on press writings, that is bound to have a negative effect on a firm's stock price, are not statistically significant.

H₁: The abnormal returns produced by the announcement of a firm's commentary on press writings, that is bound to have a negative effect on a firm's stock price, are statistically significant.

Finally, announcements concerning **strategic decisions** by firms are regarded as really important and their effect on a firm's sales, earnings and cash flows more than noteworthy. A firm's strategic decisions, such as the formation of a joint venture entity with a domestic or a foreign partner, the signing of a contract to supply a major multinational company, the right to distribute a foreign firm's products overseas, the right to develop a brand's network overseas, etc. are seen as decisions that increase the value of the firm. Hence they are in line with one of the premier corporate goals, the maximization of the market value of the company (according to the value maximization hypothesis). Though, many of the benefits of these decisions are not expected to be displayed in the short term but in the long term. So if the market is not responding favorably to long term value adding strategies, such strategies are not actually in line with the goal of maximizing the firm's market value. As mentioned earlier, a number of studies have already investigated the effect of announcements of strategic decisions on the stock price.

Bayona, Corredor and Santamaria find that stock prices of firms quoted in the Spanish stock exchange edge downwards on the days before and after the announcement, while they remain unaltered on the announcement date, hence supporting the Institutional Investors Hypothesis. Srinivashan Suresh, M. Thenmozhi and P. Vijayaraghavan study the reaction of stock prices of firms listed in the Indian Stock Exchange to corporate strategic decisions. They conclude too, that investors are not favorably disposed against such decisions, again in line with the Institutional Investors Hypothesis.

In our case our expectation are quite similar to the outcomes in the Spanish case. This can be attributed to all the similarities between the two countries, their geographical proximity, the fact that both started to develop industrially quite late compared to their European peers (hence, lacking the necessary culture for developing and running such businesses) and the similarities in temperament and composure, meaning their lack of trust in people in the task of surveying that such operations are run legitimately. Another fact that distinguishes the Athens Stock Exchange is that the bulk of investors are institutional and most of them are foreign. According to the "Axia numbers" monthly publication of the Hellenic Exchanges Group, on December 2007, foreign investor participation was 51.8% as far as all the listed companies are concerned. While for FTSE/ATHEX 20 listed companies foreign investors participation reached 60.1%. If you combine the aforementioned features, the fact that Greek investors are skeptical regarding the truthfulness of managerial announcements and that the bulk of investors in the ASE are institutional, we expect stock prices to react either negatively to strategic announcements or to remain unchanged (as investors wait to see the first signs of how such decisions are faring). Finally, we set the null and alternative hypotheses for the tests that we perform when applying the event study methodology.

H_0 : The abnormal returns produce by the announcement of a firm's strategic decisions are not statistically significant.

H_1 : The abnormal returns produce by the announcement of a firm's strategic decisions are statistically significant

There are three hypotheses that try to tackle the investors' reaction to various corporate actions:

- (1) **The Shareholder Value Maximization Hypothesis**, which hypothesizes that investors will assess long term strategic decisions favorably since they increase the value of the firm, hence investors will issue buy orders and drive the stock price upwards after such announcements.
- (2) **The Rational Expectations Hypothesis**, which hypothesizes that investors objectively investigate strategic decisions, weighing the pros and cons of such decisions in the same way. As a result, they do not react in such corporate decisions leaving the firm's stock price unaltered.
- (3) **The Institutional Investors Hypothesis**, which hypothesizes that investors will react in the rationale of institutional investors, focusing on short term benefits, therefore, reacting negatively to strategic decisions. This will result in the firm's stock price deteriorating after announcements of this kind.

We would like to test which one of the aforementioned hypotheses holds in the case of the Athens Stock Exchange. Furthermore to sum up the previous analysis about each category of soft announcements the testable hypotheses are:

- a. **Hypothesis 1:** The announcement of insider trades will produce statistically significant abnormal returns. The direction of abnormal returns will depend on whether the announced trade was a buy or sell order.
- b. **Hypothesis 2:** The announcement of changes in the board of directors will not produce statistically significant abnormal returns.
- c. **Hypothesis 3:** Firms' comments on press articles will produce abnormal returns. Again, the direction of produced abnormal returns will depend on the content of the announcement.
- d. **Hypothesis 4:** We expect the announcement of firms' strategic decisions to result in negative abnormal returns.

7. Results

In this section we discuss and try to explain the results from the application of the event study methodology for the four distinct categories of soft corporate announcements issued by firms quoted in the Athens Stock Exchange (ASE).

The first category of announcements are **changes in the firms' board of directors**. The results from the application of the event study methodology showed that the market does not react to such announcements. The abnormal returns were for most days of the event window negative but insignificant, the only days that abnormal returns were positive were days 4 and 5, when any possible effects had possibly worn off. Part of the negative abnormal returns at the days prior to the announcements could be explained by possible sales of shares by investors linked with the member of the board of directors that steps out, as in the day before the event where the abnormal returns were -0,45% with a p-value of 0.18. (see table 3A)

The negative abnormal returns confirm the theoretical notion that in most of the cases it is regarded as negative when such change occur, since the inner stability and equilibrium of the management and shareholders interests might be temporarily affected and in all probability a period of time will be required for this equilibrium to be restored. Although the fact that abnormal returns are insignificant points out that investors in Greece do not regard it as such an important corporate event so as change their holdings in the concerned firm. The conclusion that we regard as most important is that the newly introduced legislative act, that introduced the Greek corporate environment with the principals of corporate governance, has not yet gained the trust of the Greek investing public, which still regard with some suspicion the relevant efforts. This is something that can be observed worldwide because of the well known agency problem, which states the difference between the interests of shareholders and management and if we take it a step further the misalignment between the interests of large shareholders and minority shareholders. Until the freshly cut legislation acquires a certain track record which will make it gain the approval of investors we think that announcements of this kind will continue not to produce significant abnormal returns. All in all, the results produced seem not to be able to overrule our 2nd hypothesis.

Event period	N	AAR t	T stat	p-value
t-5		-0.001533	-0.445673	0.656643
t-4		-4.43E 05	-0.012880	0.989745
t-3		-0.001974	-0.573949	0.567086
t-2		-0.000353	-0.102716	0.918361
t-1		-0.004569	-1.328379	0.186595
0		0.001855	0.539256	0.590718
t+1		-0.000963	-0.280065	0.779914
t+2		-0.001531	-0.444964	0.657154
t+3		-0.004699	-1,365947	0.174532
t+4		0.001472	0.427995	0.669428
t+5		0.002452	0.712947	0.477274

Table 3A

Daily average cross sectional abnormal returns, t-statistics and p-values for the period of the event window for the event of changes in the board of directors.

The Cumulative Abnormal Returns obtained paint the same picture. For the interval of [-5,-1] the Cumulative Abnormal Return equals -0.8% and with a p-value of 0.31 is statistically insignificant even at the 10% level of statistical significance. . Next, for the interval [-1,1] which contains the day of the announcement as well, the Cumulative Abnormal Return is -0.3% with a p-value of 0.6, that makes it statistically insignificant even at the 10% level of statistical significance. Finally, for the last two intervals that we obtained Cumulative Abnormal Returns for, the picture is the same, as both have negative Cumulative Abnormal Returns, with both of them being statistically insignificant even at the 10% level of statistical significance. (see table 3B)

Event Period	CAR t	T-stat	p-value
[-5,-1]	-0.008474	-1.005759	0.316572
[-1, 1]	-0.003068	-0.514903	0.607576
[2, 3]	-0.002494	-0.512673	0.609131
[2, 5]	-0.003268	-0.424868	0.611700

Table 3B

Cumulative Average cross sectional excess returns, t-statistics and p-values for the period of the event window for the event of changes in a firm's board of directors

The **results** obtained for the next category of announcements, **strategic decisions of firms** are the on the contrary of what we expected in our hypotheses. More specifically, the abnormal returns obtained for the day of the event ($t = 0$), as well as the days before ($t = -1$) and after the event ($t = 1$) are positive and statistically significant at the 5% level of confidence. More specifically the day before the announcement we observe abnormal returns of 0.5% with a p-value of 0.03, the day of the announcement the abnormal return is the largest of all being 0,8% with a p-value of 0.0004, while on the day after the announcement the excess return observed is 0,52% with a p-value of 0.024.(see table 4A)

This contradicts the Institutional Investors Hypothesis, which supports that investors, following the rationale of institutional investors, will react negatively to firms' decisions of this kind, hence producing negative abnormal returns, since they are interested in short term profits and value enhancing decisions, while most strategic decisions add value to the firm in the long run. The results provide support to the **Shareholder Value Maximization Hypothesis** since investors appear to react positively to such strategic decisions that produce long term benefits for the firms involved. The fact that, in the day before the announcement is made public, we also observe positive abnormal return, points to the finding that apparently the market acquired information about the decision and several informed investors and entities connected to them traded on them. Furthermore, the fact that, as far as the days after the announcement are concerned, only abnormal returns in the first day are positive and statistically significant, leads as to the realization that investors in the Athens stock exchange react fast to such announcements and that diffusion of information is relatively fast.

The fact that our findings contradict that of **Bayona, Corredor and Santamaria for the similar case of Spain**, can be attributed to the fact that despite the large presence of foreign institutional investors, the sheer geographical distance makes them less active traders because of their limited access to information, to obtain which they have to rely to their Greek counterparts which may not always be so forthcoming. Moreover, the institutional investors' hypothesis and its commands are still not quite popular with retail investors and if someone is not an institutional investor he/she certainly doesn't form his/her investment strategy with their goals in mind. Finally, the most popular form of

financial theory is still classic financial theory, the one still taught at universities and business schools at large. Classic financial theory hypothesizes that firms' decisions of alliances, joint ventures formations and all kinds of corporate cooperation add value to the firm in the long term, making investors positively predisposed against such announcement. From all these, we conclude that the Greek investing public seems to follow the **Shareholder Value Maximization Hypothesis**.

Event period	N	AAR t	T stat	p-value
t-5		-0.000798	-0.346074	0.729898
t-4		-0.000564	0.244620	0.807172
t-3		-0.000164	-0.071001	0.943516
t-2		-0.002707	-1.174449	0.242560
t-1		0.005049	2.190670	0.030425
0		0.008348	3.622380	0.000430
t+1		0.005235	2.271496	0.024914
t+2		0.001287	0.558487	0.577561
t+3		0.001750	0.759524	0.449041
t+4		-0.000986	-0.427865	0.669523
t+5		0.002305	1.000116	0.319284

Table 4A

Daily average cross sectional abnormal returns, t-statistics and p-values for the period of the event window for the event of the announcement of firms' strategic decisions.

Cumulative Abnormal Returns for the interval of [-1,-5] are positive and statistically insignificant even at the 10% level of statistical significance with a p-value of 0.73. For the interval [-1,1] the Cumulative Abnormal Return is 1.06% with a p-value of 0.00841 which makes it statistically significant even at the 1% level of statistical significance. Furthermore, the Cumulative Abnormal Return for the interval [2,3] 0.65% and statistical significant too at the 5% level of statistical significance with a p-value of 0.047. Finally, for the interval [2,5], the last one that we calculated CARs for, the relevant Cumulative Abnormal Return is 0.9% with a p-value of 0.065, something that makes it statistically significant at the 10% level of statistical significance. (see table 4B)

Event Period	CAR t	T-stat	p-value
[-5,-1]	0.001945	0.344466	0.731104
[-1, 1]	0.010690	2.678098	0.008451
[2, 3]	0.006522	2.001100	0.047657
[2, 5]	0.009591	1.861195	0.065184

Table 4B

Cumulative Average cross sectional excess returns, t-statistics and p-values for the period of the event window for the event of the announcement of firms' strategic decisions.

The next category of announcements is **firms' commenting on press articles** in the case that they believe that the content of an article does not reflect reality and may harm the firm's prospects and corporate planning or in the rarer case that there was a formal question addressed to the firm by the Capital Markets Committee connected to the said article. We divide the announcements into two distinct categories, **commentary** that is bound to have a **negative effect** on the company's stock price and **commentary** that is bound to have a **positive effect** on the firm's stock price. If this distinction was not applied, then positive and negative abnormal returns would sum up to zero and the cumulative abnormal returns produced would not reflect the real effect of the said announcements on the stock price and would give a biased picture of reality. A further issue that we have to bear in mind is the ambiguous nature of announcements of this kind since some investors may interpret it in a certain way and some others in a completely different one. We did our best to overcome this issue too, through the thorough investigation of the announcements and our meticulous effort to consider all possible interpretations of the releases' content.

As far as **commentary with a possibly negative effect** is concerned the only day that the produced abnormal returns are statistically significant is the day of the event ($t=0$), when the news are diffused in the investing public. To be more precise, excess return on the event day is -1.48% with a p-value of 0.000848, which makes it significant at the 5% level of statistical significance and even at the 1% level of statistical significance. Furthermore, the said effect appears to be quite large, since the abnormal return on the day of the announcement is one of the largest of all statistically significant abnormal

returns on all the studied events, something pinpointed even more by the fact that excess returns are significant even at the 1% level of statistical significance. (see table 5A)

This fact seems to confirm our hypothesis that press writings are an important source of information for retail investors (and in some cases the only source) and investors who perform distance investing, meaning that they reside in countries other than Greece. Another conclusion that can be drawn is that investors seem to consider the information divulged through the press reliable since they react and trade according to it, at least when it comes to relatively negative news. Finally, abnormal returns on the days preceding the announcement are all statistically insignificant and positive, something that induces us to strongly believe that the content of the press release appears not to have leaked to the public. That appears to be logical, since the company would not want to give rise to negative rumors that would in all probability confuse investors and may prompt a sell off of its stock, as rumors in some cases appear to affect a firm's stock price more than solid facts.

Event period	N	AAR t	T stat	p-value
t-5		0.001409	0.325763	0.745176
t-4		2.45E-06	0.000566	0.999549
t-3		0.006561	1.516726	0.131988
t-2		0.003820	0.883070	0.378979
t-1		0.006819	1.576571	0.117549
0		-0.014809	-3.423586	0.000848
t+1		-0.001696	-0.392103	0.695684
t+2		-0.002854	-0.659745	0.510692
t+3		-0.001566	-0.362145	0.717876
t+4		-0.001576	-0.364248	0.716319
t+5		-0.001360	-0.314340	0.753813

Table 5A

Daily average cross sectional abnormal returns and t-statistics and p-values for the period of the event window for the event of negative commentary on press writings

As far as Cumulative Abnormal Returns (CARs) are concerned, for the days before the event [-1,-5], the relevant figure is, as expected from the above, positive and equal to 1.86% and statistically significant at the 10% level of statistical significance, with a p-value of 0.081. For the interval of [-1,1] the relevant CAR is equal to -0.4% with a p-value of 0.57, not being statistically significant at the 5% or even at the 10% level of statistical significance since only excess returns for the event day were significant at the 1% level. Cumulative Abnormal Returns for the intervals of [2,3] and [2,5] are both negative and statistically insignificant even at the 10% level of statistical significance. (see table 5B)

Event Period	CAR t	T-stat	p-value
[-5,-1]	0.018611	1.756568	0.081564
[-1, 1]	-0.004170	-0.556534	0.578891
[2, 3]	-0.004550	-0.743769	0.458482
[2, 5]	-0.009051	-0.935830	0.351256

Table 5B

Cumulative Average cross sectional excess returns, t-statistics and p-values for the period of the event window for the event of negative commentary on press writings

On the other hand, in **commentary which is bound to have a positive effect on stock prices**, the picture appears to be somewhat different. The day that observed abnormal returns are statistically significant is not only the day of the announcement but also the day, two days prior to the announcement. The observed excess returns are 0.83% two days before the announcement, with a p-value of 0.0418, while on the day of the event the abnormal return is 1.96% with a t-stat of 4.857. That differentiates this announcement from the previous case in that now investors appear to have knowledge of the content of the press release (or have somehow anticipated it), who hurried to take advantage of the acquired information or the floating rumors and trade according to it. In the case of positive commentary companies are not that careful to guard the confidentiality of the announcement's content, since a possible positive effect on the stock price is definitely more desired than a negative one. On the day of the announcement the observed

abnormal returns are quite large and considerably larger than those observed when the contingent effect of the press release is negative. To sum things up, investors seem to react more enthusiastically when the content of the firm's press release is positive and less enthusiastically when the content is negative (e.g. when the firm denies press writings about the possible formation of a joint venture entity), leading to much larger excess returns. (see table 6A)

Event period	N	AAR t	T stat	p-value
t-5		0.003577	0.884638	0.378136
t-4		-0.004459	-1.102602	0.272425
t-3		0.004643	1.148119	0.253222
t-2		0.008321	2.057627	0.041810
t-1		-0.000321	-0.079406	0.936843
0		0.019642	4.857089	3.66E-06
t+1		-0.004876	-1.205719	0.230318
t+2		0.000423	0.104569	0.916894
t+3		-0.003156	-0.780354	0.436732
t+4		-0.004115	-1.017520	0.310970
t+5		-0.000624	-0.154398	0.877557

Table 6A

Daily average cross sectional abnormal returns, t-statistics and p-values for the period of the event window for the event of positive commentary on press writings

Cumulative Abnormal Returns for commentary with a possibly positive impact on securities prices are positive for the interval of [-5,-1] and equal to 1.17% but statistically insignificant even at the 10% level of statistical significance, with a p-value of 0.237. On the contrary, for interval [-1,1] Cumulative Abnormal Return is again positive, equal to 2.76% and statistically significant even at the 1% level of statistical significance with a really low p-value of 0.000135, showing the intensity of investors' reaction on the announcement day. For the interval [2,3] and [2,5] Cumulative Abnormal Returns are both negative and insignificant even at the 10% level, proof the investors in the ASE react really fast to the relevant releases and their informational content is quickly priced in the stock prices. (see table 6B)

Event Period	CAR t	T-stat	p-value
[-5,-1]	0.011761	1.187339	0.237458
[-1, 1]	0.027642	3.946368	0.000135
[2, 3]	-0.004453	-0.778630	0.437743
[2, 5]	-0.012348	-1.365532	0.174662

Table 6B

Cumulative Average cross sectional excess returns, t-statistics and p-values for the period of the event window for the event of positive commentary on press writings

The last category of announcements whose effect on the related firm's stock price we investigated, are the **trading activity of insiders**. Again, announcements of this category had to be divided in two sub-samples, since selling activity by insiders could trigger further selling activity by other investors, while buying activity by insiders could lead to other investors mimicking their trades and issuing buy orders. Sell orders could lead to negative abnormal returns, whereas, buy orders could lead to positive abnormal returns and the accumulation of these said abnormal returns could distort the actual picture since their sum could be close to zero.

Results indicate that the **announcement of insiders' buying activity** seems not to have any effect on the stocks quoted in the Athens Stock Exchange. All observed excess returns are statistically insignificant at a 5% level of significance and even at a 10% level of significance. The day of the announcement the abnormal return produced is positive and again insignificant, while the pattern of abnormal returns on the days of the event window seems not to point to investors replicating the insiders' trades, since on the day following the event the excess returns might be positive but are highly insignificant (with a p-value of 0.8). Moreover two days after the announcement, the abnormal return switch to negative, while it still is statistically highly insignificant (with a p-value of 0,6), erasing any notion of investors mimicking the trading of insiders, as far as buying orders are concerned. The day that the actual insider trading takes place is the one before the announcement day. On that day too, excess returns are positive but still not statistically

significant (their p-value being 0.57), something that rules out the possibility that numerous investors connected with the insiders form their stock purchases according to that of the insiders. Lakonishok and Lee (2001), point out that insider purchases are more informative, since there is one single motive for them to buy stocks, to make a profit. Our conclusions do not point to the buying activity of insiders gaining a great following among investors in the Athens Stock Exchange. One possible explanation could be that Greek retail investors have grown cautious to the insiders' motives of buying their firm's stock after the not so rosy way that the Athens Stock Exchange got colored by the Greek mainstream media during the 1999 period. (see table 7A)

Event period	N	AAR t	T stat	p-value
t-5		-0.003187	-0.857459	0.392915
t-4		-0.005744	-1.545265	0.124938
t-3		0.000178	0.047888	0.961886
t-2		0.001725	0.464163	0.643386
t-1		0.002086	0.561258	0.575677
0		0.000946	0.254506	0.799544
t+1		0.000937	0.252140	0.801368
t+2		-0.001927	-0.518371	0.605162
t+3		0.002629	0.707282	0.480774
t+4		-0.001372	-0.369124	0.712691
t+5		0.001202	0.323322	0.747019

Table 7A

Daily average cross sectional abnormal returns, t-statistics and p-values for the period of the event window for the event of insiders buying activity

As far as Cumulative Abnormal Returns for the event of buy orders issued by insiders are concerned the picture remains unaltered from our previous inferences. For the days before the event, meaning the interval [-5,-1] the Cumulative Abnormal Return is -0.4% with a p-value of 0.58, that makes it statistically insignificant even at the 10% level of statistical significance. For the interval of [-1,1], that contains the day of the event as well, the Cumulative Abnormal Return is positive, as expected, but statistically

insignificant even at the 10% level of statistical significance, its p-value being 0.46. For the remaining two intervals, which concern the days after the announcement, [2,3] and [2,5], their CARs are negative and positive respectively, as well as highly insignificant statistically wise, confirming the fact that the buying activity of insiders has no significant effect on securities prices. (see table 7B)

Event Period	CAR t	T-stat	p-value
[-5,-1]	-0.004941	-0.542736	0.588327
[-1, 1]	0.004757	0.738960	0.461386
[2, 3]	-0.000990	-0.188254	0.850998
[2, 5]	0.001469	0.176760	0.859997

Table 7B

Cumulative Average cross sectional excess returns, t-statistics and p-values for the period of the event window for the event of the announcement of insiders buying activity.

The results obtained for the **insiders selling activity** more or less confirm our conclusions for their buying activity. The said activity by insiders appears to be unnoticed by the Greek market participants and we could stress it a bit more by saying that it is even less influential than the buy orders filled by insiders. All abnormal returns for the span of the event window are not statistically significant at the 5% level of significance with most of them being highly insignificant (with seven out of eleven having p-values more than 0.7), while the only excess return that is statistically significant at the 10% level, being the one on the day before the event, with the said abnormal return being positive. This along with the fact that the excess return obtained for the announcement day is also positive but insignificant confirm the fact that the Greek investing public does not pay any attention to the sell orders issued by insiders. Moreover, the fact that on the day before the announcement, the day where the actual trading by the insider was executed, relevant excess return was positive could be explained by one simple fact. Insiders have intimate knowledge of the performance of their firm's operations, the flow of orders and its prospects for the next few quarters, something that enables them to know the direction of the firm's upcoming financial results. More importantly it enables them to sell before

the firm's stock price takes a hit when rumors about possible faltering upcoming economic results start flowing among investors and the press or when the actual results are reported. Essentially, this means that insiders adhere to the rational of contrarian investing. Our findings could once more be attributed to the fact that Greek retail investors are reluctant to accept the actions of insiders at face value after the not so rosy way that the Athens Stock Exchange got colored by the mainstream Greek media during the 1999 period. (see table 8A)

Event period	N	AAR t	T stat	p-value
t-5		-0.001275	-0.276321	0.782781
t-4		0.004897	1.061742	0.290503
t-3		-0.001546	-0.335274	0.738009
t-2		0.002111	0.457711	0.647995
t-1		0.007769	1.684300	0.094745
0		0.000892	0.193482	0.846911
t+1		-0.002007	-0.435137	0.664251
t+2		-0.000463	-0.100373	0.920217
t+3		-0.001774	-0.384571	0.701242
t+4		-0.004940	-1.071009	0.286333
t+5		0.001652	0.358124	0.720885

Table 8A

Daily average cross sectional abnormal returns, t-statistics and p-values for the period of the event window for the event of insiders selling activity

Finally, we analyze Cumulative Abnormal Returns as well, that more or less lead to the same conclusions as Average Abnormal Returns. For the interval [-5,-1] the Cumulative Abnormal Return is 1.19% with a p-value of 0.29 which makes it statistically insignificant even at the 10% level of statistical significance. For the interval of [-1,1] the Cumulative Abnormal Return is equal to 1.07% and again statistically insignificant even at the 10% level of statistical significance, with a p-value of 0.18. Cumulative Abnormal Returns for the other two intervals that we chose are both negative and highly insignificant even at the 10% level of statistical significance. (see table 8B)

Event Period	CAR t	T-stat	p-value
[-5,-1]	0.011956	1.058244	0.292087
[-1, 1]	0.010772	1.348398	0.180091
[2, 3]	-0.002470	-0.378663	0.705613
[2, 5]	-0.007532	-0.730284	-0.466652

Table 8B

Cumulative Average cross sectional excess returns, t-statistics and p-values for the period of the event window for the event of insiders selling activity

All in all, our findings are to the contrary to what we had assumed in hypothesis 1, since investors seem to practically ignore the trading activity of insiders despite all the effort made by the Greek state with the newly introduced legislation that makes it mandatory for firms to inform the general public about such trades. We had hypothesized that such trades would have a greater impact on stock prices in the Athens Stock Exchange and would produce statistically significant excess returns, since the trading volumes are much lower than major international markets, like the NYSE, where **Lakonishok and Lee (2001)**, claim that they do not observe any significant changes in the stock prices around the time that insider trades are announced or at the time surrounding the actual trading by insiders. We conclude that buy orders from insiders relatively attract more interest than sell orders, even marginally. The fact that during the period studied (2003 – 2007), the previous bull market, trading volumes in the ASE increased impressively, made any following the insider trades gathered even more insignificant and its actual effect on stock prices negligible.

8. Conclusions

In our paper we investigate the effect that four distinct categories of soft corporate announcements have on the stock prices of the relevant firms. Our sample is made up of announcements from the period of 2003 – 2007, the previous bull market, since our intention was to check the Greek investors' reaction to soft corporate announcements in a period that calm prevailed in the Athens Stock Exchange (ASE). These announcements were issued by Greek firms quoted in the Athens Stock Exchange. We consider investors' reactions in such an environment more representing of their actual views on the said announcements than in a period of bear markets, when gloom and pessimism prevails and correlation between stocks' returns skyrockets. We think that investors' reactions during bear markets are overly nervous and they do not seem to decipher the content of soft announcements in an impartial way, so the conclusions drawn from their reactions are not unbiased.

To analyze the stocks' reaction to soft corporate announcements and to reach our conclusions we use the event study methodology and we analyze excess returns over the period of the event window that we designated.

As far as announcements of changes in the board of directors are concerned we produce evidence that stock prices of the studied firms in the Greek stock market do not react to such announcements in any day during the designated event window. Abnormal Returns and Cumulative Abnormal Returns for the studied days are all statistically insignificant and reflect that investors remain neutral when such releases are issued by firms listed in the ASE. Investors seem not to have embraced with trust the freshly introduced legislation about corporate governance, which aims to align the interests of management, large shareholders and minority shareholders. In the mind of the Greek investing community the relevant stature does not appear to adequately address the agency problem yet, though we strongly believe and we certainly hope that as the said act becomes a fixture in the minds of investors and acquires a certain track record, that this situation will change.

The next category of soft announcements whose effect on securities prices we studied is firms' commentary on press writings. To better investigate the effect of such releases and to ensure unbiasedness for our results we divided the announcements in two separate sub groups, announcement with negative effect on stock prices and announcements with a positive effect on stock prices.

Releases with a possibly negative effect on stock prices, actually affect securities prices negatively on the announcement day, with the said effect to be quite large and highly statistically significant. Securities listed in the Athens stock exchange appear to price in the effect of the release quite quickly since for the days following the announcement excess returns are statistically insignificant. The content of the release appears not to have leaked to the investing circles on the days preceding the announcement since all excess returns are not statistically significant, something that is quite logical since the firms are reluctant to start the circulation of rumors that would batter their stocks' prices and complicate things unnecessarily.

Announcements which are bound to have a positive effect on stocks prices have a rather large and statistically significant effect on stock prices on the day of the announcement's circulation. The difference is that the same applies for two days prior to the announcement, when the relevant excess return is also statistically significant. This may mean that the market had knowledge about the content of the release before the day of the official announcement. Firms obviously are less cautious of the content of a positive announcement leaking since it will probably won't do any harm to their stock price. Again, stocks quoted in the ASE seem to quickly incorporate the new information since on the days that follow the announcement excess returns are mostly negative and statistically insignificant.

Another category of soft announcement whose interaction with the issuing firm's stock price we tried to analyze are firms' strategic decisions. The stock price of the announcing firm reacts positively the day of the announcement of the said strategic decisions, with the respective excess returns being statistically significant. Moreover, the stock price posts positive abnormal returns both on the day before the release and on the day after the release, with the relevant excess returns being statistically significant. Besides the day following the release all other excess returns for the days after the release are statistically

insignificant, providing evidence again of the Greek market's quick reaction to the inflow of new information. Furthermore, the fact that on the day before the official release, the market posts another positive and statistically significant return, make it seem like the market had prior knowledge of the upcoming deal before or that market participant had somehow anticipated such a decision from the involved firm.

The last group of soft corporate announcements that underwent scrutiny are trading by insiders which according to the fresh act for corporate governance are to be made public. Again, to make sure that our results are unbiased and portray the actual picture we divided the releases into two distinct sub-groups, insiders buying activity and insiders selling activity.

Our results point out that insiders buying activity does not affect the stock prices of firms trading in the Athens Stock Exchange. Even though that trading volumes at the ASE are much lower than in other larger Markets, the impact of the actual trading by insiders seems negligible, since on the day of the actual trade, the day before the announcement, excess returns are positive but statistically insignificant. Moreover, on the days following the event Greek investors do not seem to replicate the said trades en masse, since the relevant excess returns are not significant.

The selling activity of insiders again seems not to have any effect on securities prices quoted in the ASE. What is interesting is that the selling activity of insiders appears to attract less attention than their buying activity, since on the day of the release the excess return is positive as well as on the day that the actual trade takes place, something that could mean that in the ASE insiders adhere to the rationale of contrarian investing. Our results produce evidence that despite the admiring regulatory effort to bring the trading of insiders on the spotlight, the Greek investing community appears not to pay special heed to it. This could be attributed to the fact that Greek investors are reluctant to take insiders actions on face value after the not so rosy way that the ASE got portrayed in the 1999 period from the mainstream Greek media.

All in all, we would like to highlight the possible trend that Greek investors seem to regard most of the regulatory imposed announcements warily (insider trading releases and changes in the board of directors) maybe except firms' comments on press articles (because in some cases releases by firms were triggered by questions addressed by the

Capital Markets Committee). They appear to pay more attention to the information that firms voluntarily choose to disclose to the public. That confirms the fact that the newly introduced act about corporate governance does not seem to have gained the trust of Greek investing circles.

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