

Erasmus University Rotterdam

Implications of Going Private: An Empirical analysis of the effects of Going Private transactions on the Financial Reporting Quality and Stock Market

A Master Thesis

By

Nazife Oner

Department of Accounting, Audit and Control

30 August 2016

Supervisor: Dr. Y. Gan
Second Reader: Dr. C.D. Knoops

ABSTRACT

Skepticism, concerning the reporting quality of firms that want to transform public firms into private, are dating back to the 80'. Several studies in those years made an attempt to figure out what is actually going on in firms prior to a buyout. Like (DeAngelo, 1986), who researched the relationship between earnings management and buyout transactions. Her conclusion was that managers of buyout firms have an incentive to undervalue results, so that the shares can be acquired at a lower price. Also, several studies have established a connection between earnings management and management buyouts. Managers hereby have the "temptation" to inflate the profits. A study by Perry & William (1994) showed that the profits were directed downwards (negative unexpected accruals) prior to a management buyout.

The aim of this paper is to analyze the effects of Going Private Transactions on the Financial Reporting Quality. This study especially focusses on examining accounting restatements – an important attribute of financial statement quality - prior to delisting. I analyzed company press delisting announcements and determine specific years of restatements occurrence and measure market response.

The results were quite surprising. I found that a firms going private decision has a significant negative effect on restatements, which implies that after the going private announcement, the probability of restatement has decreased, so before the agreement of going private, the chance of deterioration of the reports was relatively higher

I also examined the relation between financial reporting quality and stock returns and find no indication that restatements provide negative returns. Also the firms going private announcement does not deflate abnormal returns, but in turn increases the stock price.

TABLE OF CONTENTS

Chapter	Page
ABSTRACT.....	ii
TABLE OF CONTENTS.....	iii
LIST OF TABLES.....	iv
CHAPTER I: Introduction.....	1
CHAPTER II: Background and Literature Review.....	5
2.1 Public-to-private transaction.....	5
2.2 Pre-repurchase behavior.....	6
2.3 Restatements.....	8
2.4 Pre-repurchase stock price movement.....	11
CHAPTER III: Theoretical background and hypothesis development.....	13
3.1 The Principal Agent Problem.....	13
3.2 Financial reporting behavior prior to buyout.....	15
3.3 Stock price effects.....	16
CHAPTER IV: Research Design.....	17
4.1 Data source and sample selection.....	17
4.2 Data description.....	18
4.3 Methodology.....	20
4.3.1 Measuring pre-repurchase Financial reporting behavior.....	20
4.3.2 Measuring market reaction I analyze the market reaction to the pre-repurchase restatement announcements.....	22
4.4 Descriptive statistics.....	23
CHAPTER V: RESULTS.....	29
5.1 Interpretation Logistic Regression Hypothesis 1.....	29
5.2 Interpretation OLS Regressions Hypothesis 2.....	43
CHAPTER VI: CONCLUSION.....	48
REFERENCES.....	51
Appendix.....	53

LIST OF TABLES

Table	Page
Table 1 Distribution of buyouts over time	19
Table 2 Distribution of going-private transactions across industries.....	19
Table 3 Descriptive Statistics full sample.....	24
Table 4 Descriptive Statistics control sample.....	25
Table 5 Descriptive Statistics treatment sample	26
Table 6 Correlations hypothesis 1.....	27
Table 7 Correlations hypothesis 2.....	28
Table 8 Logistic Regression estimates of Restatement on Going Private and control variables	35
Table 9 Logistic Regression estimates of Restatement on Management Buyout and control variables.....	36
Table 10 Logistic Regression estimates of Restatement on Leverage Buyout and control variables	37
Table 11 Logistic Regression estimates of Restatement on Buyout variables and extra control variables Leverage, Tobin’s Q and ROA	38
Table 12 Marginal effects of the Logistic Regression estimates of Restatement on Going Private and control variables, as shown in Table 8.....	39
Table 13 Marginal effects of the Logistic Regression estimates of Restatement on Management Buyout and control variables, as shown in Table 9	40
Table 14 Marginal effects of the Logistic Regression estimates of Restatement on Leverage Buyout and control variables, as shown in Table 10	41
Table 15 Marginal effects of the Logistic Regression estimates of Restatement on Buyout variables and extra control variables Leverage, Tobin’s Q and ROA as shown in Table 11	42
Table 16 OLS Regression estimates of CAR on Restatement and control variables	46
Table 17 OLS Regression estimates of CAR on Restatement and extra control variables Leverage, Tobin’s Q and ROA	47

CHAPTER I: Introduction

Prior studies suggest that managers have the incentive to deflate the earnings prior to a buyout in order to lower the stock price in sequel (Perry & Williams, 1994). An explanation to this occurrence relies on the intention of the managers to purchase their firms equity at a low price as possible, prior to going private. Consequently, when the firm engages in earnings manipulation decline, stock price will immediately capture the change of the firm value and subsequently the stock price will alter (Palmrose et al., 2004). Leaving the shareholder with unavoidable loss. Given the fact that shareholders lost billions on their stock value in the past, The Securities and Exchange Commission (SEC) adopted corporate statutes to provide shareholders with dissenter rights to protect them in the process of going private transactions. However, despite these measures the public's concern is still going on.

A going private transaction can be described as a firm whereas the management of the company becomes the owner of the entire firm or at least a part of the firm. It implies that management acts as the buyer and the shareholders as the seller. Certainly, management wants to pay as little as possible for the acquisition. The price shareholder will pay is largely based on the accounting information reported in the annual statements (Perry & Williams, 1994). Hence, this creates an incentive for the management to create an detoured image of the financial information as achieving a lower acquisition price.

The assumption of unfair treating shareholders due to interest conflicts of the management lead to revision in the law of protecting public stockholders during going private transactions. Therefore, the regulations have become stricter ever since. In 1979 the SEC approve a rule that obliges comprehensive disclosure of the aim and fairness of going-private transactions. However it is unclear to what extend this tool is still powerful tool to protect shareholders in the present. Most studies (DeAngelo, 1986: Perry & Williams, 1994: Wu, 1997) that have searched for evidence on manipulation before going private, belongs to earlier years (1980,1990) where the buyout phenomenon began. These studies found partially evidence on earnings manipulation before buyouts.

Prior research on this area also merely picked components of a financial report like accruals and earnings management to identify earnings manipulation and unfair treatment of shareholders, resulting to contradictory inferences. However, according to the SEC, restatements are the most visible indicator of improper accounting (Romanus et al., 2008). In contrast to these researches, this paper will use restatements as a proxy to investigate the aggregate of errors, irregularities, and misstatements on their nature and size prior to going private and compare them with non-going private firms.

In this manner this study will provide an extensive view on the accounting decisions prior to going private transactions. Therefore, in this study I will analyze the financial reporting quality in order to investigate the accounting decisions of firms who proposed a buyout transaction.

The main research question hence is ; *What are the effects of going private transactions on the financial reporting quality, i.e. what are the effects of going private transactions on managerial accounting decisions.*

The results were quite surprising. I found that a firms going private decision has a significant negative effect on restatements, which implies that after the going private announcement, the probability of restatement has decreased, so before the agreement of going private, the chance of deterioration of the reports was relatively higher. Furthermore a going private firm was initially split into MBO firms and LBO firms because MBO firms differ from LBO firms in the sense of their financial structure and characteristics of the firms. Evidence shows that only in one specification, MBO's appeared to have an effect on the firm's reporting quality. Before a firm announced a management buyout, it was on average more likely to restate its reports and deteriorate its quality. In none of the specifications has LBO an effect on the firm's reporting quality. I also examined the relation between financial reporting quality and stock returns and find no indication that restatements provide negative returns. Also the firms going private announcement does not deflate abnormal returns, but in turn increases the stock price.

The overall conclusion of the research leads to rejecting the belief that conflicts of interests between management and stockholders induce the fair treatment of shareholders around going private transactions. The rules adopted by the SEC ruled out to be successful regarding the protection of shareholders against unfair valuation of the shares. This study contributes to the literature in several ways. Most literature investigated the delisting wave of the 1980'. However, according to Doidge et al. (2015) "the number of U.S. listings fell from 8,025 in 1996 to 4,101 in 2012, whereas non-U.S. listings increased from 30,734 to 39,427". An import issue is to investigate reporting quality of the new wave of going private. And especially by identifying the evaluation of accounting in a sequence of time prior to a buyout.

Second, as reporting quality is a broad concept with multiple dimensions, it is important to extend empirical results beyond the accruals and earnings management dimension. In this study I focus on another dimension of reporting quality, namely the restatements. Unlike managements' accrual discretions or earnings management qualities, restatements are certainly an indicator that signals that the annual report was not valid and is of a low quality (Akhigbe et al., 2005). Restatements also have the potential to provide comprehensive overview of the changes that have been applied. On the other side, restatements are a growing concern of regulators and issuers nowadays, for the past ten years restatements have significantly increase. Therefore every evidence on restatements are of considerable value to the accounting literature. Past literature documented evidence on Leveraged buyouts and Management buyouts each in particular research, or treated two types of buyouts in a general sense as going private firms. However MBO firms differ significantly from LBO firms in the sense of their financial structure and characteristics of the buyout, therefore it is important to analyze the behavior of both firms separately prior to a repurchase. Therefore this study is making an attempt to extends prior research by analyzing Leveraged buyouts, Management buyouts independently and both merged as going private each under the same context. This way I will be able to capture the effects of each type of a buyout under the same circumstances. And lastly, as earlier mentioned, management is concerned with distressing the stock market value of the firm in order to rebuy the stock for a lower price. By analyzing the stock price behavior during the announcement data, I will indirect measure for the managements' altering decisions. By also controlling for the effects of restatements, I

will be able to distinguish to what extent stock price behavior is attributable to restatements or to the fact that the firm is going private.

CHAPTER II: Background and Literature Review

2.1 Public-to-private transaction

Mao & Renneboog (2015) describes a going private transaction as follows: when a listed company is acquired and subsequently delisted, the transaction is referred to as a public to private transaction or a going private transaction. In other words, a going private transaction occurs when the company is taken over and is therefore no longer publicly traded.

According to Wu (1997) a going private transaction is usually performed by a leverage buyout, whereas the investor acquires a participation position within the company. Leveraged buyout (LBO) is a financing method in which the acquisition of a company mainly relies on financial leverage. The assets of the acquired business are used as collateral for the loan, whereas the leverage exceeds an extensive amount nearly from 80 to 90 percent of the total assets. This way, investors can take over a business with a minimum bet of own capital. The downside is that the acquired business is saddled with large debts. Private-equity firms often use a leveraged buyout to take over companies, after which they thoroughly reorganize the company and often sell parts of the company to be able to pay off the loans and bonds and make a profit.

There are also buyouts whereas the management takes an important participation in the enterprise this is called a Management buyout (MBO) where. A management buyout is a leveraged buyout where the managers become the owners of the company or division. Those managers are most of the time not able to buy the company with their own wealth, but finance the acquisition most often with debt financing methods. In the third instance, there can be a Management Buy-in, where an external investor can acquire a participation to become a member of management. A final Division concerns an Institutional Buyout, in which the company close a certain deal with a bidding group. This can range from institutional investor to investment corporations. This thesis is limited to a going private transaction on basis of a Leverage buyout and a Management buyout.

2.2 Pre-repurchase behavior

As earlier mentioned, a going private transaction can be described as a firm whereas the management of the company becomes the owner of the entire firm or at least a part of the firm. It implies that management acts as the buyer and the shareholders as the seller. The popularity of buyouts has found her way back in the 80' whereas a substantial increase in both size and number began. Consequently several researchers made an attempt to analyze the implications of going private, which cause controversial insights on the topic. Proponents (Jensen, 1988) of MBO's emphasize on the reducing agency costs and new positive incentives. Jensen (1988) postulates that a post-buyout firm combines powerful incentives that will lead to an increase in efficiency and value. A MBO usually enrolls with a significant shift of the ownership structure, in this context the management is given large equity stakes that provide them the incentive to find ways to pay off the debt which will increase the value of the firm. Those new incentives make managers act in favor of the firm which will lead to an increase in operating income and a reduction in wasteful capital expenditures (Kaplan, 1989). The opponents however relate the increase in value after a MBO to wealth transfers from employees and public bondholders to the management that becomes the investor. Shleifer & Summer (1988) argues that buyouts transfer wealth to the investor group by firing employees or by cutting the wages down. Therefore the operating income will increase at the expense of wealth decrease of employees. Another stream argues that managers have information advantage over shareholders and arguments that cash flows are mainly higher after a buyout. According to Lowenstein (1985) the management of a buyout firm already expect that cash flows will boost nearby in the future. So they repurchase stock options when the firm is under valued by the market. And due to information-asymmetry, managers can make an attempt to rebuy the stocks before the cash flows increase. Noteworthy, previous mentioned literature streams focus on post-buyout evidence whereas the second stream is more concerned with pre-buyout decisions. A considering concern regarding pre-buyouts are the conflicts between the interests of managers and stockholders.

These conflicts arise at the moment when managers have the incentive to pay the stockholders less than the fair value of the shares. Criticism of buyouts claim that such acquisitions are loaded with advantages for managers to understate their earnings and make gains over stockholders, and therefore should be strictly regulated or even prohibited (DeAngelo, 1986). Firms that went private have no public disclosure requirements, and therefore face low risks for being accused because the chance is low that their prior actions will be revealed in the latter phase (DeAngelo, 1986).

On the view of criticisms, the advantages arise when managers succeed to conceal the firms future favorable inside information from outsiders and repurchase publicly held shares at a price that does not reflect the true fair value of the firm. Certainly, management wants to pay as little as possible for the acquisition. The price shareholder will pay is largely based on the accounting information reported in the annual statements (Perry & Williams, 1994). Hence, this creates an incentive for the management to create an detoured image of the financial information to achieve a lower acquisition price. Like in the study of DeAngelo (1986), who tries to reveal the relationship between earnings management and buyout transactions. Her conclusion was that managers of buyout firms have an incentive to undervalue results, so that the shares can be acquired at a lower price. However DeAngelo (1986) did not find evidence on accrual manipulation prior to MBOs. Nor was she able to find concrete indicators to support her hypotheses that management purposely depress stock prices before a buyout.

On the other hand, a study by Perry & William (1994) showed that profits were directed downwards (negative unexpected accruals) prior to a management buyout. They conducted their research on a larger sample and utilized a regression model in order to refine the accruals and capture discretionary accruals more accurate. This analysis carefully examined the financial health of every firm before the buyout in the sample and did not find that negative accruals were caused due to the downfall of firm performance. After disaggregating the total accruals, evidence revealed that earnings management occurred in the balance post “depreciation expense” of the balance sheet and in the change of non-cash working capital post (Perry & William 1994). The study had also evidence on management delaying revenue recognition prior to an MBO event.

And Wu (1997) showed that finally earnings management preceding buyout did bring off the acquisition price by 18.6 percent and confirm that downward accruals are particularly severe in firms where managers hold large equity ownership following the buyout

2.3 Restatements

Financial reporting quality will be measured by identifying accounting restatements. According to SEC, restatements are the most visible indicator of improper accounting (Romanus et al., 2008). Past literature used regularly accruals as a proxy to measure for earning quality of MBO' s, however due to the limited features to divide accruals in to discretionary accruals and non-discretionary accruals their inferences entailed some subjective judgement. While restatements are a more accurate warning of poor accounting quality and objective measure of violations (Dechow et al., 2010). Consistent with these findings, restatements have a central role in determining the reliability of financial reports, because it also has the potential to influence the shareholders confidence regarding the capital market (Palmrose et al., 2004). Restatements are also a sign of weak earnings quality and aggressive earnings management. Therefore an growing number of studies use restatements to capture weak financial reporting quality. Dechow et al. (2010) also shows that higher levels of engagement in earnings manipulating is positively correlated with higher levels of restatements. From this point of view observing restatements will enable us to eliminate subjective judgements in the results, considering the fact that restated firms clearly violated accounting rules.

Financial accounting restatements are forced under the US GAAP when reported accounting numbers are detected to contain errors and irregularities. In addition, firms registered in the SEC are also forced to correct all information that is disclosed. As stated in Skinner (1997) the firm has "a duty to correct statements made in any filing ... if the statements either have become inaccurate by virtue or subsequent events, or are later discovered to have been false and misleading from the outset, and the issuer knows or should know that persons are continuing to rely on all or any material portion of the statements". This could include a review of the expected future revenue, the non-existence of previously reported income or revision of the expected growth ratio (Skinner, 1997).

Organizations can submit that a restatement is necessary through press releases or an K-8 form. Consequently, a form 10-K/A or 10-Q/A will be submitted which supplements or overwrites the earlier reporting. It is also possible to report a correction in the footnotes of the annual statement. Both possibilities are forms of a restatement.

A restatement is not necessarily the result of intentional inaccuracy, incompleteness or deception in the financial reporting (Skinner, 1997; Palmrose et al., 2004). For example, when an organization uses accounting on the basis of market value, it's possible that at the end of the year the performance will differ from what it has calculated in advance. In that case, one should thus do a restatement. An organization is obliged to always bring out accurate financial statements when appears that provided data are not correct (Skinner, 1997).

Plumlee & Yohn, 2010 give four causes of restatements. The first is attributed to the occurrence of errors which has been made in the company. Most errors occur by simple miscalculations, this is also the most common cause of restatements. Dechow et al. (1996) argue that even at best controlled companies miscalculations could occur. Also well-trained employees make mistakes, restatements that have internal errors as a cause are difficult to prevent. Internal errors occur mainly in estimating the stock, the cost and debt. The second cause is that accounting standards may be unclear, which leads to wrong application of the standards. Unclear standards are, according to Plumlee & Yohn (2010), responsible for 37 percent of restatements. The third cause is the occurrence of complex transactions that take place within a company, who were difficult to place. The complexity of transactions is in only three percent of the restatements the cause. The fourth and final cause of restatements is conscious manipulation of financial statements. Conscious manipulation is difficult to prevent and if it is discovered, then it is often kept hidden. Conscious manipulation occurs primarily when companies have long been struggling with negative cash flows and losses. If these companies expect negative cash flows and losses in the future, then they are more inclined to manipulate their profit. Such restatements are often warnings signals of fraud. Moreover, these companies have often a high credit balance in relation to what's on cash (Plumlee & Yohn 2010), this is because manipulation within the post accounts receivable are easier to hide than within the line item cash.

According to Dechow et al. (1996) is conscious manipulation more common in companies where the board of directors is dominated by management. Also, when the CEO is also the head of the company, the chances of conscious manipulation are larger. The same applies to a company where the CEO is also the founder of the company. A major reason for companies to conscious manipulation is to comply a cheap way for external capital (Dechow et al., 1996).

Companies take than profits (losses) in the statements, which actually do not exist or not may be attributed to the company. So that companies get a higher(lower) market value for the company. Traditional valuation models of analysts, such as the Residual Income Model, base their predictions on the proceeds of a business. So unfortunately when an overestimated (underestimated) value is been processed in the model, it will generate a higher (lower) appreciation (depreciation). This way only 3 percent of the restatements is caused by manipulation according to Plumlee & Yohn (2010). That seems like a low number, but they assume that conscious manipulation is difficult to detect. In addition, this kind of discoverings are often kept hidden to the outside world as conscious manipulation, due to the fear for image damage. Palmrose et al., (2004) note that there are major differences in the effects of restatements per company and per restatement. According to them, the largest drop in the stock price take place in the first two days after a restatement. Palmrose et al., (2004) conclude that the stock price of a company drops on average by 9.2 percent in the first two days. Note that the decline in the stock price is greater when the cause of the restatement is due to conscious manipulation. They find a negative fall in the stock price above 20 percent. Also when the restatement is imposed by the SEC, then the average decline exceeds 20 percent. Furthermore, they report a more fierce reaction to the stock market of restatements when the restatement contains an fraudulent action (-20 percent) related to the -6 percent in a non-fraudulent case (Palmrose 2004). Most extant studies categorize when working with restatements. This is due to the fact that fraud is involving intentional, non-Gaap reporting, it also implies a lack of integrity that therefore leads to a greater negative effect on the stock price (Palmrose 2004). Because fraud builds distrust and suspicion about the reliability of management assertions, that subsequently develops a higher information asymmetry.

Therefore it is important to distinguish errors from irregularities because the majority of restatement studies assume restatements are intentional, since observing the intention of the management is impossible. That way the interpretation of the results would be accurate.

2.4 Pre-repurchase stock price movement

As earlier mentioned managers tend to undervalued the stock price preceding a management buyout by using their discretion on the financial statements (Gong et al., 2008). Managers that are encouraged to act on their own benefit can use the flexibility in the accounting standards opportunistically by deflating the purchase price. According to Gong et al. (2008) managers typically start to lead the stock market to a downfall early in the quarter of the buyout announcement. In fact, these findings are consistent with Grullon & Michaely's (2004) discovery with the analysts forecasts. His findings suggest that analyst forecasts immediately alter at the moment of the announcement, because analysts already expect a decrease of the stock price.

Interestingly one might argue that repurchase announcements activate stockholders to assume that managers will manage earnings downward preceding the re-acquisition. Nonetheless extend studies show that investors in most time fail to attribute the stock price effects to manipulations in the case of corporate events as equity offerings or stock mergers (Louis & White, 2007). In the study of Louis & White (2007) they argue that reissuing firms record income decreasing accruals, while there is not an indication of decreasing operating performance. Interestingly they have higher non-discretionary earnings, ROA and cash flow from permanent activities. Furthermore they measure the market performance prior to the repurchase from day -130 to day -68 and day -67 and day -5 to the announcement date. The results indicate that there is a strong stock price reaction on the repurchase announcement, this is consistent with the presumption that firms time their repurchase announcements with the downfall of the reported earnings to control their share undervaluation for a short time period in order to repurchase the shares cheaper. They also find evidence that discretionary accruals partly have the explanatory factor on stressing the repurchase signal for firms in tender offers.

They also found that the incentive to manipulate earnings seems to be decreased in the proportion of analyst coverage and institutional investor ownership increase. Whereas firms that do not deal with analysts coverage are intended to misprice due to the fact that there will be no publications of the firm.

This in contrast to studies that show stock prices remain unaffected to earnings manipulations. Likewise in the study of Coles et al. (2006) whereas accruals are dramatically low in the period subsequent to the announcements of the reissuance of the options, while the stock market remains unaffected to these manipulations. They attribute these circumstance to that stockholders are not deceived by the manipulations because the incentives of managers prior to reissuance of stocks are noticeable. Investors anticipate the incentives of management to devaluate earnings and therefore value the firm based on actual price. However criticisms of this ideology, like Teoh et al 1998, claim that investors are unqualified to divide unmanaged earnings and accurately price the firm on actual value, and especially when they are unable to measure the managements incentives.

A second stream investigators of buyouts and stock market reactions find however increasing abnormal returns at announcement date. The research of DeAngelo et al. (1984) conducted an analysis on the gains shareholders achieve during a buyout. DeAngelo et al. (1984) find a significant positive association between stock market reaction and going private announcements which resulted in increasing wealth of shareholders by 22 percent. They also found a strengthening effect of managerial ownership on high abnormal return. This results indicate a positive relation between a MBO and stock market reaction (CAR). A possible explanation to this phenomenon is given by the wealth-gains hypothesis (DeAngelo et al., 1984). This hypothesis postulates that shareholders of publicly listed firms can expect gains from going private transactions due to their rights to vote on decisions or to their rights to hold their shares back in buyout proposals and even due to their power to sue the firm.

CHAPTER III: Theoretical background and hypothesis development

To investigate the variables that may control the likelihood of a restatements, I rely on the Agency Theory and related empirical research.

3.1 The Principal Agent Problem

There are different views on the definition of an organization. According to Jensen & Meckling (1976): “the private company or firm is simply a form of legal fiction which serves as a nexus for contracting relationships.” That means that the organization is a collective name of interrelated persons that together tries to achieve a common goal, which mostly is profit.

Today, most large organizations are represented at the stock market. This means that there is not necessarily a single owner of the company and that property and capital in most cases are separated. The shares are mostly in possession of capital holders and the work in the enterprise is being conducted by employees who are usually not the holders of capital. In this context, it is often talked about agency costs and the principal-agent problem. Both terms refer to the same problem which is caused by the separation of labor and capital.

Agency relationships are inevitable with the separation of labor and capital.

These are contracts whereby “one or more persons (the principal (s)) engage with another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent” (Jensen & Meckling, 1976). When we assume that both parties want to maximize their utility, it would be a real concern that the agent will not always act in the interest of the principal (Jensen & Meckling, 1976; Eisenhardt, 1989). In this circumstances, the principal needs to observe the actions of the agent, but this is often difficult or at high costs (Eisenhardt, 1989).

Another reason for the emergence of a principal-agent problem is risk distribution when the principal and the agent have different attitudes towards risk (Eisenhardt, 1989). Because the principal is less risk averse than the agent, there will be different preferences of risk taking. As a result, decisions are not always fully satisfactory to both parties (Grossman & Hart, 1983; Eisenhardt, 1989)

The principal can take actions to overcome such principal-agent problems, however this will always be at the expense of the result (Jensen & Meckling, 1976). A method to overcome the problem is monitoring of the income of the agent. Better monitoring of revenues enhances the chance of lower commitment and bad decisions of the agent (Eisenhardt, 1989). Observation of such revenues, however, is not always possible or it is not clear who generated the actual revenues (Grossman & Hart, 1983).

Another way in which the principal can reduce the principal-agent problem is through the creation of appropriate incentive systems (Jensen & Meckling, 1976). The purpose of these systems is to bring the goals of the agent in line with those of the principal. This could include bonus systems or share options. The agent will experience positive effects when he pursues more profit for the company. Entering such incentive systems is not easy, because the principal must be able to measure the performance of an agent to reward him. According to Jensen & Meckling (1976) and Eisenhardt (1989) is the reward usually awarded based on output, turnover or profit. These are fair measure sticks, but not without danger. It is difficult to determine the extent to which the agent actually has had a contribution or influence on the chosen outcome measurement. According to Jensen & Meckling (1976) and Hacker (1994), the relationship between the CEO and the shareholders of a company comply with the definition of an agency relationship. That means also principal-agent problems in this relationship. It is well known that CEO's often receive bonuses or attractive stock option plans and benefit from this. These incentives are often linked to the profit of the total enterprise. However as stated earlier is the indicator of the reward system not always accurately measurable. To overcome this problem, bonuses are often determined on the basis of the reported profit. This profit is stated in the annual report of the company and is initially drawn up by the management of the enterprise itself.

3.2 Financial reporting behavior prior to buyout

Conflicting interests between managers and shareholders mainly arise at the time when management is planning a buyout transaction and want to rebuy the shares at a lower price (Wu, 1997). The manager as an insider possesses the information regarding the firm's prospects and true value. A self-seeking manager could thus utilize this information for his own benefit due to conflicting interests (Wu, 1997). DeAngelo (1986) described an extensive review on the institutional and economic incentives of earnings managements before a buyout. He describes that managers have the incentives to cover any conscious made earning understatements so that the accounting manipulations would go through undetected by parties who will be affected by these techniques. Additionally, besides the whole set of income reducing techniques they seem to choose for those who seems less obvious to third parties (DeAngelo 1986).

Managers of going private firms can devalue earnings for the following reasons; especially in a management buyout, managers are the (co)acquirers of the target firm, so in this case, will downward earnings results in a cheaper purchase price. Second, it is often known that a part of the security is provided by external financiers. During the acquisition these financial supporters try to win the support of the management by bribing the management by promising them to employ them after the acquisition or to reserve them an equity stake. This way management receives incentives to back the acquisition by reporting favorable earnings. And third, because the performance of earnings of pre-buyout are being compared with post-buyout earnings, managements has the incentives to devalue those earnings before the buyout to show afterwards favorable overview of their performance in exchange for bonuses or exit premiums (Mao & Renneboog 2015). Since the responsibility of managers is to create value for the shareholders, the pursuit of buying the firm for a less amount is a violation of their duty. Note that if management is not planning a buyout, there would be no deterioration incentives available (Perry & Williams, 1994).

Therefore the main prediction is that the extent to which errors and irregularities are reported as a restatement will increase in the level of going private decision. Therefore, I hypothesize that going private firms tend to deteriorate the financial reporting quality, as it will lead to a higher frequency of restatements, relative to those that do not go private:

H1: Prior to going private, management has a greater incentive to misreport by applying aggressive accounting techniques to understate earnings, as it will lead to a higher frequency of restatements relative to those firms that do not go private.

Because Mao & Renneboog (2015) has found evidence on targets firms employing earnings manipulation on the preceding year of the MBO, I expect that restatements will occur one year prior to the MBO's. I also expect that the proportion of shares that is being bought back will have a moderating effect on the relation between going private and restatements. As evidence shows that earnings management tends to increase in the proportion of the shares being repurchased by the investor group (Gong et al., 2008). If this association surely exists, reported misstatements would increase with the number of shares that is been repurchased.

3.3 Stock price effects

To provide additional evidence on the association between decreasing financial reporting quality and going private, I will measure pre-buyout stock price behavior. As earlier mentioned, management is concerned with distressing the stock market value of the firm in order to rebuy the stock for a lower price. By analyzing the stock price behavior during the announcement data, I will indirect measure for the managements' altering decisions. By also controlling for the effects of restatements, I will be able to distinguish to what extent stock price behavior is attributable to restatements or to the expression of the announcement of taking the firm private. As earlier mentioned, stock prices are influenced by the announcements of restatements. Because a restatement disturbs the reliability of the financial statement and reduces the commitment of investors to the company. The value of the firm will therefore be indirectly affected due to distrusted investors (Palmrose et al., 2004).The previous discussion leads to the following hypothesis:

H2: Stock prices will deteriorate following a going-private announcement.

CHAPTER IV: Research Design

4.1 Data source and sample selection

This study comprises all completed North-American buyouts that occurred in the period from 2002 to 2015. The transactions are retrieved from Compustat using Wharton Research Data Services. Conditional on an open market repurchase we need to be sure if the firm has factually been delisted from the U.S. stock exchange, Sec defines a going private transaction as followed: “when the company reduces the number of its shareholders to fewer than 300 is no longer required to file reports with the SEC.” Therefore the sample selection is based on the SEC Schedule SC 13E-3 filings and SEC Form 15 (Notice of Termination of Registration) and Form 25. This way partial repurchases or buyout call backs are excluded from the sample.

A major problem underlying the incentives of management managing the income prior a going private transaction is that behavior strategies could be difficult to observe. One way to alleviate this problem is to provide evidence about earnings constructions prior to a buyout. For example, Wu (1997) shows that managers manipulate earnings through the timing of income recognition from disposal of long-lived assets and investments. Furthermore, firms that intend to go private start their repurchase programs months before the factual delist date. However, due to data limitations, I cannot observe such direct evidence of earnings manipulation for my sample during the sample period. One way to enhance the validity of the reported earnings is to examine the sample from the moment when the firm express their agreement to go private, this is called the announcement date. The time period of an announcement and the filing date varies from 2 to 12 months. If we only take the filing date in to account, we could miss significant evidence, to that end I will also collect announcement dates. Compustat does not provide additional information on going private announcements, therefore I hand collected information on the first announcement of firms that announced their going private decision. Following the extant literature (Mao & Renneboog (2015), I used Factiva, LexisNexis, Google News, and other documents to identify the initial buyout announcement.

Based on this information I further gathered the deals of details to make a distinction between whether the buyout was a MBO or a LBO. From their nature, which were mentioned earlier in chapter one, these two buyout types have specific exceptions in constructing their finances in order to be better off after a buyout. By making a distinction, we can reduce the noise associated with using the dummy variable going private. The identification of an MBO is made on the basis whether at least one member of the management participated in the transmission of the shares and stated afterwards in the firm. An LBO is identified regarding whether the buyout has been financed with external investments or is merged.

I collected a total of 371 buyout transactions and retained 246 going private transactions that satisfy the following criteria:

- I retain 354 Whole-company public to private transactions: 13 foreign companies are dropped out because these companies could still operate in a foreign exchange commission, 3 bankrupt firms were excluded and 1 firm that liquidated was also not included in the final database.
- Missing data on Compustat, Audit analytics reduced the sample to 246 buyouts.

During the sample period, a small proportion of firms went private due to bankruptcy or liquidations. These decisions on going private is not likely to be random. Thus, it is possible that unobservable firm characteristics such as firm risks could affect the decision to go private, giving rise to endogeneity problems. Since I only take going private firms that voluntarily went private in to account, I deleted firms that left the US stock exchange market under mandatory circumstances.

4.2 Data description

Table 1 shows the distribution of buyouts over a time period of 14 years; the number of buyouts had their peak around 2003-2005. While the subsequent deterioration of the stock market of the early 2000, downturned the buyout market after 2005. Kaplan (1989) claim in their research that buyouts mainly develop in high cash flow and high debt sized industries. Consistent with this assertion, the sample includes a large business spectrum where the largest buyouts occurred in services (27%) followed by manufacturing (25%), and finance (43%) industries (Table 2).

Table 1 Distribution of buyouts over time

Year	N	Percentage
2002	30	8.09
2003	52	14.01
2004	45	12.12
2005	53	14.29
2006	31	8.36
2007	33	9.09
2008	23	8.89
2009	19	5.12
2010	21	5.66
2011	19	5.12
2012	11	2.96
2013	20	5.39
2014	9	2.43
2015	5	1.35
Total	371	100.00

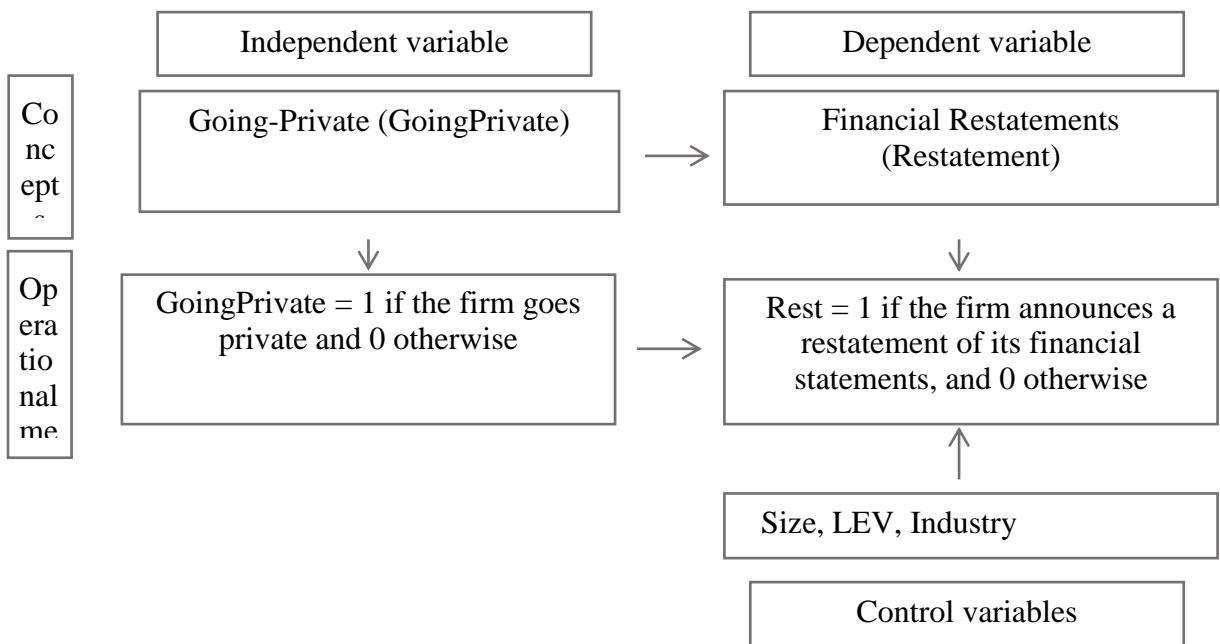
Table 2 Distribution of going-private transactions across industries

Industry	N	Percentage	Cum.Prc
Construction	4	1.52	1.52
Finance	43	16.29	17.80
Manufacturing	67	25.38	43.18
Mining	14	5.30	48.48
Public	3	1.14	49.62
Retail	24	9.09	58.71
Services	70	26.52	85.23
Transportation	24	9.09	94.32
Wholesale	15	5.68	100.00
Total	264	100.00	

4.3 Methodology

To achieve evidence from this research, I developed 2 hypotheses which were previously mentioned in chapter 2. By using the Predictive validity framework, known as the Libby boxes, I will be able to give insights on the structure of this research. In addition, this framework facilitates to focus on critical determinants of restatements and helps to clear out the definition of the leading hypotheses.

Based on my research the following model is constructed:



4.3.1 Measuring pre-repurchase Financial reporting behavior

The main prediction is that the extent to which errors and irregularities are reported as a restatement will increase in the level of going private decisions. Therefore, I hypothesize that going private firms tend to deteriorate the financial reporting quality, as it will lead to a higher frequency of restatements, relative to those that do not go private:

H1: Prior to a Going Private transaction, management has a greater incentive to misreport by applying aggressive accounting techniques to understate earnings, as it will lead to a higher frequency of restatements.

To analyze the underlying financial reporting behavior around buyout transactions, this research will make use of a regression analysis. By comparing the results of buyout firms to a control sample which exist of non-buyout firms, this regression will provide significant evidence on the factors that have an impact on restatements.

The following OLS regression model is used to examine the effects of going private on the restatements:

$$\begin{aligned}
 \mathbf{Restatement}_{i,t} &= \beta_0 + \beta_1 \mathbf{GoingPrivate}_{i,t} + \beta_2 \mathbf{LN_Equity}_{i,t} + \beta_3 \mathbf{LN_NetIncome}_{i,t} \\
 &+ \beta_4 \mathbf{LN_Sales}_{i,t} + \beta_5 \mathbf{LN_Shares}_{i,t} + \beta_6 \mathbf{LN_Assets}_{i,t} + \beta_7 \mathbf{BTM}_{i,t} \\
 &+ \beta_8 \mathbf{LN_MarketValue}_{i,t} + \beta_9 \mathbf{Leverage}_{i,t} + \beta_{10} \mathbf{ROA}_{i,t} + \beta_{11} \mathbf{TobinsQ}_{i,t} \\
 &+ \beta_k \mathbf{Industry}_i + \beta_m \mathbf{Year}_t + \varepsilon_t
 \end{aligned}$$

Where the dependent variable Restatement is 1 for firms that restated their financial statements and 0 otherwise. The independent variable Goingprivate equals one if the firm went private, and zero otherwise. Going private is also divided in a MBO, and a LBO which are also dummy variables, that each equals one when a buyout is based on the selected criteria. The need for splitting up the buyout is that LBOs are mainly based on external financing incentives, the need of an external investor could mitigate aggressive accounting in financial statements. Furthermore I add various quarterly control variables to the regression; I include Leverage to the regression to proxy for the significant effect of low leverage and high leverage firms on restatements during a buyout. According to Gong et al., (2008) low leverage firms have the incentives to enter a buyout to enhance their leverage levels. By also including total assets and type of industry I can respectively proxy for firm size effects and industry effects on the main regression. Furthermore according to Gong et al., (2008), managers have stronger incentives to take the firm private when the firm is undervalued. Therefore I measure the Market-to-book ratio (MTB) and market value to determine firm valuation. I include Sales in the model because sales intend to increase during misstatement years of firms (Dechow et al., 1996). Dechow et al. (1996) explain this by that firms are engaging in transaction based earnings management and conduct unusual transactions at the end of a quarter.

I include the level of shares outstanding because evidence shows that earnings management tends to increase in the proportion of the shares being repurchased by the investor group (Gong et al., 2008). If this association surely exists, reported misstatements would increase with the number of shares been repurchased.

Tobins Q will calculate the stock market valuation of the firms. The explanation behind the tobins Q is as followed; A low (0-1) Q implies that the cost of replacing the existing assets is higher than the stock value. This suggests that the stock is undervalued. Whereas a high Q (>1) means that the stock price is overvalued because the stocks have a higher price than the costs of replacement of the assets.

Lastly I include the Fiscal year, the net income, ROA, Stockprice close as control variables to the regression.

4.3.2 Measuring market reaction

I analyze the market reaction to the pre-repurchase restatement announcements.

I analyze the market reaction to the buyout announcement as a function of the type of the buyout and restatements. As earlier mentioned, management is concerned with distressing the stock market value of the firm in order to rebuy the stock for a lower price. By analyzing the stock price behavior during the announcement data, I will indirect measure for the managements' altering decisions. By also controlling for the effects of restatements, I will be able to distinguish to what extent stock price behavior is attributable to restatements or to the fact that the firm is going private.

I also control for the percentage of outstanding shares that managers seek to repurchase. More specifically, I use the following OLS regression to examine the effects of going private and restatements on CAR:

$$\begin{aligned}
 CAR_{i,t} = & \beta_0 + \beta_1 Restatement_{i,t} + \beta_2 GoingPrivate_{i,t} + \beta_3 MBO_{i,t} + \beta_4 LBO_{i,t} \\
 & + \beta_5 LN_Equity_{i,t} + \beta_6 LN_NetIncome_{i,t} + \beta_7 LN_Sales_{i,t} + \beta_8 LN_Shares_{i,t} \\
 & + \beta_9 LN_Assets_{i,t} + \beta_{10} BTM_{i,t} + \beta_{11} LN_MarketValue_{i,t} + \beta_{12} Leverage_{i,t} \\
 & + \beta_{13} ROA_{i,t} + \beta_{14} TobinsQ_{i,t} + \beta_k Industry_i + \beta_m Year_t + \varepsilon_t
 \end{aligned}$$

Where Car is a market-adjusted model over a estimation Window of 100 days, starting on -10 days before the buyout announcement date till 10 days after the buyout announcement date. Restatement as a dummy variable for 1 is a financial statement restatement has occurred and 0 otherwise. Because after a restatement investors lose their reliance on the financial statements, they lose their confidence in the company and the market value. Therefore I expect a negative association between restatements an the cumulative return, because a decline in market value means a decline in stock prices. The dummy variable Going private is again split in MBO firms and LBO firms. Because MBO firms differ from LBO firms in the sense of their financial structure and characteristics of the firms. By dividing these two types this study extends prior research by analyzing the characteristics of buyouts relative to the change of stock price movement around the buyout announcement. Furthermore, I include shares outstanding for the following reason; it is likely to decrease the share price more if the proportion of the shares that will be bought back is high. This is why I also expect a decrease in earnings (net income) to decrease the stock price.

Furthermore I control just like in the prior regression for, size, industry, ROA, leverage, BMT and sales.

4.4 Descriptive statistics

These regressions are estimated at the firm-year level, where i denotes firms and t denotes year. The dependent variables are respectively, the dummy variable restatements and the Cumulative Abnormal Returns (CAR). The main independent variables are going private, MBO and LBO for the first equation, and these variables enter the second equation with the addition of the dummy restatement. Before estimation of the first model, the control and target firms were matched by means of a propensity score matching principle, based on the size and industry of the two firm groups. In the second model, only the target firms' variables enter the model.

All firm-level dummy variables and control variables are matched on the basis of the company identifier keys CIK, within each firm-year combination. For as to the residuals are possibly varying over time, the standard errors are corrected by using the White heteroscedasticity adjusted errors.

Table 3 Descriptive Statistics full sample

Assets: Total assets; **Equity:** Common ordinary equity; **Shares:** Common shares outstanding; **NetIncome:** Net income; **Sales:** Firms' total sales (\times \$ million); **MarketValue:** Firm's equity as calculated the total number of outstanding shares multiplied by its end of the year closing stock price (\times \$ million); **Leverage:** Equity scaled by total assets; **ROA:** Return on assets, measured as industry aggregate operating profit before depreciation divided by industry aggregate total assets; **MTB:** Market-to-Book ratio; **TobinsQ:** Tobin's Q; **Price:** End of the year closing price; **Restatement:** Dummy value 1 if the annual report changed and 0 if the report was not deteriorated; **GoingPrivate:** Dummy value 1 if the company becomes private, and 0 else case; **MBO:** Dummy value 1 if management of the company becomes the owner of the entire firm or at least a part of the firm, and 0 else case; **LBO:** Dummy value 1 if the buyout is leveraged, and 0 else case; **LN_Equity:** Natural logarithm of common ordinary equity; **LN_NetIncome:** Natural logarithm of net income; **LN_Sales:** Natural logarithm of sales; **LN_Shares:** Natural logarithm of common shares outstanding; **LN_MarketValue:** Natural logarithm of market value of equity; **LN_Assets:** Natural logarithm of assets; **LN_Price:** Natural logarithm of closing price; **BTM:** Book-to-Market ratio; **Finance – Wholesale** are the industries. Data winsorized at the 1 and 99 percent levels. **p10 - p90** are resp. 10th, 25th, 75th, and 90th percentiles.

	<i>Obs</i>	<i>Mean</i>	<i>St.dev.</i>	<i>Median</i>	<i>Min</i>	<i>Max</i>	<i>p10</i>	<i>P25</i>	<i>P75</i>	<i>P90</i>
<i>Assets</i>	3232	1254.041	4106.875	132.435	0.000	47540.000	8.969	29.930	523.145	2358.894
<i>Equity</i>	3218	267.248	1441.997	40.733	-11926.000	20016.000	-0.002	9.610	180.879	628.363
<i>Shares</i>	3193	56.516	165.612	17.958	0.000	2602.000	3.278	7.080	45.032	100.174
<i>NetIncome</i>	3221	10.606	104.467	0.445	-2572.000	1935.000	-8.196	-1.251	5.356	22.551
<i>Sales</i>	3222	258.348	1147.502	23.550	-25.362	16031.000	0.860	4.668	108.503	343.021
<i>MarketValue</i>	1721	1131.452	4424.461	120.285	0.024	64571.106	13.181	32.791	508.130	1716.774
<i>Leverage</i>	3230	0.556	0.364	0.502	0.035	1.829	0.146	0.291	0.752	0.943
<i>ROA</i>	3230	-0.010	0.068	0.004	-0.162	0.161	-0.139	-0.021	0.020	0.043
<i>MTB</i>	3217	5.925	59.597	1.463	-836.858	1371.573	0.000	0.699	3.064	7.238
<i>TobinsQ</i>	3230	1.912	1.396	1.339	0.465	5.450	0.802	0.993	2.243	4.509
<i>Price</i>	3070	13.989	20.850	7.134	0.035	156.86	0.60	2.20	17.72	33.55
<i>Restatement</i>	3238	0.110	0.313	0.000	0.000	1.000	0.000	0.000	0.000	1.000
<i>GoingPrivate</i>	3238	0.374	0.484	0.000	0.000	1.000	0.000	0.000	1.000	1.000
<i>MBO</i>	3238	0.202	0.402	0.000	0.000	1.000	0.000	0.000	0.000	1.000
<i>LBO</i>	3238	0.186	0.389	0.000	0.000	1.000	0.000	0.000	0.000	1.000
<i>LN_Equity</i>	3218	11.825	0.010	11.823	11.731	11.960	11.823	11.823	11.824	11.827
<i>LN_NetIncome</i>	3221	11.030	0.002	11.029	10.987	11.060	11.029	11.029	11.029	11.030
<i>LN_Sales</i>	3222	10.161	0.038	10.152	10.150	10.637	10.151	10.151	10.156	10.165
<i>LN_Shares</i>	3191	2.905	1.479	2.888	-6.908	7.864	1.192	1.957	3.814	4.607
<i>LN_MarketValue</i>	1721	4.902	1.998	4.790	-3.730	11.076	2.579	3.490	6.231	7.448
<i>LN_Assets</i>	3230	4.878	2.209	4.889	-6.908	10.769	2.204	3.403	6.262	7.770
<i>LN_Price</i>	3070	1.713	1.690	1.965	-6.908	8.342	-0.511	0.788	2.875	3.513
<i>BTM</i>	3047	0.721	0.729	0.521	0.032	3.483	0.032	0.212	0.982	1.571
<i>Finance</i>	3238	0.162	0.369	0.000	0.000	1.000	0.000	0.000	0.000	1.000
<i>Manufacturing</i>	3238	0.261	0.439	0.000	0.000	1.000	0.000	0.000	1.000	1.000
<i>Mining</i>	3238	0.038	0.192	0.000	0.000	1.000	0.000	0.000	0.000	0.000
<i>Public</i>	3238	0.011	0.106	0.000	0.000	1.000	0.000	0.000	0.000	0.000
<i>Retail</i>	3238	0.082	0.275	0.000	0.000	1.000	0.000	0.000	0.000	0.000
<i>Services</i>	3238	0.261	0.439	0.000	0.000	1.000	0.000	0.000	1.000	1.000
<i>Transportation</i>	3238	0.122	0.328	0.000	0.000	1.000	0.000	0.000	0.000	1.000
<i>Wholesale</i>	3238	0.052	0.222	0.000	0.000	1.000	0.000	0.000	0.000	0.000

Table 4 Descriptive Statistics control sample

Assets: Total assets; **Equity:** Common ordinary equity; **Shares:** Common shares outstanding; **NetIncome:** Net income; **Sales:** Firms' total sales (\times \$ million); **MarketValue:** Firm's equity as calculated the total number of outstanding shares multiplied by its end of the year closing stock price (\times \$ million); **Leverage:** Equity scaled by total assets; **ROA:** Return on assets, measured as industry aggregate operating profit before depreciation divided by industry aggregate total assets; **MTB:** Market-to-Book ratio; **TobinsQ:** Tobin's Q; **Price:** End of the year closing price; **Restatement:** Dummy value 1 if the annual report changed and 0 if the report was not deteriorated; **GoingPrivate:** Dummy value 1 if the company becomes private, and 0 else case; **MBO:** Dummy value 1 if management of the company becomes the owner of the entire firm or at least a part of the firm, and 0 else case; **LBO:** Dummy value 1 if the buyout is leveraged, and 0 else case; **LN_Equity:** Natural logarithm of common ordinary equity; **LN_NetIncome:** Natural logarithm of net income; **LN_Sales:** Natural logarithm of sales; **LN_Shares:** Natural logarithm of common shares outstanding; **LN_MarketValue:** Natural logarithm of market value of equity; **LN_Assets:** Natural logarithm of assets; **LN_Price:** Natural logarithm of closing price; **BTM:** Book-to-Market ratio; **Finance – Wholesale** are the industries. Data winsorized at the 1 and 99 percent levels. **p10 - p90** are resp. 10th, 25th, 75th, and 90th percentiles.

<i>Control group</i>	<i>Obs</i>	<i>Mean</i>	<i>St.dev.</i>	<i>Median</i>	<i>Min</i>	<i>Max</i>	<i>p10</i>	<i>P25</i>	<i>P75</i>	<i>P90</i>
<i>Assets</i>	1969	1332.402	4058.259	159.002	0.000	36020.000	9.086	30.944	617.792	2863.884
<i>Equity</i>	1956	319.741	1539.117	57.667	-11926.000	20016.000	0.781	10.730	210.653	716.946
<i>Shares</i>	1956	55.745	109.876	23.672	0.001	833.396	3.977	9.136	49.586	115.396
<i>NetIncome</i>	1962	11.597	101.241	0.702	-2572.000	1935.000	-8.077	-1.317	7.737	26.296
<i>Sales</i>	1964	231.805	804.171	24.890	-25.362	9636.000	0.574	4.739	120.828	401.861
<i>MarketValue</i>	1336	1148.861	4182.966	152.974	0.024	64571.106	18.217	42.963	609.384	1903.281
<i>Leverage</i>	1967	0.531	0.355	0.469	0.035	1.829	0.135	0.270	0.725	0.930
<i>ROA</i>	1967	-0.009	0.070	0.005	-0.162	0.161	-0.146	-0.021	0.021	0.045
<i>MTB</i>	1956	8.820	76.010	1.841	-836.858	1371.573	0.000	0.905	3.980	9.504
<i>TobinsQ</i>	1967	2.161	1.512	1.516	0.465	5.450	0.871	1.057	2.761	5.450
<i>Price</i>	1872	16.147	21.058	9.70	0.035	156.86	1.030	2.900	21.255	39.070
<i>Restatement</i>	1969	0.106	0.308	0.000	0.000	1.000	0.000	0.000	0.000	1.000
<i>GoingPrivate</i>	1969	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<i>MBO</i>	1969	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<i>LBO</i>	1969	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<i>LN_Equity</i>	1956	11.825	0.011	11.823	11.731	11.960	11.823	11.823	11.824	11.828
<i>LN_NetIncome</i>	1962	11.030	0.002	11.029	10.987	11.060	11.029	11.029	11.030	11.030
<i>LN_Sales</i>	1964	10.160	0.028	10.152	10.150	10.471	10.151	10.151	10.156	10.167
<i>LN_Shares</i>	1956	3.094	1.359	3.164	-6.908	6.726	1.381	2.212	3.904	4.748
<i>LN_MarketValue</i>	1336	5.147	1.880	5.030	-3.730	11.076	2.902	3.760	6.412	7.551
<i>LN_Assets</i>	1967	4.990	2.290	5.072	-6.908	10.492	2.216	3.436	6.427	7.960
<i>LN_Price</i>	1872	1.986	1.568	2.272	-5.915	8.342	0.030	1.065	3.057	3.665
<i>BTM</i>	1859	0.605	0.624	0.435	0.032	3.483	0.035	0.181	0.802	1.327
<i>Finance</i>	1969	0.170	0.375	0.000	0.000	1.000	0.000	0.000	0.000	1.000
<i>Manufacturing</i>	1969	0.271	0.445	0.000	0.000	1.000	0.000	0.000	1.000	1.000
<i>Mining</i>	1969	0.027	0.163	0.000	0.000	1.000	0.000	0.000	0.000	0.000
<i>Public</i>	1969	0.009	0.093	0.000	0.000	1.000	0.000	0.000	0.000	0.000
<i>Retail</i>	1969	0.082	0.275	0.000	0.000	1.000	0.000	0.000	0.000	0.000
<i>Services</i>	1969	0.240	0.427	0.000	0.000	1.000	0.000	0.000	0.000	1.000
<i>Transportation</i>	1969	0.141	0.348	0.000	0.000	1.000	0.000	0.000	0.000	1.000
<i>Wholesale</i>	1969	0.049	0.215	0.000	0.000	1.000	0.000	0.000	0.000	0.000

Table 5 Descriptive Statistics treatment sample

Assets: Total assets; **Equity:** Common ordinary equity; **Shares:** Common shares outstanding; **NetIncome:** Net income; **Sales:** Firms' total sales (\times \$ million); **MarketValue:** Firm's equity as calculated the total number of outstanding shares multiplied by its end of the year closing stock price (\times \$ million); **Leverage:** Equity scaled by total assets; **ROA:** Return on assets, measured as industry aggregate operating profit before depreciation divided by industry aggregate total assets; **MTB:** Market-to-Book ratio; **TobinsQ:** Tobin's Q; **Price:** End of the year closing price; **Restatement:** Dummy value 1 if the annual report changed and 0 if the report was not deteriorated; **GoingPrivate:** Dummy value 1 if the company becomes private, and 0 else case; **MBO:** Dummy value 1 if management of the company becomes the owner of the entire firm or at least a part of the firm, and 0 else case; **LBO:** Dummy value 1 if the buyout is leveraged, and 0 else case; **LN_Equity:** Natural logarithm of common ordinary equity; **LN_NetIncome:** Natural logarithm of net income; **LN_Sales:** Natural logarithm of sales; **LN_Shares:** Natural logarithm of common shares outstanding; **LN_MarketValue:** Natural logarithm of market value of equity; **LN_Assets:** Natural logarithm of assets; **LN_Price:** Natural logarithm of closing price; **BTM:** Book-to-Market ratio; **Finance – Wholesale** are the industries. Data winsorized at the 1 and 99 percent levels. **p10 - p90** are resp. 10th, 25th, 75th, and 90th percentiles.

<i>Treatment group</i>	<i>Obs</i>	<i>Mean</i>	<i>St.dev.</i>	<i>Median</i>	<i>Min</i>	<i>Max</i>	<i>p10</i>	<i>P25</i>	<i>P75</i>	<i>P90</i>
<i>Assets</i>	1263	1131.877	4180.225	114.329	0.036	47540.000	8.926	29.117	320.695	1566.000
<i>Equity</i>	1262	185.888	1273.278	29.651	-11926.000	10680.000	-3.542	7.194	132.981	548.371
<i>Shares</i>	1237	57.736	227.451	13.095	0.000	2602.000	2.200	5.137	35.277	91.828
<i>NetIncome</i>	1259	9.061	109.329	0.204	-1161.389	1935.000	-8.530	-1.187	2.904	16.523
<i>Sales</i>	1258	299.787	1536.687	22.360	0.000	16031.000	1.449	4.474	83.409	248.683
<i>MarketValue</i>	385	1071.040	5181.570	44.900	0.045	53913.720	4.125	14.385	209.299	655.606
<i>Leverage</i>	1263	0.595	0.374	0.541	0.035	1.829	0.171	0.325	0.800	0.997
<i>ROA</i>	1263	-0.012	0.064	0.002	-0.162	0.161	-0.123	-0.023	0.018	0.040
<i>MTB</i>	1261	1.435	8.248	1.022	-108.762	162.810	-0.066	0.450	1.984	4.057
<i>TobinsQ</i>	1263	1.525	1.087	1.119	0.465	5.450	0.725	0.909	1.717	2.875
<i>Price</i>	1198	10.618	20.070	4.75	0.035	156.86	0.35	1.3	12.350	23.860
<i>Restatement</i>	1269	0.117	0.321	0.000	0.000	1.000	0.000	0.000	0.000	1.000
<i>GoingPrivate</i>	1269	0.954	0.209	1.000	0.000	1.000	1.000	1.000	1.000	1.000
<i>MBO</i>	1269	0.515	0.500	1.000	0.000	1.000	0.000	0.000	1.000	1.000
<i>LBO</i>	1269	0.474	0.500	0.000	0.000	1.000	0.000	0.000	1.000	1.000
<i>LN_Equity</i>	1262	11.824	0.009	11.823	11.731	11.898	11.823	11.823	11.824	11.827
<i>LN_NetIncome</i>	1259	11.030	0.002	11.029	11.010	11.060	11.029	11.029	11.029	11.030
<i>LN_Sales</i>	1258	10.162	0.049	10.152	10.151	10.637	10.151	10.151	10.155	10.161
<i>LN_Shares</i>	1235	2.606	1.608	2.575	-6.908	7.864	0.823	1.639	3.575	4.520
<i>LN_MarketValue</i>	385	4.053	2.159	3.804	-3.097	10.895	1.417	2.666	5.344	6.486
<i>LN_Assets</i>	1263	4.704	2.066	4.739	-3.324	10.769	2.189	3.371	5.770	7.356
<i>LN_Price</i>	1198	1.288	1.784	1.558	-6.908	7.775	-1.050	0.262	2.514	3.172
<i>BTM</i>	1188	0.904	0.836	0.710	0.032	3.483	0.032	0.295	1.205	2.100
<i>Finance</i>	1269	0.151	0.358	0.000	0.000	1.000	0.000	0.000	0.000	1.000
<i>Manufacturing</i>	1269	0.246	0.431	0.000	0.000	1.000	0.000	0.000	0.000	1.000
<i>Mining</i>	1269	0.055	0.228	0.000	0.000	1.000	0.000	0.000	0.000	0.000
<i>Public</i>	1269	0.016	0.125	0.000	0.000	1.000	0.000	0.000	0.000	0.000
<i>Retail</i>	1269	0.082	0.274	0.000	0.000	1.000	0.000	0.000	0.000	0.000
<i>Services</i>	1269	0.293	0.455	0.000	0.000	1.000	0.000	0.000	1.000	1.000
<i>Transportation</i>	1269	0.093	0.291	0.000	0.000	1.000	0.000	0.000	0.000	0.000
<i>Wholesale</i>	1269	0.057	0.231	0.000	0.000	1.000	0.000	0.000	0.000	0.000

Table 6 Correlations hypothesis 1

Restatement: Dummy value 1 if the annual report changed and 0 if the report was not deteriorated; **LN_Equity:** Natural logarithm of common ordinary equity; **LN_NetIncome:** Natural logarithm of net income; **LN_Sales:** Natural logarithm of sales; **LN_Shares:** Natural logarithm of common shares outstanding; **LN_MarketValue:** Natural logarithm of market value of equity; **LN_Assets:** Natural logarithm of assets; **LN_Price:** Natural logarithm of closing price; **BTM:** Book-to-Market ratio; **Leverage:** Equity scaled by total assets; **ROA:** Return on assets, measured as industry aggregate operating profit before depreciation divided by industry aggregate total assets; **TobinsQ:** Tobin's Q; **GoingPrivate:** Dummy value 1 if the company becomes private, and 0 else case; **MBO:** Dummy value 1 if management of the company becomes the owner of the entire firm or at least a part of the firm, and 0 else case; **LBO:** Dummy value 1 if the buyout is leveraged, and 0 else case. Data winsorized at the 1 and 99 percent levels. *Significance levels are ** $p < 0.05$, *** $p < 0.01$*

	<i>LN Equity</i>	<i>LN NetIncome</i>	<i>LN Sales</i>	<i>LN Shares</i>	<i>LN Market Value</i>	<i>LN Assets</i>	<i>LN Price</i>	<i>BTM</i>	<i>Leverage</i>	<i>ROA</i>	<i>TobinsQ</i>	<i>Going Private</i>	<i>MBO</i>	<i>LBO</i>
<i>Restatement</i>	-0.00631	-0.0305	-0.0218	-0.0184	0.0251	-0.00658	0.00955	-0.0335	-0.00967	-0.00809	0.0102	0.0173	0.00465	0.0117
<i>LN_Equity</i>	1	0.0629***	0.168***	0.263***	0.358***	0.276***	0.208***	-0.0194	-0.115***	0.0490**	-0.0271	-0.0460**	-0.0198	-0.0352*
<i>LN_NetIncome</i>	0.0629***	1												
<i>LN_Sales</i>	0.168***	0.570***	1											
<i>LN_Shares</i>	0.263***	0.225***	0.365***	1										
<i>LN_MarketValue</i>	0.358***	0.240***	0.421***	0.559***	1									
<i>LN_Assets</i>	0.276***	0.235***	0.440***	0.404***	0.758***	1								
<i>LN_Price</i>	0.208***	0.156***	0.221***	-0.0417**	0.751***	0.644***	1							
<i>BTM</i>	-0.0194	-0.0840***	-0.0927***	-0.275***	-0.309***	0.0466**	-0.198***	1						
<i>Leverage</i>	-0.115***	0.0453**	0.143***	0.0179	-0.0112	0.0549***	-0.153***	-0.186***	1					
<i>ROA</i>	0.0490***	0.178***	0.0879***	-0.101***	0.253***	0.247***	0.393***	0.00822	-0.152***	1				
<i>TobinsQ</i>	-0.0271	0.0297	-0.0126	0.228***	0.129***	-0.332***	0.0289	-0.582***	0.0837***	-0.136***	1			
<i>GoingPrivate</i>	-0.0460***	-0.00524	0.0287	-0.169***	-0.235***	-0.0647***	-0.203***	0.197***	0.112***	-0.0232	-0.225***	1		
<i>MBO</i>	-0.0198	-0.0521***	-0.0757***	-0.239***	-0.203***	-0.0776***	-0.109***	0.146***	0.0872***	0.0333	-0.160***	0.622***	1	
<i>LBO</i>	-0.0352**	0.0409**	0.108***	0.0450**	-0.0878***	0.00316	-0.135***	0.0974***	0.0173	-0.0554***	-0.109***	0.562***	-0.240***	1

Table 7 Correlations hypothesis 2

CAR: Cumulative Abnormal Returns; **Restatement:** Dummy value 1 if the annual report changed and 0 if the report was not deteriorated; **LN_Equity:** Natural logarithm of common ordinary equity; **LN_NetIncome:** Natural logarithm of net income; **LN_Sales:** Natural logarithm of sales; **LN_Shares:** Natural logarithm of common shares outstanding; **LN_MarketValue:** Natural logarithm of market value of equity; **LN_Assets:** Natural logarithm of assets; **LN_Price:** Natural logarithm of closing price; **BTM:** Book-to-Market ratio; **Leverage:** Equity scaled by total assets; **ROA:** Return on assets, measured as industry aggregate operating profit before depreciation divided by industry aggregate total assets; **TobinsQ:** Tobin's Q; **GoingPrivate:** Dummy value 1 if the company becomes private, and 0 else case; **MBO:** Dummy value 1 if management of the company becomes the owner of the entire firm or at least a part of the firm, and 0 else case; **LBO:** Dummy value 1 if the buyout is leveraged, and 0 else case. Data winsorized at the 1 and 99 percent levels. *Significance levels are ** $p < 0.05$, *** $p < 0.01$*

	<i>Restatement</i>	<i>LN Equity</i>	<i>LN NetIncome</i>	<i>LN Sales</i>	<i>LN Shares</i>	<i>LN Market Value</i>	<i>LN Assets</i>	<i>LN Price</i>	<i>BTM</i>	<i>Leverage</i>	<i>ROA</i>	<i>TobinsQ</i>	<i>Going Private</i>	<i>MBO</i>	<i>LBO</i>
<i>CAR</i>	0.0414	0.0380	0.0324	-0.0471	0.112*	0.0750	0.0564	-0.0463	0.173***	-0.145**	-0.105*	-0.0459	0.0938*	-0.0562	0.0562
<i>Restatement</i>	1														
<i>LN_Equity</i>	0.0196	1													
<i>LN_NetIncome</i>	-0.0170	-0.0646	1												
<i>LN_Sales</i>	-0.0960*	-0.166***	0.185***	1											
<i>LN_Shares</i>	-0.0483	-0.0310	0.131**	0.654***	1										
<i>LN_MarketValue</i>	-0.0536	-0.106	0.687***	0.825***	0.848***	1									
<i>LN_Assets</i>	-0.0874	-0.156***	0.148**	0.864***	0.717***	0.876***	1								
<i>LN_Price</i>	0.0244	-0.0140	0.0983*	0.485***	0.207***	0.680***	0.562***	1							
<i>BTM</i>	-0.112*	0.0565	-0.0685	-0.101*	-0.198***	-0.485***	-0.0752	-0.515***	1						
<i>Leverage</i>	-0.00157	-0.279***	0.130**	0.501***	0.0711	0.553***	0.461***	0.298***	-0.140**	1					
<i>ROA</i>	-0.0290	-0.0164	0.224***	0.227***	0.0583	0.161	0.174***	0.288***	-0.121**	0.00741	1				
<i>TobinsQ</i>	0.133**	-0.00131	0.104*	0.0892*	0.254***	0.339***	0.0187	0.437***	-0.637***	0.0296	0.0708	1			
<i>GoingPrivate</i>	0.00122	-0.0293	0.158***	0.110*	-0.00359	0.00381	0.0272	-0.0302	0.0262	0.196***	-0.0898*	-0.104*	1		
<i>MBO</i>	-0.0198	0.0616	-0.0136	-0.159***	-0.239***	-0.0542	-0.116*	-0.0476	0.0162	0.127**	0.0831	-0.0989*	-0.0477	1	
<i>LBO</i>	0.0198	-0.0616	0.0136	0.159***	0.239***	0.0542	0.116*	0.0476	-0.0162	-0.127**	-0.0831	0.0989*	0.0477	-1	1

CHAPTER V: RESULTS

5.1 Interpretation Logistic Regression Hypothesis 1

Hypothesis 1a

See Table 8 for the parameter estimates of the model with the Restatement dummy variable as the dependent variable, employed to test the effects of going private. This table presents the effects of **GoingPrivate**, or in other words whether before going private, a firm has a greater incentive to misreport by applying aggressive accounting techniques to understate earnings. If this is the case, a firm “should” have on average higher frequency of restatements during the considered time frame of the research. For the model with only the **GoingPrivate** variable explaining the restatement, a significant and negative relation is found ($\beta = -0.328, p < 5\%$). This results are not consistent with our expectations because before a firm went private, it was on average less likely to restate its reports and deteriorate its quality. The marginal effects shown in Table 12, shows that after going private announcement the probability is 2.9 percent lower of restating the reports. In same way in all specification (2)-(9) the probability of restating was found to be lower for firms that did went private, with respectively marginal effects of -0.0274, -0.0270, -0.0289, -0.0280, -0.0283, -0.0273, -0.0276, -0.0269, all significant at the 5 percent level. Net income appeared to be significant in 4 specifications ((2), (7)-(9)), with marginal effects respectively -5.626, -6.266, -6.531, -7.309, with significance levels varying between 1 and 5 percent. These parameters could be interpreted as follows. For the specification (2), a 1% increase in the net income, the probability that a firm has restates decreases by 5.63 percent. In same way the other three parameters could be interpreted, namely a 1 percent increase in net income have led on average to 6.27, 6.53 and 7.31 percent decrease in restatement probability. Sales, shares and assets were in none of the specification significantly related to restatements. In the latter specification, equity appeared negatively related to restatement. A 1 percent increase in equity led to 0.896 percent lower probability in restating the reports (Table 12), specification (9)). In the latter three specifications Book-to-Market (**BTM**) variable is significant and have a negative impact on the restatements of the firms ($\beta = -0.185, p < 5\%$, $\beta = -0.202, p < 5\%$). Stated in marginal effects (Table 12), a 10 percent increase in **BTM** leads on average to resp. 0.165 and 0.179 percent decrease in reporting quality.

The total logistic regression sample observations vary between 2,798 and 2,962 observations, dependent on the common non-missing observations amongst the variables that enter the regression model. The explanatory power given by the pseudo R^2 ranges between 0.069 (6.9%) and 0.076 (7.6%). In specification (9) this means that the independent variables jointly describe 7.6 percent of the variation in the chance of misreporting.

The hypothesis: *Prior to going private, management has a greater incentive to misreport by applying aggressive accounting techniques to understate earnings, as it will lead to a higher frequency of restatements relative to those firms that do not go private.*

Should be rejected, if firms go private, with or without control variables included. So why should this hypothesis be rejected? As found, *GoingPrivate* is negative, which implies that before going private and so before the delisting was completed, the probability of restatement has decreased.

Hypothesis 1b

See **Error! Reference source not found.** for the parameter estimates of the model with the Restatement dummy variable as the dependent variable, employed to test the effects of management buyout. This table presents the effects of *MBO*, or in other words whether before management buyout, a firm has a greater incentive to misreport by applying aggressive accounting techniques to understate earnings. If this is the case, a firm “should” have on average higher frequency of restatements during the considered time frame of the research. Only in specification (9), *MBO* appeared to have an effect on the firm’s reporting quality ($\beta = -0.677, p < 5\%$). Before a firm had a management buyout announcement, it was on average less likely to restate its reports and deteriorate its quality. The marginal effects shown in Table 13, shows that after going private the probability is 5.22 percent lower of restating the reports. Net income appeared to be significant in three specifications ((2), (7) and (8)), with marginal effects respectively -5.733, -6.385, and -7.381 with significance level of 1 percent. These parameters could be interpreted as follows. For specification (2), a 1%

increase in the net income, the probability that a firm has restates decreases by 5.73 percent.

In same way the other two parameters could be interpreted, namely a 1 percent increase in net income have led on average resp. to 6.39, and 7.38 percent decrease in restatement probability. In none of the estimations, sales, shares, market value, assets and price were significantly related to restatements. In specification (8), equity appeared negatively related to restatement. A 1 percent increase in equity led to 0.849 percent lower probability in restating the reports (Table 13, specification (8)). In the specifications (6)-(8), Book-to-Market (*BTM*) variable is significant and has a negative impact on the restatements of the firms ($\beta = -0.189, \beta = -0.201, \beta = -0.219, p < 5\%$). Stated in marginal effects (Table 13, specification (8)) a 10 percent increase in *BTM* leads on average to resp. 0.170, 0.180 and 0.195 percent decrease in reporting quality.

The total logistic regression sample observations vary between 1,477 and 2,970 observations, dependent on the common non-missing observations amongst the variables that enter the regression model. The explanatory power given by the pseudo R^2 ranges between 0.031 (3.1%) and 0.076 (7.6%). In specification (8) this means that the independent variables jointly describe 7.6 percent of the variation in the chance of misreporting.

The hypothesis: *Prior to going private, management has a greater incentive to misreport by applying aggressive accounting techniques to understate earnings, as it will lead to a higher frequency of restatements relative to those firms that do not go private.*

Should be rejected, for the latter specification. So why should this hypothesis be accepted? As found, *MBO* is negative, which implies that after management buyout announcement and so before the delisting was completed the, probability of restatement has decreased.

Hypothesis 1c

See for the parameter estimates of the model with the Restatement dummy variable as the dependent variable, employed to test the effects of leveraged buyout. This table presents the effects of *LBO*, or in other words whether before leveraged buyout, a firm has a greater incentive to misreport by applying aggressive accounting techniques to understate earnings. If this is the case, a firm “should” have on average higher frequency of restatements during the considered time frame of the research. In none of the specifications, *LBO* has an effect on the firm’s reporting quality ($p > 5\%$). The marginal effects are shown in Table 14. Net income appeared to be significant in three specifications ((2), (7) and (8)), with marginal effects respectively -5.517, -6.216, and -6.441 with significance level of 1 and 5 percent. These parameters could be interpreted as follows. For specification (2), a 1% increase in the net income, the probability that a firm has restates decreases by 5.52 percent. In same way the other two parameters could be interpreted, namely a 1 percent increase in net income have led on average resp. to 6.22, and 6.44 percent decrease in restatement probability. In none of the estimations, Equity, sales, shares, market value, assets and price were significantly related to restatements. In the specifications (6)-(8), Book-to-Market (*BTM*) variable is significant and has a negative impact on the restatements of the firms ($\beta = -0.197$, $\beta = -0.209$, $p < 5$). Stated in marginal effects (Table 14 specification (8)) a 10 percent increase in *BTM* leads on average to resp. 0.177 and 0.187 percent decrease in reporting quality.

The total logisitic regression sample observations vary between 1,477 and 2,970 observations, dependent on the common non-missing observations amongst the variables that enter the regression model. The explanatory power given by the pseudo R^2 ranges between 0.028 (2.8%) and 0.073 (7.3%). In specification (8) this means that the independent variables jointly describe 7.3 percent of the variation in the chance of misreporting.

The hypothesis: *Prior to going private, management has a greater incentive to misreport by applying aggressive accounting techniques to understate earnings, as it will lead to a higher frequency of restatements relative to those firms that do not go private.*

There is no sufficient evidence to accept the hypothesis.

Hypothesis 1d

See Table 11 for the parameter estimates of the model with the Restatement dummy variable as the dependent variable, employed to test the joint effects of going private, management and leveraged buyout. This table presents the effects of *GoingPrivate*, *MBO* and *LBO*, or in other words whether before going private, management and leveraged buyout, a firm has a greater incentive to misreport by applying aggressive accounting techniques to understate earnings. If this is the case, a firm “should” have on average higher frequency of restatements during the considered time frame of the research. Just in specification (1), *GoingPrivate* has a negative effect on the firm’s reporting quality ($\beta = -0.323, p < 5\%$). Before a firm went private, it was less likely to restate its reports and deteriorate its quality. The marginal effects are shown in Table 15. In none of the estimations, management and leveraged buyout, equity, leverage, ROA, Tobin’s Q were significantly related to restatements. Net income appeared to be significant in all specifications ((1)-(4)), with marginal effects respectively -5.965, -6.095, -5.911 and -6.067 with significance level of 1 percent. These parameters could be interpreted as follows. For specification (1), a 1% increase in the net income, the probability that a firm has restates decreases by 5.97 percent. In same way the other two parameters could be interpreted, namely a 1 percent increase in net income have led on average resp. to 6.10, 5.91, and 6.07 percent decrease in restatement probability. In the specifications (1)-(4), Book-to-Market (*BTM*) variable is significant and has a negative impact on the restatements of the firms ($\beta = -0.238, \beta = -0.246, \beta = -0.256, \beta = -0.234 p < 5$). Stated in marginal effects (Table 15) a 10 percent increase in *BTM* leads on average to resp. 0.212, 0.219, 0.229, and 208 percent decrease in reporting quality.

The total logistic regression sample observations are 2,793, which are the the common non-missing observations amongst the variables that enter the regression model. The explanatory power given by the pseudo R^2 ranges between 0.074 (7.4%) and 0.076 (7.6%). In specification (4) this means that the independent variables jointly describe 7.6 percent of the variation in the chance of misreporting.

The hypothesis: *Prior to going private, management has a greater incentive to misreport by applying aggressive accounting techniques to understate earnings, as it will lead to a higher frequency of restatements relative to those firms that do not go private.*

Should be rejected, for the first specification. So why should this hypothesis be accepted? As found, *GoingPrivate* is negative, which implies that after going private announcement and so before the delisting was completed, the probability of restatement has decreased.

Test Hypothesis 1

Table 8 Logistic Regression estimates of Restatement on Going Private and control variables

This table presents regression coefficients and standard errors for Eq. 1. Dependent variable is **Restatement**: Dummy value 1 if the annual report changed and 0 if the report was not deteriorated. Independent variables are: **GoingPrivate**: Dummy value 1 if the company becomes private, and 0 else case; **LN_Equity**: Natural logarithm of common ordinary equity; **LN_NetIncome**: Natural logarithm of net income; **LN_Sales**: Natural logarithm of sales; **LN_Shares**: Natural logarithm of common shares outstanding; **LN_Assets**: Natural logarithm of assets; **BTM**: Book-to-Market ratio; **Finance – Wholesale** are the industries. Data are winsorized at the 1 and 99 percent levels. The accompanying marginal effects are shown in **Error! Reference source not found.** Standard errors are shown between parentheses. ***, **, * indicate significance at 1, 5, and 10% levels, respectively.

Specification:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
GoingPrivate	-0.328** (0.132)	-0.315** (0.132)	-0.309** (0.133)	-0.329** (0.134)	-0.321** (0.132)	-0.316** (0.138)	-0.306** (0.138)	-0.310** (0.138)	-0.303** (0.138)
LN_Equity	-2.753 (3.851)							-5.559 (4.138)	-10.091** (4.799)
LN_NetIncome		-64.602*** (24.149)					-70.259** (27.353)	-73.324*** (25.128)	-82.281*** (26.711)
LN_Sales			-1.948 (2.264)						
LN_Shares				0.027 (0.043)					
LN_Assets					0.019 (0.028)				0.054 (0.033)
BTM						-0.172* (0.091)	-0.185** (0.092)	-0.185** (0.092)	-0.202** (0.095)
Constant	29.104 (45.320)	709.046*** (266.402)	16.324 (22.820)	-3.508*** (0.696)	-3.561*** (0.698)	-3.260*** (0.710)	771.643** (301.745)	871.186*** (294.219)	1023.259*** (303.679)
Model	Logistic	Logistic	Logistic	Logistic	Logistic	Logistic	Logistic	Logistic	Logistic
Standard errors clustered	Firm-level	Firm-level	Firm-level	Firm-level	Firm-level	Firm-level	Firm-level	Firm-level	Firm-level
Parameters	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,959	2,961	2,962	2,935	2,970	2,798	2,795	2,795	2,793
pseudo R2	0.069	0.071	0.070	0.070	0.070	0.073	0.075	0.075	0.076
Log pseudolikelihood	-1012.161	-1008.920	-1010.203	-1004.917	-1013.027	-974.049	-970.257	-969.946	-968.036

Table 9 Logistic Regression estimates of Restatement on Management Buyout and control variables

This table presents regression coefficients and standard errors for Eq. 1. Dependent variable is **Restatement**: Dummy value 1 if the annual report changed and 0 if the report was not deteriorated. Independent variables are: **MBO**: Dummy value 1 if management of the company becomes the owner of the entire firm or at least a part of the firm, and 0 else case; **LN_NetIncome**: Natural logarithm of net income; **BTM**: Book-to-Market ratio; **LN_Equity**: Natural logarithm of common ordinary equity; **LN_Sales**: Natural logarithm of sales; **LN_Shares**: Natural logarithm of common shares outstanding; **LN_MarketValue**: Natural logarithm of market value of equity; **LN_Assets**: Natural logarithm of assets; **LN_Price**: Natural logarithm of closing price; **Finance – Wholesale** are the industries. Data are winsorized at the 1 and 99 percent levels. The accompanying marginal effects are shown in

. Standard errors are shown between parentheses. ***, **, * indicate significance at 1, 5, and 10% levels, respectively.

Specification:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
MBO	-0.267* (0.151)	-0.270* (0.150)	-0.269* (0.150)	-0.272* (0.157)	-0.259* (0.150)	-0.288* (0.158)	-0.293* (0.158)	-0.275* (0.158)	-0.677** (0.313)
LN_NetIncome		-65.653*** (24.136)					-74.097*** (24.703)	-82.906*** (26.587)	-45.662* (23.380)
BTM						-0.189** (0.091)	-0.201** (0.091)	-0.219** (0.095)	-0.271 (0.223)
LN_Equity	-2.381 (3.926)						-5.192 (3.959)	-9.540** (4.711)	0.857 (5.057)
LN_Sales			-2.209 (2.203)						-3.466 (2.466)
LN_Shares				0.023 (0.044)					1.025 (0.924)
LN_MarketValue									-1.112 (0.896)
LN_Assets					0.017 (0.029)			0.053 (0.034)	0.095 (0.077)
LN_Price									1.120 (0.881)
Constant	24.560 (46.224)	720.508*** (266.250)	18.841 (22.197)	-3.640*** (0.689)	-3.692*** (0.692)	-3.365*** (0.705)	875.270*** (285.346)	1023.555*** (298.293)	526.915* (284.778)
Model	Logistic	Logistic	Logistic	Logistic	Logistic	Logistic	Logistic	Logistic	Logistic
Standard errors clustered	Firm-level	Firm-level	Firm-level	Firm-level	Firm-level	Firm-level	Firm-level	Firm-level	Firm-level
Parameters	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,959	2,961	2,962	2,935	2,970	2,798	2,795	2,793	1,477
pseudo R2	0.068	0.070	0.069	0.069	0.068	0.072	0.074	0.076	0.031
Log pseudolikelihood	-1013.737	-1010.207	-1011.393	-1006.487	-1014.572	-975.059	-970.783	-968.955	-442.055

Table 10 Logistic Regression estimates of Restatement on Leverage Buyout and control variables

This table presents regression coefficients and standard errors for Eq. 1. Dependent variable is **Restatement**: Dummy value 1 if the annual report changed and 0 if the report was not deteriorated. Independent variables are: **LBO**: Dummy value 1 if the buyout is leveraged, and 0 else case; **LN_NetIncome**: Natural logarithm of net income; **BTM**: Book-to-Market ratio; **LN_Equity**: Natural logarithm of common ordinary equity; **LN_Sales**: Natural logarithm of sales; **LN_Shares**: Natural logarithm of common shares outstanding; **LN_MarketValue**: Natural logarithm of market value of equity; **LN_Assets**: Natural logarithm of assets; **LN_Price**: Natural logarithm of closing price; **Finance – Wholesale** are the industries. Data are winsorized at the 1 and 99 percent levels. The accompanying marginal effects are shown in **Error! Reference source not found.**. Standard errors are shown between parentheses. ***, **, * indicate significance at 1, 5, and 10% levels, respectively.

Specification:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
LBO	-0.198 (0.158)	-0.179 (0.158)	-0.173 (0.159)	-0.199 (0.160)	-0.199 (0.158)	-0.152 (0.160)	-0.138 (0.160)	-0.140 (0.160)	-0.398 (0.343)
LN_NetIncome		-63.078*** (23.277)					-69.370*** (26.651)	-71.957*** (24.743)	-43.375* (22.528)
BTM						-0.197** (0.092)	-0.209** (0.093)	-0.209** (0.093)	-0.260 (0.217)
LN_Equity	-2.400 (3.986)							-4.904 (4.147)	-0.078 (5.200)
LN_Sales			-1.858 (2.223)						-2.987 (2.557)
LN_Shares				0.041 (0.044)					-0.446 (0.658)
LN_MarketValue									0.379 (0.621)
LN_Assets					0.022 (0.029)				0.083 (0.076)
LN_Price									-0.352 (0.609)
Constant	24.808 (46.915)	692.118*** (256.776)	15.294 (22.390)	-3.663*** (0.695)	-3.693*** (0.697)	-3.358*** (0.713)	761.747*** (293.989)	848.262*** (289.556)	507.884* (277.571)
Model	Logistic	Logistic	Logistic	Logistic	Logistic	Logistic	Logistic	Logistic	Logistic
Standard errors clustered	Firm-level	Firm-level	Firm-level	Firm-level	Firm-level	Firm-level	Firm-level	Firm-level	Firm-level
Parameters	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,959	2,961	2,962	2,935	2,970	2,798	2,795	2,795	1,477

pseudo R2	0.067	0.069	0.068	0.068	0.068	0.071	0.072	0.073	0.028
Log pseudolikelihood	-1014.516	-1011.182	-1012.402	-1007.238	-1015.239	-976.375	-972.481	-972.236	-443.464

Table 11 Logistic Regression estimates of Restatement on Buyout variables and extra control variables Leverage, Tobin's Q and ROA

This table presents regression coefficients and standard errors for Eq. 1. Dependent variable is **Restatement**: Dummy value 1 if the annual report changed and 0 if the report was not deteriorated. Independent variables are: **GoingPrivate**: Dummy value 1 if the company becomes private, and 0 else case; **MBO**: Dummy value 1 if management of the company becomes the owner of the entire firm or at least a part of the firm, and 0 else case; **LBO**: Dummy value 1 if the buyout is leveraged, and 0 else case; **LN_NetIncome**: Natural logarithm of net income; **BTM**: Book-to-Market ratio; **LN_Equity**: Natural logarithm of common ordinary equity; **Leverage**: Equity scaled by total assets; **ROA**: Return on assets, measured as industry aggregate operating profit before depreciation divided by industry aggregate total assets; **TobinsQ**: Tobin's Q; **Finance – Wholesale** are the industries. Data are winsorized at the 1 and 99 percent levels. The accompanying marginal effects are shown in **Error! Reference source not found.** Standard errors are shown between parentheses. ***, **, * indicate significance at 1, 5, and 10% levels, respectively.

Specification:	(1)	(2)	(3)	(4)
<i>GoingPrivate</i>	-0.323** (0.141)			0.112 (0.453)
<i>MBO</i>		-0.289* (0.157)		-0.501 (0.459)
<i>LBO</i>			-0.149 (0.160)	-0.396 (0.458)
<i>LN_NetIncome</i>	-67.065*** (23.645)	-68.375*** (23.254)	-66.126*** (23.405)	-68.298*** (23.937)
<i>BTM</i>	-0.238** (0.119)	-0.246** (0.119)	-0.256** (0.120)	-0.234** (0.119)
<i>LN_Equity</i>	-5.467 (4.108)	-5.127 (3.952)	-4.970 (4.203)	-5.494 (4.057)
<i>Leverage</i>	-0.067 (0.169)	-0.090 (0.165)	-0.144 (0.164)	-0.071 (0.168)
<i>ROA</i>	-0.924 (0.933)	-0.842 (0.930)	-0.884 (0.927)	-0.902 (0.933)
<i>TobinsQ</i>	-0.039 (0.057)	-0.028 (0.057)	-0.024 (0.057)	-0.036 (0.057)
Constant	801.187*** (279.243)	811.494*** (271.348)	784.869*** (278.216)	815.094*** (281.369)
Model	Logistic	Logistic	Logistic	Logistic
Standard errors clustered	Firm-level	Firm-level	Firm-level	Firm-level
Parameters	Odds Ratios	Odds Ratios	Odds Ratios	Odds Ratios
Year dummies	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes
Observations	2,793	2,793	2,793	2,793
pseudo R2	0.076	0.075	0.074	0.076
Log pseudolikelihood	-968.846	-969.840	-971.129	-968.258

Marginal Effects of the Logistic Regressions

Table 12 Marginal effects of the Logistic Regression estimates of Restatement on Going Private and control variables, as shown in Table 8

<i>Specification:</i>	(1) margins	(2) Margins	(3) Margins	(4) Margins	(5) Margins	(6) margins	(7) margins	(8) margins	(9) margins
<i>GoingPrivate</i>	-0.0288** (0.0118)	-0.0274** (0.0117)	-0.0270** (0.0118)	-0.0289** (0.0119)	-0.0280** (0.0117)	-0.0283** (0.0125)	-0.0273** (0.0127)	-0.0276** (0.0124)	-0.0269** (0.0125)
<i>LN_Equity</i>	-0.241 (0.336)							-0.495 (0.359)	-0.896** (0.426)
<i>LN_NetIncome</i>		-5.626*** (2.109)					-6.266** (2.523)	-6.531*** (2.233)	-7.309*** (2.448)
<i>LN_Sales</i>			-0.170 (0.195)						
<i>LN_Shares</i>				0.00241 (0.00383)					
<i>LN_Assets</i>					0.00166 (0.00249)				0.00483 (0.00303)
<i>BTM</i>						-0.0154* (0.00825)	-0.0165** (0.00838)	-0.0165** (0.00823)	-0.0179** (0.00863)
Observations	2,959	2,961	2,962	2,935	2,970	2,798	2,795	2,795	2,793

Table 13 Marginal effects of the Logistic Regression estimates of Restatement on Management Buyout and control variables, as shown in Table 9

<i>Specification:</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Margins	Margins	Margins	Margins	Margins	margins	margins	margins	margins
<i>MBO</i>	-0.0235*	-0.0236*	-0.0235*	-0.0240*	-0.0226*	-0.0258*	-0.0258*	-0.0245*	-0.0522**
	(0.0133)	(0.0132)	(0.0132)	(0.0138)	(0.0132)	(0.0142)	(0.0141)	(0.0141)	(0.0245)
<i>LN_NetIncome</i>		-5.733***					-6.385***	-7.381***	-3.519*
		(2.117)					(2.478)	(2.424)	(1.862)
<i>BTM</i>						-0.0170**	-0.0180**	-0.0195**	-0.0209
						(0.00825)	(0.00827)	(0.00860)	(0.0171)
<i>LN_Equity</i>	-0.209							-0.849**	0.0661
	(0.344)							(0.418)	(0.389)
<i>LN_Sales</i>			-0.193						-0.267
			(0.189)						(0.190)
<i>LN_Shares</i>				0.00205					0.0790
				(0.00388)					(0.0707)
<i>LN_MarketValue</i>									-0.0857
									(0.0685)
<i>LN_Assets</i>					0.00152			0.00474	0.00731
					(0.00253)			(0.00307)	(0.00592)
<i>LN_Price</i>									0.0863
									(0.0673)
Observations	2,959	2,961	2,962	2,935	2,970	2,798	2,795	2,793	1,477

Table 14 Marginal effects of the Logistic Regression estimates of Restatement on Leverage Buyout and control variables, as shown in Table 10

<i>Specification:</i>	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Margins	Margins	Margins	margins	margins	margins	margins	margins	margins
<i>LBO</i>	-0.0175 (0.0140)	-0.0157 (0.0139)	-0.0152 (0.0141)	-0.0175 (0.0143)	-0.0174 (0.0140)	-0.0137 (0.0145)	-0.0124 (0.0144)	-0.0125 (0.0144)	-0.0310 (0.0267)
<i>LN_NetIncome</i>		-5.517*** (2.051)					-6.216** (2.447)	-6.441*** (2.234)	-3.381* (1.798)
<i>BTM</i>						-0.0177** (0.00837)	-0.0187** (0.00847)	-0.0187** (0.00839)	-0.0203 (0.0168)
<i>LN_Equity</i>	-0.211 (0.349)							-0.439 (0.364)	-0.00611 (0.405)
<i>LN_Sales</i>			-0.163 (0.192)						-0.233 (0.198)
<i>LN_Shares</i>				0.00360 (0.00389)					-0.0347 (0.0517)
<i>LN_MarketValue</i>									0.0295 (0.0489)
<i>LN_Assets</i>					0.00189 (0.00253)				0.00647 (0.00586)
<i>LN_Price</i>									-0.0274 (0.0479)
Observations	2,959	2,961	2,962	2,935	2,970	2,798	2,795	2,795	1,477

Table 15 Marginal effects of the Logistic Regression estimates of Restatement on Buyout variables and extra control variables Leverage, Tobin's Q and ROA as shown in Table 11

<i>Specification:</i>	(1) Margins	(2) margins	(3) Margins	(4) margins
<i>GoingPrivate</i>	-0.0287** (0.0128)			0.00995 (0.0403)
<i>MBO</i>		-0.0258* (0.0142)		-0.0445 (0.0409)
<i>LBO</i>			-0.0133 (0.0144)	-0.0352 (0.0408)
<i>LN_NetIncome</i>	-5.965*** (2.144)	-6.095*** (2.131)	-5.911*** (2.087)	-6.067*** (2.125)
<i>BTM</i>	-0.0212** (0.0107)	-0.0219** (0.0107)	-0.0229** (0.0108)	-0.0208** (0.0106)
<i>LN_Equity</i>	-0.486 (0.358)	-0.457 (0.345)	-0.444 (0.367)	-0.488 (0.351)
<i>Leverage</i>	-0.00595 (0.0151)	-0.00803 (0.0147)	-0.0128 (0.0146)	-0.00635 (0.0149)
<i>ROA</i>	-0.0822 (0.0829)	-0.0750 (0.0828)	-0.0790 (0.0826)	-0.0801 (0.0826)
<i>TobinsQ</i>	-0.00343 (0.00511)	-0.00248 (0.00511)	-0.00215 (0.00511)	-0.00323 (0.00510)
Observations	2,793	2,793	2,793	2,793

5.2 Interpretation OLS Regressions Hypothesis 2

Hypothesis 2a

See Table 16 for the Ordinary Least Squares (OLS) regression parameter estimates of the model with the Cumulative Abnormal Returns (CAR) as the dependent variable, employed to test the effects of Restatement and going private dummy independent variable. This table presents the effects of *Restatement*, *GoingPrivate*, *MBO*, and *LBO* or in other words whether following restatements and going private, the prices of target firms on average have deteriorated. For the model with only the *Restatement* and *GoingPrivate* variable explaining the CARs, a significant and positive relation is found between stock price movements and going private ($\beta = 0.120, p < 5\%$). After a firm went private, it had on average positive stock prices movements. In financial terms, firms that went private had on average 12 percent higher CARs. The same verdict was noticed in specifications (2)-(4), with respectively parameters 0.274, 0.082 and 0.181, all significant at the 5 percent level. Given that I forecasted a negative abnormal return around going private announcements, this outcome totally rejects this assumption. However our result are consistent with Deangelo (1984), who performed a test arguing the effect of going private on stockholder wealth. He indicated that stockholders experience a substantial return increase on common stock when management proposes to go private. She shows in the results that the two days surrounding the initial proposal to go private, the wealth of public stockholders increased by an average of 22.27 percent. A possible explanation could be given by the wealth-gains hypothesis of DeAngelo et al. (1984). This hypothesis postulates that shareholders of publicly listed firms can expect gains from going private transactions due to their rights to vote on decisions or to their rights to hold their shares back in buyout proposals and even due to their power to sue the firm.

Restatement affected the aggregate cumulative stock price fluctuations positively ($\beta = 0.119, p < 1\%$), namely after target firms' restatement, CARs appeared on average 12% higher. Figure (1) in the Appendix show us that investor already begin to anticipate till the announcement date and after the announcement date the abnormal returns gets a positive shock. This result is contrary to our predictions of having restatements a negative effect on market return.

A possible explanation for this outcome might be due to the occurrence of our restatement sample has a significant low percentage firms did actually restated their financial statements in this time period. Or because the restatements are not divided into category of fraud, errors or irregularities.

A classification of restatements namely show that each category has a different impact on de CAR (Dechow et al., 1996). In none of the specifications, MBO, LBO, equity, net income, sales, assets, price are significantly related to CAR.

In the specifications (1) and (3), Book-to-Market (**BTM**) variable is significant and has a positive impact on the CARs ($\beta = 0.048, p < 5\%, \beta = 0.053, p < 1\%$). Stated in financial terms, a 10 percent increase in **BTM** led on average to resp. 0.48 and 0.53 percent increase in cumulative returns.

The total OLS regression sample observations vary between 146 and 459 observations, dependent on the common non-missing observations amongst the variables that enter the regression model. The explanatory power given by the adjusted R^2 ranges between 0.054 (5.4%) and 0.419 (41.9%). In specification (2) this means that the independent variables jointly describe 41.9 percent of the variation in the cumulative abnormal returns.

The hypothesis: *Stock prices will deteriorate following a going-private announcement.*

Should be rejected, since in all specifications it is evident that following a going private event, the stock price fluctuations have resulted in extraordinary returns, above the markets expectations, with or without inclusion of selected control variables.

Hypothesis 2b

See **Error! Reference source not found.** for the Ordinary Least Squares (OLS) regression parameter estimates of the model with the Cumulative Abnormal Returns (CAR) as the dependent variable, employed to test the effects of Restatement and going private dummy independent variable, now with the inclusion of Leverage, ROA and Tobin's Q. Again this table presents the effects of **Restatement**, **GoingPrivate**, **MBO**, and **LBO** or in other words whether following restatements and going private, the prices of target firms on average have deteriorated.

For the model with only the **Restatement** and **GoingPrivate** variable explaining the CARs, a significant and positive relation is found between stock price movements and going private ($\beta = 0.150, p < 1\%$). After a firm went private, it had on average positive stock prices movements. In financial terms, firms that went private had on average 15 percent higher CARs. The same verdict was noticed in specifications (4) and (7), with respectively parameters 0.152 and 0.267, all significant at the 1 percent level. Restatement did not have an effect on the aggregate cumulative stock price fluctuations. In none of the specifications, MBO, LBO, ROA, Tobin's Q, net income, assets and price are significantly related to CAR.

In the specifications (5)-(7), Book-to-Market (**BTM**) variable is significant and has a positive impact on the CARs ($\beta = 0.114, \beta = 0.122, p < 5\%$). Stated in financial terms, a 10 percent increase in **BTM** led on average to resp. 1.14 and 1.22 percent increase in cumulative returns. One percent increase of equity, resulted in same to 0.093 percent increase in CAR (specification 7). Sales has negative and significant outcomes in specifications (5)-(7), i.e. one percent increase in sales resulted in resp. 0.126, and 0.134 percent higher CARs. Lastly, market value affected the CARs positively, with one percent increase in the value of the target firm, resulting in resp. 0.224 and 0.249 percent higher CARs.

The total OLS regression sample observations vary between 146 and 485 observations, dependent on the common non-missing observations amongst the variables that enter the regression model. The explanatory power given by the adjusted R^2 ranges between 0.026 (2.6%) and 0.295 (29.5%). In specification (7) this means that the independent variables jointly describe 29.5 percent of the variation in the cumulative abnormal returns.

The hypothesis: *Stock prices will deteriorate following a going-private announcement.*

Should be rejected, since in all specifications it is evident that following a going private event, the stock price fluctuations have resulted in extraordinary returns, above the markets expectations, with or without inclusion of selected control variables.

Test Hypothesis 2

Table 16 OLS Regression estimates of CAR on Restatement and control variables

This table presents regression coefficients and standard errors for Eq. 2. Dependent variable is **CAR**: Cumulative Abnormal Returns. Independent variables are: **Restatement**: Dummy value 1 if the annual report changed and 0 if the report was not deteriorated; **GoingPrivate**: Dummy value 1 if the company becomes private, and 0 else case; **MBO**: Dummy value 1 if management of the company becomes the owner of the entire firm or at least a part of the firm, and 0 else case; **LBO**: Dummy value 1 if the buyout is leveraged, and 0 else case; **LN_Equity**: Natural logarithm of common ordinary equity; **LN_NetIncome**: Natural logarithm of net income; **LN_Sales**: Natural logarithm of sales; **LN_Assets**: Natural logarithm of assets; **LN_Price**: Natural logarithm of closing price; **BTM**: Book-to-Market ratio; **LN_MarketValue**: Natural logarithm of market value of equity; **Finance – Wholesale** are the industries. Data are winsorized at the 1 and 99 percent levels. Standard errors are shown between parentheses. ***, **, * indicate significance at 1, 5, and 10% levels, respectively.

	Specification:	(1)	(2)	(3)	(4)
<i>Restatement</i>		0.065 (0.040)	0.119*** (0.043)	0.059 (0.039)	0.127* (0.064)
<i>GoingPrivate</i>		0.120** (0.060)	0.274** (0.119)	0.082** (0.041)	0.181** (0.088)
<i>MBO</i>			0.018 (0.067)		-0.005 (0.071)
<i>LBO</i>		0.016 (0.062)		0.022 (0.060)	
<i>LN_Equity</i>			0.075 (0.051)	0.059 (0.050)	0.039 (0.044)
<i>LN_NetIncome</i>			-0.023 (0.165)	0.019 (0.014)	-0.026 (0.190)
<i>LN_Sales</i>			-0.130* (0.074)		-0.062 (0.058)
<i>LN_Assets</i>			0.004 (0.085)	0.011 (0.018)	-0.017 (0.056)
<i>LN_Price</i>			-0.049 (0.075)		-0.039 (0.061)
<i>BTM</i>		0.048** (0.023)	0.080 (0.050)	0.053*** (0.020)	0.103* (0.058)
<i>LN_MarketValue</i>			0.174*** (0.064)		0.119* (0.064)
Constant		0.183* (0.105)	-0.653 (1.255)	-0.708 (0.481)	-0.493 (1.368)
Model		OLS	OLS	OLS	OLS
Standard errors clustered		Firm-level	Firm-level	Firm-level	Firm-level
Year dummies		Yes	Yes	No	No
Industry dummies		Yes	Yes	No	No
Observations		459	146	459	146
R-squared		0.085	0.419	0.054	0.188
adj. R-squared		0.034	0.298	0.039	0.128
p(F)		0.000	0.000	7.022	4.012

Table 17 OLS Regression estimates of CAR on Restatement and extra control variables Leverage, Tobin's Q and ROA

This table presents regression coefficients and standard errors for Eq. 2. Dependent variable is **CAR**: Cumulative Abnormal Returns.. Independent variables are: **Restatement**: Dummy value 1 if the annual report changed and 0 if the report was not deteriorated; **GoingPrivate**: Dummy value 1 if the company becomes private, and 0 else case; **MBO**: Dummy value 1 if management of the company becomes the owner of the entire firm or at least a part of the firm, and 0 else case; **LBO**: Dummy value 1 if the buyout is leveraged, and 0 else case; **Leverage**: Equity scaled by total assets; **ROA**: Return on assets, measured as industry aggregate operating profit before depreciation divided by industry aggregate total assets; **TobinsQ**: Tobin's Q; **LN_NetIncome**: Natural logarithm of net income; **BTM**: Book-to-Market ratio; **LN_Equity**: Natural logarithm of common ordinary equity; **LN_Sales**: Natural logarithm of sales; **LN_MarketValue**: Natural logarithm of market value of equity; **LN_Assets**: Natural logarithm of assets; **LN_Price**: Natural logarithm of closing price; **Finance – Wholesale** are the industries. Data are winsorized at the 1 and 99 percent levels. Standard errors are shown between parentheses. ***, **, * indicate significance at 1, 5, and 10% levels, respectively.

Specification:	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Restatement	0.045 (0.035)	0.043 (0.036)	0.043 (0.036)	0.045 (0.035)	0.123* (0.073)	0.123* (0.073)	0.119* (0.061)
GoingPrivate	0.150*** (0.031)			0.152*** (0.033)			0.267*** (0.075)
MBO		-0.006 (0.025)		0.007 (0.025)	-0.011 (0.048)		
LBO			0.006 (0.025)			0.011 (0.048)	-0.031 (0.046)
Leverage	-0.169*** (0.032)	-0.140*** (0.030)	-0.140*** (0.030)	-0.171*** (0.033)	0.172 (0.165)	0.172 (0.165)	0.155 (0.159)
ROA	-0.415 (0.361)	-0.479 (0.358)	-0.479 (0.358)	-0.421 (0.357)	-0.301 (0.410)	-0.301 (0.410)	-0.341 (0.387)
TobinsQ	0.004 (0.019)	-0.005 (0.019)	-0.005 (0.019)	0.004 (0.019)	-0.094 (0.057)	-0.094 (0.057)	-0.053 (0.051)
LN_NetIncome					0.041 (0.105)	0.041 (0.105)	0.017 (0.106)
BTM					0.114** (0.048)	0.114** (0.048)	0.122** (0.047)
LN_Equity					0.064 (0.040)	0.064 (0.040)	0.093** (0.041)
LN_Sales					-0.126** (0.053)	-0.126** (0.053)	-0.134** (0.051)
LN_MarketValue					0.224*** (0.077)	0.224*** (0.077)	0.249*** (0.075)
LN_Assets					-0.060 (0.067)	-0.060 (0.067)	-0.073 (0.068)
LN_Price					-0.042 (0.041)	-0.042 (0.041)	-0.049 (0.044)
Constant	0.371*** (0.046)	0.514*** (0.043)	0.508*** (0.050)	0.370*** (0.047)	-0.706 (0.874)	-0.716 (0.875)	-1.041 (0.823)
Model	OLS	OLS	OLS	OLS	Model	OLS	OLS
Standard errors	Robust	Robust	Robust	Robust	Robust	Robust	Robust
Year dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	485	485	485	485	146	146	146
R-squared	0.097	0.076	0.076	0.097	0.365	0.365	0.431
adj. R-squared	0.048	0.026	0.026	0.046	0.219	0.219	0.295
F-statistic	28.886	35.393	35.393	27.432	5.203	5.203	5.398
p(F)	0.000	0.000	0.000	0.000	0.000	0.000	0.000

CHAPTER VI: CONCLUSION

In this study I analyzed the effects of: Going Private Transactions on Financial Reporting Quality. This study especially focused on examining accounting restatements prior to delisting.

I found that a firm's going private decision has a significant negative effect on restatements, which implies that after the going private announcement, the probability of restatement has decreased, so before the agreement of going private, the chance of a low financial reporting quality was relatively higher. According to these results we can conclude that the financial reporting quality of firms that go private do not decrease, but instead, show an increasing reporting quality.

Furthermore a going private firm was initially split into MBO firms and LBO firms because MBO firms differ from LBO firms in the sense of their financial structure and characteristics of the firms. I predicted that because LBOs are mainly based on external financing incentives, the need of an external investor could mitigate aggressive accounting in financial statements and thus will show increasing effects on financial reporting quality. Evidence shows that only in one specification, MBOs appeared to have an effect on the firm's reporting quality ($\beta = -0.677, p < 5\%$). Before a firm announced a management buyout, it was on average more likely to restate its reports and deteriorate its quality. In none of the specifications has LBOs an effect on the firm's reporting quality ($p > 5\%$). Furthermore I include the level of shares outstanding because evidence showed that earnings management tends to increase in the proportion of the shares being repurchased by the investor group (Gong et al., 2008). In none of the cases were the shares outstanding significant related to restatements. In all of the three cases had the market-to-book ratio a significant negative impact on the restatements of the firms. This implies that overvalued stock prices has an decreasing effect on restatements. Also the Net Income has a significant effect on restatements. In all of the three cases an increase in net income decreases the probability that a firm has restated his financial statement.

I also examined the relation between financial reporting quality and stock returns and find no indication that restatements provide negative returns. Also the firms going private announcement does not deflate abnormal returns, but in turn increases the stock price. Figure (1) show us that investors already begin to anticipate till the announcement date and after the announcement date the abnormal returns gets a positive shock. These findings are not in line with the findings of Gong (2008) who had evidence on the fact that managers typically start to lead the stock market to a downfall early in the quarter of the buyout announcement. Also the findings of Grullon & Michaely (2004) discovered that analyst forecasts immediately alter at the moment of the announcement, because analysts already expect a decrease of the stock price are not in line with our results.

My results could be attribute to that stockholders are not deceived by the manipulations because the incentives of managers prior to reissuance of stocks are noticeable. Investors could anticipate the incentives of management to devalue earnings and therefore value the firm based on actual price. Another possible explanation could be given by the gain-sharing hypothesis described by DeAngelo et al. (1984). This hypothesis postulates that shareholders of publicly listed firms can expect gains from going private transactions due to their rights to vote on decisions or to their rights to hold their shares back in buyout proposals and even due to their power to sue the firm. However they also show a higher abnormal return for MBO, the MBO is in this study insignificant.

As regards to the restatements, the outcome was unexpected and surprising. It could be that huge response on going private announcement could mitigate the negative effects of restatements. Investors might lose their attention or concerns regarding restatements and react overall positively to the stock market at the moment or expectation of the delisting announcement of the firm, which also creates a positive relation between restatement and stock return.

It is surely surprising that restatements have a positive effect on abnormal returns, since we expected a decrease in share price. The recommendations regarding this study would be definitely to search for a direct evidence on the contradicting effects of going private announcement, as a positive variable, and restatements, as a negative variable, on stock market given the fact how each variable eliminates or strengthens de effects on the existing variable. I also want to recommend to investigate this setting by categorizing restatements in errors, irregularities and fraud since each of this type has a different effect on shareholders (Plumlee & Yohn, 2010).

Limitation of this study include potential biases regarding to the small size of going private firms in the sample, which are smaller than average Compustat company. It may be possible to generate different results when executing the same research with a greater sample.

My study contributes to the literature by providing empirical evidence suggesting that firms increase their reporting quality prior to going private. While the return on the stock market around going private announcements indicate that the decision of going private and restatements have a significant positive effect on abnormal return. Further research should explore potential explanations for this phenomenon.

The overall conclusion of this research is to rejecting the belief that conflicts of interests between management and stockholders induce the fair treatment of shareholders around going private transactions. The rules adopted by the SEC ruled out to successful regarding the protection of shareholders against unfair valuation of the shares.

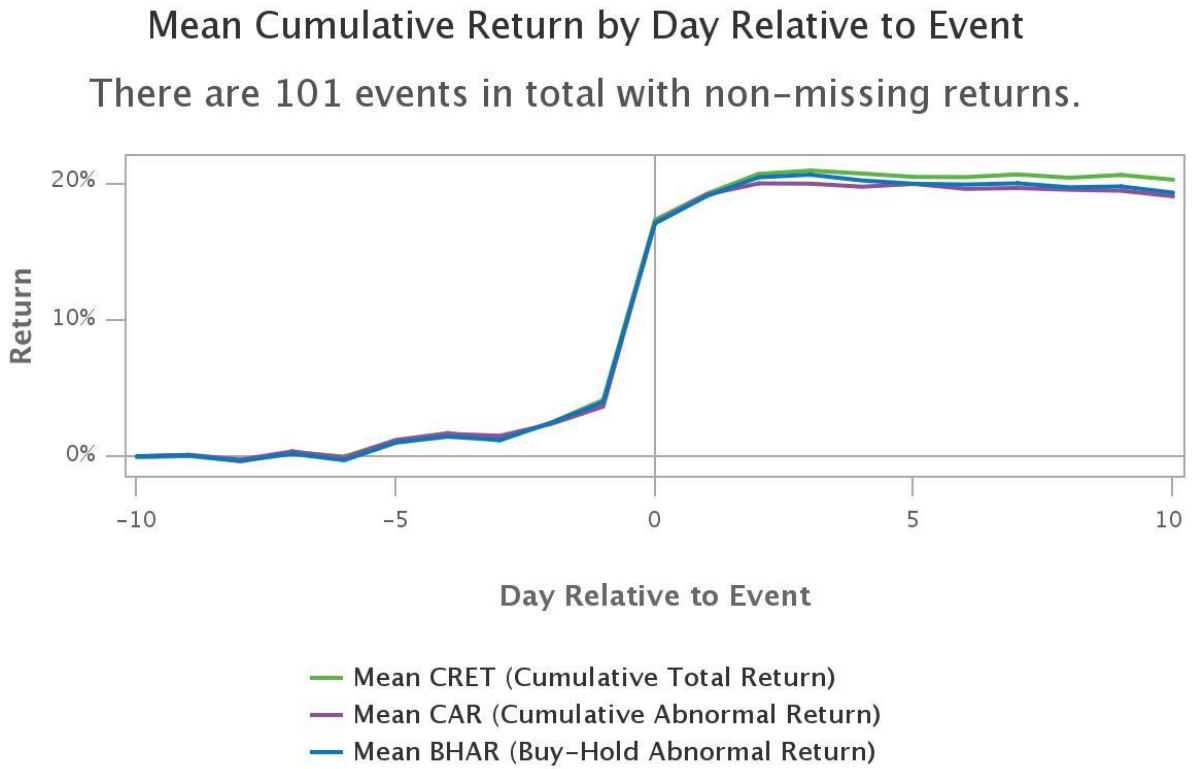
REFERENCES

- Akhigbe, A., Kudla, R. J., & Madura, J. (2005). Why are some corporate earnings restatements more damaging? *Applied Financial Economics*, Vol. 15, Issue 5, 327-336.
- Coles, J., Hertzzel, M., & Kalpathy, S. (2006). Earnings management around employee stock option reissues. *Journal of Accounting & Economics*, Vol. 41, Issues 1-2, 173-200.
- DeAngelo, H., DeAngelo, L., & Rice, E. (1984). Going Private: Minority Freezeouts and Stockholder Wealth. *The Journal of Law & Economics*, Vol 27, No 2, 367-401.
- DeAngelo, L. E. (1986). Accounting numbers as market valuation substitutes: A study of management buyouts of public stockholders. *The Accounting Review*, Vol. 61, No 3, 400-420.
- Dechow, P., Schrand, C., & Ge, W. (2010). Understanding earnings quality: a review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, Vol. 50, Issues 2-3, 344-401.
- Dechow, P., Sloan, R., & Sweeney, A. (1996). Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research*, Vol. 13, 235-50.
- Doidge, C., Karolyi, C. A., & Stulz, R. M. (2015). The U.S. Listing Gap. *NBR Working Paper No 21181*.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and Review. *The Academy of Management Review*, Vol. 14, No 1, 55-74.
- Gong, G., Louis, H., & Sun, A. (2008). Earnings management and firm performance following open-market repurchase. *The Journal of Finance*, Vol. 63, No 2, 947-986.
- Grullon, G., & Michaely, R. (2004). The information content of repurchase programs. *Journal of Finance*, Vol. 59, No 2, 651-680.
- Jensen, M. (1988). Takeovers: Their causes and consequences. *Journal of Economic Perspectives*, Vol. 2, No 1, 21-48.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm : Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, Vol. 3, 305-360.
- Kaplan, S. (1989). The effects of management buyouts on operating performance and value. *Journal of Financial Economics*, Vol. 24, No 2, 217-254.
- Louis, H., & White, H. (2007). Do managers intentionally use repurchase tender offers to signal private information? Evidence from firm financial reporting behavior. *Journal of Financial Economics*, Vol. 85, No 1, 205-233.
- Lowenstein, I. (1985). Management buyouts. *Columbia Law Review* 85, 730 - 784.
- Mao, Y., & Renneboog, K. (2015). Do managers manipulate earnings prior to management buyouts? *Journal of Corporate Finance*, Vol. 35, 43-61.
- Palmrose, Z.-V., & Scholz, S. (2004). The circumstances and legal consequences of Non-GAAP reporting: Evidence from restatement. *Contemporary Accounting research*, Vol. 21, No 1, 139-180.
- Palmrose, Z.-V., Richardson, V. J., & Scholz, S. (2004). Determinants of market reactions to restatement announcements. *Journal of Accounting and Economics*, Vol. 37, No 1, 59-89.
- Perry, S. E., & Williams, T. H. (1994). Earnings management preceding management buyout offers. *Journal of Accounting and Economics*, Vol. 18, No 2, 157-179.

- Plumlee, M., & Yohn, T. (2010). An analysis of the underlying causes attributed to. *Accounting Horizons*, Vol. 24, 41-64.
- Romanus, R. N., Maher, J. J., & Fleming, M. D. (2008). Auditor Industry Specialization, Auditor Changes, and Accounting Restatements. *Accounting Horizons*, Vol. 22, No 4, 389-413.
- Shavell, S. (1975). Risk Sharing and incentives in the principal and agent relationship. *The Bell Journal of Economics*, Vol. 10, No 1, 55-73
- Shleifer, A., & Summers, L. (1988). Breach of Trust in Hostile Takeovers, Corporate Takeovers: Causes and Consequences, 33-68. Chicago: University of Chicago Press.
- Skinner, D. (1997). Earnings disclosures and stockholder lawsuits. *Journal of Accounting and Economics* 23, 249-82.
- Teoh, S., Welch, I., & Wong, T. (1998). Earnings management and the long-run market performance of initial public equity offerings. *Journal of Finance*, Vol. 53, No 6, 1935-1974.
- Wu, Y. W. (1997). Management buyouts and earningsmanagement. *Journal of Accounting, Auditing & Finance*, Vol. 12, No 4, 373-389.

Appendix

Figure 1 Cumulative abnormal return



Highcharts.com