The Value Relevance of the Proposed New Leasing Standard

An event study of the European Stock Markets’ Reaction to the proposed replacement of IAS17

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Acknowledgements

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Abstract

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Title: The Value Relevance of the Proposed New Leasing Standard - An Event Study of the European Stock Markets’ Reaction to the Proposed Replacement of IAS 17.

Background and Problem Discussion: Due to companies large off-balance sheet obligations, discussions of the current standard regarding leasing, IAS 17, have provided suggestions to a new leasing standard, which is the foundation for this thesis.

Purpose and Research Question: The purpose of this study is to examine if the implementation of a new leasing standard could have an effect on the market value of firms. The research question is: Do investors find the replacement of IAS 17 value relevant? If so, is the value relevance more prominent in certain industries or related to the size of the company?

Methodology: In order to fulfil the purpose, an Event Study is performed. Data collection is primarily performed through DataStream and analysis of the data is performed in Stata.

Results and Conclusion: The empirical findings in this study suggest no general effect on value relevance regarding the new standard. No significant results are found within different industries. However, considering companies of different size, significant results are found. The general conclusion is therefore that size is probably a variable that is value relevant to investors considering the replacement of the new leasing standard.

Keywords: Leasing, Operating leases, IAS 17, New Leasing Standard, Value relevance, Stock market reaction, Event Study.
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1. Introduction

This chapter introduces the subject of leasing by describing the background and problems related to recognition of leasing agreements in accounting and what impact it can have on stakeholders. Thereafter, the purpose and delimitations of this study are presented. The chapter ends with contributions of the study to existing research.

1.1 Background

Companies can acquire assets differently, either by purchase or, if they do not possess the funds to buy the asset, they have the option of leasing. The option to lease gives the lessee access to the assets they need through a long-term rental agreement with periodic payments to a lessor. The benefit with leasing is foremost the possibility to acquire an asset without tying up a big amount of cash, which a lot of smaller companies with less capital resources often find useful (Lerman, 1989). International Accounting Standard Board’s (IASB) accounting standard for leasing is IAS 17, which gives the user guidance of the accounting policies and disclosures applicable to leases. Leases are distinguished as either a financial or an operational lease, where the main difference is that financial leases are similar to a loan-financed purchase. An operational lease on the other hand, is not recognised as an asset in the balance sheet of the lessee but as rent expense in the income statement (IAS 17). The use of operating leases has increased, which has raised concerns among regulators and practitioners. This is, since there seem to be a belief that the current accounting regulations regarding leases allow organisations to act opportunistically since the operating leases are kept off-balance (Altamuro, Johnston, Pandit and Zhang, 2014).

Consequently, companies who choose to use operational leases instead of financial leases or purchase, will report improved return on asset and debt ratio and thus, better solidity. Keeping operational leases off-balance will therefore lower comparability between firms (Marton, Lumsden, Lundqvist and Pettersson, 2012). Therefore, the increase in use of operating leases may be a result of management wanting to improve reported ratios as the ratios do not include items off-balance (Dhaliwal, Lee and Neamtiu, 2011). Further, the off-balance arrangements could help smooth the ratios from one period to another which is also a motivation for management to use operating leases (Lander and Auger, 2008). This opportunistic behaviour, combined with a lack of transparency within the financial reporting, could result in an increased risk area regarding operating leases. This is, since there is a risk operating leases are not appropriately considered by the stakeholders in the financial reporting since the stakeholders do not have all the information of the transactions (Altamuro et al. 2014). A lot of previous research is conducted within the area of leasing and the possible effect capitalisation of operational leases would have on companies and stakeholders. Thus, the leasing area is a well-discussed and a current research subject since the standard is currently undergoing a change due to previously mentioned reporting problems, although the finalised new standard is yet to be determined.

1.2 Problem Discussion

When the seller and buyer have different information regarding the quality of a considered company, an information asymmetry occurs. The impossibility to distinguish good quality from bad, affects the price setting, since the buyer base the price on possible misleading information in the balance sheet. This asymmetry, often referred to as the Lemon Problem, is considered in business settings and is one reason of the existence of different financial institutions (Akerlof, 1970). Dhaliwal et al. (2011) state that the classification of the leased
Asset is a central issue within the area of leasing. In many organisations, operating leases are the largest off-balance sheet obligation and a large source of financing the operations. Therefore, the classification of leases should have a rather large impact on the balance sheet. In accordance with the Lemon Problem, it could also affect the stock price of the company since stakeholders might not have all relevant information about the company's underlying assets and liabilities. The lack of transparency within the standard received a lot of critique after the last financial crisis since the lessees do not recognise lease commitments in a useful and transparent manner (IAS 17). The usefulness of the information when omitting the operational lease from the balance sheet is also questioned by Lyon (2010). A memo was prepared in February 2007, stating three issues within previous research, relevant for the work of improving the standard:

“(1) the financial statements impact of capitalizing operating leases, (2) the similarity between leases and debt, and (3) the potential benefits of operating lease capitalization to credit analysts” (Bauman and Francis, 2011:248)

IASB and Financial Accounting Standards Board (FASB) agreed in July 2006 that the standard for leases has to change in order to increase the transparency of lease transactions, increase comparability of financial information and make it more consistent with the Conceptual Frameworks’ definition of assets and liabilities (Bauman and Francis, 2011). IASB’s definition of an asset is:

“Asset is a resource controlled by the entity as a result of past events and from which future economic benefits are expected to flow to the entity” (IASB Conceptual Framework)

IASB released an Exposure Draft 2013 considering the replacement of the current leasing standard. According to the Exposure Draft, all lease agreements longer than 12 months, should be included in the balance sheet of the lessee as a “right of use asset” and a liability to pay the lease (IASB ED, 2013). These proposed changes in the classification would thus affect both the balance sheet and income statement and hence, the ratios of companies that today use operational leases (IAS 17). As a consequence, the information asymmetry would probably decrease since stakeholders will get easier access to all relevant information to base their investment decisions on, which could affect the stock price.

Previous research also suggest that the proposed new leasing standard could affect certain industries more than others i.e. aircraft industry, shipping industry, trade & retail and banks. This is, since these studies examine and evaluate the effects on companies’ financial information within these industries with a result suggesting industries using more operational leasing should be more affected by a replacement of the standard. Aircraft and shipping industry tend to use operational leasing for their assets, which thus lead to a major part of their assets and liabilities being kept off-balance (Gavazza 2010; Li 2006). Operational leases is also widely used within retailing since it offers flexibility to adjust faster to changes with regards to store optimisation i.e. be able to close and open stores according to demand (KPMG, 2010). Banks in their role as lessee can be affected of the new leasing standard with regards of changes in their ratios and thus problems with meeting their regulatory capital requirements (EY 2013; KPMG 2013). It is further argued that smaller companies tend to use more operational leasing due to difficulties to raise capital (Lasfer and Levis 1998; Morais 2013). However, other studies have reached other conclusions, Koh and Jang (2009) and Adams and Hardwick (1998) also find that smaller firms do use more
operating leases. Yet, they state that this is only true up to a certain level, and thereafter, operating leases increase as the size of the company increase.

1.3 Purpose and Delimitations

The main purpose of this study is to examine the capital market’s reaction to the new leasing standard and therefore to display if investors find the proposed new leasing standard value relevant. The definition of value relevance used when performing the study is:

“An accounting amount is defined as value relevant if it has a predicted association with equity market values” (Barth, Beaver and Landsman, 2001:79)

Thus, if the implementation of a new leasing standard, with the implication of capitalising operating leases, could have an effect on the capital market it should also directly affect the value of firms. Further, previous research suggests certain variables to affect companies’ value relevance differently regarding leasing. Gavazza (2010) indicates that certain industries should be more affected than others by the new standard, as operational leasing is more common in these industries. Also, there are indications that the size of the company can be an interesting parameter when investigating the value relevance, as smaller companies tend to have more operating leases. Consequently, this could mean that these firms will be more affected by the replaced standard (Lasfer and Levis 1998; Morais 2013). Therefore, an addition to the main purpose is also to present whether the effect of the new standard is more prominent in certain industries and if there is a stronger market reaction regarding smaller companies within these industries.

In order to fulfil the purpose, a cross-sectional study in terms of an Event Study is performed. Since the new leasing standard is yet to be determined, this thesis evaluates the effect the latest Exposure Draft from May 16th 2013 had on the capital market. The main argument for this is that if the Exposure Draft indicates a market reaction, the actual implementation will probably also provide a reaction on the market. Previous research conducted by Armstrong, Barth, Jagolinzer and Riedl (2010) also consider certain events leading up to the implementation of IFRS to evaluate what effect the adoption of IFRS would have. This implies that an evaluation based on the effect of the release of an Exposure Draft is relevant for further analysis. Further, the replacement of IAS 17 will mostly affect the lessee not the lessor, who will continue to report similarly as today (IAS 17). The study is therefore delimited to examine the reporting of the lessee. The study is further delimited to companies listed on the European stock market since IFRS is most commonly used on this market.

1.4 Contribution

The shareholder perspective has been in focus within previous research regarding leases, and the main area examined is how the new standard could affect the balance sheet and the negative effect on certain ratios (Dhaliwal et al. 2011; Lander and Auger 2008). However, the effect on the capital market when introducing the new leasing standard does not seem to have been further investigated. Therefore, the main contribution of this thesis is to present the capital markets reaction to the new standard and thereby show if investors perceive the new standard value relevant. The result will therefore indicate if the new standard could have an effect on the stock market, and will contribute to existing research as it displays the problems regarding capitalisation of leases from a different perspective than the research by e.g. Dhaliwal et al. (2011) and Lander and Auger (2008). In addition to the main purpose, this thesis also examines if the market effect is more prominent in certain industries and if
the size of the company has an impact on the market reaction within these industries. These two aspects also contributes to previous research as studies such as Gavazza (2010) and Koh and Jang (2009) mainly suggest industry and size as an indicator for more operating leases but the effect of it regarding the new standard is yet to be determined.
2. Institutional Background

This chapter firstly presents the accounting standard of Leasing, IAS 17 as of today. Thereafter the accounting problems of the standard are discussed followed by a description of the replacement of the standard.

2.1 IAS 17

The current standard for leasing is IAS 17, which gives both lessors and lessees guidance on how to account for leasing agreements in their financial statement. A lease can be classified as either an operational lease or a financial, which is distinguished by the amount of risks and rewards that are transferred of the underlying asset. Hence, if the risks and rewards are substantially transferred to the lessee it is considered as a financial lease, if not, it is considered as an operational lease. The classification is therefore based on the substance of the transaction, not the legal contract. A financial lease is recognised as an asset and a liability for the lessee and a receivable of the lessor. The amount recorded should be the lowest of the fair value of the leased property and the present value of the minimum future lease payments (IAS 17). An operational lease is recognised as an expense on a straight-line basis over the lease term. Thus, an operational lease is not recognised in the balance sheet of the lessee, however, detailed information about the leases are required in the disclosures. The lessees are obligated to disclose the minimum lease payments for the next year, between two and five years and beyond five years (Ibid).

2.2 Accounting Problems IAS 17

Currently, operational leases and financial leases are accounted for differently which creates issues within accounting. The leasing standard has been criticised on many grounds, mainly because of lack of faithful representation due to lack of transparency when the users do not have all relevant information for basing their financial decisions (FASB, 2013). The objective of financial reporting is to show accurate information of a company, which thus is problematic if part of the information is omitted from the balance sheet (Lyon, 2010). When all information is not presented to the shareholders, an information asymmetry occurs, which will affect the price (Akerlof, 1970). Operational leases might thus not be appropriately considered in the financial reporting since the stakeholders do not have all the information of the transactions (Altamuro et al. 2014). Lyon (2010) explains this phenomenon with an example:

“Making a distinction between operating and finance leases could mean, for example, a business that leases an aircraft on an operating lease, and which relies for its business on that aircraft, could have a set of accounts that makes no reference to the aircraft. This, surely, means that the accounts fail to represent the whole story of the business” (Lyon, 2010:329)

Companies that choose to use operational leases instead of financial leases or purchase will report improved return on assets, debt ratio and solidity compared to firms that do not lease their assets, which will thus, also lower comparability (Marton et al. 2012).
2.3 Proposed Replacement of IAS 17

Due to the previously mentioned critique of the standard, IASB published an Exposure Draft in 2010 with a proposed replacement of IAS 17. The draft also received a lot of critique, which led to a new Exposure Draft that was published 16th of May 2013, and a finalised IFRS standard, considering leasing, is expected in the second half of 2015. The aim of the Exposure Draft is to improve comparability and quality of financial reporting by achieving greater transparency of companies leverage and the assets and risks they actually have in their operations. The proposed change of the current standard will have a great impact on the financial reporting, mainly for the lessee (IASB ED, 2013). According to the Exposure Draft, lease agreements will be classified as a Type A or a Type B lease instead of an operational or financial lease, which is used today. Once the lease has been classified, it cannot be re-classified later. Most lease agreements, except properties and some other exceptions, will be classified as a Type A lease whereas most leases of property i.e. land or building will be classified as a Type B. The exceptions that can be made regarding the classification of a lease to Type B instead of Type A is if:

“(a) the lease term is for an insignificant part of the total economic life of the underlying asset or (b) the present value of the lease payments is insignificant relative to the fair value of the underlying asset at the commencement date”

(IAASB ED, 2013)

According to the Exposure Draft, all lease agreements longer than 12 months, should be included in the balance sheet of the lessee as a “right of use asset” and a liability to pay the lease, initially measured at the present value of lease payments. The liability of a Type A lease will be presented as an interest expense and amortisation expense in the companies’ financial information whereas Type B lease liabilities will be presented as a single lease cost (IAASB ED, 2013). This proposed replacement of the standard would thus affect both the balance sheet and income statement and also the ratios of companies that today use operational leases (IAS 17). Rent expense would be replaced with depreciation and interest expense, thus the interest coverage would decrease. Furthermore, EBITDA is expected to increase due to an increase in interest bearing debt (PwC, 2009).
3. Literature Review and Hypothesis

This chapter begins with a presentation of the Efficient Market Hypothesis. Secondly, previous research regarding off-balance sheet obligations is presented followed by implications of the new leasing standard in different industries. Thereafter, the new standard’s possible effect on companies of different size is discussed. Hypotheses are presented throughout the text.

3.1 The Efficient Market Hypothesis

The purpose of an investment is in general to make a profit, thus many investors aim to purchase undervalued shares and sell them when the price has increased in order to make a profit. However, it is stated, that on an efficient market where all information is given, there is no such thing as under- or overvalued prices (Claesson, 1987). Due to the relatively large access of information on the stock exchange and the high velocity of the transactions, previous research argue that the stock exchange is an example of a market that is relatively efficient. Therefore, it should be impossible to provide transactions with arbitrage on the stock exchange (Claesson, 1987). The idea is thus that new information spreads quickly and incorporates into the stock prices without delay (Burton, 2003). However, The Efficient Market Hypothesis has been criticised during the 21st century since many statisticians and economists now believe that stock prices partially can be predicted based on past stock price patterns (Ibid). Burton (2003) however concludes that even though the sophistication of the techniques used today allows one to find patterns of stock returns, the market is still efficient in terms of handling new information, which will thus prevent investors from obtaining extraordinary returns.

Although, the Efficient Market Hypothesis seems to be well approved within previous research, there are still indications that the capital market can show an effect due to certain events. Runesson (2015) examines the effect on the market aligned with certain events when the amendments of IAS 19 - Employee Benefits were presented. Both an Exposure Draft and the actual release of the new adjusted standard are examined and both show an effect on the market. However, the effect of the release of the Exposure Draft is smaller than of the actual release. Runesson (2015) suggests that a possible explanation for the small effect connected to the release of the new Exposure Draft, is that there could be a stronger affect prior the event. Therefore, one could argue that leakage can be the explanation of such response on the capital market. Another example is Armstrong et al. (2010) who perform an Event Study by investigating the adoption process of IFRS. Their study is performed by evaluating the European stock markets reaction to 16 events leading up to the adoption. The 16 events occurred between 2002 and 2005 and were assumed to affect the likelihood of IFRS adoption. Thus, the capital markets reaction to the change of companies financial reporting is examined. To evaluate the investors’ reaction to the IFRS adoption, they examine a three-day market- adjusted return for companies on the European stock market based on 16 events. The market adjustment mitigates other potential news that coincides with the events and is based on the market index of STOXX Global 1800 ex. Europe. This index excludes European firms and is chosen because inclusion of the returns of European firms in the market adjusted returns could remove some of the effects of the events. The authors find that investors expected net benefits of the adoption of IFRS in Europe due to improved quality of financial information and a decrease in information asymmetry. However, they argue that some markets are less developed than others i.e. less efficient, which could lead to a biased result since the event cannot be examined properly in their study (Armstrong et al., 2010).
3.2 Off-Balance Sheet Obligations

Considering the area of off-balance sheet obligations i.e. a company’s assets or debts not accounted for on the balance sheet, e.g. operational leases, previous research has focused on the effect on equity risk (Altamuro et al., 2014). Dhaliwal et al. (2011) state that the classification of the leased asset is a central issue within the area of leasing. They examine this further with the purpose of investigating:

“How the stock market participants view the economic substance of the leased assets and the associated financial obligations, regardless of their on- versus off-balance sheet accounting treatment” (Dhaliwal et al., 2011:152)

Their study includes reasoning regarding the fact if operating leases have the same risk-relevance for creditors and investors as the financial leases on-balance. The research concludes that companies’ cost of equity is positively correlated with adjustments of capitalising off balance sheet leases, since the leverage ratio changes (Ibid).

Altamuro et al. (2014) adds another perspective to this research area, choosing not to study from a shareholder perspective but rather the perspective of creditors regarding operational leases. Primarily they investigate if operating leases are a part of the basis of conclusion when creditors make their decisions. Secondly, Altamuro et al. (2014) explore in what way the operating leases are treated if considered by the creditor. Finally, they examine if there are certain types of creditors that treat operating leases differently compared to others, thus are able to incorporate the necessary adjustments. Cotten et al. (2013) do a similar research with the aim to investigate whether or not the impact of debt in operating leases is reflected in bond ratings. They perform their study by comparing companies actual credit ratings with a synthetic one where financial information are adjusted to reflect the increase of debt from operating leases. Further, Altamuro et al. (2014) find evidence that imply that creditors do take operating leases into account when performing credit risk assessment, thus one can “rely on rating agencies to assess and adjust for implications of off-balance sheet obligations such as operational leases” (Altamuro et al. 2014:553) whereas Cotton et al. (2013) conclude that even though the credit agencies take the information of operational lease into account, the information provided by companies is not transparent enough and thus, ratings will become more accurate with a new standard. The research of Altamuro et al. (2014) further suggests;

“To the extent rating agencies ignore economic differences across leases and mechanically capitalize all leases, the credit risk assessment reflected in the credit rating will represent the most conservative case” (Altamuro et al. 2014:553)

Their study also implies that creditors differ their opinion depending on the character of the lease. Therefore, Altamuro et al. (2014) state, a new accounting standard within the area should not ignore these differences in character, as the information value of the financial statements will increase.

Further, PwC also examined the shareholder perspective when conducting a research in 2009 with the aim to investigate the impact on financial ratios if the leasing standard were to change according to the proposal. The new standard would lead to higher EBITDA, leverage and interest bearing debt for companies. They examine the impact on a sample of 3000 companies worldwide in different industries. Their results suggest that the average effect on interest-bearing debt of these companies would increase by 58% (PwC, 2009). Considering
the high effect on the balance sheet (PwC, 2009), one could argue that the replacement of the standard could have an effect on the stock exchange, which could appear as an abnormal return when the information is released. This is also in line with Dhaliwal et al. (2011) stating that the classification of the leased asset is a central issue within off-balance sheet obligations. Therefore, following hypothesis is stated:

\[ H_1 = \text{There is an abnormal return for May 16, 2013.} \]

3.3 Implications of the New Standard in Different Industries

According to the study of PwC (2009), there are implications that the new standard will have larger impact in certain industries. This is since the effect on interest bearing debt, in their study, varies between different industries. The industries that would have the largest effect on debt are operating in e.g. trade and retail, where the average increase in interest bearing debt is found to be 213% whilst in transportation and warehousing the equivalent number is 95%. Since outliers influence the average they also provide the median percentage, which is 64% and 14% for trade and transportation respectively. Imhoff, Lipe and Wright (1993) carry out a research about grocery stores and the airline industry by estimating the amount of operational leases used by analysing the companies’ disclosures, and conclude that when operational leases are added to debt-to-assets ratios it is easier to explain shareholders risk. PwC (2009) further conclude that the impact on companies within an industry can differ depending on country of residence and the size of the company. The proposed new leasing standard thus seems to affect some industries more than others, firstly retailing. The new standard could have a significant impact on retailer’s financial information since they often choose not to invest in their own properties, but rather use leasing agreements (PwC, 2010). The expected median increase within retail regarding interest-bearing debt is assumed to be 64% when the new standard is introduced (PwC, 2009). The new standard is also assumed to affect retailers that operate a large number of stores in different countries to a bigger extent since most part of their stores are under an operating lease agreement and will thus largely affect their ratios when included on the balance sheet. Operational leases give these bigger retailers flexibility to adjust faster to changes with regards to store optimization i.e. being able to close and open stores according to demand (KPMG, 2010). Thus, the retailing industry is assumed to be one of the industries mainly affected by the new standard since most of their locations are under an operational leasing agreement, a relevant hypothesis is therefore:

\[ H_{2a}: \text{The abnormal return is more prominent in the retail industry compared to industries with less operational leasing.} \]

Secondly, the aircraft industry is also found by PwC (2009) to be highly affected by the new standard. The aircraft industry uses operating leases to a large extent since their customer demands can change rapidly over night, leasing thus gives them higher flexibility. Since airlines use a big amount of operational leases, the new leasing standard will likely lead to lower credit rankings and financial difficulties (PwC, 2009). Gavazza (2010) investigate the impact of asset liquidity and the effect on lease contracts in the aircraft industry and finds a relation suggesting that, as the market for an asset becomes more liquid, leasing becomes more popular. Further, Gavazza (2010) concludes:
“more-liquid assets (1) make leasing, operating leasing in particular, more likely; (2) have shorter operating leases; (3) have longer capital leases; and (4) command lower mark-ups of operating lease rates” (Gavazza, 2010:82)

Gavazza (2010) further claims, when investigating leasing issues, the aircraft market is the ideal choice since more than half of commercial aircrafts are leased. Regarding the study by Gavazza (2010), the airline industry should be of interest when examining certain industries and the effect of a new leasing standard since there are indications that the industry could be highly affected. Therefore, the following hypothesis is stated:

\[ H_{2b}: \text{The abnormal return is more prominent in the aircraft industry compared to industries with less operational leasing.} \]

Further, the shipping industry also use operational leases to a large extent since it is a highly capital intensive industry (Li, 2006). Further, Li (2006) argues that there are both advantages and disadvantages with using operational leasing in the shipping industry, which is the reason why operational leasing is not as big part of the overall financing of ships compared to the aircraft industry. The advantages are tax benefits and improved financial position for the firm whereas the main disadvantage compared to other industries is higher restrictions on early termination of the lease, thus lower flexibility (Ibid). KPMG (2013) also states that the new standard would have significant impact on ship owners and operating companies, as stated by KPMG’s global head of shipping:

“People’s gearing will look higher, their debts will look higher. They will have quite a different-looking balance sheet and that will have an impact on their banking covenants. It may also affect their tax situation and their ability to pay dividends” (John Luke, KPMG 2013:3)

Therefore, the shipping industry is also expected to be highly affected by the new standard, and as their ability to pay dividends may decrease, one might be able to trace a reaction to the stock market, thus a relevant hypothesis is therefore:

\[ H_{2c}: \text{The abnormal return is more prominent in the shipping industry compared to industries with less operational leasing.} \]

Further, another industry that could be affected is the banking sector. In IFRSs Effect Analysis of the Exposure Draft considering leases, they consider the effect that the new standard could have on regulatory capital requirements for banks and the effect on debt covenants. Thus, the proposed replacement of IAS 17 would require banks in their role as lessee to record a larger amount of assets and liabilities on their balance sheet. This might increase the amount of risk-weighted assets and hence, affect their regulatory needs of capital (Effect Analysis, ED 2013). KPMG (2013) and EY (2013) highlight that lessees will have to include their operational leasing, as many of them have a substantial amount of property leases, on the balance sheet. This would lead to increased assets and liabilities, which in turn would impact their regulatory capital. Since banks are highly regulated, their capital ratios and other metrics are closely monitored and could thus change when adding the operational leasing to the balance sheet.

As stated by Altamuro et al. (2014), opportunistic behaviour along with lack of transparency is a large problem considering off-balance sheet obligations. One could argue, the banking sector might act opportunistically due to the earlier mentioned capital requirements they
have to fulfil and therefore, a change in the standard could have a rather large impact on their accounting and thus, also in their share price. An interesting hypothesis to investigate further could therefore be:

\[ H_{2d}: \text{The abnormal return is more prominent in the banking industry compared to industries with less operational leasing.} \]

3.4 The Association Between Company Size and Operational Leasing

As PwC (2009) conclude, the possible impact of the new standard could vary between companies of different sizes within certain industries that use more operational leasing. Thus the relationship between firm size and the use of operational leasing is evaluated in previous research, though with mixed results. Lasfer and Levis (1998) investigate the determinants when choosing whether to lease or buy assets, and argue that the decision is highly influenced by the size of the company since financial opportunities and agency costs can differ between small and larger companies. Morais (2013) predict a negative relation between the use of leases and the size of the company, thus smaller companies are assumed to lease relatively more than larger companies due to the fact they may not have the financing opportunities to buy the asset. Graham, Lemmon and Schallheim (1998) further explain this by stating that the size of the company and the amount of leasing used is a relevant variable since larger companies are more likely to be debt financed than smaller ones. This since smaller companies can have difficulties obtaining external funds due to information asymmetry which leasing arrangements thus can mitigate. Koh and Jang (2009) also find that smaller firms use more operating leases. However, they state that this is only true up to a certain level, and thereafter, operating leases increase as the size of the company increase. Adams and Hardwick (1998) reach a similar conclusion as Koh and Jang (2009) thus, the relationship between firm size and operational leases is negative up to a certain level. Even though the research conducted on the variables operational leasing and size has shown mixed results, there is more evidence that smaller companies would use more operational leases, thus a hypothesis could be that the share price on small companies will be affected more within a certain industry and a suggested hypothesis is therefore:

\[ H_3 = \text{The abnormal return is associated with the size of the company within industries with more operating leasing} \]
4. Method

In this chapter, the method when performing this study is presented. Firstly, the three steps when performing an Event Study is explained; defining the Event Window, calculating according to the Market Model and finally, the hypotheses. Further, the data collection and data analysis process is described and finally, a discussion regarding validity and reliability is presented.

4.1 Event Study

An Event Study enables one to examine the relationship between the stock price and a certain economic event (Strong, 1992) and is based on the assumption that a certain event is captured by abnormal returns (Mackinlay, 1997). The methodology of an Event Study is commonly used in previous research when examining certain events and their effect on the capital market (Armstrong et al. 2010; Armstrong et al. 2010) and should therefore be an appropriate choice of method to fulfill the purpose of this study. However, since the new standard for leases is not finalised, an Event Study of the implementation of the standard cannot be performed. Instead, this Event Study will consider the publishing of the latest Exposure Draft, published May 16th 2013. The main argument for this is that if an event on the stock exchange can be traced to this date, this can be an indication that the actual implementation also will have an effect on the stock exchange. As previously mentioned, similar Event Studies on the release of Exposure Drafts are conducted by Runesson (2015) and Armstrong et al. (2010). For example, Armstrong et al. (2010) evaluate investors’ reaction to the adoption of IFRS by conducting an Event Study based on 16 events leading up to the adoption. One of the events they consider before the adoption is for example the event; European Parliament passes resolution requiring all EU-listed companies to use IFRS by 2005. Thus, their research is also based on events before the implementation, which indicates that our study of the release of the Exposure Draft could give an indication of the market reaction when the new standard is implemented in the future.

In the Event Study, the abnormal return is calculated in order to examine if any deviations from the normal return can be observed (Strong, 1992). The abnormal return can be defined as the difference between the actual ex post return, i.e. after the event, and the normal return which is defined as the “expected return without conditioning on the event taking place” (Mackinlay, 1997:15). Therefore, the abnormal return can be defined as follows in figure 4.1.

\[
\text{Abnormal Return (AbR)} = \text{Actual Return (AcR)} - \text{Normal Return (NoR)}
\]

Figure 4.1

Further, for the actual return, the definition of Mackinlay (1997) is used in this study. It is defined as the change in price for each company’s share at the special time, t and explained in figure 4.2.

\[
\text{AcR}_t = \frac{p_t - p_{t-1}}{p_{t-1}}
\]

Figure 4.2

Where:
- \(\text{AcR}\) Actual Return
- \(P\) Price at a certain time (t)
4.1.1 Event Window

The basic structure of an Event Study consists of three steps. First, the Event Window has to be decided (Strong, 1992) which is the time period that is examined in the Event Study (Mackinlay, 1997). In this case, the Exposure Draft of IASB was published on May 16th 2013, which is the date examined in this study. Previous Event Studies indicate that the Event Window can be on a daily, weekly or monthly basis (Strong, 1992). However, it is determined that a smaller time period will provide a more precise and reliable result since it will provide a result less biased by other possible events (Morse, 1984). Although, the Event Window must at least include the specific day of the event in order to conclude if there is any effect on the market (Mackinlay, 1997).

In this study, a small delay might occur, since there is no information of the time of the announcement of the Exposure Draft. If it is presented late in the afternoon, one could argue that part of the effect might occur the day after the event. The event for this study, May 16th 2013 took place on a Thursday. Therefore, it is decided to only include one day after the event, Friday May 17th 2013, in order to capture any possible delays. Further, there is a possibility that information about the release might have reached the shareholders before the actual release date. Therefore, one day before the event will also be included in the Event Window. More days are not included, due to the general statement of Morse (1984) that a small Event Window will provide a better, less biased result. An Event Window of three days is also applied in the study conducted by Armstrong et al. (2010). Therefore, our Event Window will consist of only three days, which is shown in figure 4.3.

4.1.2 The Market Model

When the Event Window is determined, the second step is to perform calculations within the test period (Strong, 1992). Generally, the abnormal return consists of the difference between the normal return and the *ex post* return in the test period (Mackinlay, 1997), which can be calculated in different ways (Strong, 1992). Mackinlay (1997) suggests two models to perform the study: *The Market Model* and *The Constant Mean Return Model*. *The Market Model* assumes a stable linear relation between the market return and the return of the security. It is also more precise and will therefore give a more reliable result. *The Constant Mean Return Model* assumes that the return of a security is constant. However, due to its sophistication, *The Market Model* increases the ability to detect event effects (Ibid), and is therefore chosen in order to perform this study.

In order to generate an estimate of the normal return, an Estimation Window, figure 4.4, is set which enables to calculate the normal return used in figure 4.1 (Ibid). The Estimation Window is set to 120 days prior the actual event leaving a few days before the event in order
to ensure that the Event Window and Estimation Window do not interact and bias the result (Mackinlay, 1997; Strong, 1992).

<table>
<thead>
<tr>
<th>2012/11/19</th>
<th>2013/05/10</th>
</tr>
</thead>
</table>

Time

**Estimation Window**

The formula used in the regression to establish alpha and beta, as originally defined by Mackinlay (1997), is displayed below in figure 4.5.

\[
\text{NoR}_t = \hat{\alpha}_t + \hat{\beta}_i \text{MR}_t + \epsilon_{it}
\]

Where:

- \(\hat{\beta}_i\) Association between the market return and the actual return
- \(\hat{\alpha}_t\) Share price without market influence
- MR\(_t\) Return on the market at the time (t)
- \(\epsilon_{it}\) Residual
- NoR\(_t\) Normal Return on the security at the time (t)

Further, Mackinlay (1997) defines \(\hat{\alpha}_t\) and \(\hat{\beta}_i\) as follows in figure 4.6 and 4.7.

\[
\hat{\alpha}_t = \bar{\mu}_i - \hat{\beta} \bar{\mu}_m
\]

\[
\hat{\beta}_i = \frac{\sum_{t=T_0+1}^{T_1}(\text{AcR}_t - \bar{\mu}_i)(\text{MR}_t - \bar{\mu}_m)}{\sum_{t=T_1+1}^{T_2} \text{MR}_t - \bar{\mu}_m^2}
\]

Where:

- \(\bar{\mu}_i\) Estimated mean of share price
- \(\bar{\mu}_m\) Estimated mean of market return

Finally, the market return is calculated as follows in figure 4.8.

\[
\text{MR}_t = \frac{P_{mt} - P_{mt-1}}{P_{mt-1}}
\]
Where:

\( P_m \)  
Price on market index at a certain time (t)

### 4.1.3 Hypothesis

The final step to perform an Event Study is to calculate the mean abnormal return that is tested within the null-hypothesis (Strong, 1992). Firstly, normal return is achieved by using alpha and beta from the regression in figure 4.5 where the market value is decided by using the STOXX 1800 ex. Europe index (see section 4.2.3). Thereafter, the actual return is calculated through figure 4.2 and finally abnormal return is received by using formula 4.1 by subtracting the normal return from actual return.

Further, in this case, abnormal returns are extended in two dimensions, both over a certain time period and through different companies. Therefore, in order to accommodate a multiple Event Window (Mackinlay, 1997), one has to cumulate the abnormal returns and get the Cumulated Abnormal Return (CAR), (Mackinlay, 1997; Strong, 1992; Serra, 2002) (Figure 4.9). However, to calculate CAR, firstly one has to calculate the average returns, over time for the Event Window for each time period and company within the Event Window (Serra, 2002), which is presented in figure 4.10.

\[
\overline{CAR}(t_0, t_1) = \sum_{t=t_1}^{t_2} \overline{AR}_0
\]

Where:

\( N \)  
Number of companies within the suggested sample

\( AR_{i0} \)  
Abnormal Returns for each company at each time period (0)

\( t_1 \)  
See figure 4.3

\( t_0 \)  
See figure 4.3
4.2 Data Collection
4.2.1 Regression Variables

The regression variables used in this study is described below. A summary of the variables is thereafter presented in table 1.

*Cumulative Abnormal Returns* (CAR) serves as the dependent variable. Calculations for CAR are explained previously in this chapter under 4.1, 4.1.2 and 4.1.3.

*Leverage* (LEV) is the control variable that enables to control for the liquidity within the sample. This is an important factor to include as a control variable since liquidity is an underlying factor when making new investments decisions such as leasing (Ball, Kothari and Watts, 1993). Leverage is calculated as long-term debt divided by shareholders equity (Ax, Johansson and Kullvén, 2010).

*Return on Common Equity* (RoCE) enables one to control for performance (Runesson, 2015), which also is an underlying factor when making decisions regarding new investments. Therefore, it is recognised as a control variable. RoCE is calculated by dividing net income by common shareholder equity (Runesson, 2015).

*Price Volatility* (PVol) is a variable directly collected from DataStream and displays the standard deviation from the previous year’s mean of daily prices which enables to control for risk (Runesson, 2015). The Price Volatility is believed to affect the decision-making regarding leases and is therefore chosen as a control variable. However, after examining its values in a histogram, the distribution demanded the variable to be winsorised with 2%.

*Industry* is the independent variable that enables to control for different effects within certain industries which is tested in H2. Companies are filtered by SIC code in DataStream and categorised as *Aircraft, Banking Sector, Retail, Shipping and Others* where *Others* is the benchmark to the first four industries. Each of the five industries are categorised as dummy variables in order to provide correlation analysis in Stata. *Aircraft, Banking Sector, Retail, and Shipping* are thus the industries argued to use relatively more operational leasing compared to others. These industries are aggregated into a new variable: *Industries with more Operational Leasing* (IOL), which is used in order to answer H2 and H3.

*LnSize* is the independent variable in order to analyse and draw conclusion regarding H3. Previous research such as Runesson (2015) and Beattie, Goodacre and Thomson (2000) use a logarithm of Total Assets as a variable for size. However, as of today, Operating Leases are not included within Total Assets and the variable will therefore not provide an appropriate measure for size. Instead, a logarithm of revenue is used as a measure of size as it is believed to better display the appropriate size of the companies within the sample. The logarithm is simply used to better display the correlation coefficient in the final regression. The regression with the original values provides smaller values as the revenues are relatively large compared to CAR.
### TABLE 1 Variable Overview

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type</th>
<th>Calculation/Datastream Code</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR</td>
<td>Dependent</td>
<td>See chap 4</td>
<td>Captures Abnormal Return</td>
</tr>
<tr>
<td>LEV</td>
<td>Control</td>
<td>WC0325</td>
<td>Controls for liquidity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WC02999 – WC03255</td>
<td></td>
</tr>
<tr>
<td>RoCE</td>
<td>Control</td>
<td>WC01706</td>
<td>Controls for performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WC03501</td>
<td></td>
</tr>
<tr>
<td>PVol</td>
<td>Control</td>
<td>WC03255</td>
<td>Controls for risk</td>
</tr>
<tr>
<td>Industry</td>
<td>Independent</td>
<td>1 = Others, 2=Aircraft, 3=Banking, 4= Retail and 5 = Shipping</td>
<td>Answer H2</td>
</tr>
<tr>
<td>IOL</td>
<td>Independent/Dummy</td>
<td>1 = 2, 3, 4 and 5 (above)</td>
<td>Answer H2 and H3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 = Others</td>
<td></td>
</tr>
<tr>
<td>LnSize</td>
<td>Independent</td>
<td>Ln (WC01001)</td>
<td>Answer H3</td>
</tr>
</tbody>
</table>

#### 4.2.2 Sample

The sample for this study is limited to companies listed on the stock exchange in Europe who report according to IFRS. Companies reporting according to IFRS but with local modifications are excluded. The original sample is collected through European Security and Market Authority (ESMA), and further filtering is provided in DataStream. This is, since ESMA provides a complete sample of all active companies on the European Market for the specific date that is demanded for this study, May 16th 2013. The filters used in DataStream are *Accounting Practices Followed*, to make sure all companies in the sample follow IFRS, and *Operational Leases*, as a sample of companies reporting leasing expenses is of main relevance for this study. However, DataStream does not provide sufficient information for all companies and further it does not provide complete information for all control variables. Therefore, the companies that have a lack of information are excluded from the sample after filtering. The final sample consists of 2008 companies. The complete list of the sample is attached in Appendix 1.

#### 4.2.3 Market Index

In order to measure the market index, the index STOXX Global 1800 excluding Europe is used. There are several indices to choose from, however, this one is used in previous research conducted by Armstrong et al. (2010). The reason for excluding Europe in the market index is because inclusion of the returns of the European firms in the market adjusted returns could remove some of the effects of the event. Armstrong et al. (2010) conclude that in their research, including the European market would not have an effect on the results, however, in this study Europe is excluded in order to minimise the risks of getting a biased result.
4.3 Data Analysis Procedure

Firstly, the necessary data is collected from DataStream and calculations in order to obtain CAR are performed in Stata. During the process, regression variables presented in previous section are chosen carefully. Descriptives of the data are found in section 5.1 and 5.2. Thereafter, it is suggested by Collis and Hussey (2014) to ensure that there is no significant correlation between the variables presented in 4.2.1 that can bias the result due to multicollinearity. An appropriate correlation test for nonparametric data is to use Spearman Correlation Matrix, which is presented in 5.2.2 (Ibid). Thereafter, to answer H1 a Mean-Comparison Test is performed. Finally, to answer H2 and H3, regressions are performed with the variables presented in section 4.2.1.

4.3.1 Mean-Comparison Test

In order to measure if the Exposure Draft of the replacement of the leasing standard caused a reaction on the market i.e. an abnormal return, a Mean-Comparison Test is performed. The test shows if the mean value of CAR equals zero or not. If the stock market does not react to the Exposure Draft i.e. do not find the announcement value relevant, there will not be an abnormal return and the mean value of CAR will be zero. If the null hypothesis can be rejected it indicates that the stock market reacts to the new leasing standard and hence finds it value relevant. In the Mean-Comparison Test a significance level of 0.01, 0.05 and 0.1 is tested which means that there is a 1, 5 or 10 percent risk that the statistical analysis is due to chance (Collis and Hussey, 2014). Based on this, the null hypothesis ($H_0$) is tested against the alternative hypothesis ($H_1$):

$$H_0; \overline{CAR}_{t(t_1, t_2)} = 0$$

$$H_1; \overline{CAR}_{t(t_1, t_2)} \neq 0$$

Further, in order to establish the reliability of the result, the significance of the result is analysed. This is resolved by Stata providing the $t$-value that serves to indicate the significance of the result. A rule of thumb is a significance level of 95 % and according to Newbold, Carlson and Thorne (2010) a $t$-value for that significance level with a sample as large as in this thesis, is therefore $t > 1.96$ or $t < -1.96$.

4.3.2 Regression Model

In order to establish to what extent the industry affect the value relevance, linear regression is performed in Stata (Figure 4.11). The regression model displays to what extent the variable industry affects CAR and the control variables are used to control whether the market tends to react to them. The regression is used to answer H2. Further, in order to evaluate the last hypothesis, H3, a multiple regression model is used that evaluates the interaction between size and the industries with more operational leasing and provides a coefficient based on both variables. The variables used in the regression are described in section 4.2.1.

$$CAR_i = \alpha + \beta_1 Industry_1 + \beta_2 LnSize_i + \beta_3 Leverage_i + \beta_4 RoCE_i + \beta_5 Volatility_i + \epsilon_i$$

Figure 4.11
4.4 Validity and Reliability

According to Collis and Hussey (2014), quantitative studies are characterised by high reliability but low validity, which has provided a special focus on keeping a high level of validity through the performance of this research. The filtering in DataStream provides a sample that only includes companies with operational leasing agreements that follow IFRS. This will likely increase the validity as it ensures that the intended companies are taken into account when performing this study. Therefore, as the filtering is performed in DataStream, which is a well-known and widely used database, both validity and reliability should be increased. Further, the chosen time period of the Event Window will likely also increase the validity as the window is chosen according to previous authors findings regarding the time frame. As Morse (1984) states, a smaller window give a more precise and unbiased result. In other terms, less biased results should provide a result that measures what is intended to be measured without including other parameters. Therefore, the relatively small Event Window should increase the validity of the research as well. Finally validity could be firstly decreased due to the choice of market index might have captured events in the world which is not applicable on the European market. However, as argued in section 4.2.3, the chosen index can also improve validity as it excludes Europe and thus other events that may have happened during this time period, which minimises the risk of getting a biased result.

The reliability is also considered when performing the research. Primarily, there were two researches performing this study, which should have increased the reliability as the collection of data, and two persons together have performed calculations and analysis in Stata, which decreases the risk of errors. DataStream is a database providing secondary sources that also increases the reliability of the study as it can be repeated by another researcher. However, DataStream could not provide data for all companies that were provided by ESMA, which means some companies were excluded from the sample. This could decrease the reliability and validity of the sample as Collis and Hussey (2014) state that a sample that is not random will bias the result. Finally, according to previous authors, The Market Model is characterised by being more precise when calculating abnormal returns (Mackinlay, 1997: Strong 1992) and should therefore also contribute to increased reliability of the presented result.
5. Empirical Findings and Analysis

The first part of this chapter presents a sample overview. Thereafter the regression variables are presented through descriptive statistics. The findings of the statistical testing of the hypotheses will thereafter follow along with analysis of the results.

5.1 Sample Overview

The sample when performing this study is provided from DataStream. A more detailed description of how the data is collected and a description of the variables are displayed in section 4.2.1 and 4.2.2. Initially, in this section, the sample is presented in general to give an overview of what the data looks like. Further, in section 5.2, more detailed descriptive data is presented. In the table below, table 2, the sample and distribution within countries is presented.

### TABLE 2 Distribution by Country

<table>
<thead>
<tr>
<th>Country</th>
<th>Freq.</th>
<th>Percent</th>
<th>Country</th>
<th>Freq.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>3</td>
<td>0.15%</td>
<td>Israel</td>
<td>5</td>
<td>0.25%</td>
</tr>
<tr>
<td>Austria</td>
<td>53</td>
<td>2.64%</td>
<td>Italy</td>
<td>200</td>
<td>9.95%</td>
</tr>
<tr>
<td>Belgium</td>
<td>43</td>
<td>2.14%</td>
<td>Jersey</td>
<td>13</td>
<td>0.65%</td>
</tr>
<tr>
<td>Bermuda</td>
<td>14</td>
<td>0.70%</td>
<td>Latvia</td>
<td>1</td>
<td>0.05%</td>
</tr>
<tr>
<td>British Virgin Islands</td>
<td>1</td>
<td>0.05%</td>
<td>Lithuania</td>
<td>13</td>
<td>0.65%</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>28</td>
<td>1.39%</td>
<td>Luxembourg</td>
<td>19</td>
<td>0.94%</td>
</tr>
<tr>
<td>Canada</td>
<td>2</td>
<td>0.10%</td>
<td>Malta</td>
<td>10</td>
<td>0.50%</td>
</tr>
<tr>
<td>Cayman Islands</td>
<td>2</td>
<td>0.10%</td>
<td>Morocco</td>
<td>1</td>
<td>0.05%</td>
</tr>
<tr>
<td>China</td>
<td>1</td>
<td>0.05%</td>
<td>Netherlands</td>
<td>55</td>
<td>2.73%</td>
</tr>
<tr>
<td>Cyprus</td>
<td>13</td>
<td>0.65%</td>
<td>Netherlands Antilles</td>
<td>1</td>
<td>0.05%</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>2</td>
<td>0.10%</td>
<td>Norway</td>
<td>94</td>
<td>4.67%</td>
</tr>
<tr>
<td>Denmark</td>
<td>63</td>
<td>3.14%</td>
<td>Poland</td>
<td>45</td>
<td>2.24%</td>
</tr>
<tr>
<td>Estonia</td>
<td>5</td>
<td>0.25%</td>
<td>Portugal</td>
<td>28</td>
<td>1.39%</td>
</tr>
<tr>
<td>Faroe Islands</td>
<td>1</td>
<td>0.05%</td>
<td>Romania</td>
<td>9</td>
<td>0.45%</td>
</tr>
<tr>
<td>Finland</td>
<td>85</td>
<td>4.23%</td>
<td>Singapore</td>
<td>2</td>
<td>0.10%</td>
</tr>
<tr>
<td>France</td>
<td>141</td>
<td>7.01%</td>
<td>Slovakia</td>
<td>6</td>
<td>0.30%</td>
</tr>
<tr>
<td>Germany</td>
<td>327</td>
<td>16.28%</td>
<td>Slovenia</td>
<td>14</td>
<td>0.70%</td>
</tr>
<tr>
<td>Gibraltar</td>
<td>1</td>
<td>0.05%</td>
<td>South Africa</td>
<td>1</td>
<td>0.05%</td>
</tr>
<tr>
<td>Great Britain</td>
<td>373</td>
<td>18.55%</td>
<td>Spain</td>
<td>70</td>
<td>3.48%</td>
</tr>
<tr>
<td>Greece</td>
<td>33</td>
<td>1.64%</td>
<td>Sweden</td>
<td>180</td>
<td>8.95%</td>
</tr>
<tr>
<td>Guernsey</td>
<td>2</td>
<td>0.10%</td>
<td>Switzerland</td>
<td>6</td>
<td>0.30%</td>
</tr>
<tr>
<td>Hungary</td>
<td>10</td>
<td>0.50%</td>
<td>United Arab Emirate</td>
<td>1</td>
<td>0.05%</td>
</tr>
<tr>
<td>Ireland</td>
<td>18</td>
<td>0.90%</td>
<td>United States of America</td>
<td>4</td>
<td>0.20%</td>
</tr>
<tr>
<td>Island</td>
<td>5</td>
<td>0.25%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isle of Man</td>
<td>4</td>
<td>0.20%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total</td>
<td>2,008</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

Noticeably, 1080 of the observations, thus 54%, are represented by four countries i.e. Germany, Great Britain, Italy and Sweden. This could of course be explained by these countries simply having more listed companies, but could also be an effect of accounting choices, thus in a larger extent choosing to use operational leasing. A few companies that are registered outside of Europe e.g. China and Australia are also represented in the sample.
Since filtering of the sample is provided through the filter: *Accounting Practices Followed* in DataStream the sample is assumed to be limited to companies listed on the stock exchange in Europe who reports according to IFRS. Companies reporting according to IFRS but with local modifications are also excluded in DataStream. Since the study examines both the overall effect of the Exposure Draft on the European market and the effect in different industries the following table is presented to show the distribution of the sample in different industries.

**TABLE 3 Industry Overview**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Freq.</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft Industry</td>
<td>23</td>
<td>1.14 %</td>
</tr>
<tr>
<td>Banking Industry</td>
<td>98</td>
<td>4.87 %</td>
</tr>
<tr>
<td>Retail Industry</td>
<td>169</td>
<td>8.40 %</td>
</tr>
<tr>
<td>Shipping Industry</td>
<td>28</td>
<td>1.39 %</td>
</tr>
<tr>
<td>Others</td>
<td>1690</td>
<td>84.19 %</td>
</tr>
<tr>
<td>Total</td>
<td>2,008</td>
<td>100.00 %</td>
</tr>
</tbody>
</table>

The variable called “Others” serves as a benchmark to the IOL industries tested in H2. It is simply created by adding all industries not included in H2; Aircraft, Banking, Retail and Shipping i.e. the IOL industries. The variable “Others” therefore enables a comparison between the four variables investigated and to draw conclusions to whether cumulated abnormal returns within certain industries are more prominent than others.

**5.2 Variable Data**

In this section, descriptive statistics regarding the chosen variables when performing the regressions are presented which serve to give more information about the variables. Thereafter, to ensure that the variables will not bias the regression, the correlation between the variables is evaluated through Spearman’s correlation.

**5.2.1 Variable Overview**

**TABLE 4 Descriptive Statistics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Median</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volatility</td>
<td>2008</td>
<td>146.1129</td>
<td>19.8385</td>
<td>328.0204</td>
<td>.1808</td>
<td>1670</td>
</tr>
<tr>
<td>Leverage</td>
<td>2008</td>
<td>.4570197</td>
<td>.278953</td>
<td>2.011053</td>
<td>-25.8873</td>
<td>48.9965</td>
</tr>
<tr>
<td>CAR</td>
<td>2008</td>
<td>.0008799</td>
<td>.000713</td>
<td>.0026219</td>
<td>-.012969</td>
<td>.024011</td>
</tr>
</tbody>
</table>

The descriptive statistics are described in table 4, which displays that the mean of CAR is 0.0008799, slightly higher than the median. Moreover, the standard deviation of CAR is relatively high compared to the mean which indicates that there is a spread as can be seen in the minimum and maximum values. This is further considered in the mean-comparison test in section 5.3. LnSize shows the spread in size based on revenue between the companies in the sample, which will be relevant for the last hypothesis, H3, where the size of the company in relation to CAR is evaluated and further analysed in section 5.5.
5.2.2 Spearman’s Correlation

Before performing the regression, it is important to control the correlation between the variables and to control for their correlation intensity. If there is high correlation, the regression can be biased due to multicollinearity. Further, since the data is nonparametric a Spearman’s correlation is applied in order to examine the association (Collis and Hussey, 2014). Below, in table 5, the Spearman’s Correlation Matrix for significance level 0.05 is presented.

### TABLE 5 Spearman’s Correlation

<table>
<thead>
<tr>
<th></th>
<th>CAR</th>
<th>LEV</th>
<th>RoCE</th>
<th>Pvol</th>
<th>Aircraft</th>
<th>Banking</th>
<th>Retail</th>
<th>Shipping</th>
<th>Others</th>
<th>LnSize</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEV</td>
<td>-0.0158</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RoCE</td>
<td>0.0030</td>
<td>-0.1252*</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pvol</td>
<td>-0.0345</td>
<td>-0.1519*</td>
<td>0.3682*</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aircraft</td>
<td>0.0001</td>
<td>0.0253</td>
<td>0.0123</td>
<td>-0.0275</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banking</td>
<td>-0.0046</td>
<td>0.0731*</td>
<td>-0.0721*</td>
<td>-0.0130</td>
<td>-0.0244</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>-0.0103</td>
<td>0.0182</td>
<td>0.0329</td>
<td>0.0571*</td>
<td>-0.0327</td>
<td>-0.0689*</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shipping</td>
<td>-0.0101</td>
<td>0.0857*</td>
<td>-0.0072</td>
<td>-0.0054</td>
<td>-0.0128</td>
<td>-0.0270</td>
<td>-0.0361</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>0.0138</td>
<td>-0.0919*</td>
<td>0.0162</td>
<td>-0.0260</td>
<td>-0.2481*</td>
<td>-0.5221*</td>
<td>-0.6988*</td>
<td>-0.2741*</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>LnSize</td>
<td>-0.0090</td>
<td>0.1419*</td>
<td>0.2131*</td>
<td>0.3833*</td>
<td>0.0475*</td>
<td>0.1082*</td>
<td>0.1161*</td>
<td>0.0048</td>
<td>-0.1676*</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Correlation is significant at 0.05* level

This matrix in table 5 evaluates the risk of multicollinearity which is the case if the correlation between two independent variables in a multiple regression model is higher than 0.9. That could lead to unreliable estimates of the standard errors and difficulties to distinguish the separate effects of the independent variables (Collis and Hussey, 2014). Table 5 displays that there are several significant values. However, Collis and Hussey (2014) state that a Correlation Coefficient between 0 - 0.39 indicates weak correlation. Therefore, most of the suggested correlations are disregarded. The correlation between Others and Banking is -0.5221 and the correlation between Others and Retail is -0.6988, these values are considered as medium negative correlation according to Collis and Hussey (2014). Since none of the correlation coefficients are higher than 0.7 it is not likely that the strength of the correlation will cause the regression analysis to be biased (Ibid).

5.3 Results and Analysis of H1

\[
H_1 = \text{There is an abnormal return for May 16, 2013.}
\]

5.3.1 Mean-Comparison Test Results

The mean-comparison test does not take any other factors into account but just if the mean value of CAR equals zero or not for the entire sample. Thus, if the CAR significantly deviates from zero on the event date of the replacement of the leasing standard and thus is value relevant for investors (Collis and Hussey, 2014). Table 6 below shows the result of the mean-comparison test.
TABLE 6 Mean-Comparison Test of CAR

One-sample t test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std.Err</th>
<th>Std.Dev</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR</td>
<td>2008</td>
<td>.0008799</td>
<td>.0000585</td>
<td>.0026219</td>
<td>.0007651-.0009946</td>
</tr>
</tbody>
</table>

Ho: mean = 0
Ha: mean < 0
Pr(T < t) = 1.0000
Ha: mean != 0
Pr(|T| > |t|) = 0.0000
Ha: mean > 0
Pr(T > t) = 0.0000

t = 15.0381
degrees of freedom = 2007

The mean value of CAR is 0.0008799, thus the same value as in 5.2.1 Since the mean is positive, one can draw the conclusion that there is an abnormal return and the null hypothesis i.e. that the mean value of CAR equals zero, can be rejected at a $\alpha = 0.05$. This is further supported by the very large t-value, which indicates that this is a solid result. The mean value is the same at significance level of 0.01 and 0.1, which can be observed in Appendix 2. A two-sample t test was also conducted in order to evaluate the mean value of CAR in the IOL industries and is presented below in table 7.

TABLE 7 Mean-Comparison Test of IOL

Two-Sample t test

<table>
<thead>
<tr>
<th>Group</th>
<th>Obs</th>
<th>Mean</th>
<th>Std.Err</th>
<th>Std.Dev</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Others</td>
<td>1690</td>
<td>.0008786</td>
<td>.0000625</td>
<td>.0025694</td>
<td>.000756-.0010012</td>
</tr>
<tr>
<td>IOL</td>
<td>318</td>
<td>.0008868</td>
<td>.000162</td>
<td>.0028891</td>
<td>.5681-.0012056</td>
</tr>
<tr>
<td>Combined</td>
<td>2008</td>
<td>.0008799</td>
<td>.0000585</td>
<td>.0026219</td>
<td>.0007651-.0009946</td>
</tr>
</tbody>
</table>

Table 7 indicates that there is not a particular difference of the mean value of CAR between the IOL industries and the other industries, which are assumed to have less operational leasing. Thus, there is a small positive abnormal return in both groups, which indicates that there is no difference of how the investors in the different industries perceived the Exposure Draft of the new leasing standard.

5.3.2 Mean-Comparison Test Analysis

As the first hypothesis, $H_1$ suggests, a market reaction to the announcement of the replacement of the leasing standard is expected. The Mean-Comparison Test presented in table 6 and 7 suggests a positive reaction. Even though the mean value of CAR regarding the IOL industries does not differ much from the total mean value of CAR, the standard deviation is slightly higher for IOL, 0.0028891, which could be an indication that our
following hypotheses regarding the different IOL industries could give a different result through a larger market reaction in one of the IOL industries.

As discussed previously, the Efficient- Market Hypothesis assumes that the stock exchange is a perfectly efficient market and would therefore not show any visible reaction when new information is released (Claesson, 1987: Burton, 2003). The result can therefore be supported by The Efficient- Market Hypothesis, concluding that the Exposure Draft did not cause a reaction on the market price at a certain event due to the efficiency on the market. This indicates that investors on the European Market have access to all relevant information due to good transparency in firms financial information which contradicts the statement of Altamuro et al. (2014) who stated that operational leases might not be appropriately considered by the stakeholders in the financial reporting since they do not have all the information of the transactions. Akerlof (1970) and Lyon (2010) also describe the transparency issue and thus the “lemon problem” as information asymmetry could occur and affect the price when part of the information is omitted from the balance sheet. However, the empirical findings in this study indicate that investors already have acknowledged firms operational leasing in their firm value assessments and hence, do not find the new leasing standard value relevant.

Another possible explanation to the weak effect could be because the replacement of the leasing standard is a highly discussed and current subject which could already have had an impact on the investors to consider companies operational leasing obligations in their value assessment. The fact that an earlier Exposure Draft of the new standard was released in 2010 could also have led to investors already considering the fact of capitalising operating leases, which thus could mean that a similar event study on the Exposure Draft from 2010 could have provided a different result. Runesson (2015) suggests another possible explanation for a small effect connected to the release of the new Exposure Draft, as there could be a stronger affect prior the event. Thus, early leakage of information could be the explanation of such lack of response on the capital market.

The result of the Mean Comparison Test is rather contradictory to most previous research in the area such as Altamuro et al. (2014), PwC (2009) and Marton et al. (2012) who all claim that the current standard regarding operating leases is not transparent enough and thus as Dhaliwal et al. (2012) and PwC (2009) state, the replaced standard should have a negative effect on the overall market. Since previous research implies that the market reaction is likely to be negative, one cannot exclude that another event might have affected the result of this study to its positive character. Thus, there is a possibility that the release of the Exposure Draft itself caused a negative market reaction but another event perceived as positive by the investors causing a positive effect on the market might have mitigated the result of this study. Further, the choice of market index, STOXX 1800 ex. Europe, might have an effect on the result as well. This is, since the choice of market index might have captured events in the world which is not applicable on the European market. However, a similar discussion is held by Armstrong et al. (2010) where both an index including and excluding Europe were applied in their Event Study. Although, similar results were achieved with both indexes, which could be an indication, that using another market index will not necessarily change the result of this study.

Finally, Runesson (2015) also had a result suggesting the release of an Exposure Draft for IAS 19, Post-Employment benefits, did not have an impact on the capital market. However, Runesson (2015) also performs an Event Study when the actual standard for Post-Employment Benefits is released with a larger effect regarding abnormal returns. Therefore,
it cannot be excluded that the actual release of the replaced standard will have a larger effect when implemented.

5.4 Empirical Findings and Analysis of H₂

H₂a: The abnormal return is more prominent in the retail industry compared to industries with less operational leasing.

H₂b: The abnormal return is more prominent in the aircraft industry compared to industries with less operational leasing.

H₂c: The abnormal return is more prominent in the shipping industry compared to industries with less operational leasing.

H₂d: The abnormal return is more prominent in the banking industry compared to industries with less operational leasing.

A regression for the second hypotheses will be analysed in this section. The chosen industries i.e. IOL, are benchmarked against all other industries found when collecting the sample.

**TABLE 8 Linear Regression H₂**

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEV</td>
<td>-0.000</td>
</tr>
<tr>
<td></td>
<td>(-0.605)</td>
</tr>
<tr>
<td>RoCE</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(0.386)</td>
</tr>
<tr>
<td>PVol</td>
<td>-0.000</td>
</tr>
<tr>
<td></td>
<td>(-1.175)</td>
</tr>
<tr>
<td>Aircraft</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
</tr>
<tr>
<td>Banking</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>(0.996)</td>
</tr>
<tr>
<td>Retail</td>
<td>-0.000</td>
</tr>
<tr>
<td></td>
<td>(-0.729)</td>
</tr>
<tr>
<td>Shipping</td>
<td>-0.000</td>
</tr>
<tr>
<td></td>
<td>(-0.804)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.001***</td>
</tr>
<tr>
<td></td>
<td>(12.691)</td>
</tr>
</tbody>
</table>

Observations: 2,008
R-squared: 0.13

Robust t-statistics in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 8 displays a regression for both independent and control variables with CAR as the dependent variable. The IOL industries are all compared to the variable “Others” which serves as a benchmark for all IOL industries. As one can see, Aircraft and Banking are providing positive CAR whereas Retail and Shipping provide negative CAR. However, there is no significant result for the independent variables of the different industries as the t-value is too small. Therefore, this table confirms previous results in table 7 suggesting that there is not a more prominent effect on the capital market within the IOL industries.
compared to the other industries. Hence, this research opposes the previous research claiming that Aircraft, Banking, Retail and Shipping (Gavazza 2010; PwC 2010; KPMG 2010; KPMG 2013), which are industries with higher amounts of operational leasing, would be more affected by the new standard.

Considering the results in table 8, the study of Imhoff et al. (1993) is questioned as they indicate CAR for both aircraft and retail should be more affected by the new standard. In the empirical findings presented in this study, neither aircraft nor retail provide any significant empirical results which indicate that these industries themselves are not value relevant for the shareholders considering the replacement of the leasing standard. Consequently, this implies that the findings of Gavazza (2010), using similar reasoning that Imhoff et al. (1993) regarding the aircraft industry, also can be questioned. However, notably the representation of the aircraft and shipping industry is relatively small, 23 and 28 companies respectively, which can be argued not to be a sample large enough to draw any conclusions. However, the underlying sample for this study includes all active companies on the European Market according to ESMA, wherefore the sample cannot be enlarged. This reasoning is applicable to all industry groups in the sample. Thus, the empirical findings of this study suggest that the variable Industry itself is not value relevant for investors since they already incorporate companies’ off-balance sheet obligations into their value assessments.

5.5 Empirical Findings and Analysis of H₃

\[ H₃ = The \ abnormal \ return \ is \ associated \ with \ the \ size \ of \ the \ company \ within \ industries \ with \ more \ operating \ leasing \]

Following section describes the effect that the variable size has on CAR. As \( H₃ \) suggests, the intention is to measure if the size of the company within the IOL industries affects CAR. Therefore, the interaction between size and IOL industries is presented in order to draw conclusions regarding \( H₃ \).

5.5.1 Analysis of the Interaction between Company Size and IOL

| TABLE 9 Linear Regression \( H₃ \) |
|-------------------|-------------------|
| VARIABLES         | INTERACTION       |
| LEV               | -0.000            |
|                   | (-0.723)          |
| RoCE              | 0.000             |
|                   | (0.532)           |
| PVol              | -0.000            |
|                   | (-0.608)          |
| IOL               | -0.001            |
|                   | (-1.285)          |
| LnSize            | -0.000**          |
|                   | (-1.993)          |
| IOL _LnSize       | 0.000             |
Table 9 presents the empirical findings if IOL industries and Size are combined in order to answer $H_3$. However, in order to measure $H_3$, i.e. the interaction between the variables, a new variable, $\text{IOL} \times \text{LnSize}$, is created which is simply created by multiplying IOL and LnSize. As the variable IOL does not provide any significant results, it is noteworthy that the variable LnSize does. Notably, the coefficient is close to zero, which implies that the effect on the market is very small, however, the t-statistic is -1.993, which is significant at a 0.05 significance level. This implies that size is a variable that affects the capital market, in this case negatively as the coefficient is negative.

Since previous studies suggest that size is a decision making variable regarding how to finance the business, smaller companies are assumed to lease relatively more due to less financing opportunities to buy the asset (Lasfer and Levis, 1998; Morais 2013). Therefore the result of this regression is in line with previous research and adds an interesting aspect as size itself seems to be value relevant for investors in this case. Graham et al. (1998) also claim that smaller companies lease relatively more than larger firms because of difficulties obtaining external funds where stakeholders do not have all relevant information due to information asymmetry.

One explanation for the small effect is that the correlation between size and operating leases previously has been claimed to only be true up to a certain level (Koh and Jang 2009; Adams and Hardwick 1998). Thus, smaller companies are assumed to use operational leasing more due to problems to raise capital to buy the assets, however, this is only true up to a certain level since the largest companies also are found to use a lot of operational leasing (Ibid). One could therefore argue that larger firms affect the findings negatively and if they were excluded from the sample, the effect might have been more significant. However, if the largest firms would be excluded, the sample would be highly reduced since many large firms are included in the sample. This especially applies within certain industries within IOL, e.g. aircraft and shipping, as many companies within these industries have capital-intensive assets. Excluding the larger companies would thus decrease the sample to a large extent, which, in this case, is not considered desirable as it is assumed to interfere with the analysis. If many companies within certain industries are excluded, the result could be biased. Therefore, a reduction of the sample considering size is not performed in this study.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.002***</td>
</tr>
<tr>
<td></td>
<td>(1.354)</td>
</tr>
<tr>
<td>Observations</td>
<td>2,008</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Robust t-statistics in parentheses

*** p<0.01, ** p<0.05, * p<0.1
6. Conclusion and Suggestions for Further Research

According to the empirical findings, there is no indication that the Exposure Draft has a general effect on the value relevance for investors as stated in H1. Further, there is no indication that the value relevance regarding operating leases is affected by which industry the company is in. Therefore, as of hypothesis one and two, no significant results are found within the empirical findings. This thus contradicts previous research claiming that companies operating in certain industries use more operational leasing agreements and therefore should be more affected by the new leasing standard than other industries. Previous research further claim that the current leasing standard is not transparent enough which thus causes a “lemon problem” where the investors are assumed to not have all relevant information to base their investment decisions on. This is also contradicted in this research as the investors seem to have all relevant information and thus do not find the new standard value relevant.

Arguments are held whether the value relevance is rather small within this research due to the fact that investors already have taken the replacement of the standard into account as a first Exposure Draft was released in 2010. Since an Exposure Draft of the new leasing standard was released in 2010, one could argue that there could have been a larger market reaction at that time. Thus, the reason to the small effect of this study could be that investors already are aware of the implications of the new standard and thus already incorporates this in their value assessment of the companies. The earlier Exposure Draft could thus already have mitigated the information asymmetry discussed in previous research and in accordance to the efficient-market hypothesis, the investors already have all relevant information. Another possible explanation to the contradictory result discussed in the analysis is the possibility that another event on the European market during the same event window could have had an effect on the results of this thesis. Thus an event perceived as positive by the investors might have mitigated a possible negative effect of the release of the exposure draft. Further, the choice of market index could also have had an effect on the overall result as it may have captured events not applicable on the European market. Considering hypothesis three, the empirical findings provide small evidence that adds an interesting aspect to existing research. The results show that the new standard could be perceived as value relevant for investors in smaller companies regardless of which industry they operate in. This leads to the conclusion that investors in smaller companies could benefit the most of the new leasing standard, as their financial information would be more transparent and thus more comprehensive.

6.1 Suggestions for Further Research

Since previous research has shown that the actual implementation creates a larger market reaction, it cannot be excluded that the actual release of the new standard will have a larger effect when implemented. Therefore, suggestion for further research is to examine if the actual release of the new standard will have a larger effect. However, as of today, that is not possible, as the new standard is not finalised. Further, since PwC (2009) stated that the impact on companies within an industry could differ depending on which country they operate in, that could also be of interest in further research as that parameter was not considered in this study. Finally, as a large discussion is held in this study, that the release of the first Exposure Draft in 2010 could have had a larger impact on the market, it could therefore be interesting to perform a similar study regarding that release.
7. References

7.1 Literature


Lerman, P. (1989) “Should you lease or buy equipment?”, Business development publication


Newbold, P. , Carlson, W.L. and Thorne, B. “Statistics for Business and Economics” 7th Edision, Pearson Education Inc


7.2 Electronic References


EY (2013) “Leases re- exposed: the impact on banks”

FASB (2013)

IASB’s Agenda Paper 48, Effects analysis of the 2013 exposure draft leases.
http://www.ifrs.org/search/Pages/Results.aspx?k=effect%20analysis%20for%20leases
[Accessed 2015-01-26]

KPMG (2013) “New on the horizon: leases for banks”

http://www.scafbok.net/read/new-on-the-horizon-leases-for-retailers-kpmg-7181556/
[Accessed 2015-03-29]

KPMG (2013) “Shipping insights briefing, a view of the future: 2017- bigger balance sheets!”
[Accessed 2015-03-29]

PwC and Rotterdam School of management (2009) “PwC’s benchmark study for leasing”
http://www.pwc.com/gx/en/transportation-logistics/publications/benchmark-leasing.jhtml
[Accessed 2015-01-25]

[Accessed 2015-03-29]

STOXX 1800 excluding Europe
[Accessed 2015-03-29]
Appendix 1 - Sample

3U HOLDING AG
4IMPRINT GROUP PLC
888 HOLDINGS PLC
A & P ANDREOU
A.G. BARR PLC
A.S. ROMA SPA
A.S.T. GROUPE
AAK PUBL AB
AALBERTS INDUSTRIES
AAP IMPLANTATE AG
AAREAL BANK AG
AB SKF
AB SKF
ABC DATA
ABENGoa S.A.
ABENGoa S.A.
ABERDEEN ASSET MGMT
ABG SUNDAL COLLIER
ABLYNX N.V.
ACAL PLC
ACANDO AB
ACCELL GROUP NV
ACCOR SA
ACEA SPA
ACERINOX S.A.
ACOTEL GROUP
ACQUE POTABILI SPA
ACTEOS
ACTI DE CONS Y SERV
ADC AFRICAN
ADDNODE GROUP AB
ADESSO AG
ADIDAS AG
ADILER MODEMA
ADMIRAL GROUP PLC
ADOCIA SAS
ADOLFO DOMINGUEZ SA
ADVAG A
ADVEO GROUP INTL
AEDES LIGURE LOMBARD
AEFFE S.P.A.
AEGEAN AIRLINES S.A.
AEOILIAN INV FUND SA
AER LINGUS
AERODROM LJUBLJANA
AEROPORTO DI FIRENZE
AF GRUPPEN ASA
AFARAK GROUP OYJ
AFFECTO OYJ
AFONE
AFREN PLC
AG ALLG ANLAGEVERW
AGA RANGEMASTER
AGASTI HOLDING
AGEAS SA
AGORA SA
AGRANA BETEILIGUNGS
AGRIA GROUP HOLDING
AGROWILL GROUP AB
AGTA RECORD AG
AHLSTROM OYJ
AIR BERLIN PLC
AIR CHINA LIMITED
AIXTRON SE
AKASTOR ASA
AKER ASA
ALANDSBANKEN ABP
ALANDSBANKEN ABP
ALBA SE
ALCATEL
ALEO SOLAR AG
ALERION CLEANPOWER
ALIOR BANK SA
ALK
ALL FOR ONE STEEB
ALLGEBER HOLDING
ALLIANCE TRUST PLC
ALLIANZ SE
ALLTELE ALLMANNA SVE
ALMIRALL SA
ALNO
ALPETOUR POTOVALNA
ALPHA ASTIKA AKIN
ALPHA BANK A.E.
ALPHAFORM AG
ALSTRIA OFFICE
ALTERN
ALTRAN TECHNOLOGIES
ALUMASC GROUP PLC
ALZA REAL ESTATE
AMADEUS FIRE AG
AMAG AUSTRIA
AMBIENTHESIS SPA
AMBRA S.A.
AMEC FOSTER WHEELER
AMER SPORTS
AMERICAN SHIPPING CO
AMG ADVANCED METAL
AMINEX PLC
AMLIN PLC
AMPLIFON SPA
AMREST HOLDINGS SE
ANALYTIK JENA AG
AND INTERNATIONAL
ANDRITZ AG
ANGLO
ANGLO AMERICAN PLC
ANGLO PACIFIC GROUP
ANHEUSER
ANITE PLC
ANOTO GROUP AB
ANSALDO STS SPA
ANTIBIOTICE SA
ANTOFAGASTA PLC
AP MOELLER MAERSK
AP MOELLER MAERSK
APB APRANGA
APERAM
APETIT OYJ
APPTIX ASA
APR ENERGY PLC
APRIL SA
AQUALIS PLATINUM
ARCADIS NV
ARCHOS SA
ARENALS FOSSEKOMP.
AREVA SA
ARHUS ELITE A/S
ARISE AB
ARKIL HOLDING A/S
ARM HOLDINGS PLC
ARNOLDO MONDADORI ED
ARTNET AG
ARYZTA AG
AS SILVANO FASHION
ASCENCIO SCA
ASCOPIAVE SPA
ASHMORE GROUP PLC
ASHTEAD GROUP PLC
ASIA RESOURCE
ASIAN BAMBOO AG
ASPO OYJ
ASPOCOMP GROUP OYJ
ASSA ABLOY AB
ASSOCIATED BRITISH
ASSSYSTEM SA
ASTALDI
ASTARTA HOLDING NV
ASTM SPA
ASTRAZENECA PLC
AT&S AUSTRIA TECHN
ATB AUSTRIA ANTRIEB
ATLANTIA SPA
ATLANTIC PETROLEUM
ATLAS COPCO AB
ATLAS COPCO AB
ATM SA
ATOS SE
ATOSS SOFTWARE AG
ATRESMEDIA CORP
ATRIA PLC
ATRIUM LJUNGBERG AB
ATTICA HOLDINGS S.A.
AUDI AG
AUDIO VISUAL
AUGUSTA TECHNOLOGIE
AURIGA INDUSTRIES
AURUBIS AG
AUTOGRILL SPA
AUTOMOTIVE COMPO
AUTOOSTRIDE MERID
AVANZA BANK
AVEGA GROUP AB
AVENTIR FINANCE
AVENIR TELECOM
AVIA SOLUTIONS
AWILCO
AVIVA PLC
AVOCET
AVON RUBBER PLC
AXEL SPRINGER AG
AXFOOD AB
AXIS AB
AXWAY SOFTWARE
AYCO GRUPO INMOBIL
AZ ELECTRONIC
AZIMUT HOLDING SPA
B&B TOOLS AB
B&C SPEAKERS S.P.A.
B+S BANKSYSTEME
BABCOCK INT'L GROUP
BACCARAT SA
BAE SYSTEMS
BALDA AG
BALFOUR BEATTY PLC
BALLAST NEDAM NV
BANCA CARIGE
BANCA CARIGE
BANCA COMERCIALA CAR
BANCA FINNAT EURAMER
BANCA GENERALI SPA
BANCA INTERMOBILIARE
BANCA PICCOLO
BANCA POP DI MILANO
BANCA POPOLARE
BANCA POPOLARE
BANCA POPOLARE DELL
BANCA PROFILO
BANCA TRANSILVANIA
BANCO BILBAO VIZCAYA
BANCO BPI, S.A.
BANCO COMERCIAL PORT
BANCO DESIO BRIANZA
BANCO DESIO BRIANZA
BANCO DI SARDEGNA
BANCO ESPIRITO SANTO
BANCO SABADELL
BANCO SANTANDER SA
BANIF BANCO INTER
BANK BPH S.A.
BANK GOSP
BANK HANDLOWY
BANK MILLENNIUM SA
BANK OCHRONY
BANK PEKAO S.A.
BANK ZACHODNI WBK SA
BANKIA SAU
BARCLAYS PLC
BARRATT DEVELOPMENTS
BASICNET SPA
BASLER AG
BASTOGI SPA
BASWARE OYJ
BATM ADVANCED COMM
BAUER AG
BAVARIAN NORDIC AS
BAYER AG
BAYER. MOTOREN WERKE
BAYER. MOTOREN WERKE
BAYWA AG
BAYWA AG
BBA AVIATION
BBI DEVELOPMENT SA
BDI
BE GROUP AB
BE SEMICONDUCTOR IND
BE THINK SOLVE EXEC
BEALE
BEATE UHSE AG
BEAZLEY PLC
BECHTLE AG
BEIJER ALMA AB
BEIJER ELECTRONICS
BEIJER REF PUBL AB
BEKAERT NV
BELGACOM NV
BELLWAY PLC
BELSHIPS ASA
BELVEDERE
BENE AG
BENETEAU SA
BENI STABILI SPA
BERENDSEN PLC
BERENTZEN
BERKELEY GROUP
BERTRANDT AG
BEST HOTEL PROPE
BEST UNION COMPANY
BETA SYSTEMS
BETER BED HOLDING
BG AGRO AD VARNA
BG GROUP PLC
BHF KLEINWORT
BHP BILLITON PLC
BIALETTI INDUSTRIE
BIANCAMANO SPA
BIESSE SPA
BIG YELLOW PLC
BIGBEN INTERACTIVE
BIJOU BRIGITTE AG
BILBORD AD SOFIA
BILFINGER SE
BILIA AB
BILLERUDKORSNAS PUBL
BIOERA SPA
BIOGAIA AB
BIOHIT OYJ
BIOINVENT INTL
BIOR F PHARMA ASA
BIOPORTO A/S
BIQUELL
BIOSEARCH
BIOTAGE AB
BIOTEC PHARMACON ASA
BIOTEST AG
BIOTEST AG
BIRDSTEP TECHNOLOGY
BISICHI MINING PLC
BJORN BORG AB
BLACK EARTH
BLOOMSBURY
BNP PARIBAS
BODEGAS RIOJANAS SA
BODYCOTE
BOERO BARTOLOMEO SPA
BOLIDEN AB
BOLLORE
BOLSAS Y MERCADOS
BOLZONI SPA
BONG LJUNGDAHL AB
BONIFICA TERRENI FER
BORGOSIESA SPA
BORGOSIESA SPA
BORREGA
BORUSSIA DORTMUND
BOULE DIA
BOURSORAMA
ETABLISSEMENTS DELH
ETAM DEVELOPPEMENT
ETRONI CORP
EURO DISNEY SCA
EUROCASH SA
EUROKAI GMBH
EUROMEDICA
EUROMICRON AG COMMUN
EUROMONEY INSTL INV
EURONAV NV
EUROPEAN RELIANCE CO
EUROTECH SPA
EUTELSAT COMM
EVONIK INDUSTRIES AG
EVRY ASA
EVS BROADCA EQUIPMEN
EXACT HOLDING NV
EXCEET GROUP
EXEL COMPOSITES OYJ
EXILION ENERGY
EXIQON A/S
EXPERIAN PLC
EXPRIVIA S.P.A.
F
F E BORDING A/S
F&C ASSET MGMT
F&C COMML PROP
F&C UK REAL
FABASOFT AG
FAIR VALUE REIT
FAIVELEY
FARSTAD SHIPPING ASA
FAST CASUALWEAR AG
FASTIGHETS AB BALDER
FENNER PLC
FERMIERE DU
FERRARO PLC
FH B NYRT
FIDESSA GROUP
FIDIA SPA
FIELMANN AG
FIERA MILANO SPA
FILTRONIC PLC
FIMBANK P.L.C.
FINANCIERE DE L'ODET
FINANZAS E INVER
FINGERPRINT CARDS AB
FINMECCANICA SPA
FINNAIR OYJ
FINNLINES OYJ
FIRST INVESTMENT
FIRST SENSOR AG
FIJARSKIPTI
FLORIDIENNE SA
FLUGHAfen WIEN AG
FLUIDRA SA
FLUXYS BELGIUM NV
FLYBE GROUP PLC
FNMI S.P.A.
FOLLI FOLLIE COMM
FONCIERE ATLAND
FONCIERE DES MURS
FORIS AG
FORTEC ELEKTRONIK
FORTHNET SA
FORTUM OYJ
FORTUNA ENTERTAIN
FOTEX HOLDING
FOYER S.A.
FRANCOTYP POSTALIA
Fraport AG
FRAUENTHAL HOLDING
FRED. OLSEN ENERGY
FREENET AG
FREN BREMBO
FRENESIUS SE
FRESNILLO PLC
FREY S.A.
FRIWO AG
FUCHS PETROLUB SE
FUCHS PETROLUB SE
FUGRO NV
FULLER, SMITH
FULLSIX SPA
FUNCOM N.V.
Funespana SA
FUNKWERK AG
FUTEBOL CLUB
FUTURE PLC
G.A.P. VASSILOPOULOS
G4S PLC
GABRIEL HOLDING AS
GAG IMMOBILIEN AG
GAGFAH SA
GALAPAGOS
GALLIFORD TRY PLC
GALP ENERGIA
GAMES WORKSHOP GROUP
GAMESA CORP TECNOLOG
GAS NATURAL SDG S.A.
GAS PLUS SPA
GAUMONT SA
GC RIEBER SHIPPING
GDF SUEZ SA
GEA GROUP AG
GECI INTERNATIONAL
GEFRAN
GEM DIAMONDS
GEMALTO N.V.
GENEL ENE
GENERAL BANK OF
GENERAL DE ALQUILER
GENERALE DE SANTÉ SA
GENERIX
GENMAB A/S
GEOX SPA
GERRESHEIMER AG
GERRY WEBER AG
GESCO AG
GETIN HOLDING SA
GETIN NOBLE BANK SA
GETINGE AB
GEVEKO AB
GFK AG
GFT TECHNOLOGIES AG
GIOVANIO FEDON E
GK SOFTWARE AG
GKN PLC
GL EVENTS
GLANBIA PLC
GLASTON CORPORATION
GLAXOSMITHKLINE
GLENCORE PLC
GLINTT GLOBAL
GLOBAL GRAPHICS SE
GLUNZ & JENSEN A/S
GN STORE NORD A/S
GO
GO PLC
GOLDEN OCEAN
GOLDEN SANDS
GOODTECH ASA
GOODWIN PLC
GRAFTON GROUP PLC
GRAINGER PLC
GRAND HARBOUR MARINA
GREENCORE GROUP PLC
GREENE KING PLC
GREENTECH ENGERY
GREENYARD FOODS NV
GREIGGS PLC
GREIFFENBERGER AG
GRENELEASING AG
GRESHAM COMPUTING
GRESHAM HOUSE PLC
GREG SEAFOOD ASA
GRIGISKE AB
GROTMUJ
GROUP BRUXELLES
GROUPE CRIT
GROUPE FLO SA
GROUPE OPEN SA
### Appendix 2 – Mean-Comparison Test

**One-sample t test**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std.Err.</th>
<th>Std.Dev.</th>
<th>[99%Conf.Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR 2008</td>
<td>2008</td>
<td>0.0008799</td>
<td>0.0000585</td>
<td>0.0026219</td>
<td>0.000729</td>
</tr>
</tbody>
</table>

mean = mean(car)  
Ho: mean = 0  
degrees of freedom = 2007

Ha: mean < 0  
Ha: mean != 0  
Ha: mean > 0  
Pr(T < t) = 1.0000  
Pr(|T| > |t|) = 0.0000  
Pr(T > t) = 0.0000

**One-sample t test**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std.Err.</th>
<th>Std.Dev.</th>
<th>[90%Conf.Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR 2008</td>
<td>2008</td>
<td>0.0008799</td>
<td>0.0000585</td>
<td>0.0026219</td>
<td>0.0007836</td>
</tr>
</tbody>
</table>

mean = mean(car)  
Ho: mean = 0  
degrees of freedom = 2007

Ha: mean < 0  
Ha: mean != 0  
Ha: mean > 0  
Pr(T < t) = 1.0000  
Pr(|T| > |t|) = 0.0000  
Pr(T > t) = 0.0000