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Leasing – why are some companies averse to capitalise their operating lease contracts?

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“One of my great ambitions before I die is to fly in an aircraft that is on an airline’s balance sheet.”

Sir David Tweedie,
Chairman of IASB

Abstract

In August 2010 IASB and FASB published an Exposure Draft with proposed changes to the current IAS 17 - *leases*. To get an understanding of how the affected companies perceive the changes, I assessed a large number of the letters. Based on this, I created a taxonomy of six different sectors to categorise their views. As expected, there was a stark contrast between the comment letters across the sectors. However, what I found more interesting was a significant deviation in the opinions within two of the sectors I assessed. These were not only about minor changes but also regarding the major change; elimination of differentiation between an operating and finance lease. To find an explanation to why some supported the change and others were in disfavour of it, I created a data set with different explanatory variables. I tested the variables against the companies that were supportive and disfavoured the elimination in a regression model to see if there was any pattern. The results showed evidence that disagreeing companies were more exposed to operational leases. However, the specific reason to this is not clear from the result. Based on a combination of the findings in the taxonomy and statistical results, one may argue that it could be a combination of how the leasing intensive companies are able to comply with the changes and whether or not they are worried about how the consequences of the exposure draft will affect their financial ratios.

Acknowledgements

I would like to take the opportunity to thank some people who have been important for my last piece of work as a student. Firstly, I would like to thank my thesis tutor, Ricardo F. Reis, for advice throughout the process. I would also like to thank my former professor in my IFRS course, Cristina Neto de Carvalho, for making IAS 17 – *leases* very interesting when this accounting standard was brought up. I also want to thank my former colleagues in this course, Ana Maria Perestrello and Robert V.L. Stenmark. We were a very well collaborating group and took the work very seriously when working on different topics in IFRS. I also want to thank my friend, Thomas Dales Bennett, for being a very good and supportive fellow student throughout my master degree.

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1 Introduction

1.1 Abbreviations

IFRS International Financial Reporting Standards

GAAP Generally Accepted Accounting Principles

IAS International Accounting Standards

IAS 17 - Leases Prescribes the accounting policies and disclosures applicable to leases, both for lessees and lessors. (IASB u.d.)

FASB Since 1973, Financial Accounting Standards Board, has been responsible for establishing FASB standards, known as GAAP. (FASB u.d.)

IASC International Accounting Standards Committee. Formed in 1973. Established the IAS'. (Zeff 2012)

IASB International Accounting Standards Board, the independent standard-setting body of the IFRS Foundation. Continued the work of IASC from 2001. Improves the IAS' and develops IFRS'. (Zeff 2012)

IFRS Foundation the legal entity under which the IASB operates. (Deloitte u.d.)

ED Exposure Draft, proposes new accounting methods for the current IAS 17. (IASB 2010)

1.2 Definitions

Lease: A contract in which the right to use a specified asset (the underlying asset) is conveyed, for a period of time, in exchange for consideration. (IASB 2010)

Lessee An entity that enters into a contract to provide another entity with consideration in return for the right to use an asset for a period of time. (IASB 2010)

Lessor An entity that enters into a contract to provide another entity with the right to use an asset for a period of time in return for consideration. (IASB 2010)

Finance lease A lease is classified as a *finance lease* if it transfers substantially all the risks and rewards incident to ownership. There will be an asset and liability arising from such lease contract. (European Commission 2010)

Operating Lease Leases that does not meet the definition as a finance lease by the classification at the inception of the lease. There will be no asset or liability arising from such lease contract. (European Commission 2010)

1.3 Background

Financial statements are an important source of information for investors and lenders in their economic decision making process. Therefore, it is crucial that the numbers in the financial statements reflect the true and actual values. The consequences of directly false and/or misleading financial statements may be severe not only for the investors or lenders but for all the stakeholders the company may have. To avoid this from happening, the IASB develops accounting standards with an objective *“to develop, in the public interest, a single set of high quality, understandable, enforceable and globally accepted financial reporting standards based upon clearly articulated principles. These standards should require high quality, transparent and comparable information in financial statements and other financial reporting to help investors, other participants in the world’s capital markets and other users of financial information make economic decisions.”* (Deloitte 2012). For the time being, IAS 17 distinguishes between two types of lease contracts; finance and operational lease. The main difference between these two is that the asset is not capitalised when having an operational lease. Essentially, this means that companies can avoid reporting the asset and corresponding liability arising from a lease contract as long as it falls under the operating lease category. This is happening even though companies are committed to annual payments over several years and the payments are measurable. In my opinion, this can be viewed as a violation of the main objectives of the IASB. This may give ground to an imperfect market due to the asymmetric information and moral hazard. IASB has over the last six years discussed a change in the IAS 17. They want to eliminate the current differentiation between lease contracts, meaning companies with operational leases have to capitalise the asset instead of having it off their balance sheet and only disclose information about their lease contracts in the notes. In August 2010, the IASB released an Exposure Draft with several changes to IAS 17. The major change is the elimination of the current distinction between an operational and financial lease. In practice, this means that all types of lease contracts will have to be recorded on the balance sheet regardless of the terms

in the contract. The new accounting treatment for lease contracts will have huge effects for companies with a high operating leasing intensity.

The public was given 120 days to give their comments about the Exposure Draft. IASB received 786 comment letters from all over the world across a vast variety of business sectors. For the time being, IASB is working on a re-exposure Draft with an expected release in 2013. Despite the criticism to the already released Exposure Draft, IASB is still agreeing on capitalising the assets and liabilities arising from lease contracts (IASB 2012).

1.4 Objectives

The main objective for this thesis is to find possible explanatory factors to the deviation in companies' opinion about the upcoming accounting change for leases. However, besides of having a main objective, there is one sub-objective for each of its six parts. Part 2, the literature review, aims at understanding the background behind the criticism against the current accounting method for lease contracts. Part 3 and 4 focus on the Exposure Draft and how the proposed accounting method will financially affect companies. Part 5 presents some findings on how different industry sectors perceive the Exposure Draft. Part 6 presents and discusses the findings from my self-made data set. The conclusion will clarify whether or not I have met my aims and identify problems that occurred during the work. There will also be a suggestion for further research.

2 Literature review

Traditional finance theory suggests that leasing and corporate debt are substitutes, an increase in one should be compensated with a similar decrease in the other. However, Delof, Lagaert and Verschueren (2007) argue that the empirical evidence on this issue is conflicting. Research by Marston and Harris (1983) found strong evidence of these two methods to finance a company's assets are substitutes. That said, in the same research there was also found some evidence that firms do not view leases and debt on a dollar-for-dollar basis. Results from a more recent study by Yan (2006) rejected the hypothesis that leases and debt are complements. However, the same results could not reject the hypothesis that they are substitutes. A contrasting result to this was found by Ang and Peterson (1984). The research indicated that greater debt is associated with a higher leasing intensity. The article mentions an inefficient market for debt and debt-like securities as one possible explanation to why they are not complements. She also refers to a report by Abdel-Khalik (1981), which, based on a survey, reveals that a high percentage of lenders for some reason ignore operational leases. Another finding that suggests that lease contracts may contribute to an inefficient market is from research by Zechman (2010) in an investigation of synthetic leases (an operational lease). The research showed that managers of firms with incentives to use off-balance sheet financing do not provide transparent disclosure of their synthetic leases. A research paper by Myers and Majluf (1984) states that inside information among the managers that is not conveyed will affect the investment decision of an investor. Harper, Mister and Strawser (1987) rejected their hypothesis stating that *"There are no differences between debt-numerator responses of subjects receiving pension information in the Balance Sheet format versus the footnote format"*, after having bankers and students to determine a company's debt-to-equity ratio¹ The same study also rejected their hypothesis stating that *"There are no differences between the debt-numerator response regardless whether it is a sophisticated or less sophisticated user"*. These findings may be a reason to why overseas bankers

¹ There were 51 bankers and 82 undergraduate accounting students participating in the experiment. They were categorised as sophisticated and less sophisticated users, respectively.

in the UK ranked “amount of ‘off-balance sheet’ financing to be incorporated in the balance sheet” as the highest prioritised area when asked how published accounting information could be improved in a survey by Berry and Robertson (2006). According to the World Leasing Yearbook of 2010, the total annual leasing volume in 2008 for the top 50 countries amounted for \$644 billion. However, the lease contracts categorised as operational leases will not appear on the balance sheet of the companies. These are only disclosed in the notes Branswijcki, Longueville and Everaert (2011). Feldman and Carter (2002) explain in an article how difficult and time consuming it is to calculate the real value of a company’s obligations when excluding operational leases from the balance sheet. Barth and Schipper (2008) argue that the current distinction between an operating and financing lease gives ground to significant different accounting treatments by only making minor changes in the contractual terms. When Abdel-Khalik (1981) surveyed American companies he discovered that they actually did take advantage of the distinction, as they tended to renegotiate their leasing contracts when Statement 13 (FASB’s version of IAS 17 (FASB 1976)) was issued in 1976. Beattie, Goodrace and Thomson (2006) argue that a vast range of well known and used performance ratios be significantly affected if operating leases were required to be recognised on the lessee’s balance sheet rather than merely disclosed in a footnote. Beattie, Edwards and Goodacre (1998) found evidence from companies in the UK that approximately 39 per cent of long term-liabilities do not appear on the balance sheet due to the current accounting treatment of operational leases. Capitalising these would increase gearing (net debt to equity) by 260 per cent. Concerns regarding the off-balance-sheet nature of operating leases have led the IASB and FASB to eliminate the difference between the two types of leasing contracts as IAS 17 does today (Branswijcki, Longueville and Everaert 2011). There were, however, concerns about this matter among the FASB members even when statement 13 was first introduced. In a FASB meeting in 1979 a majority of the Board members expressed that they would support recognition of all types of lease contracts if Statement 13 was to be reconsidered (Abdel-khalik 1981). In the spring of 2006 IASB and FASB both discussed a proposal to add a leasing project to its agenda. On the 17th of August 2010, after different stages and hearings, the

IASB and the FASB jointly published an Exposure Draft for public comment proposals to improve the reporting of lease contracts (IFRS Foundation 2010). As expected, the draft did require balance sheet recognition of all leases. Only leases of twelve months or less would be given simplified requirements for lessees and lessors. (IASB 2010). Evidently, this would have a large impact both for lessees and lessors. Leone (2010) explains in an article how the Exposure Draft has been criticised, both by lessees and lessors, for being, naive, lacking value and in need of serious re-evaluation. The feedback in the comment letters sent from all across the world was also mixed after the ED was released, and many argued that this would have severe impact on their financial ratios (FASB u.d.). Beattie *et al.* (1998) did research about how capitalisation of the operating leasing agreements would affect key accounting ratios. Calculations showed that capitalization had a significant impact on different financial ratios. Goodacre (2003) also found statistical evidence that capitalising the operating leases in the retail sector in the UK would lead to an increase in all of the nine financial ratios tested for. For instance; net debt to equity increased from 17 to 157 per cent, ROA decreased and ROE increased after capitalising the operating leases. The average impact on net profit was, however, relatively small. These findings are consistent with research by Fülbier, Silva and Pferdehirt (2008) among listed German companies. The results showed a significant impact on both profitability and gearing ratios.² When breaking them into industry sectors, the retail and fashion sector showed a particular strong effect across all ratios. The effect in EBIT and net income was moderate and insignificant, respectively.³

To summarise, many of the findings from former research could suggest that leasing contracts, especially operational leases, may violate the objectives of IASB when they are treated according to IAS 17. Hence, these findings can be used to justify the capitalisation requirement for all types of lease contracts.

² Major changes in financial ratios occurred primarily for the gearing ratios. The profitability ratios showed minor, but still significant, effects.

³ The moderate effect in EBIT is due to operating lease expense being only slightly higher than the depreciation expense. The insignificant effect in net income is due to the interest and depreciation expense being somewhat similar to the operating lease expense.

3 Exposure Draft

The following is based on the Exposure Draft *Leases* published by the IASB 17th of August 2010 (IASB 2010). The draft was jointly developed by IASB and FASB. The boards developed the proposals after considering responses to their discussion paper *Leases: Preliminary Views*, published in March 2009. The public was given up until 15 December 2010 (120 days) to send in their comments about the proposed changes in the current IAS 17. The Exposure Draft argues the way leases are treated on companies' balance sheets need to change as the current IAS 17 fails to meet the needs of users of financial statements because they do not provide a faithful representation of leasing transactions, both for lessees and lessors. Consequently, the IASB and FASB initiated a joint project to eliminate the current distinction between a finance and operating lease. The new approach would ensure that assets and liabilities arising under leases are recognised in the statement of financial position. The proposed requirement would affect any entity that enters into a lease, with some specified exemptions. The main proposals in the Exposure Draft which will affect a lessee concerns 1) the accounting method and 2) measurement of the leased asset and liability.

1. The accounting method: *"a lessee would recognise an asset representing its right to use the leased ('underlying') asset for the lease term (the 'right-of-use' asset) and a liability to make lease payments.*
2. Assets and liabilities recognised by lessees would be measured on a basis that:
 - a) assumes the longest possible term that is more likely than not to occur, taking into account the effect of any options to extend or terminate the lease.
 - b) uses an expected outcome technique to reflect the lease payments, including contingent rentals and expected payments under term option penalties and residual value guarantees, specified by the lease.
 - c) is updated when changes in facts or circumstances indicate that there would be a significant change in those assets or liabilities since the previous reporting period.

4 Effects of the changes

To get a better understanding of how the current IAS 17 treats different types of lease contracts and also how the proposed changes will affect lease contracts, there are three examples below. The two first examples will examine the effects on lease contracts that meet the current definition of a finance and operational lease, respectively. Then, in example 3, the operational lease contract in example 2 will be treated with the proposed rules in the Exposure Draft. There will also be a real life example for how British Airways will be affected.

4.1 Current IAS 17 – Finance lease

Example 1

The newly started company GULP Inc. wants to have a car for their frequent contact with clients in various locations. Since the company just started their business, they do not have the funds to buy the car outright and their bank is reluctant to give a loan to finance the car until they can show a good and stable income for at least two years. However, GULP Inc. needs the car now and contacts LEASEIT, a well-known leasing company. They offer GULP Inc. to lease a new Landrover for ten years. The annual lease payment will be 32.549,08 EUR and interest rate is 10 per cent⁴. The car is depreciated over a straight-line-basis over ten years with a salvage value of zero. By the end of the lease period, the ownership of the car will be transferred from LEASEIT to GULP Inc. A similar car can be bought outright today for 200.000 EUR. GULP Inc. is responsible for insuring the car as well as potential repairs and maintenance during the lease period.

4.1.1 Classification of the lease contract

IAS 17.8 and IAS 17.10 can be used to classify the lease contract as either an operational or finance lease.

⁴ The discount rate used to determine the present value of lease payments for lessors is the rate that the lessor charges the lessee.

IAS 17.8: The information about who is responsible for insurance, repairs and maintenance suggests that all risk and returns are transferred from LEASEIT to GULP Inc. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership.

IAS 17.10:The lease contract between LEASEIT and GULP Inc. is classified as a finance lease based on:

1. The ownership of the Landrover will transfer from LEASEIT to GULP Inc. by the end of lease period.
2. The expected lifetime of such vehicle is ten years. The lease period of ten years is therefore a major part of the economic life of the asset.
3. The interest rate of ten per cent, annual payments of 32.549,08 EUR and lease period of ten years result in a present value of 200.000 EUR, which is equal to the fair value of the car. Therefore, the lease payments amount to substantially all of the fair value of the leased asset.

4.1.2 Effects on financial statements

Below gives an overview of how a finance lease will affect the financial statements of an entity if IAS 17 was to be followed.

According to IAS 17.20, when having a finance lease a lessee shall recognise the lease contract as an asset and liability equal to the lower of the fair value of the asset and the present value of the minimum lease payments. In this scenario, the fair value and present value of aggregate minimum lease payments (32.549,08) over ten years with an interest rate of 10 per cent is equal to $\left(PV = 32,549,08 \text{ EUR} \left(\frac{1-(1+0,1)^{-10}}{0,1} \right) \right)$ 200.000 EUR. Therefore, GULP Inc. debit asset and credit liabilities equal to 200.000 EUR.

IAS 17.25 states that finance lease payments shall be apportioned between the interest expense and the reduction of the outstanding liability. Consequently, in

the statement of cash flows, the interest expense will be reported under operating cash flow and the down payment will be under financing cash flows. In the income statement the interest expense will be considered as an operational expense. As the liability is decreasing, the interest expense will decline and the proportion of down payment of the annual lease payment.

According to IAS 17.27, a finance lease results in a depreciation expense as well as a finance expense each period. The depreciation method shall be consistent with that for owned depreciable assets. The depreciation recognised shall be calculated in accordance with IAS 16 and IAS 38⁵. By depreciating the asset using a straight-line method, the annual depreciation expense will be 20 000 EUR, given a salvage value equal to zero and no additional acquisition costs. The depreciation expense will credit the asset and debit the equity side of the balance sheet. In the income statement, it will count as an operational expense and added back in the cash flow statement.

According to IAS 17.30, GULP Inc should apply IAS 36⁶ to determine whether or not the leased asset has become impaired during the period.

⁵ IAS 16 and IAS 38 are the accounting standards for Property, Plant and Equipment and Intangible assets, respectively.

⁶ IAS 36 is the accounting standard for impairment of assets

The graphs in figure 1 show the evolution of the cash flows and expenses arising from the lease contract in this particular example with the mentioned assumptions. The corresponding lease liability amortisation table that shows all the exact values can be found in exhibit 1 in the appendix.

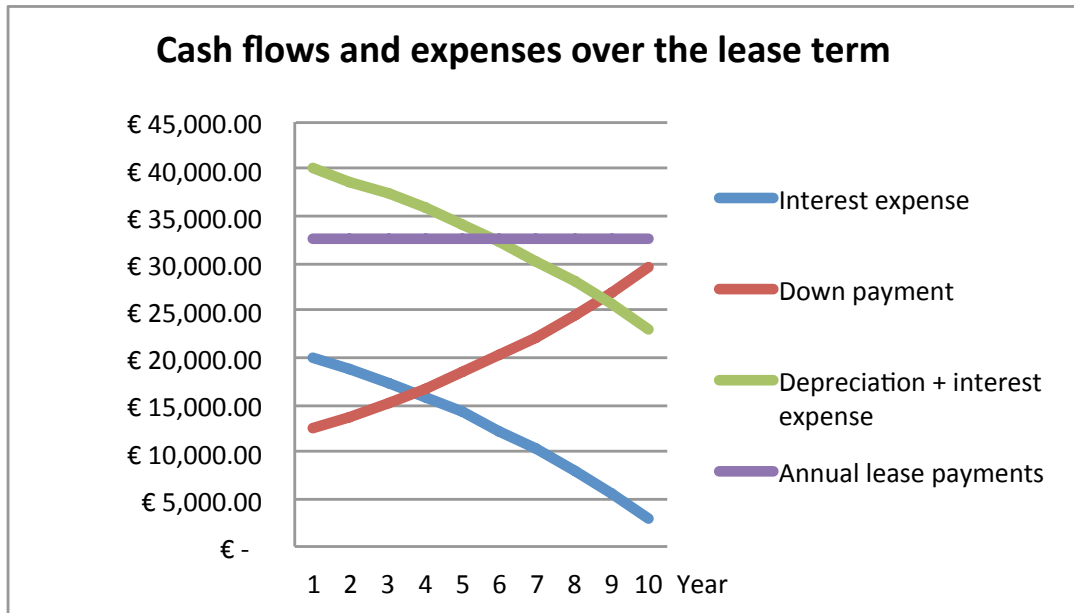


Figure 1: The figure shows cash flows and expenses arising from the lease contract.

The figure shows that while the annual lease payments are constant throughout the whole period, the interest expense and down payment decreases/increases, respectively. This is due to the reduction in the lease liability, subsequently the interest part of the lease payment decreases. At the same time, the down payment increases to keep the annual lease payment constant.

4.2 Current IAS 17 – Operational lease

Example 2

The well-established company Ben-Port Inc has experienced a rapid growth recently. They need an extra car to visit their clients. Even though Ben-Port Inc has the financial stability needed to either buy the car or get a loan to fund it, they would like to have the flexibility to change the car after three years. Also, they do not want to deteriorate their financial ratios by adding more debt and assets to their balance sheets. They decide to contact LEASEIT, which has an available Landrover they offer to lease for the three year period the car is needed. The car is insured by LEASEIT during the whole period. They will also be responsible for repairs in the event of any damages to the car. Moreover, they will bear the loss in the event of impairment. The market value of similar Landrover is 200.000 EUR. The annual lease payment will be 32.549,08 EUR and interest rate of 10 per cent. They also give Ben-Port Inc the opportunity to extend the leasing contract with another one or two years if needed. For the time being, there is a 30 per cent chance that the lease contract will only last for the initial three years. There is a 30 per cent chance that Ben-Port Inc will exercise the option of extend it with another year and 40 per cent chance they will extend it with another two. Given this, the lease term that is more likely to occur is five years, the initial three plus the option to extend it with another two years.

4.2.1 Classification of the lease contract

IAS 17.8 and IAS 17.10 can be used to classify the lease contract as either an operational or finance lease.

IAS 17.8: Based on the information about insurance, repairs and impairment it is evident that all risk and returns still held by LEASEIT and not transferred from to Ben-Port Inc. A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership.

IAS 17.10: The lease contract between LEASEIT and Ben-Port Inc is classified as an operational lease contract based on:

- 1) The lease does not transfer the ownership of the asset by the end of the lease term.
- 2) Ben-Port Inc Inc has not the option to purchase the car at any point.
- 3) The expected lifetime of such vehicle is ten years. The lease period of three years is therefore not a major part of the economic life of the asset.
- 4) The interest rate of ten per cent, annual payments of 32.549,08 EUR and lease period of three years will amount the present value of the minimum lease payments to $\left(PV = 32,549,08 \text{ EUR} \left(\frac{1-(1+0,1)^{-3}}{0,1} \right) \right)$ 80.944,74 EUR. This is only 40 per cent of the Landrover's present fair value and is therefore not substantially all of the fair value of the leased asset.

4.2.2 Effects on financial statements

Below gives an overview of how an operating lease will affect the financial statements of an entity if IAS 17 was to be followed.

There is no asset or liability arising from an operational lease contract. Subsequently, there is no depreciation expense. According to IAS 17.33, lease payments under an operating lease shall be recognised as an expense on a straight-line basis over the lease term, unless another systematic basis is more representative of the time pattern of the user's benefit. The lease payments will remain constant over the lease period and be treated as an operational expense both in the income and cash flow statement. The purple line in figure 1 illustrates the lease payments' straight-line basis.

4.3 IAS 17 based on the Exposure Draft

To get a better understanding of how the proposed changes will affect leases currently classified as operational leases, the lease contract with its assumptions from example 2 between Ben-Port Inc and LEASEIT will now be treated according to the new accounting rules in the exposure draft.

4.3.1 Definition of a lease

The Exposure Draft proposes to define a lease as a contract in which the right to use a specified *asset* is *conveyed* for a period of time in exchange for *consideration*. Since the *asset* will be transferred (*conveyed*) from LEASEIT to Ben-Port Inc over a period of time in exchange for lease payments (*consideration*), one can state that the definition of a lease contract is met.

4.3.2 Effects on financial statements

Since the definition of a lease contract is met, Ben-Port Inc will have to recognise an asset representing its right to use and underlying asset during the lease term, and a liability to make *lease payments*. The lease payments and discount rate will be the same as in example 2. Ben-Port Inc will have to measure the right-of-use asset at the amount of the liability to make lease payments plus any initial direct costs incurred by the lessee. There are no initial direct costs incurred by the lessee. Ben-Port Inc shall select the amortisation method and review the amortisation period in accordance with IAS 38. The amortisation expense shall present the amortisation separately from other amortisation expenses. By using a straight-line amortisation method and salvage value of zero, the annual amortisation expense will be 20 000 EUR. The asset and liability will be measured based on the longest possible term that is more likely than not to occur, taking into account the effect of any options to extend or terminate the lease. This means Ben-Port Inc has to take into account the probability that the

lease term may be extended more than the initial three years. Ben-Port Inc has to determine the lease term based on the probability ⁷of each term to occur:

- 30 per cent probability of a 3-year term
- 30 per cent probability of a 4-year term
- 40 per cent probability for a 5-year term

The term will be at least three years. There is a 70 per cent probability that the lease term will be four or five years. When comparing the two probabilities, there is a higher probability of having a 5-year term. Given this, Ben-Port Inc has to measure the asset and corresponding liability based on a five-year period even though the additional two years is only an option⁸.

By using the present value formula as used previously, the present value of the lease payments to be $\left(PV = 32,549,08 \text{ EUR} \left(\frac{1-(1+0,1)^{-5}}{0,1} \right) \right)$ 123,386.62 EUR.

Consequently, Ben-Port Inc debits assets and credits liabilities by 123,386.62 EUR. This value is 52 per cent higher than if Ben-Port Inc just had to measure the asset and liability based on three years⁹. The liability will be presented separately from other financial liabilities. The right-of-use asset will be treated as a tangible asset and presented separately from non-leased assets. As a result of the asset and liability arising from the lease contract, Ben-Port Inc will have to recognise the following in the statement of comprehensive income:

1. Interest expense
2. Amortisation of the right-of-use asset in accordance with IAS 38
3. Revaluation gains and losses in accordance with IAS 38 after using IAS 16 to revalue the asset.
4. Any changes in the liability to make lease payments resulting from reassessment
5. Any impairment losses on a right-of-use asset, in accordance with IAS 36

⁷ The Exposure Draft states that the following factors should be considered when assessing the probability of each possible term: *contractual factors, non-contractual factors, business factors* and *other lessee-specific factors*.

⁸ This measurement method will be required for all types of lease contracts and is, according to the Exposure

Draft, one of the more significant changes for lease contracts currently defined as finance lease.

⁹ This is calculated by finding the difference in value between three and five years

$\left(\frac{123,386.62 \text{ EUR} - 80,944.74 \text{ EUR}}{80,944.74 \text{ EUR}} \right) 52,4 \%$

The amortisation and interest expense shall be presented separately from other amortisation and interest expenses, either in profit or loss or in the notes. By using the same amortisation method and assumptions as in example 1, the annual amortisation expense will be 20 000 EUR. The interest expense will decrease as the down payments are being done resulting in a lower liability. As for the cash flow statement, cash payments for leases shall be classified as financing activities and presented separately from other financing cash flows. These will increase in value over the lease period as the interest expense decreases.

The graphs in figure 2 below show the evolution of the cash flows and expenses arising from the lease contract by using the two different accounting treatments. The corresponding lease liability amortisation table which contains the values behind the graphs can be found in exhibit 2 in the appendix.

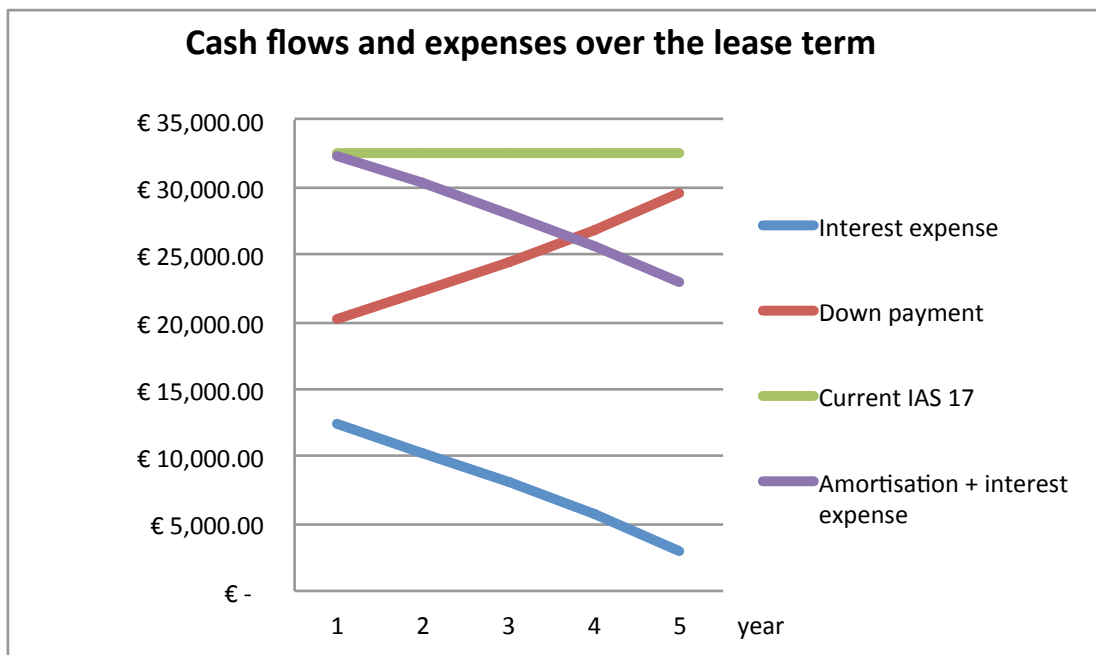


Figure 2: Shows the cash flows and amortisation expenses over a lease period

To better illustrate the differences in cash flows and expense throughout the period, I assumed a lease term of five years in both scenarios. The figure shows significant differences by using the two different accounting treatments. The current IAS 17 results in a constant lease expense over the lease period. This will

be treated as an operating expense in the income statement. The other graphs show the evolution of the amortisation, interest and down payment over the lease term. As one can see, these have a very similar shape as the ones for a finance lease with the current IAS 17.

I made an example to better illustrate how the different accounting treatments will result in different financial numbers in the income statement and financial ratios. I put the annual revenue and tax rate equal to 50 0000 EUR and 25 per cent, respectively over the lease term. These assumptions results in a very similar net income in the first year. The income statements over the lease period for the different scenarios are shown in exhibit 3 in the appendix. However, ceteris paribus, the deviation will increase over the lease term. The operating income will increase as a result of lower interest expenses due to the decrease in liability. Consequently, the tax expense will increase over the lease term. However, the increase in tax expense is not greater than the decrease in interest expense. This results in an increase in net income over the lease term.

The cash flows arising from the lease contract will remain the same regardless of which accounting method is used. The amortisation is not a cash flow. Hence, it will be added back in the cash flow statement. Consequently, the cash flows will only be the interest and down payment, which is equal to the lease expense.

Table 1 below shows how the different accounting methods will affect different financial ratios.

Financial ratios after one year

	Current IAS 17	Exposure Draft	Difference
ROE	21%	31%	10%
ROA	21%	9%	-12%
Debt-to-Equity	0	2.40	
Debt-to-Asset	0	0.71	

Table 1: Shows the difference in performance ratios after one year

The balance sheet showing assets, debt and equity values for the different accounting treatments can be found in exhibit 4 in the appendix.

As the net income is almost the same after one year, the difference in ROE is, more or less, solely a consequence of the reduction in equity due to the amortisation expense. As the denominator becomes smaller in value when expensing tax, interest and amortisation, the return on the equity value will become greater. The decrease in ROA is due to a higher asset value when recognising the asset on the balance sheet. In turn, the return on the asset value will decrease. The debt-to-equity ratio is 2.4. This is an increase from 1.23 from the beginning of the year, which is an increase equal to 95 per cent. As there is no liability arising from the lease contract by using the current IAS 17 accounting method, the debt-to-equity and debt-to-asset ratio will be equal to zero. The significant increase is explained by a greater decrease in equity (57 per cent)¹⁰ in comparison to decrease in debt (16 per cent)¹¹. The debt-to-asset ratio is equal to 0.71, this is an increase from 0.55 from the beginning of the year, which is equivalent to 29 per cent. The increase is due to a greater decrease in asset value (35 per cent)¹² in comparison to the decrease in debt value (16 per cent). *Ceteris paribus*, Ben-Port Inc from the example will appear significantly more leveraged by applying the proposed accounting method.

The increase in ROE and decrease in the three other ratios tested for in this example is in accordance with the empirical research I mentioned in the literature review, which tested the impact on the same ratios when using real values.

¹⁰ Decrease equity value: $\frac{100,000 \text{ EUR} - 43,035.59 \text{ EUR}}{100,000 \text{ EUR}} = 57 \%$

¹¹ Decrease debt value: $\frac{123,386.62 \text{ EUR} - 103,176.20 \text{ EUR}}{103,176.20 \text{ EUR}} = 16 \%$

¹² Decrease asset value: $\frac{223,386.62 \text{ EUR} - 146,211.79 \text{ EUR}}{146,211.79 \text{ EUR}} = 35 \%$

4.4 British Airways and the Exposure Draft

Until now there have only been fictive examples with made up values to illustrate how the different accounting methods will affect a company in different ways. To get a real life example of how the proposed accounting change will affect the balance sheet of a real company, I assessed the annual report of British Airways from 2010. The leasing note discloses information about the company's leasing contracts. It will be impossible to estimate the exact values of the lease operating lease contracts by considering the "lease term that is more likely to occur" when measuring the asset and liability arising from the operating lease contract. To simplify, I included the whole value that is disclosed in the notes. Bear in mind that the note includes lease some contracts that ranges up to year 2145 and that this may not be the lease term that is more likely to occur. However, it gives an idea of how the recognition of asset and liability arising from lease contracts will affect the values in the balance sheets. The values in table 2 are based on calculations from the annual report. The values retrieved from the annual report can be found in exhibit 5 in the appendix.

British Airways 2010 group					
	Increase with ED		With current IAS 17	With ED	Increase
		Debt-to-Equity	4.05	5.43	34%
		Debt-to-Assets	0.80	0.84	5%
Non-current assets	34%				
Current assets	7%				
Total assets	27%				
Non-current liabilities	56%				
Current liabilities	5%				
Total liabilities	34%				
Equity	0%				
Total Liabilities and Equity	27%				

Table 2: The table shows differences in balance sheet values and leverage ratios with different accounting methods (Source: British Airways annual report 2010).

There is only a minor change in debt-to-asset ratio. Even though the increase in debt and asset are the same in real values, the ratio will increase as due to a greater increase in liabilities (34 per cent) compared to assets (27 per cent) in relative values when recognising the asset and liabilities. The debt-to-equity ratio has a much higher increase. This is solely explained by the increase in total

liabilities, as the equity value is unchanged. For this reason, the increase in the ratio is equal to the increase in total liabilities.

4.5 Summary of the main differences

Table 3 below summarises the main differences between the current IAS 17 and the proposed new accounting method for lease contracts.

Current IAS 17	Exposure Draft	Practical Effect
Distinguishes between an operating and finance lease.	Elimination of the distinction. All leases are recognised on the balance sheet.	Significantly affect the financial ratios.
The present value of the lease contract is the total of future minimum lease payments	The present value of a lease contract should be based on the longest possible term that is more likely to occur.	If the current lease contract is 5 years but lessee and lessor determines that a renewal of another 5 years is more likely than not to occur, lessee would recognise a liability based on 10 years.
Lease payments arising from an operating lease contract counts as an operating expense	Lease payments will be divided into two subparts. Interest expense and down payment, operating and financing activity respectively.	Will increase the EBITDA as the interest and amortisation is yet to be deducted.
The lease payments arising from an operating lease contract will remain constant over the lease period.	Down payments and interest expenses arising from the lease contract will increase/decrease respectively over the period.	The operating profit will increase over the lease term.

Table 3: Summarises the differences between the current IAS 17 and Exposure Draft.

5 Taxonomy

This part focuses on the comment letters sent from companies all over the world during the 120 days response period after the Exposure Draft was released. To get a better understanding and knowledge about how companies from different industries perceive the Exposure Draft, I randomly picked a smaller sample from of six industries I wanted to assess. Based on what was written in the letters, I created an overall summary of all the letters and a summary from each industry.

5.1 Overall summary

The sectors I assessed were: investment banks, leasing companies, retail, energy, transport and telecommunications. In some cases, it was organisations rather than companies that had sent comment letters in behalf of their members. The most frequent brought up issues were the following:

1. The accounting method
 - a. Recognition of a right-to-use asset and a liability to make lease payments.
 - b. Recognition of short-term leases

2. Measurement
 - a. Estimation of lease term
 - b. Estimation of lease payments
 - c. Reassessment of assets and liabilities

3. Practical effects for the companies
 - a. Effects on performance ratios
 - b. Cost/benefit analysis
 - c. Whether or not this would improve transparency, comparability

Among the 18 questions that were raised in the Exposure Draft, the core question is whether or not the leased asset should be recorded on the balance

sheet. The ones in favour of recognising assets and liabilities arising from lease contracts were the companies from the investment banking and telecommunication sector. The only sector with a clear consensus of being in disfavour was the leasing sector. In the other three, the opinions were rather mixed with no siding to either being in favour or in disfavour of it. Some of the ones who disagreed argued that the lease was an operating activity rather than a financing vehicle, therefore they should not have to capitalise the asset. The ones in favour were, in general, against recognition of short-term leases, claiming this would be too much of an administrative burden. There was a clear consensus, across all six sectors against the proposed measurement criteria. They argued that these criteria would result in a wrong method of how to measure a company's asset and liabilities. All the industries (except from the investment banks) were concerned about how the new standard would influence their performance ratios, both among the ones in favour and disfavour of recognising the asset. They also argued that the cost of implementing the proposed standard would outweigh the benefits due to the complexity. The investment banks meant the new standard would improve transparency and comparability. On the contrary, many of the other industries argued completely the opposite.

5.2 Summary of each industry sector

Below is a summary of what each sector answered in their comment letters to the FASB and IASB during the 120 days response period after the Exposure Draft was released 17th of August 2010.

5.2.1 Leasing companies

Leaseplan, The Netherlands	Porterbrook Leasing Company ltd, UK
Trilogy Leasing Co LLC, USA	Beacon Intermodal Leasing LLC, USA
Japan Leasing Association, Japan	Lasalle Systems Leasing Inc., USA
Great America Leasing Corp, USA	CSI Leasing, USA
Pacific Rim Capital, USA	First Financial Corp. Leasing Inc., USA

The overall consensus among the respondents was that the current IAS 17 has to improve. However, they had many and strong opinions against several of the proposed rules. As for the capitalisation question, they were against recording the lease contract onto the balance sheet. They mentioned that this would have no value for the user and that themselves would ignore lease contracts on balance sheets. They were worried about violating loan covenants when recording them and that this would particularly harm businesses, in particular smaller businesses. The proposed new rules would damage the leasing business and potentially drive the total global demand down. There was also a strong resistance against the proposed measurement criteria. They were also worried about how the profitability ratios of companies would deteriorate as a result of deducting amortisation and interests. This would give an incorrect picture of businesses with a high leasing intensity. Moreover, they complained about the complexity with them and meant they would be very difficult to apply in practice.

5.2.2 Investment banks

Lloyds TSB, UK	JP Morgan Chase & Co, USA
Morgan Stanley, USA	Barclays, UK
Goldman and Sachs, USA	Citigroup, UK

All of these banks were favour of changing the current IAS 17. They argued the new standard would improve the usefulness and transparency of financial statements. There was a consensus among them to record the assets and liabilities arising from leasing contracts for lessees. That said, there were mixed opinions regarding capitalising of short-term leases. They also argued against the proposed accounting method for lessors. More, all the respondents argued against the proposed measurement criteria. The asset and liability should be determined based on what is written in the contract rather than also consider possible options in the future.

5.2.3 Retail

Gap Inc., USA	Apple, USA
Myer Holdings ltd, Australia	Norgesgruppen, Norway
Japan Chain Store Association, Japan	El Corte Inglés, Spain
National Retail Federation, USA	Best Buy Europe Distribution, UK
ESPIRIT Holding ltd, Hong Kong	J Sainsbury's plc., UK

There was a general consensus stating the current IAS 17 standard should be improved. However, there were inconsistent opinions about the capitalisation question. Some were supportive to the change and others disagreed. Some even used the word “understand” when answering the capitalisation question. There was a clear consensus that the Exposure Draft is very complex and would create a large administrative burden and would materially diminish the value of the company’s statements for the users. They argued that an expense arising from leasing is an operating expenses rather than a financing activity. There was a clear consensus that the Exposure Draft would have a very negative effect on all the financial statements. They where concerned with how this would effect their

profitability and leverage ratios. They also strongly disagreed with the measurement criteria.

5.2.4 Energy

Statoil, Norway	Exxon Mobil Corp., USA
Shell International, Holland	Hydro-Quebec, Canada
Chevron, USA	Solid Energy NZ, New Zealand
BR Petrobras, Brasil	Pennwest Energy Inc, USA
Repsol, Spain	E.ON AG, Germany

This sector was split in the capitalisation question. However, the ones who agreed with capitalising lease contracts disagreed with capitalising short-term contracts. Everyone was against the proposed measurement criteria. There was also an overall consensus about the Exposure Draft being too complex and not justified in a cost/benefit analysis. Some were also concerned about the impact on performance ratios.

5.2.5 Transport

Asiana Airlines, South Korea	Hanjin Shipping, South Korea
British Airways Plc., UK	The Japanese Shipowners Ass., Japan
FedEx Corporation, USA	Hong Kong Shipowners Ass., Hong Kong
Canada Pacific, Canada	National Association of Chinese Shipowners, Taiwan
Air NZ, New Zealand	
BNSF Railway Company, USA	

There are three subsectors within this industry; railway, shipping and airline. The airlines were mixed in their opinion regarding capitalising the asset. British Airways, Asiana Airlines were both against whereas Air NZ was in favour. The shipping companies/organisations were all against. BNSF Railway Company, Canada Pacific and FedEx Corporation were all in favour. Similar to the other sectors, the ones in favour argued that short-term leases should be excluded and the ones against argued that a lease contract is not a financing activity. There was a general concern about the complexity and some argued that disclosure in

footnotes should be sufficient. There was also a clear consensus against the measurement criteria.

5.2.6 Telecommunicatios

Deutche Telekom AG, Germany	Telstra, Australia
Telephone and Data System Inc., USA	Tw telecom, USA
Telecom ITALIA, Italy	AT&T, USA
France Telecom Orange, France	MTN group ltd., South Africa
Telefonica S.A, UK	

The respondents were supportive of a new accounting standard for leases, and agreed that leases should be recorded on the balance sheet for lessees. That said, they were concerned how this would affect the comprehensive income statement and cash flow statement, and thereon the profitability ratios. As for short-term leases, they disagreed with recording them on the balance sheet. There were clear and strong arguments against the proposed method of how to determine the lease term, lease payments as well as reassessment of the lease contract. There was also a clear consensus that the costs of applying the Exposure Draft would not outweigh the benefits. Some also argued that this would not give relevant information to the end user.

6 Binominal Regressions

I wanted to find out if there is a statistical explanation to why some companies supports capitalising their leasing contracts and some disagrees. In this chapter, I will start explaining the logic behind my hypothesis for the variables I have chosen to include and what results I expect from the regressions. Then, I will continue with defining the variables in detail. In the end, the results will be presented and discussed.

6.1 Hypothesis behind the selected independent variables

Essentially, the main logic and reasoning behind the hypothesis for each variable in the regression is based on my findings from empirical research, fictive and real life examples as well as findings in the taxonomy. The fictive example in part 3 shows how ROA and different leverage ratios deteriorate when the Exposure Draft is used to treat the leasing contract. This example is also in line with the real life example from British Airways. A 34 per cent increase in debt-to-equity ratio when capitalising its leasing contracts may give ground for concerns not only for British Airways itself but also for its investors and lenders. Since the net income will more or less be unaffected by the capitalisation, it is clear that the company also will suffer a decrease in ROA and ROC. Both the fictive example and real example about British Airways are in line with what is presented in the literature review; capitalisation does have a strong impact on important and commonly used financial ratios. As expected, British Airways was also one of the companies against capitalising. As seen in the taxonomy, some of the argumentation against capitalising was its impact on financial ratios. Based on all this, one could also expect companies with a high leasing intensity to be more averse against capitalising, simply because these will be more affected by the accounting change. All variables, profitability ratios, leverage ratios, post capitalisation ratios and leasing intensity ratios, are constructed in such way that if a company has a high value of it, my hypothesis suggests that it is averse

against capitalising. That is, when the input level of the independent variable increases, the likelihood of having a disagreeing company increases.

The respective null and alternative hypothesis is:

- H0: *“The (independent variable) has zero effect on whether the company disagrees or supports the capitalisation question.”*
- H1: *“The (independent variable) has an effect on whether the company disagrees or supports the capitalisation question.”*

The main reason why I included the profitability ratios (see variable 1 – 5 in table 4) is that I wanted to see if a high profitability would lead to aversion to capitalisation. Many of the companies from both sectors expressed in their comment letters that they were afraid of how the capitalisation would affect their profitability ratios. In which case, there could be some evidence stating that a high profitability would lead to aversion, as some profitability ratios will be largely negatively affected when capitalising due to the increase in the denominator. In this case, these would be ROA, ROC and Asset Turnover. One should note that any significant results from these could have two possible explanations;

- 1) A high profitability leads to aversion
- 2) Hiding: the company is averse because their high profitability ratio will be deteriorated when capitalising.

As mentioned in the literature review, the capitalisation would only affect the net income to a minor extent. Thus, a high Profit Margin and/or ROE should only be affected at a smaller scale. Therefore, these ratios should not be subject to any measurement errors, meaning any results should solely be due to their profitability. Subsequently, if there are no significant results from Profit Margin and/or ROE, but at the same time significant results from ROA, ROC and Asset Turnover, the explanation why may be due to the second suggested explanation above rather than a high profitability.

I do not expect the profitability ratios to be statistically significant, simply because I find it hard to believe that a higher profitability ratio would make the company disagree on the capitalisation question. If there is some evidence from ROA, ROC and/or Asset Turnover, I believe this is because they want to hide their assets and liabilities or other explanations.

I wanted to include EBITDA to Interest, Depreciation and Amortisation Expense (see variable 9 in table 4) because the aggregate value of the expenses in the denominator could suggest a smaller operational leasing intensity, as there are no such expenses for operational lease contracts. A high operational leasing intensity could suggest a lower value, which, in turn, could increase the value of the ratio. However, the EBITDA may be smaller for companies with a high operational leasing intensity as the leasing expense is deducted at this stage. Thus, companies that use financial lease or use other means of finance to finance their assets may have a higher EBITDA. The question is which factor is bigger. Based on the argumentation above, whether or not there will be any significant statistical evidence from this ratio is not clear.

Variables 6 – 8, 12 and 14 test for different leverage ratios. Variables 10, 11, 13, 15 and 16, test for different leverage ratios post capitalisation and the operational leasing intensity for a company (for all variables see table 4). Note that I capitalised the full value of their future operating leasing obligations even though this might not be required. As already pointed out in part 3, the Exposure Draft only requires the companies to capitalise for the period that is more likely to occur. Therefore, the values disclosed in the notes may not be the same values that would have been disclosed if the requirements in the Exposure Draft were followed. Nevertheless, it gives an indication about how much more value they will be required to add onto their balance sheet. In the literature review, I pointed out some conflicting empirical evidence regarding leasing and debt. If these two means of finance were substitutes, one could argue that a high leverage ratio will not influence the response variable, because the company would already consider this when evaluating its leverage level. In which case,

this should result in a non-significant variable. However, if they are not perceived equally, one could argue that a higher leverage ratio may make the company being more averse to capitalising, as this will increase the leverage. In this is true, this could lead to a rejection of the null-hypothesis. The same argumentation will be behind the post-capitalisation variables. Given they are not perceived equally, one could expect statistical evidence suggesting that companies with a high increase in leverage ratios post capitalisation will be more averse to capitalisation. If they are substitutes, one could expect that they have already taken into account their leasing contracts when determine their leverage ratios. Subsequently, their response will not be affected by an increase in their leverage ratios.

If there are significant results from the leverage ratios pre capitalisation it suggest that they want to hide their values because they do not want to increase their already high leverage ratios. However, lack of results from pre leverage ratios and significant variables for post capitalisation variables, could suggest that the company is not afraid of hiding the values but has another explanation to their aversion. This said, the problem with this argumentation is that one leave out the ones with a medium high leverage ratio. These could also disagree with the capitalisation question because they do not want to increase their leverage ratios. One should also not that the post capitalisation variables may also be subject to measurement error. That is, these variables are capturing something different than what they are meant to and are defined as. This will be brought up again when the results are ready to be discussed.

The more straightforward variables, with less possibility of capturing something different than what the variables are meant to capture, are the variables that measure the companies leasing intensity. Essentially, significant results from such variables will suggest that companies with a high leasing intensity will be averse to capitalise their leasing contracts. I believe one can expect some significant results from these variables, as it does make sense that companies

with a large portion of leasing contracts as a proportion of their assets will tend to be averse to capitalise them.

6.2 The independent variables

Many of the independent variables I have used in my regression are either the same or similar to the financial ratios which have been tested for in different empirical studies. Table 4 defines each of the independent variables used in my regression. To make the statistical results more comparable, all ratios are in percentages. There are some clarifications for averages, total capital and how the operating lease contracts are determined in a table in Exhibit 6.

Independent variable	Definition
1. ROE	$\frac{\text{Net Income Available for Common Shareholders}}{\text{Average Total Equity}} * 100$
2. ROA	$\frac{\text{Net Income}}{\text{Average Total Assets}} * 100$
3. ROC	$\frac{\begin{aligned} &\text{Net Income (losses)} \\ &+ \text{Minortory Interest} \\ &+ \text{Interest Expenses} \left[1 - \left(\frac{\text{Effective Tax Rate}}{100} \right) \right] \end{aligned}}{\text{Average Total Capital}} * 100$
4. Asset Turnover	$\frac{\text{Net Sales}}{\text{Average Total Assets}} * 100$
5. Profit Margin	$\frac{\text{Net Income}}{\text{Net Sales}} * 100$

6. Long Term Debt to Total Capital*	$\frac{\text{Long Term Borrowings}}{\text{Total Capital}} * 100$
7. Total Debt to Total Common Equity*	$\frac{\text{Short and long term borrowings}}{\text{Total Common Equity}} * 100$
8. Total Debt to Total Assets	$\frac{\text{Short and long term Borrowings}}{\text{Total Assets}} * 100$
9. EBITDA to Interest, Depreciation and Amortisation expense	$\frac{\text{EBITDA}}{\text{Interest, depreciation and amortisation expense}} * 100$
10. Operational Leases to Fixed Assets	$\frac{\text{Future Minimum Operating Lease Obligations}}{\text{Fixed Assets}} * 100$
11. Operational Leases to Long Term Borrowings	$\frac{\text{Future Minimum Operating Lease Obligations}}{\text{Long Term Borrowings}} * 100$
12. Total Liabilities To Equity	$\frac{\text{Total Liabilities}}{\text{Equity}} * 100$
13. Increase in Total Liabilities to Equity	The numbers are based on how many per cent the Total-Liabilities-to-Equity ratio increases by adding the Future Minimum Operating Lease Obligations to Total Liabilities.
14. Long Term Borrowings to Fixed Assets	$\frac{\text{Long Term Borrowings}}{\text{Fixed Assets}} * 100$
15. Increase Long Term Borrowings to Fixed Assets	The numbers are based on how many per cent the Long Term Borrowings-to-Fixed Assets ratio increases by adding the Future Minimum Operating Lease Obligations

	to Long Term Borrowings and Fixed Assets.
16. Increase in Total Assets	The numbers are based on how many per cent the Total Asset value will increase by adding the Future Minimum Operating Lease Obligations to Total Assets.

Table 4: The table defines each of the independent variables.

6.3 Sample and Data collection

The taxonomy revealed that there are some conflicting opinions regarding the capitalisation question within two¹³ of the industries I assessed; retail and energy. If my hypothesis was true for the variables I tested for, one should be able to distinguish between the disagreeing and supporting companies from these sectors. Therefore, I used these two sectors in the sample. I went through every letter sent from these sectors to collect my sample. I categorised each company based on what was answered to question 1 in the Exposure Draft, which goes: “Do you agree that a lessee should recognise a right-of-use asset and a liability to make lease payments? (...)” Their answer made it possible to put the company in either the *Disagree* or *Support* category. Letters sent from organisations on behalf of companies had to be excluded from the sample, as there would be no relevant financial data to find from these. I also had to exclude three of the companies, as the letters were too ambiguous for me to be able to categorise them. I was left with 56 observations of which 33 and 23 were from Retail and Energy, respectively. All the data used to form the variables is financial data retrieved from the *Bloomberg* platform in November 2012. The financial data is from 2010, the year when the comment letters were sent. Some companies had missing values in some of the financial information, meaning this was not collected by *Bloomberg*. When trying to find the missing financial myself, I did succeed in finding it in some cases. I decided not to use the financial data I found myself, as I did not want my data to be biased. Therefore, the data for each security used in this data set can be retrieved by using *Bloomberg*.

¹³ The transport sector was also mixed. However, I chose not to treat this as one separate sector as there are significant differences between the three subsectors (railway, shipping and airline) in this industry.

6.4 Stata

The spreadsheet with all values from all companies was imported into the statistic program *Stata*. The dependent variable is a dummy variable, being either 1 or 0, which reflects the companies' responses. Here, 1 and 0 means *Disagrees* and *Supports*, respectively. The explanatory variables, which should why a company disagrees or supports the change, are the independent variables. There are different types of binominal regressions when having a binary outcome. The significance may vary depending on the method used. I will present and focus on the results from a PROBIT regression. I both did the regressions when mixing the industries together and when separating them. There is a slight deviation in the amount of observation from regression to regression. This is due to elimination of companies who had not reported financial data to *Bloomberg*, which was included in the variable. Moreover, I started having one variable each regression before continuing with two and three variables for each regression.

The following *Stata* and statistical facts are based on information retrieved from a web site of Princeton University written by German Rodrigez. To make sure the significant results were robust, I made *Stata* do two post-estimations, a classification table and *receiver operating characteristic* (hereon ROC) curve. The classification table is based on cross tabulation of observed and predicted outcomes. The cut off point that determines a positive/negative outcome, is at a probability higher/lower than 0.5. The table also gives other indices of interest, such as sensitivity and specificity. The sensitivity measures the proportion of actual positives correctly identified as such. In this case, the proportion of correctly identified disagreeing companies. The specificity measures the proportion of negatives, which are correctly identified as such. In this case, the percentage of supporting companies who are correctly identified as being supportive. The ROC value is based on the sensitivity and specificity and is a summary measure of predictive power of the model. The ROC value ranges between 0.5 and 1, where 0.5/1 means no/absolute predictive power.

6.5 Results

In this section, the more interesting results from different regressions will be presented. I will start presenting the results from regressions and then continue with robustness test for every variable that turned out to be significant. I will also present a table that illustrates the differences in the variables' means.

6.5.1 Regressions

For all tables, $P > |z|$ is the corresponding P value for the absolute value of z from the regressions. The variables with a blue and green colour are significant at a ten¹⁴ and five per cent level, respectively. The results from the regressions with one variable are shown in table 5 below. In this case, the variable in red is significant at a ten per cent level for energy. I have also included the coefficients and standard errors in all tables. When having two variables in one regression I have included the correlation between the variables. Negative coefficients and correlations will be marked with a red colour.

No:	Independent Variable	Both Industries PROBIT			Energy PROBIT			Retail PROBIT		
		P > z	Coef.	Std.Err	P > z	Coef.	Std. Err.	P > z	Coef.	Std. Err.
1	ROE	0.095	0.039	0.023	0.626	-0.027	0.056	0.118	0.047	0.030
2	ROA	0.216	0.047	0.038	0.752	-0.031	0.099	0.353	0.043	0.046
3	ROC	0.168	0.033	0.024	0.504	-0.049	0.073	0.229	0.036	0.030
4	Asset Turnover	0.296	0.002	0.002	0.615	-0.004	0.008	0.659	-0.001	0.003
5	Profit Margin	0.588	-0.012	0.022	0.745	0.009	0.028	0.549	0.040	0.067
6	Long Term Debt to Capital	0.896	0.001	0.007	0.564	-0.009	0.016	0.535	0.005	0.009
7	Total Debt to Total Com Equity	0.543	0.000	0.001	0.587	-0.003	0.005	0.413	0.000	0.000
8	Total Debt to Total Assets	0.873	-0.002	0.011	0.308	-0.024	0.024	0.543	0.009	0.014
9	EBITDA to Interest, Depreciation and Amortisation Expense	0.226	0.002	0.001	0.384	0.002	0.002	0.684	0.001	0.002
10	Operational leases to Fixed Assets	0.055	0.004	0.002	0.132	0.072	0.048	0.219	0.003	0.003
11	Operational lease contracts to Long Term Borrowings	0.987	0.000	0.000	0.091	0.016	0.009	0.650	0.000	0.000
12	Total Liabilities to Equity	0.461	0.000	0.000	0.554	0.001	0.002	0.380	0.000	0.000
13	Increase in Total Liabilities to Equity	0.079	0.004	0.003	0.102	0.057	0.035	0.445	0.002	0.003
14	Long Term Borrowings to Fixed Assets	0.503	0.005	0.008	0.403	-0.022	0.026	0.460	0.007	0.009
15	Increase in Long Term Borrowings to Fixed Assets	0.838	0.000	0.000	0.110	0.021	0.013	0.851	0.000	0.000
16	Increase in Total Assets	0.029	0.011	0.005	0.152	0.084	0.059	0.168	0.009	0.007

Table 5: The table contains the results for each independent variable.

¹⁴ The number of observations for each regression is approximately 50 when regressing both industries together. When separating them, there are approximately 20 and 30 observations for Energy and Retail, respectively. Therefore, a fairly high significance level is used. Due to rounding procedures, up until 0.104 is accepted.

As some of the variables were significant when having one variable in a regression, I wanted to see if the results were still there when putting two and three variables into the same regression model. As the results in table 6 show, it did still show significant results for post capitalisation and leasing intensity ratios at a five and ten per cent level when mixing the industries. However, the significance from ROE disappeared.

Both industries two variables								
No:	Independent Variable	1st variable			2nd variable			Correlation 1st and 2nd variable
		PROBIT P > z	Coef.	Std. Err.	PROBIT P > z	Coef.	Std. Err.	
1 and 10	ROE and Operational leases to Fixed Assets	0.176	0.038	0.028	0.203	0.0032	0.0025	0.396
1 and 13	ROE and Increase in Total Liabilities to Equity	0.165	0.038	0.027	0.228	0.0032	0.0027	0.179
3 and 16	ROC and Increase in Total Assets	0.436	0.022	0.028	0.073	0.0099	0.0055	0.439
5 and 10	Profit Margin and Operational leases to Fixed Assets	0.506	0.017	0.026	0.050	0.0050	0.0025	-0.281
5 and 13	Profit Margin and Increase in Total Liabilities to Equity	0.572	0.014	0.025	0.068	0.0049	0.0027	-0.304
5 and 16	Profit Margin and Increase in Total Assets	0.375	0.023	0.026	0.022	0.0129	0.0056	-0.341
5 and 7	Profit Margin and Total Debt to Common Equity	0.631	-0.011	0.022	0.527	-0.0004	0.0006	-0.100

Table 6: Results from regressions for both industries when regressing two variables.

I also did the same for each industry. Table 7 below shows that there was still significance at a ten per cent level from the energy sector from one post capitalisation variable. However, the significance from ROE disappeared.

Energy two variables								
No:	Independent Variable	1st variable			2nd variable			Correlation 1st and 2nd variable
		PROBIT P > z	Coef.	Std. Err.	PROBIT P > z	Coef.	Std. Err.	
1 and 10	ROE and Operational leases to Fixed Assets	0.472	-0.044	0.061	0.132	0.079	0.053	0.090
1 and 13	ROE and Increase in Total Liabilities to Equity	0.501	-0.040	0.060	0.106	0.061	0.038	0.063
3 and 16	ROC and Increase in Total Assets	0.532	-0.047	0.076	0.191	0.070	0.054	-0.083
5 and 10	Profit Margin and Operational leases to Fixed Assets	0.531	0.019	0.030	0.127	0.074	0.049	-0.095
5 and 13	Profit Margin and Increase in Total Liabilities to Equity	0.726	0.011	0.031	0.104	0.056	0.034	0.023
5 and 16	Profit Margin and Increase in Total Assets	0.586	0.016	0.030	0.149	0.085	0.059	-0.059
5 and 7	Profit Margin and Total Debt to Common Equity	0.848	0.005	0.029	0.636	-0.002	0.005	-0.219

Table 7: Results from regressions for energy industry when regression two variables.

Table 8 below show that there are still significant results for ROE from the retail industry when having two variables in the same regression. However, there were no results from post capitalisation or leasing intensity variables.

Retail Two variables								
No:	Independent Variable	1st variable			2nd variable			Correlation 1st and 2nd variable
		PROBIT			PROBIT			
		P > z	Coef.	Std. Err.	P > z	Coef.	Std. Err.	
1 and 10	ROE and Operational leases to Fixed Assets	0.098	0.061	0.037	0.486	0.0022	0.003	0.361
1 and 13	ROE and Increase in Total Liabilities to Equity	0.092	0.061	0.036	0.694	0.0014	0.004	0.077
3 and 16	ROC and Increase in Total Assets	0.280	0.038	0.035	0.312	0.0074	0.007	0.377
5 and 10	Profit Margin and Operational leases to Fixed Assets	0.329	0.069	0.070	0.208	0.0037	0.003	-0.028
5 and 13	Profit Margin and Increase in Total Liabilities to Equity	0.349	0.065	0.070	0.413	0.0027	0.003	-0.042
5 and 16	Profit Margin and Increase in Total Assets	0.232	0.089	0.074	0.125	0.0113	0.007	-0.156
5 and 7	Profit Margin and Total Debt to Common Equity	0.413	0.059	0.072	0.455	-0.0004	0.001	-0.106

Table 8: Results from regressions for retail industry when regression two variables.

Table 9 below shows the results from the regressions when having three explanatory variables in the same regression for both industries. As the table shows, two leasing intensity variables were still significant.

Both industries three variables										
No:	Independent Variable	1st variable			2nd variable			3rd variable		
		PROBIT			PROBIT			PROBIT		
		P > z	Coef.	Std. Err.	P > z	Coef.	Std. Err.	P > z	Coef.	Std. Err.
5, 7 and 10	Profit Margin, Total Debt to Common Equity and Operational Leases to Fixed Assets	0.528	0.016	0.026	0.516	-0.0003	0.0005	0.081	0.005	0.003
5, 7 and 13	Profit Margin, Total Debt to Common Equity and Increase in Total Liabilities to Equity	0.567	0.015	0.026	0.525	-0.0003	0.0005	0.109	0.005	0.003
5, 7 and 16	Profit Margin, Total Debt to Common Equity and Increase in Total Assets	0.421	0.021	0.027	0.500	-0.0004	0.0005	0.040	0.013	0.006

Table 9: Results from regressions when mixing the industries and having three variables

Table 10 below shows the results from the regressions when having three explanatory variables and when separating the industries. As the table shows, the results disappear when separating the industries. This could be due to noise because of the number of variables.

<u>Energy three variables</u>										
		1st variable			2nd variable			3rd variable		
No:	Independent Variable	PROBIT			PROBIT			PROBIT		
		P > z	Coef.	Std. Err.	P > z	Coef.	Std. Err.	P > z	Coef.	Std. Err.
5, 7 and 10	Profit Margin, Total Debt to Common Equity and Operational Leases to Fixed Assets	0.549	0.020	0.033	0.943	0.0004	0.006	0.132	0.075	0.050
5, 7 and 13	Profit Margin, Total Debt to Common Equity and Increase in Total Liabilities to Equity	0.710	0.012	0.033	0.894	0.0008	0.006	0.108	0.056	0.035
5, 7 and 16	Profit Margin, Total Debt to Common Equity and Increase in Total Assets	0.629	0.016	0.033	0.966	-0.0003	0.006	0.151	0.085	0.059
<u>Retail three variables</u>										
		1st variable			2nd variable			3rd variable		
No:	Independent Variable	PROBIT			PROBIT			PROBIT		
		P > z	Coef.	Std. Err.	P > z	Coef.	Std. Err.	P > z	Coef.	Std. Err.
5, 7 and 10	Profit Margin, Total Debt to Common Equity and Operational Leases to Fixed Assets	0.239	0.089	0.076	0.527	-0.0003	0.0005	0.377	0.003	0.003
5, 7 and 13	Profit Margin, Total Debt to Common Equity and Increase in Total Liabilities to Equity	0.247	0.088	0.076	0.518	-0.0003	0.0005	0.645	0.002	0.004
5, 7 and 16	Profit Margin, Total Debt to Common Equity and Increase in Total Assets	0.196	0.103	0.079	0.535	-0.0004	0.0006	0.285	0.009	0.008

Table 10: Results from regressions when separating the industries and having three variables.

6.5.2 Coefficients

The coefficients are fairly small in all cases. This is due to large differences between the minimum and maximum value for each variable. For the significant variables, all the coefficients are positive. This means when the variable does have an affect on the response variable, it is positive; an increase in the input variable will increase the probability of having a disagreeing company. Energy

has larger coefficients than retail, this suggest that retail has a higher difference between max and min. I will get back to this when analysing the means.

6.5.3 Correlations

In the correlation matrix for the significant variables when having one variable per regression from both industries in table 11 one can clearly see a high correlation between variable 10, 13 and 16 and rather low correlation between the other variables. The strong correlation between 10, 13 and 16 will lead to miscalculations if having these together in the same regression.

```
. corr Response ROE OperationalLeasestoFixed IncreaseinTotalLiabilitie
> IncreaseTotalAssets
(obs=49)
```

	Response	ROE Operat~d	Increa~e	Increa~s
Response	1.0000			
ROE	0.1961	1.0000		
Operationa~d	0.2716	0.3956	1.0000	
Increasein~e	0.2398	0.1786	0.8648	1.0000
IncreaseTo~s	0.2984	0.3519	0.9050	0.9438

Table 11: Correlation matrix with the significant variables and response variable.

To make sure correlation was not a problem when having two and three variables in the same regression, I included all the respective correlations when having two variables in one regression in the tables (see table 6, 7 and 8). The correlations for regression models with three variables with significant results are in the correlation matrixes in table 12 below.

```
. corr ProfitMargin TotDebttoComEquity Inc
> reaseTotalAssets
(obs=48)

. corr ProfitMargin TotDebttoComEquity Ope
> rationalLeasestoFixed
(obs=48)
```

	Profit~n	TotDeb~y	Increa~s
ProfitMargin	1.0000		
TotDebttoC~y	-0.1121	1.0000	
IncreaseTo~s	-0.3596	0.0755	1.0000

	Profit~n	TotDeb~y	Operat~d
ProfitMargin	1.0000		
TotDebttoC~y	-0.1121	1.0000	
Operationa~d	-0.2898	0.0356	1.0000

Table 12: Correlation matrix for significant results when having three variables.

Overall, the results show a fairly low to almost no correlation for models with a significant result. Thus, one can argue that the models are not subject to miscalculations due to correlation between the independent variables.

6.5.4 Differences in mean

To better understand the difference between industries, I calculated the means of each variable for each industry. I also included the standard errors. The results are in table 13 below. The highlighted differences in means are the bigger ones.

No:	Independent Variable	Mean Energy	Mean Retail	Diff. in mean	STD.ERR Energy	STD.ERR Retail
1	ROE	13%	25%	12%	1.067	8.2
2	ROA	5%	8%	3%	0.59	1.07
3	ROC	10%	15%	5%	0.99	1.98
4	Asset Turnover	52%	170%	119%	7.51	15.32
5	Profit Margin	12%	5%	8%	1.96	0.63
6	Long Term Debt to Capital	34%	31%	3%	3.62	5.16
7	Total Debt to Total Com Equity	80%	268%	188%	12.02	209.18
8	Total Debt to Total Assets	24%	22%	2%	2.701	3.32
9	EBITDA to Interest, Depreciation and Amortisation Expense	209%	256%	46%	31.48	22.7
10	Operational leases to Fixed Assets	7%	123%	116%	1.91	19.86
11	Operational lease contracts to Long Term Borrowings	33%	3265%	3232%	7.9	1605.033
12	Total Liabilities to Equity	188%	407%	219%	25.62	249
13	Increase in Total Liabilities to Equity	10%	107%	97%	2.55	14
14	Long Term Borrowings to Fixed Assets	24%	31%	7%	2.45	5.58
15	Increase in Long Term Borrowings to Fixed Assets	23%	1358%	1336%	5.07	729.4
16	Increase in Total Assets	6%	61%	55%	1.69	8

Table 13: The table shows the differences in means between the industries for the variables.

The findings show several large differences in means between the industries. The differences are, more or less, solely driven by the statistics from retail. The large standard errors whenever the retail has a large mean suggest that there are

some significant outliers that increase the mean. This makes it difficult to say something more about the characteristics. The significant larger mean and a fairly low standard error for operational lease to fixed assets for retail suggests that one can argue that this sector is more leasing intensive than energy.

6.5.5 Robustness test results

The results from robustness tests are presented in table 14 below. The highlighted regression models are the ones with better results. However, all results are fairly good and suggest a good model.

Both industries robustness test					
No:	Independent Variable	Correctly classified	Sensitivity	Specificity	ROC
One variable					
1	ROE	63%	50%	77%	0.61
10	Operational leases to Fixed Assets	61%	48%	73%	0.66
13	Increase in Total Liabilities to Equity	59%	44%	73%	0.65
16	Increase in Total Assets	61%	52%	69%	0.67
Two variables					
3 and 16	ROC and Increase in Total Assets	62%	54%	70%	0.68
5 and 10	Profit Margin and Operational leases to Fixed Assets	59%	44%	73%	0.67
5 and 13	Profit Margin and Increase in Total Liabilities to Equity	63%	48%	77%	0.66
5 and 16	Profit Margin and Increase in Total Assets	65%	56%	73%	0.69
13 and 16	Increase in Total Liabilities to Equity and Increase in Total Assets	63%	52%	73%	0.70
Three variables					
5, 7 and 10	Profit Margin, Total Debt to Common Equity and Operational Leases to Fixed Assets	60%	43%	76%	0.68
5, 7 and 16	Profit Margin, Total Debt to Common Equity and Increase in Total Assets	65%	57%	72%	0.69
Energy Robustness test					
No:	Independent Variable	Correctly classified	Sensitivity	Specificity	ROC
One variable					
11	Operational lease contracts to Long Term Borrowings	68%	25%	93%	0.69
Two variables					
5 and 13	Profit Margin and Increase in Total Liabilities to Equity	73%	38%	93%	0.64
Retail Robustness test					
No:	Independent Variable	Correctly classified	Sensitivity	Specificity	ROC
Two variables					
1 and 10	ROE and Operational leases to Fixed Assets	70%	69%	73%	0.78
1 and 13	ROE and Increase in Total Liabilities to Equity	67%	69%	64%	0.73

Table 14: The table contains the robustness test results for the significant variables.

In a perfect scenario the correctly classified and ROC rate would have been close to 100 per cent and 1, respectively. If the sample size could have been larger, one might have seen larger values. As we can understand from the means in table 10, there are some extreme outliers in the sample. Subsequently, if these go against the normal pattern in the sample they will deteriorate the model at a larger extent in a small sample size. Based on this, I believe it is feasible to argue that the models for the significant independent variables are robust.

6.6 Discussion

Here I will discuss the findings from the regressions and try to connect it with the literature review, fictive and real life example and some findings in the taxonomy. I will start discussing the results from both industries before I continue with looking at the industries separately.

6.6.1 Both industries

Out of the five different profitability ratios tested for, only ROE showed significant results. This may suggest that the profitability does have some affect on the aversion are the significant results from ROE. A reason to this may be that profitable companies may find it more important to window dress their financial ratios. However, the lack of evidence from the other profitability ratios makes it not clear whether or not this is true, and may suggest that the disagreeing companies do not particularly stick out as being more profitable companies. There was also a lack of evidence suggesting that highly leveraged firms would be more averse to capitalise.

As said in the literature review, capitalisation of operating lease contracts will have a very strong negative impact on profitability, especially for ROA, ROC and Asset Turnover and leverage ratios. No evidence from either of these ratios could suggests that companies with these specifics are not worried about how the capitalisation will deteriorate their profit and leverage ratios. In other words, companies with such characteristics are not trying to hide their assets and liabilities. This said, the taxonomy did reveal that both disagreeing and supporting companies were concerned about how their performance ratios would be affected by the capitalisation. Having concerns from both disagreeing and supporting companies will deteriorate the distinction between the two types of companies and may be a reason to why there is not any clear evidence from these ratios. This does not, however, mean that hiding is not an explanation to why companies are averse. So far, only companies that have a lot to loose when capitalising have been covered. One should also analyse the variables that showed significant results, the post capitalisation and leasing intensity variables.

One way of putting these significant results in words is to say that companies with a large increase in their leverage ratio when capitalising, and companies with a high operational leasing intensity, in comparison to their assets and liabilities, may be more averse to capitalisation. I.e. this could mean that these companies want to hide their assets and liabilities arising from their leasing contracts. If this was not true, the capitalisation should not matter, as the company would already have taken this into account when assessing their leverage ratios and how the capitalisation will impact them.

One could argue that these results support the empirical evidence stating that leasing and debts are not substitutes. If the company really perceived debt equal to leasing contracts, the impact of capitalisation would not matter. However, the result from independent variable number 11, *Operational Lease contracts to Long Term Borrowings*, contradicts this argumentation. This ratio gives the same values as if one calculates the increase in Long-term borrowings to equity. Since this variable is not significant, it may not be feasible to argue that these results suggest that operating lease contracts and debt are not substitutes after all.

Even though some evidence suggests that companies with a large increase in their leverage ratios (see results from the significant variable 13 *increase in total liabilities to equity*) are more likely to be averse, one should bear in mind that this may be capturing something different than the definition of the variable. It could also be the capitalisation impact on liabilities. As one can see from the correlation matrix (table 11), the correlation between *increase in total liabilities to equity* and *increase in total assets* (significant variable 16) have a correlation of 0.94. This suggests that the result is due to the impact on liabilities and not necessarily the impact on leverage ratios. This may be the same as if one was to test for the increase in ROA, ROC and Asset Turnover when capitalising. The result may show that a high decrease in these ratios will lead to aversion, however, what is really tested for is the increase in assets/liabilities. Therefore, one should be very careful when analysing the results from increase in leverage

and profitability ratios after capitalisation. Variable 13 should therefore be seen as a leasing intensity variable rather than a post capitalisation variable.

Based on the argumentation above and the significant results from the regressions, it is only feasible to argue that a high operating leasing intensity will lead to aversion. These variables should not be subject to any miscalculations. If this is true, what could be a possible explanation to this? I believe the taxonomy can clarify this to some extent. There were a large number of complaints about the Exposure Draft, both from disagreeing and supporting companies, about its complexity and that the cost of implementing all the new requirements did not outweigh the benefits. Subsequently, an explanation to the results could be due to the higher complexity and time spent when having a high operational leasing intensity rather than the deterioration of leverage and profit ratios. This said, there were many companies across all sectors, which argued that they were afraid of how it would affect their financial ratios.

One should also consider other non-numerical factors, which are more firm and/or industry specific. Many of the disagreeing companies said they did not see the leasing contract as a financing decision but rather an operating activity. In this case, they are disagreeing with the definition of the purpose of a lease contract. Subsequently, they disagree with capitalising it, simply because they believe it is an expense. Also, some of the disagreeing companies also argued that a better disclosure should be efficient. This takes us back to the hiding question, and it suggests that they are not necessarily afraid of showing the additional assets and liabilities.

There could be many explanations to the rejection of the null hypothesis for leasing intensity variables, meaning a higher increase in assets/liabilities will lead to aversion. Based on the statistical results and taxonomy, one could argue that it may be a combination of whether or not companies with a high leasing intensity are worried about how their financial ratios will be deteriorated when capitalising, and how they are able to comply with the complexity of the new

accounting treatment for operating leases. These two explanations may have different weightings. In other words, company X, which has a high leasing intensity, is averse solely because of the complexity that comes with the Exposure Draft. Company Y, which also has a high leasing intensity, is averse both because it will deteriorate its financial ratios and because of the complexity.

6.6.2 Differences between Energy and Retail

The significant result from ROE in the retail sector could have the same explanation as the one when mixing the industries; profitable firms tend to be averse because they want to look good for the users of their financial information. Capitalisation will affect their profitability and leverage ratios severely. However, again, no evidence from other profit ratios makes it difficult to say whether or not this is the case.

The energy sector did have some evidence from leasing intensity ratios. I believe it is feasible to argue that the reason why is the same as the one for both industries. I believe the lack of evidence from the retail sector is due to the enormous difference in means (in one occasion 3232 per cent age points) for leasing intensity variables. It is likely that the outliers in the retail sector deteriorate the distinction.

Overall, a large number of the significant results disappeared when separating the industries. This could mean that there is no clear distinction between these two industries, but rather a matter of to what extent a company from any industry is exposed to leasing contracts. That is, if one included other industries, the significant results from leasing intensity variables would possibly still occur.

7 Concluding thoughts

The aim for this thesis has been to educate the reader about former research about leasing usage, explaining the Exposure Draft and its practical effects for companies. I have also wanted to make the reader understand how different industries perceive the Exposure Draft. I found it important that the reader had this as background knowledge before presenting and discussing the results from the regressions I did.

I had some problems with how to work with *Stata*. I learned that it is not always a yes or no answer to questions regarding how to go about in this statistical program. In many cases, the answer is “it depends” or “there are many ways of doing this”. This was confusing, but at the same time I learned from it. Ideally, I would have preferred to have a larger sample size. However, the number of comment letters sent from the two industries I analysed and the extent companies had reported financial information to *Bloomberg* constrained me to the number of observations I was left with.

I believe I managed to provide the reader some important background knowledge by presenting selected empirical findings from research and include some practical examples that explains the main differences between the IAS 17 and Exposure Draft. I also believe the reader got an understanding about how different industries perceive the Exposure Draft and that the opinions are mixed.

I am satisfied with finding some of the evidence, which explain why some companies are averse to capitalise their operating lease contracts. However, I would have preferred to find more evidence suggesting that companies are averse due to the impact on financial ratios. Even though, this still might be true, this is not fully explained by my results. However, this could be an interesting topic for further research.

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Comment letters

All comment letters used to get information to the taxonomy and regression are retrieved from FASB own website where they are published.

(URL:http://www.fasb.org/jsp/FASB/CommentLetter_C/CommentLetterPage&id=1218220137090&project_id=1850-100&page_number=1)

Industry: Retail				Industry: Energy			
Company	Letter no	Country	Category	Company	Letter no	Country	Category
Japan Chain store Association	286	Japan	Understands	Statoil	778	Norway	Disagrees
National retail Federation	269	USA	Supports	Shell International	378	The Netherlands	Supports
ESPIRIT holding ltd	182	Hong Kong	Disagrees	Chevron	248	USA	Supports
Apple	243	USA	Understands	Repsol	472	Spain	Supports
Myer Holdings ltd	284	Australia	Disagrees	Exxon Mobil Corpration	491	USA	Supports
ESPIRIT holding ltd	182	Hong Kong	Disagrees	Hydro-Quebec	101	Canada	Supports
Norgesgruppen	147	Norway	Disagrees	Solid Energy New Zealand	105	New Zealand	Disagrees
El corte Ingles	183	Spain	Disagrees	Pennwest Energy Inc	213	USA	Disagrees
J Sainsbury's plc	195	UK	Disagrees	E on ag	426	Germany	Disagrees
Gap Inc	128	USA	Supports	Progress Energy Inc	370	USA	Supports
Sobeys Inc	377	Canada	Supports	Enso plc	475	UK	Supports
WM Morrison Supermarkets PLC	324	UK	Supports	Transocean	482	USA	Supports
WHSmithsPLC	322	UK	Disagrees	Entergy Services inc	519	USA	Supports
Next Plc	329	UK	Disagrees	Excel Energy inc	543	USA	Supports
Limited Brands inc	214	USA	Disagrees	Idaho power company	606	USA	Supports
Signet Jewelers	227	USA	Disagrees	Edison international	615	USA	Disagrees
Woolworths ltd	229	Australia	Disagrees	Suncor Energy Inc	764	Canada	Disagrees
Douglas Holding	232	Germany	Disagrees	Canadian Natural Resources	740	Canada	Disagrees
Marks & Spencer	238	UK	Disagrees	EDF group	746	France	Disagrees
Richemont	62	Switzerland	Supports	PPL corporation	448	USA	Supports
John Lewis	112	UK	Disagrees	American Electrical Power	507	USA	Supports
Shoprite Holdings ltd group	123	South-Africa	Disagrees	Ontario Power Generation inc	425	Canada	Supports
Williams-Sonoma Inc	154	USA	Supports	Hess Corporation	698	USA	Supports
New look retail group ltd	210	UK	Disagrees				
Hutchison Whampoa ltd	272	Hong Kong	Disagrees	Industry: Transport			
Kesko Corporation	405	Finland	Disagrees	Company	Letter no	Country	Category
Toys "R" Us Iberia, S.A	409	Spain	Supports	Asiana Airlines	290	South Korea	Disagrees
The Carphone Warehouse	412	UK	Disagrees	British Airways Plc	350	UK	Disagrees
Best buy Co.Inc	478	USA	Supports	FedEx Corporation	534	USA	Supports
LVMH	459	France	Disagrees	Canada Pacific	508	Canada	Supports
Luxtottica Group S.p.A	453	Italy	Supports	Air NZ	741	New Zealand	Supports
Dollar General	434	USA	Supports	BNSF Railway company	393	USA	Supports
Indigo Books&Music Inc	463	Canada	Supports	Hanjin Shipping	733	South Korea	Disagrees
Vitamin Shoppe	557	USA	Supports	The Japanese Shipowners Association	316	Japan	Disagrees
Dixons Retail plc	737	UK	Supports	Hong Kong Shipowners association	237	Hong Kong	Disagrees
Darty plc	722	UK	Disagrees	National Association of Chinese Shipowners	752	Taiwan	Disagrees
Tesco plc	419	UK	Disagrees				
				Industry: Leasing			
Company	Letter no	Country	Category	Industry: Investment Banks	Letter no	Country	Category
Leaseplan	251	The Netherla	Understands	Company	Letter no	Country	Category
Trilogy Leasing Co LLC	255	USA	Disagrees	Lloyds TSB	390	UK	Supports
Japan Leasing Association	289	Japan	Disagrees	Morgan Stanley	436	USA	Supports
Great America Leasing Corporation	479	USA	Supports	Goldman and Sachs	446	USA	Supports
Pacific Rim Capital	22	USA	Disagrees	JP Morgan Chase & Co	311	USA	Supports
Porterbrook Leasing Company ltd	116	UK	Disagrees	Barclays	438	UK	Supports
Beacon Intermodal Leasing LLC	118	USA	Disagrees	Citigroup	593	UK	Supports
Lasalle Systems Leasing Inc.	126	USA	Disagrees				
CSI Leasing	398	USA	Disagrees				
First Financial Corporate Leasing Inc	355	USA	Disagrees				
				Industry: Telecommunications			
Company	Letter no	Country	Category				
Deutsche Telekom AG	99	Germany	Supports				
Telephone and Data System Inc	253	USA	Supports				
Telecom ITALIA	437	Italy	Supports				
France Telecom Organge	401	France	Supports				
Telefonica S.A	440	UK	Supports				
Telstra	294	Australia	Supports				
Tw telecom	529	USA	Disagrees				
AT&T	590	USA	Supports				
MTN group ltd	774	South Africa	Supports				

9 Appendix

Exhibit 1: The table shows the values behind the graphs in figure 1.

Lease liability amortisation table for GULP Inc

Fair value of leased asset € 200,000.00
Implied interest rate 10%

	Beginning of year Lease Liability	Annual Lease Payment	Interest expense	Down payment	End of year lease liability	Depreciation	Depreciation + interest expense
Year							
1	€ 200,000.00	€ 32,549.08	€ 20,000.00	€ 12,549.08	€ 187,450.92	€ 20,000.00	€ 40,000.00
2	€ 187,450.92	€ 32,549.08	€ 18,745.09	€ 13,803.99	€ 173,646.93	€ 20,000.00	€ 38,745.09
3	€ 173,646.93	€ 32,549.08	€ 17,364.69	€ 15,184.39	€ 158,462.55	€ 20,000.00	€ 37,364.69
4	€ 158,462.55	€ 32,549.08	€ 15,846.25	€ 16,702.83	€ 141,759.72	€ 20,000.00	€ 35,846.25
5	€ 141,759.72	€ 32,549.08	€ 14,175.97	€ 18,373.11	€ 123,386.61	€ 20,000.00	€ 34,175.97
6	€ 123,386.61	€ 32,549.08	€ 12,338.66	€ 20,210.42	€ 103,176.19	€ 20,000.00	€ 32,338.66
7	€ 103,176.19	€ 32,549.08	€ 10,317.62	€ 22,231.46	€ 80,944.73	€ 20,000.00	€ 30,317.62
8	€ 80,944.73	€ 32,549.08	€ 8,094.47	€ 24,454.61	€ 56,490.13	€ 20,000.00	€ 28,094.47
9	€ 56,490.13	€ 32,549.08	€ 5,649.01	€ 26,900.07	€ 29,590.06	€ 20,000.00	€ 25,649.01
10	€ 29,590.06	€ 32,549.08	€ 2,959.01	€ 29,590.07	-€ 0.0	€ 20,000.00	€ 22,959.01
Total		€ 325,490.80		€ 200,000.02		€ 200,000.00	

Exhibit 2: The table shows the values behind the graphs in figure 2.

Lease liability amortisation table for Ben-Port Inc

Fair value of leased asset € 123,386.62
Implied interest rate 10%

	Beginning of year Lease Liability	Annual Lease Payment	Interest expense	Down payment	End of year lease liability	Current IAS 17	Amortisation	Amortisation + interest expense
Year								
1	€ 123,386.62	€ 32,549.08	€ 12,338.66	€ 20,210.42	€ 103,176.20	€ 32,549.08	€ 20,000.00	€ 32,338.66
2	€ 103,176.20	€ 32,549.08	€ 10,317.62	€ 22,231.46	€ 80,944.74	€ 32,549.08	€ 20,000.00	€ 30,317.62
3	€ 80,944.74	€ 32,549.08	€ 8,094.47	€ 24,454.61	€ 56,490.14	€ 32,549.08	€ 20,000.00	€ 28,094.47
4	€ 56,490.14	€ 32,549.08	€ 5,649.01	€ 26,900.07	€ 29,590.07	€ 32,549.08	€ 20,000.00	€ 25,649.01
5	€ 29,590.07	€ 32,549.08	€ 2,959.01	€ 29,590.07	-€ 0.00	€ 32,549.08	€ 20,000.00	€ 22,959.01
Total		€ 162,745.40		€ 123,386.62				

Exhibit 3 The table shows the evolution in the income statements for Ben-Port Inc for different accounting treatments for the same lease contract.

Income Statements

Exposure Draft

<i>Sales</i>	€	50,000.00	€	50,000.00	€	50,000.00	€	50,000.00	€	50,000.00
Operational income/expense										
<i>Amortisation</i>	€	20,000.00	€	20,000.00	€	20,000.00	€	20,000.00	€	20,000.00
<i>Interest expense</i>	\$	12,338.66	\$	10,317.62	\$	8,094.47	\$	5,649.01	\$	2,959.01
Operational Income	€	17,661.34	€	19,682.38	€	21,905.53	€	24,350.99	€	27,040.99
<i>Tax 25 %</i>	€	4,415.34	€	4,920.60	€	5,476.38	€	6,087.75	€	6,760.25
Net income	€	13,246.01	€	14,761.79	€	16,429.15	€	18,263.24	€	20,280.74

Current IAS 17

<i>Sales</i>	€	50,000.00	€	50,000.00	€	50,000.00	€	50,000.00	€	50,000.00
Operational income/expense										
<i>Lease expense</i>	€	32,549.08	€	32,549.08	€	32,549.08	€	32,549.08	€	32,549.08
Operational Income	€	17,450.92	€	17,450.92	€	17,450.92	€	17,450.92	€	17,450.92
<i>Tax 25 %</i>	€	4,362.73	€	4,362.73	€	4,362.73	€	4,362.73	€	4,362.73
Net income	€	13,088.19	€	13,088.19	€	13,088.19	€	13,088.19	€	13,088.19

Exhibit 4: The table shows the evolution of the balance sheets for Ben-Port Inc for different accounting treatments for the same lease contract.

Balance sheet

With current IAS 17 by the inception of lease contract

	Assets		Liabilities		Equity		
	<i>Dr</i>	<i>Cr</i>	<i>Dr</i>	<i>Cr</i>	<i>Dr</i>	<i>Cr</i>	
Cash	€	100,000.00			Capital	€	100,000.00
Total	€	100,000.00		€	-		€ 100,000.00

With Exposure Draft by the inception of lease contract

	Assets		Liabilities		Equity			
	<i>Dr</i>	<i>Cr</i>	<i>Dr</i>	<i>Cr</i>	<i>Dr</i>	<i>Cr</i>		
Leased asset	€	123,386.62	Lease payments	€	123,386.62	Capital	€	100,000.00
Cash	€	100,000.00						
Total	€	223,386.62		€	123,386.62			€ 100,000.00

With current IAS 17 after one year

	Assets		Liabilities		Equity		
	<i>Dr</i>	<i>Cr</i>	<i>Dr</i>	<i>Cr</i>	<i>Dr</i>	<i>Cr</i>	
Cash	€	63,088.19			Capital	€	63,088.19
Total	€	63,088.19		€	-		€ 63,088.19

With Exposure Draft after one year

123%

	Assets		Liabilities		Equity			
	<i>Dr</i>	<i>Cr</i>	<i>Dr</i>	<i>Cr</i>	<i>Dr</i>	<i>Cr</i>		
Leased asset	€	103,176.20	Lease payments	€	103,176.20	Capital	€	63,035.59
Cash	€	63,035.59						
Amortisation		€	20,000.00		Amortisation	€	20,000.00	
Total	€	146,211.79		€	103,176.20			€ 43,035.59

Exhibit 5: The table shows the main values from the balance sheet of British Airways group in the financial year 2010.

British Airways 2010 group

With current IAS 17		With ED		
<i>Values in million pounds</i>		Lease contracts	Total	Increase
No current assets	£ 7,973.00	£ 2,713.00	£ 10,686.00	34%
Current assets	£ 2,704.00	£ 193.00	£ 2,897.00	7%
Total assets	£ 10,677.00	£ 2,906.00	£ 13,583.00	27%
Non-current liabilities	£ 4,824.00	£ 2,713.00	£ 7,537.00	56%
Current liabilities	£ 3,740.00	£ 193.00	£ 3,933.00	5%
Total liabilities	£ 8,564.00	£ 2,906.00	£ 11,470.00	34%
Equity	£ 2,113.00		£ 2,113.00	0%
Total Liabilities and Equity	£ 10,677.00		£ 13,583.00	27%

Exhibit 6: The table clarifies what is behind some of the independent variables used in the regression

Averages:	Average of the beginning and ending balances
Total Capital:	ST Borrowings + LT Borrowings + Preferred Equity + Minority Interest + Share Capital & Additional Paid-In Capital + Retained Earnings
Future Minimum Operating Lease Obligations:	Total of the Future Minimum Operating Lease Commitments (Year 1 + Year 2 + Year 3 + Year 4 + Year 5 – Sublease income)