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Master Thesis

IAS 31 – Accounting for Interests in Joint Ventures

What are the effects on investors' decision usefulness of eliminating proportionate consolidation as accounting method of the OSEBX-listed companies which have interest in joint ventures?

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Preface

This thesis has been a part of our Master of Science in Business and Economics at the Norwegian Business School. Our major has been Business law, Tax and Accounting. The process of working with our thesis has been challenging and very much interesting. We have learned more than we could have imagined and gained useful knowledge of accounting for interest in joint ventures. It has been exiting to go in dept of a theme that has been a part of an international and national debate for many years. It has been a great way of ending our master degree.

A special thanks goes to our industrial professor, Sverre Dyrnes at the Department of Accounting, Auditing and Law. We are thankful for your support and willingness to answer our questions, especially in regards to the conversion part in our thesis. Moreover we would like to thank Niels Georg Beer Holm. We are grateful for your review of layout and structure. An appreciation also goes to our supervisor John Christian Langli. Any shortcomings and mistakes are recognized at our own accounts.

Lastly, we would like to thank our family and friends for their encouragements and support.

Karianne Holte Hveem

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Executive summary

"Practitioners and academics have discussed and debated the impact of joint ventures on financial statements of investor companies since the sixties. This debate is neither nor likely to be resolved quickly" (Kocan 1962; Nielsen 1965; Reklau 1977; Dieter and Wyatt 1978; Kothovala 2003, 518)

This quote addresses our curiosity and motivation for accounting of interests in joint ventures. There are two alternative methods of accounting for interests in joint ventures for listed companies in Norway which is in compliance with IFRS; the equity method and proportionate consolidation. Listed companies in Norway are obliged to report group financial statements in accordance with IFRS as a result of the EEA agreement. The IFRS joint venture accounting standard, IAS 31 – Interest in joint venture, is currently being re-evaluated in several countries. One can find considerable diversity throughout countries regarding which accounting practice is being used. Some countries have made one of the two accounting methods compulsory, while other countries still allows companies to choose which accounting method to be used in their financial statements. US GAAP requires the equity method to be used, while the Canadian GAAP requires proportional consolidation. In Norway, amongst other countries, companies have the liberty of choosing which accounting practice to be used according to the international accounting standard IAS 31.

The main objective of the financial statements is to give the users information that is relevant for economic decisions. With this background, we wanted to investigate the effect on decision usefulness if eliminating the option to choose the proportionate consolidation method. We formulated the following research question; *What are the effects on investors' decision usefulness of eliminating proportionate consolidation as accounting method of the OSEBX-listed companies which have interest in joint ventures?*

We have not found much previous research on this topic in Norway, however there is conducted a similar study in Canada in 2003 by Graham, King and Morrill – "Decision Usefulness of Alternative Joint Venture Reporting Methods ".

Graham, King and Morrill found that the components of return on common shareholders' equity (profit margin, asset turnover, and the leverage ratio), ROCSE, predict future return on common shareholders' equity better when the ratios are based on proportionate consolidation rather than the equity method. The ROCSE and its components are widely used by financial statement users, and are considered to be of significant importance. The method for our thesis is largely inspired of the similar study by Graham, King and Morrill. However, there are relevant differences such as the option to choose accounting method in Norway.

The data used for our quantitative analysis was gathered from companies listed at Oslo Stock Exchange (OSEBX), including Oslo Axess (OAAX), with home-state in Norway. The results from this analysis showed that ratios normally used by financial statement users (the components of ROSCE) are almost equal for both proportionate consolidation and the equity method. However, there was an indication that proportionate consolidation might have better ability than the equity method to predict future performance.

There are various opinions regarding which of the accounting methods to use when accounting for interests in joint venture. The main argument for the proportionate consolidation method is that this method seems to give more information and is a better predictor of future performance than the equity method. The supporters of the equity method focuses on the lack of a theoretical basis for recording the proportionate share of joint venture accounts because resources and claims subject to joint control do not fit with traditional definitions of assets and liabilities.

We believe that both accounting methods can be considered as suitable for Norwegian companies, since there is little difference in their ability to predict future performance. However, international consistency would make it easier for investors and other users of the financial statement to make economic decisions. In this way the principle of transparency and comparison are ensured.

1. Introduction

The thesis is divided into four parts with twelve chapters. In the first part (chp. 2 - 6), we start by clarifying our research question and make clear of earlier research in relevance with our topic. Further, we explain the term decision usefulness and present a way of measuring it. The first part will also give you an understanding of concepts, definitions and ideas required to understand the concept related to business combinations and the term joint venture. There are three international accounting standards that are relevant to Joint Ventures; IAS 31 – Interests in Joint Ventures ant it's "sister standards" IAS 27 – Consolidated and Separate Financial Statements and IAS 28 – Investments in Associates. We present the applicable accounting standards with main focus on the standard IAS 31 for reporting interests in joint ventures, which comprise the equity method and proportionate consolidation.

The second part (chp. 7) contains an "8 step model" for the method used for our further analysis. We explain our research design and the statistical method used. There is also an explanation of how Graham, King and Morrill have done their analysis in Canada and a comparison with our method.

The third part (chp. 8 - 11) of our thesis contains the quantitative analysis and the results we have observed from this analysis. The results from descriptive statistic and the regression model are presented and discussed. In addition to the quantitative analysis we have found it valuable to consider other and more qualitative factors, which are part of the ongoing debate regarding the accounting methods. We therefore also present and discuss pros and cons of the different accounting methods both from an international and national perspective.

The conclusion of our thesis is presented in the last part (chp 12). In chapter twelve we take into account both the quantitative analysis, other relevant research and the discussion of the different opinions of the two accounting methods and theory.

2. Research question

2.1 The research question

The problem to be addressed in this thesis is based on an exposure draft presented in third quarter of 2007 regarding a change of IFRS's (International Financial Reporting Standards) IAS 31 - Interests in Joint Ventures. The draft proposed to eliminate the option to choose proportionate consolidation for reporting of interest(s) in joint venture(s). Today, IFRS is flexible in the sense that companies can choose between the equity method and proportionate consolidation for accounting of interest in joint ventures. The Norwegian Accounting Act opens for IFRS to be an applicable standard for developing financial statements c.f. the Norwegian Accounting Act section 3-9. Group financial statements for companies listed on Oslo Stock Exchange are required to be in accordance with IFRS. The suggestion of eliminating proportionate consolidation, thereby a change in the current applicable accounting regulations started a debate in many jurisdictions. We find it interesting to investigate how the possible changes would affect the decision usefulness for users of the financial statements of Norwegian listed companies.

The number of joint ventures has increased significantly over the last decades. Joint ventures comprise of participants being more than one company, and are especially popular in capital-intensive industries such as oil and gas explorations, shipping, mineral extraction, and metals processing (Reference for Business 2011). Oil, gas and shipping are common industries in Norway and this is one of the reasons why this type of business combination caught our attention.

There are several reasons for creating a joint venture. Saving money is one of them and getting access to competence and knowledge is another. It is obvious that two or more companies can benefit from sharing costs as well as income through an agreement that also gives them the joint control that characterizes a joint venture. Companies within capital-intensive industries depend heavily on advances in technology to reduce costs. A jointly controlled arrangement with another company can benefit each of the partners by sharing personnel or assets

(Reference for Business 2011). Starting a joint venture could also be part of a strategy to expand into other markets. The partners could then benefit by sharing their competence and knowledge. Our curiosity to this type of business combination caught our minds and made us more confident to choose the topic of accounting of joint ventures for further research.

We want to examine how the possible change in legislation will affect the Norwegian companies and its stakeholders, with a focus on investors' decision usefulness. Our thesis shall examine what effect elimination of the option to choose the proportionate consolidation method may have on the *decision usefulness* of financial statements. We base our research on companies listed on the Oslo Stock Exchange (including Oslo Axess) with home-state in Norway. We ended up with the research question;

What are the effects on investors' decision usefulness of eliminating proportionate consolidation as accounting method of the OSEBX-listed companies which have interest in joint ventures?

2.2 Previous research

There has not been a lot of earlier research on this topic that we are aware of, especially not in Norway. The study by Graham, King and Morrill examined the topic in Canada which made it a natural choice for us to use as an inspiration for our research method and study. However, there are relevant differences in our research question and studies because Canada is obliged to use proportionate consolidation in accounting of interest in joint ventures, while Norway has the option to choose between the equity method and the proportionate method. Graham, King and Morrill's research has nevertheless contributed as inspiration for the method and theory in our thesis. We are not aware of previous research in Norway that is directly relevant for our research question. But the issue has been debated in NOU 2003:23 – Changes in the Norwegian Accounting Act. However, the Norwegian debate deal with the elimination of proportionate consolidation in the parent company accounts. There were no comments to the accounting methods in the group accounts. Further, we have not found any complete overview of joint ventures related to the companies listed on Oslo Stock Exchange.

3. Decision Usefulness

"The decision usefulness approach to financial reporting implies that accountants need to understand the decision problems of financial statement users" (Scott 2009, 87) It is important that the financial statement is a good tool for users to make relevant decisions. An important issue is therefore whether the equity method and proportionate consolidation represents good information for the users, and which of the two methods that is the most informative for them. Accountants have adopted the approach of decision usefulness as a reaction to the impossibility of making correct financial statements to all users. Identifying the users and their needs for information from the statements is an important and difficult task. However, accountants generally agree that the major users of the financial statements are the investors, and they therefore often focus on theories of decision and investment (Scott 2009, 60).

Further Scott (2009, 87) states that "Financial statements are an important and cost-effective source of information for investors, even though they do not report directly on future investment payoffs". Financial statements can help the investors to predict the future performance of the firm and therefore give them some prediction on the return on the investment.

Graham, King and Morrill provide evidence relevant to the decision-usefulness of joint venture accounting by analysing Canadian firms. It is important that there is a useful trade-off between relevance and reliability in the financial statements (Scott 2009, 88). Graham, King and Morrill describe the approach of decision usefulness that the Financial Accounting Standards Board's (FASB 1990) identify. FASB identifies predictive value as a characteristic of relevance and reliability, which makes information useful for economic decisions. Graham, King and Morrill's results indicate that financial statements with interests in joint ventures reported in accordance with the proportionate consolidation method provide better predictions of future profitability than the equity method. (Graham, King and Morrill 2003, 124)

Still, it is challenging to measure decision usefulness. Accounting research has not succeeded in coming up with an undisputed or definite measure of the term. A reason for this problem could be that the users of the financial statements have different objectives and different ways of interpreting the statements. However, there is a general perception that certain ratios provides important information about a company and is normally a relevant and important part of the background for economic decisions by external users. Graham, King and Morrill used the components of return on common shareholders' equity (profit margin, asset turnover and the leverage ratio) for measuring ability to predict future return on common shareholders' equity in their study. We agree that these ratios are widely used by financial statement users and generally considered to be of significant importance. Return on equity is also considered as by far the most popular yardstick of financial performance among investors and senior managers according to relevant accounting theory (Higgins 2009, 38). We therefore base a material part of our quantitative analysis on these ratios. However, we emphasize that there are other factors and arguments that should be taken into account when evaluating decision usefulness of financial statements. Such arguments are to certain extent presented in economic theory, and we have aimed to reflect and consider this in the qualitative parts of our analysis.

4. IFRS 3 - Business Combination

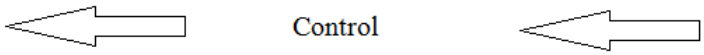
In order to understand the accounting of joint ventures a natural point of departure is the concept of business combinations and the applicable accounting principles for business combinations. According to IFRS 3 a business combination "Is the bringing together of separate entities or businesses into one reporting entity". The definition of business combinations by IFRS 3 applies to entities which are brought together to form a joint venture, entities under common control, business combination involving two or more mutual entities and where separate entities are brought together to form a reporting entity by contract alone without obtaining an ownership interest (IFRS Manual of Accounting 2009, 25003). In other words a business combination is a transaction or other event where the acquirer obtains control of one or more businesses (Beams et al 2009, 21).

According to Beams et al (2009) there are several reasons or objectives for taking on a business combination rather than just expanding through new facilities and so forth. Some of the reasons listed up are cost advantages, lower risk, fewer operating delays, avoidance of takeovers and business tax advantage (Beams et al 2009, 18). In other words, it is beneficial to combine operations into business combinations in order to achieve economies of scale where Beams et al 2009 further states:

> Accounting for business combinations is one of the most important and interesting parts of accounting theory and practice. At the same time it is complex and controversial (Beams et al 2009,21).

This quote addresses our curiosity and motivation for accounting of interests in joint ventures, considering that this is an extension of a business combination. Accounting of interest in joint ventures is elaborated in IAS 31, and is a much-debated topic both nationally and internationally. Hence, joint ventures are also an interesting part of accounting theory and practice.

It is normal for an entity to conduct its business through strategic investments in other entities. IFRS, and most national GAAPs, widely distinguish three types of strategic investment as illustrated in the table below (Bonham et al. 2009, 391).



	Subsidiary	**Joint venture**	**Associate**
Accounting method	Consolidation	Equity/proportionate consolidation	Equity
IFRS	IAS 27	IAS 31	IAS 28

The first type, subsidiaries, is entities that are controlled by the reporting entity. Joint ventures, the type that is central for our thesis, are entities that are jointly controlled by the reporting entity and one or more third parties. An entity that is neither controlled or jointly controlled by the reporting company, but is subject to significant influence is called associates. (Bonham et al 2009, 391) These three types of business combinations have different regulations for accounting and are subject to different international accounting standards, but they are in some degree linked to each other. When presenting the standard for joint ventures – IAS 31, it is natural to present the accounting standards IAS 27 – Consolidated and Separate Financial Statements and IAS 28 - Investment in Associates. However, before discussing these accounting standards, we address the issue of defining a joint venture and present the different types of joint ventures.

5. Joint Venture

5.1 Introduction

One distinguishes between subsidiaries and associates on one hand, and on the other hand one distinguishes between joint ventures. Joint ventures are basically formed by a legal or contractual relation between the parties. In comparing interests in associates and subsidiaries, a difference is that these do in general involve an acquisition of a separate economic or legal entity (Bonham et al. 2009, 851).

5.2 Defining the term joint venture

The term joint venture has different definitions in accounting theory, and the definitions vary between countries. The definition of the term is vital for determining the scope of the applicable accounting standard. In this paper we use the definition as set out in IAS 31. IAS 31 defines joint venture as a "*contractual arrangement* whereby two or more parties undertake an economic activity that is subject to *joint control*". *Joint controlled* is defined as "the contractual agreed sharing of control over an economic activity, and exists only when strategic financial and operating decisions relating to the activity require the unanimous consent of all parties sharing control (the venturers)" (IFRS Manual of Accounting 2009, 24003). An activity that does not have any contractual arrangement for set up joint control is not seen as joint ventures according to the IAS 31. (IFRS 2011, 626) Furthermore control is defined as "the power to govern the *financial and operating policies* of an economic activity, so as to obtain benefits from it" (IFRS Manual of Accounting 2009, 24006).

As mentioned, the definition of joint venture varies across countries. The United States generally defines joint ventures as "operated by a small group of businesses (the joint ventures) as a separate and specific business or project for the mutual benefit of the members of the group". While Canada utilize a more specific definition; "A joint venture is an arrangement whereby two or more parties (the ventures) jointly control a specific business undertaking and contribute resources toward its accomplishment" (Graham, King and Morrill 2001, 2).

One of the continuing issues in accounting for interests in joint venture is that not all of the accounting jurisdictions agree on the definitions of joint control. As an example Canadian GAAP defines joint ventures as jointly controlled assets, operations and enterprises. While under UK GAAP, jointly controlled assets and operations are not considered joint ventures, thus joint ventures must be distinct entities (Soonawalla 2006, 398). As seen we have several understandings of the term joint venture and the definition generally varies among the major accounting standards; US GAAP, Canadian GAAP, IFRS and so forth. It is natural for us to choose the definitions of IAS 31 in this thesis since the listed companies at Oslo Stock Exchange (including Oslo Axcess) has to deal with the IAS 31. However, it is valuable with consistent definitions in order to facilitate comparisons of financial statements made in accordance with accounting principles in different jurisdictions. Therefore the US and Canadian definitions are also relevant when evaluating the IFRS standards.

5.3 Forms of joint venture

Joint ventures can be in several forms and structures. (IFRS 2011, 626) IAS 31 identifies three types of joint venture with different kinds of requirements in the financial statements; jointly controlled operations, jointly controlled assets and jointly controlled entities. IFRS (2011, 1626) states some characteristics that are common for all types of joint ventures;

a) Two or more venturers are bound by a contractual arrangement; and
b) The contractual arrangement establishes joint control

5.3.1 Jointly controlled operations

Jointly controlled operations involves the use of the assets and other resources of the venturers without creating a corporation, partnership, or a financial structure that is separate from the venturers themselves. The ventures utilize their own property, plant, equipment and inventories. They also acquire their own expenses, liabilities and finance. (IFRS 2001, 1627)

An example of this type of arrangement could be when two venturers unite their operations and resources to produce a specific product, such as a ship. Each of the participants takes care of a particular part of the manufacturing, being responsible for their own costs and is given their share of the revenue from the sale of the ship. The contract specifies how this is to be shared. (IFRS 2011, 1627)

When there are interests in jointly controlled operations, the financial statements shall present the assets that the venture in question controls, the liabilities and expenses it requires, and its share of income from sale in the joint venture. (IFRS 2011 1627)

5.3.2 Jointly controlled assets

Some joint ventures entail the joint control or joint ownership of assets related to the joint venture. The assets are utilized to gain benefits for the venturers. Each venturer may take their share of the output from the assets and each of them stands up for their agreed share of the expenses incurred (IFRS 2011, 1628).

This type of joint venture is typical for the oil, gas and mineral extraction industries. An example of that could be oil companies that jointly control and operate an oil pipeline. A venturer with interests in jointly controlled assets shall in the financial statement recognize; its share of the jointly controlled assets, the liabilities that is acquired, and its share of liabilities acquired with the other part relative to the joint venture and the income/ expenses from the joint venture (IFRS 2011, 1628).

5.3.3 Jointly controlled entities

A jointly controlled entity is a type of joint venture that engages the founding of a corporation, partnership or other entity in which each venture has an interest. The entity function as other entities, but a contractual arrangement between the venturers establishes joint control over the economic activity of the entity (IFRS 2011, 1629). An example of this type of joint venture could be two entities that combine their activities in a specific business by transferring the related assets and liabilities into a jointly controlled entity.

This thesis concerns the last type of joint venture; jointly controlled entities. IAS 31 specifies that the venturer in this case can use either proportionate consolidation or the alternative equity method (described in IAS 28), but the IASB has an intention of removing the option of choosing proportionate consolidation. IAS 31 will then be equal to the US GAAP where the equity method is required when accounting for interest in joint ventures. IAS 31 is said to be a more complex standard than its "sister" standards IAS 27 - Consolidated and Separate Financial Statements and IAS 28 - Investments in Associates (Bonham et al. 2009, 851) With the suggested change, IAS 31 will be more similar to IAS 28 concerning investments in associates and hence less complex.

5.4 IAS 27 - Consolidated and Separate Financial Statements

IAS 27 shall be applied for preparation and presentation of consolidated financial statements for a group of entities under the control of a parent. Consolidated financial statements are required whenever there is a consolidated group. A consolidation occurs when a new corporation is formed to take over the assets and operations of two or more separate business entities and dissolves the previously separate entities (Beams et al 2009, 20). IAS 27 also specifies that it should be utilized in accounting for investments in subsidiaries, jointly controlled entities and associates when an entity elects, or is required by local regulations, to present separate financial statements. Hence, venturers with ownerships in joint ventures are required to have consolidated financial statements, in accordance with IAS 27. The presentation of consolidated financial statements requires that the statements should include a consolidated balance sheet, income statement and cash flow statements and notes to the consolidated financial statements. All of these elements deal with the parent and its subsidiaries (IFRS 2011, 1535; IFRS Manual of Accounting 2009, 24001).

According to IAS 27 a group is obliged to present their financial statements in a consolidated form. This standard defines consolidated financial statements as "the financial statements of a group presented as those of a single economic entity". IFRS Manual of Accounting (2009) argues that the financial statement of a parent by itself do not present a full picture of its economic activities or financial position. Users of financial statements would like to get information about the

parent company *and* its subsidiaries, joint ventures and associates in order to get an informative picture of the whole group and not only the parent.

5.5 IAS 28 – Investments in Associates

IAS 28 is applicable for accounting for investments in associates. However, it should be mentioned that the standard is not applicable for investments in associates which are held by venture capital organisations or mutual funds, unit trusts and similar entities including investment-linked insurance funds that upon initial recognition are designated as at fair value through profit/loss or are classified as held for trading and accounted for in accordance with IAS 39 – Financial Instruments: Recognition and Measurement (IFRS 2011, 1590).

A main difference with the scope of this standard compared to IAS 27 regarding subsidiaries and IAS 31 regarding joint ventures is that IAS 28 is applicable when the investor has significant influence over the entity – separate or joint control is not required. There are several ways to exercise significant influence and IAS 28 identifies these factors; (1) investor representation on the board of directors or equivalent, (2) participation in policy-making processes, (3) material transactions between the investor and investee, (4) interchange of managerial personnel, and (5) provision of essential technical information (Epstein and Jermakowics 2008, 373) .

IAS 28 is linked to IAS 31-Interests in Joint Ventures since investment in associates shall be accounted for by the equity method and the definition of the equity method is therefore found in IAS 28. Accordingly, a venturer that has an interest in a jointly controlled entity within the extent of IAS 31, and elect to report using the equity method should comply with the requirements of IAS 28 relating to the equity method of accounting (Bonham et al, 795) As IAS 31 and joint ventures is our main focus we choose to describe the definition of the equity method in connection with IAS 31 below.

6. IAS 31 – Accounting for Interests in Joint Ventures

6.1 Introduction – IAS 31

International Accounting Standard 31 (IAS 31) – Interests in Joint Ventures replaced the earlier version IAS 31- Financial Reporting of Interests in Joint Ventures which was latest revised in 2000. The current standard was effective from January 2005. The standard shall be utilized when accounting for interests in joint ventures and when reporting for the joint venture assets, liabilities, income and expenses in the financial statements of venturers and investors. In addition, it shall be used regardless of the structure and form of the joint venture. Unlike the IAS 28, IAS 31 does not apply to venturers' interests in jointly controlled entities held by venture capital organisations or mutual funds, unit trusts and similar entities including investment-linked insurance funds that upon initial recognition are designated as at fair value through profit/loss or are classified as held for trading and accounted for in accordance with IAS 39 – Financial Instruments: Recognition and Measurement. (IFRS 2011, 1624)

IAS 31 is the standard which currently is debated because of the suggestions of elimination of proportionate consolidation. The standard, its scope and possible changes is the focus for this thesis. The applicable standard states that a venturer shall report its interest in a jointly controlled entity by using proportionate consolidation or the alternative method presented in IAS 28 (the equity method). (IFRS 2011, 1630)

6.2 Proportionate consolidation

The IAS 31 defines proportional consolidation as follows:

> A method of accounting whereby a venturer's share of each of the assets, liabilities, income and expenses of a jointly controlled entity is combined line by line with similar items in the venturer's financial statements or reported as separate line items in the venturer's financial statements. (PwC 2009, 28021)

Here the investor reports its proportionate share of each financial statements item: assets, liabilities, revenues and expenses of the joint venture. Hence, in a 50:50 joint venture, the venturer shows its own liabilities and assets plus 50 % of the assets and liabilities of the joint venturer (IFRS Manual of Accounting 2009, 28022).

The accounting method of proportionate consolidation is similar to the preparation of consolidated financial statements. "The difference from full consolidation is that under that method the subsidiary's assets, liabilities, revenues and expenses are included in full and the other investors' interest are reflected as a single figure in the balance sheet and the income statement as a minority" (IFRS Manual of Accounting 2009, 28022).

If a company report interest in joint ventures through proportionate consolidation there are two reporting format; the company can report on a line-by-line basis or by separate line items (or side by side in a column format). The latter is hardly ever seen in practise; therefore we will only elaborate on the line-by-line reporting format. In this reporting format some financial information of the joint venturer is "lost" amongst the financial statements for the whole group. That is why the line-by-line reporting format requires additional disclosure. The standard requires a disclosure of:

> The aggregated amounts of each of the current assets, long-term assets, current liabilities, long-term liabilities, income and expenses related to its interest in joint ventures (IFRS Manual of Accounting 2009, 28052).

In other words the figures that are included proportionally in the numbers of the whole group shall be disclosed.

6.3 The equity method

IAS 31 also permits the use of the equity method for accounting on interest in joint ventures. IAS 28 defines the equity method as follows:

> The equity method is a method of accounting by which an equity investment is initially recorded at cost and subsequently adjusted to reflect the investor's share of the net assets of the associate (investee). The profit or loss of the investor includes the investor's share of the profit or loss of the associate (investee) (IFRS Manual of Accounting 2009, 27017)

While the proportionate consolidation method is similar to the accounting principles for investments in subsidiaries (IAS 27), using the equity method for joint venture interest is similar as accounting for investment in associated companies (IAS 28).

The equity method is often referred to as "one-line consolidation" because the investment is reported in a single amount on one line of the investor's balance sheet and income statement (Beams et al 2009, 47). This can be disclosed in the notes to the financial statements. One reports the investments at cost and regulate for dividends, earnings and losses. The investor accounts its share of the investee's earnings as investment income and its share of the losses as investment loss. (Beams et al. 2009, 44)

The supporters of the equity method argue that it is unsuitable to combine controlled items with jointly controlled items and those who think that venturers have significant influence, instead of joint control, in a jointly controlled entity (IFRS 2011, 1631)

6.4 Illustration of the two accounting methods

The two applicable accounting methods can be illustrated in an example by Graham, King and Morrill. Partner Limited is a company that owns 40 % of JV Incorporated. The balance sheet and income statement for both the methods is presented below.

	Partner	JV
Balance sheet		
Assets (other than investments)	$100	$30
Liabilities	50	20
Income statement		
Revenues	$60	$20
Expenses	40	15

Partner's year-end balance sheet and income statement, under proportionate consolidation and under the equity method, would appear as follows:

PROPORTIONATE CONSOLIDATION		**EQUITY METHOD**	
Partner Ltd.: Balance Sheet		**Partner Ltd.: Balance Sheet**	
Assets [100 + (40% × 30)]	$112	Other assets	$100
		Investment in JV [40% × (30 – 20)]	4
Total assets	$112	Total assets	$104
Liabilities [50 + (40% × 20)]	58	Liabilities	50
Shareholders' equity	54	Shareholders' equity	54
Liabilities plus shareholders' equity	$112	Liabilities plus shareholders' equity	$104
Partner Ltd.: Income Statement		**Partner Ltd.: Income Statement**	
Revenues [60 + (40% × 20)]	$68	Revenues	$60
Expenses [40 + (40% × 15)]	46	Expenses	40
		Share of JV income [40% × (20 – 15)]	2
Net income	$22	Net income	$22

One can see from the balance sheet that the share of joint venture assets ($12) and liabilities ($8) are included for the proportionate consolidation method while only the net of the two ($4) is presented using the equity method. The income statements show that the share of joint venture revenue ($8) and expenses ($6) are included using proportionate consolidation method while only the net of the two ($2) is presented using the equity method. Accordingly, total assets, total liabilities and revenue tend to be higher using the proportionate consolidation method, but shareholders' equity and the net income will always be the same regardless of the choice method.

7. Method

7.1 The process of our research

A method can be said to be a planned approach for carrying out a research study and answering a question (Gripsrud, Olsson and Silkoset 2004, 12). Which type of approach that is most appropriate in certain situations is dependent of several factors; the goal for the research, how "the world looks" and what kind of resources that are available. Choosing a suitable method and describing it is important for ending up with a good and reliable result. If the method for a research is not presented, it would make it difficult for the users to interpret the result and make up their own mind about it.

The process of our research can be seen in 8 steps;

1) Development of the research question
2) Choosing the research design
3) Choosing the method – qualitative or quantitative
4) Collecting the data
5) Selecting a sample
6) How to analyze (using statistics)
7) Validity and reliability of conclusions
8) Interpretations of the results

(Jacobsen 2005, 65)

7.1.1 Development of the research question

Our first step is explained more in depth in the part *2.1 Research question* of this paper. We started with a curiosity around the debate regarding the possible change of the applicable method for reporting interests in joint venture in the financial statement. Forming a joint venture is also a subject that caught our attention because of the expended use of such type of business combinations. Accordingly, we find the topic to be interesting at this time and relevant for many Norwegian companies.

A challenge is normally to find a research question that makes it possible to do an empiric research (Jacobsen 2005, 68). We have had the benefit of using Graham, King and Morrill's research question as a point of departure and adjusted this, rather than creating a completely new research. This also makes it possible for us to compare our results with the results of Graham, King and Morrill.

A natural limitation of the scope of our research has been to focus on Norwegian companies, and we have therefore chosen to study all the listed entities at Oslo Stock Exchange (including Oslo Axcess) with Norway as home-state (200 companies). As we needed to review the annual reports for all these companies, our data collection work has been extensive.

7.1.2 Choosing the research design

The research design comprises an explanation of how the process is to be so that one is able to solve the specific task (Gripsrud, Olsson and Silkoset 2004, 58). Theory of research methods normally distinguish between three main types of design; explorative design, descriptive design and causal design. Explorative design is common when the user has little knowledge to the topic and primary want to do a further research of it. The main goal for such a design could be to understand and interpret the actual phenomenon at best possible way (Gripsrud, Olsson and Silkoset 2004, 59). When using the descriptive design, the user has a fundamental understanding of the topic. The aim with this design is to describe the situation in the best possible way. A causal design can investigate possible reason-/ consequence explanations, which in other words means that one uses a kind of experiment.

There are three factors that can have an effect on the choice of research design; 1) Experience, 2) theory and 3) level of ambitions (Gripsrud, Olsson and Silkoset 2004, 70). There is not any clear choice of design for our thesis. We did not have a lot of experience with the topic, but we had access to a similar research paper which gave us fundamental understanding of the topic. There is little information regarding joint ventures and their related applicable accounting methods in Norway. However, there is a lot of available accounting theory regarding the two accounting methods. We aim only to a limited extent to explain causal relations as

part of our study. Accordingly, when applying the above described types of research design, we find our design to be closest to the descriptive type of design.

7.1.3 Choosing the method – qualitative or quantitative

A method can be divided into quantitative or qualitative and the main distinction between the two is about how the data is registered and analyzed. Qualitative methods operate with text while quantitative methods utilize numbers (Johannessen, Tufte and Christoffersen 2010, 237). Our thesis consists mainly of a quantitative method, but we have some parts which include qualitative discussions.

Statistics is normally an important factor when working with a quantitative method which is also the case for our study. A beneficial factor with statistics is that it can standardize the information and easily analyze it with computers (Jacobsen 2005, 132). Statistics also facilitates comparing results and studies and makes it possible to see correlation and deviation within the selected sample.

The qualitative part of our thesis has to do with others' opinions on this topic and mainly related to the current discussion regarding the potential new relevant legislation in Norway.

7.1.4 Collecting the data

We have used primary data for our research. All the information we have gathered has been publicly available. The source of the information is Oslo Stock Exchange, the annual reports on the websites of the companies and the database Orbis. The advantage with using Orbis is that we can get somewhat a consistent format of the data we subtract. However the disadvantage with this database was that it could be to general and that it lacked information about the joint ventures proportionate share of the assets, liabilities, revenues and expenses.

The main challenge in this part of our method was to find a centralized source of information for the data we needed for our statistic and analyzes. We looked into some databases before we ended up with using Orbis and manual reading of the

annual reports from the companies listed on the Oslo Stock Exchange. There were also large differences in what we could get out of the annual reports. Some of them where very descriptive, while others where more confusing and gave only the information they were obliged to give. At glance, the reports using proportionate consolidation had more descriptive notes to the financial statements of interest the joint venture to the financial statements. This was one of the reasons that made us limit our sample to the proportionate consolidated financial statements in order to facilitate for the conversion calculations.

7.1.5 Selecting a sample

One of the main reasons for using a quantitative method is that we want to get a representative picture of the population. (Jacobsen 2005, 276) It is desirable to get a large number of variables for the analysis as that will give a better picture of our population. Since we have not found a current and complete overview of joint ventures related to Norwegian companies, we have examined the annual reports for 2009 for all the companies listed on the Oslo Stock Exchange as a point of departure. Going through the 2009 reports we observed that 48 of the companies with Norway as home-state had participating interest(s) in joint venture(s). We extracted the ones that gave clear information of interest in joint venture. Of these companies, 12 were using proportionate consolidation method and 11 were using the equity method. To conduct a conversion into the pro forma financial statements necessary for our analysis as described under section 7.4, information that was easily available using the proportionate consolidation method was needed. Therefore we limited our sample to these companies, giving us a sample of 12 companies and 48 observations after reviewing annual reports for the years 2006-2009. This lead us to a sample that might not be large enough to give us reliable result in the regression analysis.

7.1.6 How to analyze (using statistics)

The next step in the method is to insert the data into a statistical program and analyze the information we get from this output. We used the well known computer program SPSS in our statistical analysis. We used descriptive statistics, Pearson correlation and multiple regression analysis for the statistical tests. Our

input consisted of one dependent variable and several independent variables. In our case the independent variables and the dependent variable are given, because we use the well-known DuPont model. This model disaggregates the rate of return on common shareholders' equity (ROCSE) into the components profit margin ratio (PM), total assets turnover ratio (ATO) and leverage ratio (LEV). In our analysis the dependent variable is the ROCSE and the independent variables are PM, ATO and LEV.

$$ROCSE = \frac{Net\ income}{Revenue} \times \frac{Revenue}{Average\ total\ assets} \times \frac{Average\ total\ assets}{Average\ shareholders'\ equity}$$

ROCSE = Net profit matgin × Asset turnover × Leverage

The disaggregation or decomposition of the ROCSE allows us to evaluate and determine the reasons for change in ROCSE. This decomposition tells us why a company's overall profitability, is a function of efficiency, operating profitability and financial leverage. The decomposition of ROE presents how the different ratios affect the company's profitability as measured by ROCSE (Robinson et al. 2009, 297).

The first part of the statistical analysis is descriptive statistics, which summarize information about the sample. "Descriptive statistics are statistics that are reported merely as information about the sample of observations included in the study and that are not used to make inferences about some larger populations" (Warner 2008, 1006). Here we get to know the mean and the sample standard deviation that tells us how much variation or dispersion there is from the average. Low standard deviation indicates that the data point tends to be very close to the mean. High standard deviation indicates that the data are spread out over a large range of values.

The next step of our statistical analysis was a Pearson correlation test which is "a measure of the strength of a supposed linear association between two quantitative variables, each measured on a continuous scale with units, which is so constructed that it can take values only within the range from -1 to +1" (Kinnear and Gray 2010, 617). In this kind of test we get to know the Pearson *r,* which is "a

parametric correlation statistic that provides information about the strength of relationships between two quantitative variables" (Warner 2008, 1031). We also get to know the p-values. In statistical testing, the probability, under the null hypothesis, of obtaining a value of the test statistic at least as unlikely as the value that has been calculated from the data. If the p-value is smaller than 0.05 or 0.01 the test has show significance beyond the 0.05 or the 0.01 level, respectively" (Kinnear and Gray 2010, 616)

The final, but most important statistic test was the regression analysis conducted by a multiple regression. Regression analysis with more than two independent variables is called multiple regression analysis. There are three different ways to include the independent variables; 1) simultaneous multiple regression, 2) stepwise multiple regression and 3) hierarchical multiple regression. (Johannessen 2009, 152-155). The first one is the most used regression model, which is the one we have conducted, while the two other are more controversial. The regression model was conducted by a general linear test which incorporates a number of different statistical models: ANOVA, ANCOVA, MANOVA, MANCOVA, ordinary linear regression, t-test and F-test.

According to Warner (2008) a general linear test compares full and reduced model regressions. The full model (unrestricted) is the one thought to be the most appropriate for the data. The reduced model (restricted) is the model described by the null hypothesis. One reject null hypothesis if F is large or if p-value is small. So, in our simultaneous multiple regression analysis we use F-statistics to decide whether or not to reject the reduced model in favour of the full model. In simultaneous multiple regression "all the relevant repressors are entered in the equation directly so that the test of each regression coefficient effectively put it at the end of the queue and test the ΔR^2 in the presence of all the other variables. " (Kinnear and Gray 2010, 473). Our full regression model includes all proportionate consolidation and equity method variables. Whiles, our reduced model includes only the equity method independent variables. In this way we will see if variance in ROCSE is explained better by the proportionate consolidation ratios when included with the equity method ratios.

A potential problem to this model is the case of multicollinearity. "If we have measured several variables, some of them which are highly correlated, the multiple regression packages the researcher is using may not work at all" this is the case of multicollinearity. None of the predictors should be 100 % linear combination of each other. The less they correlate the better. High correlation between the predictors leads to unstable coefficients and corresponding large p-values. It is difficult to point out which variable who explains what (Kinnear and Gray , 473).

7.1.7 Validity and reliability of conclusions

In all research is it important to evaluate the results critically. It serves little purpose to generalize from results that cannot be considered valid and reliable. The topic can be divided into internal (statistical) validity and external validity.

Statistical validity and reliability addresses the issue of generalizing from a sample to a population. When evaluating the internal validity and reliability we have asked ourselves the following questions;

- Is our sample large enough and representative for the population as we ended up with a net sample of 12 (9) companies?
- Does the deviation between the gross sample and the net sample threaten the validity and reliability of our results?
- Do the factors we measures actually measure the question to be addressed?, e.g. is the ROCSE ratio sufficient to measure decision usefulness?

After evaluating internal validity, the external validity is considered by answering the following questions:

- Can we with a sufficient degree of certainty generalize our results to the whole population – are our result significant?
- Can we generalize our results beyond our population i.e. to other countries?

7.1.8 Interpretations of the results

The final step in our method would be to examine our statistical results in context with relevant theory and the article of Graham, King and Morrill.

7.2 The Canadian study by Graham, King and Morrill 2003

Our method is significantly inspired by the equivalent study by Graham, King and Morrill of the joint ventures in Canada. Hence the following explanation of their method is almost equivalent to the method we used, which was described in part 7.1.6. Their study resulted in a report published in 2003; "Decision Usefulness of Alternative Joint Venture Reporting Methods". This report contains a section that explains their approach and scientific method. We aimed to replicate this method in our study of joint ventures and the related ventureres listed on the Oslo stock exchange.

Graham, King and Morrill document the financial statement differences and compare them in their ability to predict future profitability. As us, they compare the financial statements ratios from the two different accounting methods after having converted the proportionate consolidation balance sheets into pro forma equity method balance sheet by subtracting joint venture liabilities from the venturer's total assets and from the venturer's total liabilities. The pro-forma equity method income statements are converted from the proportionate consolidation income statements by eliminating joint venturer's revenues and expenses, and then adding the difference between the joint venturer's revenue and expenses to the venturer's other revenues and expenses (Graham, King and Morrill 2003, 127).

Graham, King and Morrill (2003) examined the effect of joint venturer's on the venturer's financial statements through ratios, and then used financial analysis techniques to find the predictive ability of return on investment from the different accounting methods. They have, as us, based their research on the Dupont Model. This model, also known as Return on Investment (ROI), disaggregates the rate of return on common shareholders' equity (ROCSE) into the components; profit margin, asset turnover and leverage ratio, as illustrated by the table below;

Return on Common Shareholders' Equity	=	Profit Margin	x	Total Assets Turnover	x	Leverage Ratio

$$\text{Return on Common Shareholders' Equity} = \frac{\text{Net Income}}{\text{Average Common Shareholder's Equity}}$$

$$\text{Profit Margin} = \frac{\text{Net Income}}{\text{Sales}}$$

$$\text{Total Assets Turnover} = \frac{\text{Sales}}{\text{Average Total Assets}}$$

$$\text{Leverage Ratio} = \frac{\text{Average Total Assets}}{\text{Average Common Shareholder's Equity}}$$

(Graham, King and Morrill 2001, 15)

Further, this thesis and the study by Graham, King and Morrill have examined the joint venturers contribution of the ventures current assets, total assets, current liabilities and total liabilities in order to see how significant the joint venture's contribution is to the venturer. The ratios are calculated twice, first using the data from the reported financial statements based on proportionate consolidation, and then using equivalent financial information from pro forma financial statements based on the equity method. For examining the predictive ability of the components of ROCSE, Graham, King and Morrill have used the following regression model;

$$ROCSE_t = a_{0(t-1)} + a_1 ROCSE_{(t-1)} + e \quad (a)$$

$$ROCSE_t = b_{0(t-1)} + b_1 ROCSE_{(t-1)} + b_2 EQPM_{(t-1)} + b_3 EQTURN_{(t-1)} + b_4 EQLEV_{(t-1)} + e \quad (b)$$

$$ROCSE_t = c_{0(t-1)} + c_1 ROCSE_{(t-1)} + c_2 PCPM_{(t-1)} + c_3 PCTURN_{(t-1)} + c_4 PCLEV_{(t-1)} + e \quad (c)$$

$$ROCSE_t = d_{0(t-1)} + d_1 ROCSE_{(t-1)} + d_2 EQPM_{(t-1)} + d_3 EQTURN_{(t-1)} + d_4 EQLEV_{(t-1)} + d_5 PCPM_{(t-1)} + d_6 PCTURN_{(t-1)} + d_7 PCLEV_{(t-1)} + e \quad (d)$$

7.3 The replication of the Graham, King and Morrill study

We collected data by going through all the annual reports to all the listed companies at Oslo Stock Exchange (OSEBX), including Oslo Axess (OAAX) for the years 2006-2009. During the review of the reports we searched for key words such as joint venture, jointly controlled entities, IAS 31, equity method and proportionate consolidation to find companies to our sample. Accordingly, we cannot guarantee that our data material is complete and that other companies than listed in our exhibit have participating interest in joint ventures. Where companies with joint ventures were detected through the search of the annual reports, we

used the database Orbis to export certain of the items we needed for the converting. To complete the data material we manually scanned the reports and their related notes for additional information not available through Orbis.

We encountered several challenges in replicating the study. First of all, Norwegian accounting practice allows both the equity method and proportionate consolidation, while Canada requires the use of proportionate consolidation. Since the equity method does not provide sufficient information to create pro forma statements based on proportionate consolidation, our sample of companies is limited to the ones that have chosen to report in accordance to the proportionate consolidation method.

7.4 Creation of pro forma financial statements showing the equity method

Graham, King and Morrill chose the model below in their method of converting the financial statement from proportionate consolidation to pro forma equity method statement;

Venturer Balance Sheet Conversion

Other Assets	+	Share of Joint Venture Assets	=	Other Liabilities	+	Share of Joint Venture Liabilities	+ Shareholders' Equity
	–	Share of Joint Venture Liabilities			–	Share of Joint Venture Liabilities	
Other Assets	+	Equity in Joint Ventures	=	Other Liabilities			+ Shareholders' Equity

Venturer Income Statement Conversion

Other Revenues	+	Share of Joint Venture Revenues	–	Other Expenses	–	Share of Joint Venture Expenses	= Net Income
	–	Share of Joint Venture Expenses			+	Share of Joint Venture Expenses	
Other Revenues	+	Income from Joint Venture	–	Other Expenses			= Net Income

This model seems somewhat simplified as it is unclear what items "other revenue" and "other expenses" consist of. We first interpreted the formula such that "other revenue" is total operating revenue (excluding income from joint venture). The reason for this is that total revenue including also non-operating revenue is not a figure that is found in the financial statements. However, in order to get to "net

income" on the other side of the equation we have to include the financial items and tax. Accordingly, in our calculation we have also considered these items and all revenue.

As net income is always the same in the two accounting methods, converting calculations is not needed for this item. Operating income is converted by subtracting the share of the joint venture income from the reported total operating income. We converted the total assets by subtracting the venturers share of the joint venture's liabilities from the total assets. Reference is also made to the explanation of the two accounting methods and example in sections 6.2 – 6.4 above for illustration of the conversion calculations.

8. Quantitative analysis

8.1 Introduction - results

As explained in the part above, concerning the method, we carried out a quantitative analysis using statistics. In this part the results from this analysis will be presented by tables where we compare certain ratios with use of the two accounting methods; proportionate consolidation and the equity method. The main part of our quantitative analysis is the regression model with the ROCSE and the related ratios profit margin, asset turnover and leverage ratio. We also present the main findings from our evaluation of the validity and reliability of our results. One of the disadvantages in our quantitative analysis is that the sample is small with only twelve companies, due to the fact that there are limited amount of companies using proportionate consolidation when accounting for interests in joint venture. Table 1 Panel A below displays our calculation of the profit margin under proportionate consolidation and the equity method for the years 2009, 2008 and 2007. Table 1 Panel B and C are calculation for year 2009.

Table 1 Panel A - Profit Margin Ratios

Company	Profit margin (PC) 2009	Profit margin (EQ) 2009	Profit margin (PC) 2008	Profit margin (EQ) 2008	Profit margin (PC) 2007	Profit margin (EQ) 2007
TELENOR ASA	6,59 %	6,64 %	8,29 %	8,34 %	20,77 %	20,90 %
REC ASA	-25,63 %	-26,58 %	37,41 %	40,37 %	20,07 %	21,26 %
AUSTEVOLL SEAFOOD ASA	8,79 %	9,31 %	4,05 %	4,12 %	14,70 %	14,82 %
AF GRUPPEN ASA	5,00 %	5,01 %	3,71 %	3,74 %	3,15 %	3,34 %
DOF ASA	18,56 %	19,11 %	2,30 %	2,30 %	6,42 %	6,55 %
SOLSTAD OFFSHORE ASA	41,03 %	46,24 %	1,22 %	1,46 %	31,71 %	34,36 %
BW OFFSHORE ASA	-2,15 %	-2,26 %	-112,29 %	-114,96 %	8,24 %	8,49 %
OLAV THON EIENDOMSSELSKAP ASA	25,90 %	27,87 %	-9,91 %	-10,36 %	184,17 %	200,60 %
HEXAGON COMPOSITES ASA	7,08 %	7,30 %	-1,28 %	-1,34 %	0,61 %	0,62 %
GC RIEBER SHIPPING ASA	4,17 %	4,31 %	-10,36 %	-10,57 %	131,25 %	140,01 %
OCEANTEAM SHIPPING ASA	-245,01 %	-716,90 %	-171,08 %	-769,74 %	-22,47 %	-22,65 %
ODFJELL SE	9,58 %	9,92 %	11,09 %	11,35 %	-0,82 %	-0,82 %

The sample contained some amounts of extreme cases with large negative net income. We wanted to see how the extreme cases affected our result so we did an analysis with the whole sample and one where we eliminated the extreme cases. Table 1 Panel A shows Oceanteam and BW Offshore as extreme cases, hence we excluded these companies. We also excluded REC since this company has a large

negative income compared to the rest. This left us with only nine companies. There was no point in eliminating all of the cases with negative net income because this would have left us with an even smaller sample. We have chosen to display the statistics without the extreme case of negative net income, because we think this portrays a better picture of the reality. The statistics of the sample including extreme case of negative net incomes is to be found in appendix 7.

Further one can see from table 1 panel A that there is little difference between equity and proportionate consolidation for the profit margins. The difference is due to lower reported sales under the equity method, but the same net income. This is as expected since net income always is equal for the two methods and sales will differ, c.f. illustration of the two methods in section 6.4 above.

8.2 The effect of joint ventures on the venturers' financial statements

Table 1 Panel B presents joint ventures's assets, liabilities, revenues and expenses in per cent of the venturers' same items accounted for by proportionate consolidation. From the means one can see that the joint ventures represent a considerable portion of the venturers respective accounts. On average the joint venturers' current assets contributes 4,57 % of the venturers' current assets, 8,05 % of the total assets, 7,47 % of the current liabilities, 11,71 % of the total liabilities, 9,27 % of revenues and 9,58 % of the expenses.

Table 1 Panel B – Ratios	**Mean**
Joint Venture Current Assets / Venturer Current Assets	4,57 %
Joint Venture Total Assets / Venturer Total Assets	8,05 %
Joint Venture Current Liabilities / Venturer Current Liabilities	7,47 %
Joint Venture Total Liabilities / Venturer Total Liabilities	11,71 %
Joint Venture Sales / Venturer Sales	9,27 %
Joint Venture Expenses / Venturer Expenses	9,58 %

** Calculations is to be found in appendix 5*

8.3 Comparison of financial ratios using proportionate consolidation and the equity method

Table 1 Panel C present the venturer financial ratios calculated by proportionate consolidation and the equity method. From the first row we observe a considerable difference in the ratio between the joint venture assets and the venturer asset under the two accounting methods. Proportionate consolidation with a mean of 8, 05 % is almost half of the equity method of 15, 05 %. Through all of the ratios one can see that equity method ratios are slightly higher than the proportionate consolidation ratios. This is not surprising since the conversion reduces assets, liabilities, sales and expenses.

Table 1 Panel C - Ratios	**Accounting Method**	**Mean**
Joint Venture Assets / Total Assets	PC EQ	8,05 % 15,05 %
Revenue / Total Assets	PC EQ	48,50 % 49,73 %
Net Income / Revenue	PC EQ	10,69 % 11,12 %
Net Income / Total Assets	PC EQ	4,07 % 6,31 %

** Calculations is to be found in appendix 5*

8.4 Results from descriptive statistics

Table 2 Panel A presents comparative descriptive statistics. The variables are ROCSE for the reporting year 2009 (t) and the variables profit margin, assets turnover and leverage ratio for the prior reporting year 2008 (t-1). We have used three years of balance sheet data and two years of income statement data to calculate reporting year ROCSE and the t-1 year asset turnover and leverage ratios. PC denotes ratios under proportionate consolidation, and EQ denotes ratios under the equity method.

Table 2 Panel A - Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROCSE 2009	9	0,023	0,319	0,156	0,101
Profit margin (PC) 2008	9	-0,104	0,111	0,010	0,073
Assets turnover (PC) 2008	9	0,090	2,059	0,630	0,609
Leverage ratio (PC) 2008	9	1,709	4,262	3,028	0,836
Profit margin (EQ) 2008	9	-0,106	0,114	0,010	0,075
Assets turnover (EQ) 2008	9	0,087	2,091	0,634	0,618
Leverage ratio (EQ) 2008	9	1,645	4,156	2,929	0,825
Valid N (listwise)	9				

The mean of ROCSE is 15, 6 % with a standard deviation of 10, 1 %. The mean of the profit margin under is 1 % for both accounting methods. At first glance this seems quite small, but if we look at the positive profit margins in Table 1 Panel C, one can see that the profit margins are small overall. Small profit margins in this year are probably due to the credit crunch. Further, one can see that the profit margins generally are larger under the equity method. This is a natural consequence of net income being the same under both methods, but revenue is generally lower under the equity method. There are many cases of the profit margin being the same, or close to equal if one does not round of any numbers, under both accounting methods. However, if we look at Table 1 Panel C one can see that profit margin on average is lower under the equity method than under proportionate consolidation. The mean assets turnover and mean leverage ratio under the two methods are almost equal, but in Table 1 Panel C one can see that in general equity method report larger ratios than proportionate consolidation.

Profit margins under both methods have lower standard deviation than the other ratios, indicating that profit margin data point tends to very close to the mean. The other ratios have a large standard deviation, indicating that the data are spread out over a large range of values.

8.5 Results from Pearson Correlation

Table 2 Panel B - Correlations

		ROCSE 2009	Profit margin (PC) 2008	Assets turnover (PC) 2008	Leverage ratio (PC) 2008	Profit margin (EQ) 2008	Assets turnover (EQ) 2008	Leverage ratio (EQ) 2008
ROCSE 2009	Pearson Correlation	1	,270	,653	.706*	,276	,637	.688*
	Sig. (2-tailed)		,482	,056	,034	,473	,065	,040
	N	9	9	9	9	9	9	9
Profit margin (PC) 2008	Pearson Correlation	,270	1	,293	,330	1.000**	,305	,285
	Sig. (2-tailed)	,482		,444	,386	,000	,425	,457
	N	9	9	9	9	9	9	9
Assets turnover (PC) 2008	Pearson Correlation	,653	,293	1	,624	,292	.999**	,625
	Sig. (2-tailed)	,056	,444		,073	,446	,000	,072
	N	9	9	9	9	9	9	9
Leverage ratio (PC) 2008	Pearson Correlation	.706*	,330	,624	1	,328	,621	.994**
	Sig. (2-tailed)	,034	,386	,073		,389	,074	,000
	N	9	9	9	9	9	9	9
Profit margin (EQ) 2008	Pearson Correlation	,276	1.000**	,292	,328	1	,304	,283
	Sig. (2-tailed)	,473	,000	,446	,389		,427	,461
	N	9	9	9	9	9	9	9
Assets turnover (EQ) 2008	Pearson Correlation	,637	,305	.999**	,621	,304	1	,621
	Sig. (2-tailed)	,065	,425	,000	,074	,427		,074
	N	9	9	9	9	9	9	9
Leverage ratio (EQ) 2008	Pearson Correlation	.688*	,285	,625	.994**	,283	,621	1
	Sig. (2-tailed)	,040	,457	,072	,000	,461	,074	
	N	9	9	9	9	9	9	9

*. Correlation is significant at the 0.05 level (2-tailed)
** Correlation is significant at the 0.01 level (2-tailed).

Table 2 Panel B presents Pearson correlation coefficients of the variables in year 2008 (t-1). The profit margin under proportionate consolidation shows a lower correlation (0,270) with the ROCSE than the equity method (0,276). The asset turnover ratios are almost equal but, but are not significantly correlated with the ROCSE. The assets turnover ratios and the leverage ratios under both accounting methods are highly and significantly correlated with each other under the two accounting methods (0.999 p-value = 0.000). This indicates that evaluations of trends in asset turnover and leverage ratios will differ little between proportional consolidation and the equity method of accounting for interest in joint venture. The profit margins are even more correlated (1.000) with each other with a significance level of 0.000. In the Canadian research the profit margin ratios was significantly correlated, but less than the other ratios suggesting that evaluation of trends in the profit margin will differ across the two accounting methods. In our case, it is the opposite where the profit margin ratios are perfectly correlated, indicating that trends in the profit margin not will differ across the two accounting

methods. Table 1 Panel A also shows little difference between the two accounting methods.

As mentioned earlier in the thesis, under part seven - method, a potential problem in this model is the case of multicollinearity. None of the predictors should be 100 % linear combination of each other. High correlation between the predictors leads to unstable coefficients and corresponding large p-values. Hence from this model it is difficult to point out which variable who explains what.

8.6 ROCSE regression results

Table 3 present the results of the regression of the combination of prior-year (2008) ROCSE and prior year DuPont ratios; profit margin, asset turnover and leverage ratio.

$$ROCSE_t = a_{0(t-1)} + a_1 ROCSE_{(t-1)} + e \quad (a)$$

$$ROCSE_t = b_{0(t-1)} + b_1 ROCSE_{(t-1)} + b_2 EQPM_{(t-1)} + b_3 EQTURN_{(t-1)} + b_4 EQLEV_{(t-1)} + e \quad (b)$$

$$ROCSE_t = c_{0(t-1)} + c_1 ROCSE_{(t-1)} + c_2 PCPM_{(t-1)} + c_3 PCTURN_{(t-1)} + c_4 PCLEV_{(t-1)} + e \quad (c)$$

$$ROCSE_t = d_{0(t-1)} + d_1 ROCSE_{(t-1)} + d_2 EQPM_{(t-1)} + d_3 EQTURN_{(t-1)} + d_4 EQLEV_{(t-1)} + d_5 PCPM_{(t-1)} + d_6 PCTURN_{(t-1)} + d_7 PCLEV_{(t-1)} + e \quad (d)$$

EQ denotes the equity method and PC denotes proportionately consolidated. There are four regression models a), b), c) and d).

Table 3

a) Regression: $ROCSE_{2009} = ROCSE_{2008}$

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.406[a]	,165	,081	,1068547

a. Predictors: (Constant), ROCSE 2008 b. Dependent Variable: ROCSE

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,023	1	,023	1,973	.190[a]
	Residual	,114	10	,011		
	Total	,137	11			

a. Predictors: (Constant), ROCSE 2008 b. Dependent Variable: ROCSE 2009

b) Regression: $ROCSE_{2009} = ROCSE_{2008} + PM_{EQ(2008)} + ATO_{EQ(2008)} + LEV_{EQ(2008)}$

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.812[a]	,659	,317	,0837268

a. Predictors: (Constant), Leverage ratio (EQ) 2008, Profit margin (EQ) 2008, Assets turnover (EQ) 2008, ROCSE 2008
b. Dependent Variable: ROCSE 2009

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,054	4	,014	1,930	.270[a]
	Residual	,028	4	,007		
	Total	,082	8			

a. Predictors: (Constant), Leverage ratio (EQ) 2008, Profit margin (EQ) 2008, Assets turnover (EQ) 2008, ROCSE 2008
b. Dependent Variable: ROCSE 2009

c) Regression: $ROCSE_{2009} = ROCSE_{2008} + PM_{PC(2008)} + ATO_{PC(2008)} + LEV_{PC(2008)}$

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.834[a]	,696	,391	,0790799

a. Predictors: (Constant), Leverage ratio (PC) 2008, Profit margin (PC) 2008, Assets turnover (PC) 2008, ROCSE 2008
b. Dependent Variable: ROCSE 2009

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,057	4	,014	2,285	.222[a]
	Residual	,025	4	,006		
	Total	,082	8			

a. Predictors: (Constant), Leverage ratio (PC) 2008, Profit margin (PC) 2008, Assets turnover (PC) 2008, ROCSE 2008
b. Dependent Variable: ROCSE 2009

d) Regression: $ROCSE_{2009} = ROCSE_{2008} + PM_{EQ(2008)} + ATO_{EQ(2008)} + LEV_{EQ(2008)} + PM_{EQ(2008)} + ATO_{EQ(2008)} + LEV_{EQ(2008)}$

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.934[a]	,872	,488	,0724930

a. Predictors: (Constant), Leverage ratio (EQ) 2008, Profit margin (EQ) 2008, Assets turnover (EQ) 2008, ROCSE 2008, Leverage ratio (PC) 2008, Assets turnover (PC) 2008
b. Dependent Variable: ROCSE 2009

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,072	6	,012	2,273	.337[a]
	Residual	,011	2	,005		
	Total	,082	8			

a. Predictors: (Constant), Leverage ratio (EQ) 2008, Profit margin (EQ) 2008, Assets turnover (EQ) 2008, ROCSE 2008, Leverage ratio (PC) 2008, Assets turnover (PC) 2008
b. Dependent Variable: ROCSE 2009

Regression a) displays the relationship between reporting year (2009) ROCSE and prior year (2008) ROCSE. From the adjusted R^2 one can see that prior year (2008) ROCSE explains 8, 1 % of current year (2009) ROCSE. In regression b) we added the equity method ratios to regression a), and the explanatory power increased to 31, 7 %. In regression c) we added proportionate consolidation ratios to the first regression model a), and the explanatory power increased to 39,1 %. By including both the equity method- and proportionate consolidation ratios the explanatory power increases even more; to 48, 8 %. These regression models suggest that proportionate consolidation provide more predictive power than the equity method ratios. However, none of the results are significant with p-values greater than a 0.05 level. Further, having calculated the ratios by hand we see that there is not a great different between the proportionate consolidation ratios and the equity method ratios. Still, the ratios under the equity method report slightly larger ratios which might give the financial statement user an impression of a company that has greater earnings.

8.7 Summary/Conclusion from the quantitative analysis

First of all, the portion contributed by the joint ventures to the venturers indicates that the accounting method for these investments may have significant influence on the venturers' financial statements. When analyzing the financial ratios for the two accounting methods there were little difference, but we found a considerable difference in the ratios between the joint venture assets and the venture asset. The ratio for the proportionate consolidation (8, 05 %) was almost half the one for the equity method (15, 05 %). It could seem like that the joint venture asset contribute more to the venturer assets when reporting using the equity method. Our result is the opposite of what Graham, King and Morrill had for this specific analysis. They got a significant larger ratio for proportionate consolidation than for the equity method. We are not sure what have caused this difference, but assume it may be due to technicality. Graham, King and Morrill may have used the net investment in joint venture as "joint venture assets" while we used the joint venture assets stated in the notes.

The results from the descriptive statistic show that the mean of the profit margin is quite low for both the accounting methods. One explanation for this could be the

global economic recession, and therefore there could be a difference between the methods that would have appeared in a normal year. The profit margin from using the equity method is in general slightly higher compared to the profit margins calculated from the proportionate consolidation figures. This is what we had expected since revenue is lower under the equity method than proportionate consolidation. The small difference indicates that it does not matter much which method is being used.

The Pearson correlation tells us to what degree our variables are related. We found that the profit margin under the proportionate consolidation method showed a lower correlation with the ROCSE than for the equity method. The result also showed that the assets turnover ratios and the leverage ratios under both accounting methods are highly correlated with each other. Further, profit margin ratios are perfectly correlated, indicating that trends in the profit margin not will differ across the two accounting methods. Table 1 Panel A also shows little difference between the two accounting methods. Hence, it does not matter much which method is being used.

We find it important to evaluate validity and reliability of our results presented, and to address the questions listed in section *7.1.7 – Validity and reliability of conclusions* concerning our method. The small sample in our quantitative analysis could make it difficult for us to give a reliable result. It has been difficult to get a sample that represents the population comprising all the joint venture investment by the companies listed at Oslo Stock Exchange. It would make it easier for us to avoid deviation of the gross sample and the net sample if there had been one accounting method. Our net sample consists of nine companies and there is significant risk that this sample is too small to generalize our results to the population. It is not any clear answer to how large a sample should be, because it depends on the situation. However, a rule of thumb could be that populations should be represented with 100 observations and minimum 30. As mentioned, our sample consists of only twelve (nine) companies. But as we said, it depends on the situation. In our case there are 200 listed companies with home-state in Norway, where approximately 48 has interests in joint ventures. Hence, our sample is limited. Accordingly, a sample of twelve (nine) companies can be seen as a small sample, hence risk of uncertain reliability/validity of the results.

As mentioned earlier in this study, the ROCSE is a popular ratio for investors and hence therefore a good tool to be seen in relation with the decision usefulness. The regression showed that proportionate consolidation provides more predictive power than for the equity method. However, it is important to take into consideration that the result is not significant since all of the p-values are under the 0, 05 level. In addition the regression analysis may have little value considering the case of multicollinearity between the ratios. This indicates that the ability of predicting current year ROCSE is the same under both methods.
Further, the ROCSE is of course not the only factor that could be considered when measuring decision usefulness and we have therefore aimed to evaluate our result in a larger context after the qualitative discussion in the sections below.

A relevant question is also whether we can generalize our results beyond our population i.e. to other countries. It should be mentioned that we through our research question have not aimed to give our results relevance beyond describing the situation for OSEBX-listed companies with home-state in Norway. Comparing our results with the results of Graham, King and Morrill, we find that some of the results are consistent. This may indicate that the results may have universal relevance. However, the two studies are clearly not sufficient to make such statement with a reasonable degree of certainty. We hope future studies can contribute to exploring this topic further.

9. Development and future prospects for the IAS 31

IAS 31 was issued in December 1990 and it has been adjusted several times after that. It was withdrawn in 2003 and replaced with a revised version which became utilized in 2005. The revised version was a result of the IASB's improvement project. In 2007, IASB presented an Exposure Draft 9 Joint Arrangements (ED 9) with the purpose of replacing the IAS 31 and SIC-13. SIC 13 (Jointly controlled entities – Non-Monetary Contributions by venturers) is an interpretation of IAS 31, and is used under the international generally accepted accounting practices (GAAP). ED 9 addresses the same terms as IAS 31, and the terminology is pretty much the same. However, the main change to IAS 31 is that it suggests removing the method of proportionate consolidation for jointly controlled entities. This change will make IFRS more consistent with the US GAAP for most industries. An example of suggested change in terminology is that the term joint venture will be replaced with joint arrangement. Further, joint arrangement can be divided into three types, as one can find in the current IAS 31, but with a change of words/terminology:

1) *Joint Operation* will replace the term *"jointly controlled operation"* utilized in IAS 31. Under joint operations parties in the arrangement use their own assets and resources, but share expenses and revenues that are incurred in the common activity.

2) *Joint asset* will replace the term *"jointly controlled asset"* which is the term used in IAS 31. The term implies that each party has the right to the asset, often with joint ownership. Each party then gets a share of the output from the assets, but they also takes a share of the cost of operating the asset.

3) *Joint venture* will replace the term *"jointly controlled entity"* which is the term used in IAS 31. A joint venture can be explained as an arrangement that is jointly controlled by the venturers. In this arrangement, each party shares profit or loss of the activity. In this arrangement, only the equity

> method will be available for accounting since the proportionate consolidation no longer will be possible to exercise.
> (Bonham et al. 2009, 852, 893-894)

However, ED 9 has not been accepted yet. There are still many proponents of proportionate consolidation; hence it is difficult to come to an international agreement on accounting method for interest in joint venture.

The main change in the suggestion presented above is to eliminate proportionate consolidation as an alternative to the equity method. In the following two sections (10 and 11) we will elaborate around the international debate and thereafter the debate from a Norwegian point of view.

10. The debate over the two accounting methods - Pros & cons

The different methods of accounting for interest in joint ventures can significantly impact the financial statements and the decision usefulness. Hence it matters which accounting method that gives the financial statement user the best information. In IFRS Manual of Accounting (2009) it is argued that the financial statement of a parent by itself do not present a full picture of its economic activities or financial position. Users of financial statements would like to get information about the parent company *and* its subsidiaries/joint ventures, in order to get an informative picture of the whole group and not only the parent. However, it is important to take in mind the different countries, industries and regulations when evaluating these beliefs.

Accounting of interest in joint venture is an issue currently being discussed as several countries are re-evaluating their accounting standards. So which accounting method portrays the correct picture of economic performance and thereby can predict future performance; the equity method or proportionate consolidation?

There are several opinions of which of the two methods that are most appropriate when accounting for joint venture. First of all, the IAS 31 does not recommend

> the use of the equity method because proportionate consolidation better reflects the substance and economic reality of a venturer' interest in a jointly controlled entity, that is to say, control over the venturer's share of the future economic benefits. Nevertheless, this standard permits the use of the equity method as an alternative treatment, when recognising interest in jointly controlled entities" (IFRS Manual of Accounting 2009, 28021).

"The primary arguments for proportionate consolidation reflect the assumption that the components provide better predictions of future profitability than the equity method's single line presentation" (Graham, King and Morrill 2003, 124). Graham, King and Morrill finds evidence of proportionate consolidation giving better predictions of future profitability than accounts using the equity method as the results of our statistical analysis also indicates. This is because proportionate consolidation discloses the disaggregated components of the joint venture. The notes display the exact share that is included in the balance sheet and income statement figures. In other words, proportionate consolidation gives a broader and more comprehensive represent of the degree of the ventureres operation and liabilities. Further the proponents of proportionate consolidation argue that it better predict the probability of the firm to generate cash in the future and the future performance of the firm (Milburn and Chant 1999, 23-24).

On the other side, the proponents of the equity method argues that the proportionate consolidation method lack a theoretical basis for recording the proportionate share of joint venture accounts because resources and claims subject to joint control do not fit with traditional definitions of assets and liabilities. Supporters of the equity method argue that there is no theoretical basis for including jointly *controlled assets and liabilities with those fully controlled by investors*. Further they argue that investors do not guarantee for the debt and financial obligations in the company, therefore one should report the net interest as a single line in the net income statements and (balance sheet). Debt and financial obligation should not be included in the investor's liabilities. In other words they mean that these obligations are the responsibility of creditors. The equity method is more creditor-oriented than the proportional consolidation

method. Proponents of the latter method argue the opposite and state that debt actually is often the responsibility of an investor (Kothavala 2003, 518-519).

On the other hand IAS 28 specifies that equity accounting is the method that should be used when one wants to reflect the investor's interests in associates. IAS 28 also defines significant influence as "the power to participate in the financial and operating decisions of the investee, but is not control or joint control over those policies". These definitions might point in the direction of the equity method being inappropriate when accounting for interest in joint ventures, considering IAS 28 focus on the associates and not joint venture.

Schroeder (2011) argues that proportionate consolidation ignores the concept of control, when the parent company controls the net assets of the subsidiary then it controls 100 % of those assets and not just a proportionate share of the subsidiaries assets and liabilities. A determination of the nature of minority interest is important because it affects the underlying premises of alternative accounting treatments for the recognition and measurement of consolidated assets and earnings (Schroeder, Clark and Cathey 2011, 528). Because of the controversy surrounding the inability to reach a consensus on the nature of minority interests some accountants advocate an alternative proportionate consolidation, which would ignore minority interest all together. Under the proportionate consolidation, the parent company would only report its share of assets and liabilities of the subsidiary entity, and no minority interest would need to be reported.

A study of "Accounting for joint ventures and associates in Canada, UK and US" by Soonawalla, shows that aggregation of joint venture and associate investments numbers, and aggregation of revenues and expenses leads to loss of forecasting and valuation relevant information. The equity method takes a too narrow approach of assets and liabilities. Based on these findings she argues that US accounting principles with a requirement of the equity method hides information that financial statement users could use to predict future earnings. This is tested by estimating relation between future earnings or current share prices and net income, joint venture earnings components, associate earnings, and their corresponding equity book value components (Soonawalla 2006, 395). Therefore,

in sum the equity method hides information that financial users could have used to better predict future earnings of a company. In addition, the equity method has given higher equity values in situation where the analyst had low knowledge of joint venture accounting rules.

These are some of the main arguments and findings from international research. Having conveyed these arguments it is natural to take a look into the arguments of Norwegian institutions. One can find two flanks in Norway as well, one being proponents for the equity method and on being proponents for proportionate consolidation.

11. NOU 2003:23 – Evaluation of the Norwegian Accounting Act of 1998

11.1 Introduction

We have viewed the international arguments and research for accounting of interest in joint ventures. Hence, it is natural to view the debate from a Norwegian point of view. Through the EEA agreement Norway is obliged to implement new European law that influences our internal market, and the Norwegian Accounting Act is considered to be such law. "Based on the EU regulation of 19th July 2002, decisions in the EEA and the Norwegian Parliament, all listed companies are required to issue consolidated financial statements in accordance with IAS/IFRS" (NOU 2003:23, 18).

IAS establishes a foundation for developing an internal market with a purpose of increasing the comparison of accounting information for listed companies. One of the conditions/assumption for a common capital market is that listed companies reports after the mutual principle of transparency and comparison. A set of commonly accepted accounting rules will increase the principle of transparency, and should evolve from international, accepted accounting standards. The obligation to follow IAS/IFRS resulted in a Governmental Task Force, established by the Norwegian Government by a Royal Decree on 7th of June 2002. The Task Force evaluated the Accounting Act of 1998 following three years of experiences in practice and resolutions in the European Union and European Economic Area to modernize the accounting directives, and to require the use of international

accounting standards for consolidated financial statements of listed companies from 2005" (NOU 2003: 23, 18).

The Task Force arranged a hearing in October 2002 about experiences around the Norwegian Accounting Act of 1998. Some of the organisations participating were;

- Den norske revisorforening
- Finansnæringens Hovedorganisasjon (FNO)
- Landslaget for regnskapskonsulenter (LRK)
- Norges Autoriserte Regnskapsførers Forening
- Norsk Bedriftsforbund
- Norsk RegnskapsStiftelse
- Norske Finansanalytikeres Forening
- Nærings- og handelsdepartementet (NLD)
- Næringslivets Hovedorganisasjon (NHO)
- The Norwegian National Authority for Investigation and Prosecution of Economic and Environmental Crime (ØKOKRIM)
- Statistisk Sentralbyrå (SSB)

The next part will present the discussion around accounting for interests in joint venture.

11.2 IAS 31 – The Norwegian debate

The Norwegian Accounting Act § 5-18 opens up for a choice of accounting method in the parent company- and group accounts when accounting for interest in joint ventures. The Norwegian Standard does not distinguish between different forms of joint ventures, in contrast with IAS 31. However, listed companies at Oslo Stock Exchange with interests in joint ventures have to report in accordance with IFRS and IAS 31. In the notes one can see the disclosure of different forms of joint ventures. Nevertheless, the Norwegian debate evolves around the use of accounting method in the parent company accounts, and there were no comments to the application of method in the group accounts. It was the application of the methods in the parent company accounts that was considered as an issue. Even though this "only" leaves us with arguments for the accounting issues in the parent company, we still found it appropriate to present these points of views.

During the hearing in October 2002 the participants; Den Norske Revisorforening, NHO, FNO, Norges Autoriserte Regnskapsføreres Forening and some listed companies at Oslo Stock Exchange, was against a proposal of the equity method being compulsory in the parent company accounts. On the other hand, ØKOKRIM and SSB supported the suggestion of the equity method to be compulsory for the parent company accounts. SSB argued in favor of the equity method and emphasized that this method gives an element of market value and that it shows reinvested earnings.

NHO argues that the equity method requires periodic calculations which involve complicated calculations. In this sense, NHO argues that it will be a disproportionate resource- and knowledge demanding task, especially for small companies. Further, a complicated system can represent prominent risk of errors, which can lead to incorrect equity capital, hence errors in the distribution of dividends/group contribution and additional tax as a consequence of incorrect estimations. NHO also presented calculations indicating a cost of 2.5 billions the first year of implementation of the equity method, followed up by 1.3 billion the second year. The cost is related to fond of valuation differences.

The main argument from The Task Force for a compulsory use of the equity method seems to be the principle of comparison. Accordingly, if the IASB proceeds with the requirement of the equity method, it would be wrong for the Norwegian GAAP to use another method. At the same time the Task Force recognises that it would be a disproportionate burden to command companies to apply the equity method in the parent company accounts. Thus, The Task Force concluded that companies should not be required to use the equity method in the parent company accounts when they have group account. The Task Force have also considered if listed companies that does not deliver group accounts should be required to use the equity method. But the conclusion is that such a requirement should not be implemented.

The purpose of the annual report is to give the financial statement user relevant information to be used when one need to take economic decisions. Both the parent company and group accounts are developed on accounting principles to give the best information about the company's performance. It is not discussed in the

preliminary work of the legislative change if the accounts have different purposes of satisfying diverse needs of information of financial statement users. The debate has its roots in the fact that different financial statement users have different needs of information depending of one look at the parent company accounts or the group accounts. From a creditor point of view the parent company accounts is to be viewed as the most important. The companies legislation contains a number of regulations with the purpose of protecting the creditors; minimum capital adequacy requirement, distribution of dividends, limitations in purchasing own stock and giving loan to shareholders. If one take a creditors pint of view, then proportionate consolidation might give the best information. From an investors point of view the equity method gives a better picture of the earnings from reported investment (NOU 2003:23, 190-191)

The Task Force emphasized that international development was pointing in direction of removing proportionate consolidation in both the parent company accounts and the group accounts. The reason is that the company under this method capitalizes items which are not under the company's control; the assets are per definition under jointly control. Hence the Norwegian Accounting Act could be outdated in a short period of time if still allowing proportionate consolidation. Hence the question was whether one should take expected future development into consideration by removing proportionate consolidation or wait for the verdict from international standards. The committee did not see it appropriate to advance expected development and remove proportionate consolidation in the parent company- and group accounts. At the point of this hearing in October 2002 there was not conducted any research on how many companies used the equity method.

In our view the following quote summarizes the defensive position of the Task Force in relation to the international debate and shows that the governing objective of Norwegian authorities seems to be consistency with international practice and thereby to facilitate comparison of listed companies' financial statements across borders:

"The Accounting Act should continue to be a framework law without the need to change the law once an IAS/IFRS is issued or changed…The Task Force has

emphasized the requirement to prepare the financial statements in conformity with good accounting practices. IAS/IFRS should continue to be basis for development of Norwegian accounting standards, whereas consideration of the special needs for small companies should be taken care of by developing separate standards for small entities" (NOU 2003: 23, 18).

11.3 Summary

There are several opinions on which accounting method to use for reporting for interests in joint ventures. One of the main arguments for the proportionate consolidation method seems to be that it gives more information and is said to be a better predictor for future profitability than does the equity method. On the other side, the proponents of the equity method argues that the proportionate consolidation method lack a theoretical basis for recording the proportionate share of joint venture accounts because resources and claims subject to joint control do not fit with traditional definitions of assets and liabilities.

It is important to have in mind that Norway is obliged through the EEA agreement to implement new European law that influence the internal market, hence a change in IAS could also lead to a change for accounting in Norway. The aim with IAS is to make it easier to compare accounting between markets. Transparency and comparison is two important factors when developing accounting principles. With this background, it is understandable that Norwegian authorities have taken a rather defensive position to the international debate and seem to value the most international consistency and ability to compare financial statements across borders.

12. Conclusion

In this thesis we have learned that the definition of business combinations by IFRS 3 applies to entities which are brought together to form a joint venture, entities under common control, business combination involving two or more mutual entities and where separate entities are brought together to form a reporting entity by contract aloe without obtaining an ownership interests. OSEBX-listed companies with ownership interests in joint ventures are required to have consolidated financial statements in accordance with IFRS. When accounting for interests in a joint venture according to the IFRS, the applicable standard is IAS 31- Interests in Joint Ventures, which gives the companies the option to choose between two accounting methods; proportionate consolidation and the equity method.

IAS 31 is being re-evaluated in several countries. In 2007, IASB presented an Exposure Draft 9 Joint Arrangements (ED 9) with the suggestion to eliminate the option to choose the proportion consolidation method when accounting for interests in joint ventures. However, ED 9 has not been accepted yet. This same topic has been debated in Norway and many other countries. One can find considerably diversity throughout countries for which accounting practice being used. On this basis, we wanted to investigate the effects on decision usefulness of the financial statements of listed companies in Norway by implementation of the suggestion to eliminate the option to use the proportionate consolidation method.

The results from our quantitative analysis show that ratios normally used by financial statement users (the components of ROSCE) are almost equal using both methods. In terms of decision usefulness for financial statement user it seems that the accounting method does not significantly matter. However, our results indicate that the proportionate consolidation method may have better ability to predict future performance of the company. But, since the ratios do not differ much and our results regarding predictability are not significant, we conclude that there is no evidence that the equity method misleads financial statement users when predicting the future performance of a company with interest in joint ventures. However, there is no doubt that the equity method masks information that could

be of use for the financial statement users. The fact that it is not required to show the disaggregated amount of revenue, expenses, assets and liabilities under the equity method makes it more difficult for a financial statement user to see the whole picture.

Our quantitative analysis showed similar results to the equivalent study by Graham, King and Morrill concerning Canadian companies. Graham, King and Morrill conclude that proportionate consolidation gives more information than the equity method. The study of Graham, King and Morrill is conducted in Canada and there are relevant differences compared with other countries. As our results are somewhat similar, this can indicate that their results could have universal relevance.

There is little doubt that the quantitative analysis does not consider all factors relevant when evaluating the effect of the choice of method on decision usefulness of financial statements. We therefore found it valuable to supplement the analysis with an international and national discussion of the two methods.

The primary arguments for proportionate consolidation reflect the assumption that the components provide better predictions of future profitability than the equity method's single line presentation. Supporters of the equity method argue that there is no theoretical basis for including jointly *controlled assets and liabilities with those fully controlled by investors*. Further they argue that investors do not guarantee for the debt and financial obligations in the company, therefore one should report the net interest as a single line in the net income statements and balance sheet. The results of this thesis indicate that there is no evidence of material differences on decision usefulness between the two methods. Further, the debate conveyed in this thesis shows that there are strong proponents on both sides. From our research we believe that the most important aspect is the fact that different financial statement user has different needs of information. From a creditor's point of view, the proportionate consolidation method might give the best information. While the equity method gives a better picture of the earnings from reported investment from an investor's point of view, according to the Norwegian preparatory legislative work (NOU 2003:23). On this basis of our qualitative analysis, we believe that each of the two accounting methods can be

considered as suitable for Norwegian companies and that the prevailing focus for legislative authorities should be on the principle of comparison and transparency.

As part of the Norwegian hearing, NHO presented calculations indicating a cost of 2.5 billions the first year of implementation of the equity method as compulsory, followed up by 1.3 billion the second year. The cost is related to fond of valuation differences. Such cost and less measurable disadvantages as a result of making one of the methods compulsory should be considered in the debate, but we believe this cost easily can be outweighed by the advantages in a long term perspective.

We base our main conclusion on the two important factors; the principle of transparency and comparison when we see the two accounting methods in relation to each other and decision usefulness. A consistent accounting practice internationally should be the prevailing objective as there does not seem to be significant disadvantages for decision usefulness by any of the methods. Consistency would make it easier for investors and other users of the financial statement to compare the values that the financial statements show. On this basis, it is our opinion that if the IASB proceeds with the suggestion to make the equity method compulsory, the Norwegian GAAP should comply with this development. The international development is currently pointing in direction of removing proportionate consolidation in both the parent company accounts and the group accounts. However, the debate is still ongoing and the outcome remains uncertain. It is clearly not ideal that the international debate is not concluded and that practice continues to be inconsistent regarding accounting method for interests in joint ventures. From a Norwegian point of view we still have little choice but to participate in the international debate and await its conclusion. Considering the costs and disadvantages related to implementation of new legislation, we would consider it unwise to make one of the two methods compulsory at this point in time as there would be considerable risk that a new change would be needed as a result of conclusion of the international debate. We therefore encourage Norwegian authorities to be engaged in the international debate going forward based on the following three principles: 1) The proportionate consolidation method seems slightly favourable compared to the equity method, however the differences on decision usefulness are not material. 2) The prevailing objective for the international debate should be to achieve consistent accounting practice world-

wide by agreeing on consistent definitions (e.g. of the term joint venture) and making one of the accounting methods compulsory, 3) It is important to conclude the international debate as soon as possible as Norwegian authorities need to consider this conclusion before making one of the accounting methods compulsory and thereby put an end to the current inconsistent practice regarding accounting for interests in joint ventures.

13 Appendix

Appendix 1 - Theory behind consolidated financial statements

Both the parent company theory and the entity theory have a unique philosophy regarding the nature and purpose of consolidated financial statements. Current practise has taken elements from both entity- and parent company theory, which is called contemporary theory (Schroeder, Clark and Cathey 2011, 525). As a result, IFRS has elements of both theories that concern how the group is established and how the financial statements of the group are consolidated (IFRS Manual of accounting by PwC 2009, 24002).

Theories of consolidation concern a group of entities where a group is a parent and all its subsidiaries. A parent is defined as an "entity that has one or more subsidiaries" (IFRS Manual of accounting by PwC 2009, 24006), while a subsidiary is defined as "an entity that is controlled by another entity" (IFRS Manual of accounting by PwC 2009, 24007). Furthermore a subsidiary can be a company, a partnership, an unincorporated association carrying on a trade or business for profit or not trading for profit and a trust. A subsidiary occurs when another company acquires a majority (more than 50 %) of its outstanding voting stocks (Beams et al 2009, 21). It is not necessary to acquire 100 % of the stocks in order to be a business combination. In cases where a company acquires less than 100 % of the stocks of a subsidiary, the companies remains as separate legal identities and have separate accounting methods.

7.2.2 Entity theory

In this theory the parent company and subsidiaries (the consolidated company) is seen as an entity separate from its owners and one considers the whole group as a single entity. Hence the focus is on the control over the consolidated group operating as a single unit, consisting of several legal entities. The purpose of consolidated financial statements in accordance with the entity theory provides information to all shareholders (parent company shareholders and outside non controlling stockholders of the subsidiaries) (Schroeder, Clark and Cathey 2011, 526). In practical terms this means that the reporting entity records 100 % of the net assets of the subsidiary and 100 % of their goodwill. Minority interest is

treated as a part of shareholders' funds, emphasizing the control the parent with its shareholders has over a subsidiary (IFRS Manual of Accounting 2009, 24002-24003). In other words, the total amount of income and equity of the subsidiary are allocated between non-controlling and controlling shareholders. An example of a standard that is consistent with the entity theory is Statements of Financial Accounting Standards (SFAS) No. 141 – Accounting for business combination, contained in the FASB ASC 805. SFAS No. 141 is consistent with the entity theory when it comes to reporting of consolidated companies: "The companies are required to report 100 % of the fair value of both the assets and liabilities of an acquired company even when there is a non-controlling interest remaining the acquired company" (Schroeder, Clark and Cathey 2011, 526).

7.2.3 Parent company theory

In this theory we have an understanding of the stockholders with an ownership interest in the net assets of the consolidated company. These statements are prepared for the benefit of the parent company stockholder and it is assumed that the minority interest/non-controlling stockholder do not benefit from these financial statements. Hence this reporting method provides information for stockholders of parent company. The net income of the consolidated group is equal to the net income of the parent company. The parent company's stockholders' interest is limited to its shareholding in subsidiaries, the minority interests are not regarded and they are shown separately. Even if the parent owns less than 100 percent of the shares in a subsidiary the reporting entity comprises 100 percent of the entire group of entities under the parent's control as its base. However, the goodwill only relates to the parents share of the subsidiary and not to the minority share. As opposed to the entity theory, non-controlling interest is not treated as an equity investment (Schroeder, Clark and Cathey 2011, 526; IFRS Manual of Accounting 2009, 24002). This theory is related to current practise and identifies the primary user of consolidated financial statements as the stockholders and creditors of the parent company (Beams et al 2009, 400). This theory reflects both the parent company theory and the entity theory.

Appendix 2 – Collected data of listed companies using proportionate consolidation: The venturers' accounts

	Sales PC 2009	Sales EQ 2009	Sales PC 2008	Sales EQ 2008	Sales PC 2007	Sales EQ 2007	Net income 2009	Net income 2008	Net income 2007
TELENOR ASA	97 650 000 000	97 014 000 000	96 167 000 000	95 581 000 000	92 473 000 000	91 899 000 000	6 437 000 000	7 974 000 000	19 203 000 000
REC ASA	9 156 000 000	8 831 000 000	8 191 000 000	7 590 000 000	6 642 043 000	6 270 630 000	-2 347 000 000	3 064 000 000	1 333 353 000
AUSTEVOLL SEAFOOD ASA	11 237 313 000	10 615 634 000	4 019 190 000	3 958 144 000	3 451 985 000	3 424 620 000	987 949 000	162 951 000	507 545 000
AF GRUPPEN ASA	5 400 967 000	5 383 735 000	5 916 440 000	5 859 238 000	5 538 421 000	5 224 592 000	269 942 000	219 359 000	174 586 000
DOF ASA	4 327 276 000	4 203 177 000	4 339 722 000	4 339 640 000	3 454 381 000	3 385 652 000	803 041 000	99 862 000	221 894 000
SOLSTAD OFFSHORE ASA	2 529 383 000	2 244 393 000	2 208 880 000	1 846 358 000	2 219 051 000	2 047 830 000	1 037 791 000	26 929 000	703 605 000
BW OFFSHORE ASA	2 353 502 480	2 242 502 480	3 319 673 130	3 242 673 130	3 580 822 920	3 476 521 860	-50 662 480	-3 727 720 660	295 069 320
OLAV THON EIENDOMSSELSKAP ASA	2 215 149 000	2 058 937 000	2 263 585 000	2 165 776 000	1 182 542 000	1 085 717 000	573 829 000	-224 380 000	2 177 923 000
HEXAGON COMPOSITES ASA	867 542 000	841 872 000	767 273 000	733 973 000	599 391 000	589 120 000	61 439 000	-9 808 000	3 627 000
GC RIEBER SHIPPING ASA	1 687 280 000	1 635 024 000	1 601 906 000	1 569 469 000	506 160 000	474 512 000	70 404 000	-165 938 000	664 355 000
OCEANTEAM SHIPPING ASA	231 937 571	79 268 227	183 518 760	40 788 524	213 625 913	211 874 163	-568 271 531	-313 965 079	-47 997 950
ODFJELL SE	7 277 837 965	7 028 941 261	14 475 496 059	14 138 413 536	6 698 051 947	6 698 051 947	697 086 939	1 605 078 755	-54 631 058

	Assets PC 2009	Assets EQ 2009	Assets PC 2008	Assets EQ 2008	Assets PC 2007	Assets EQ 2007	Assets PC 2006	Assets EQ 2006
TELENOR ASA	166 031 000 000	164 428 000 000	187 172 000 000	185 141 000 000	160 832 000 000	158 652 000 000	148 608 000 000	146 272 000 000
REC ASA	34 134 000 000	33 338 000 000	30 209 000 000	29 204 000 000	17 945 336 000	17 304 840 000	14 780 543 000	14 780 272 489
AUSTEVOLL SEAFOOD ASA	16 291 209 000	15 951 124 000	15 984 653 000	15 857 067 000	8 813 030 000	8 211 199 000	6 846 306 000	6 786 449 000
AF GRUPPEN ASA	3 059 012 000	3 051 154 000	3 194 083 000	3 173 275 000	2 553 479 000	2 430 203 000	2 155 489 000	2 019 418 000
DOF ASA	21 784 685 000	20 556 622 000	19 830 765 000	19 693 124 000	16 741 731 000	16 549 455 000	10 640 763 000	10 478 282 000
SOLSTAD OFFSHORE ASA	12 266 546 000	11 169 557 000	10 213 357 000	9 200 968 000	10 314 669 000	9 489 294 000	8 293 720 000	7 522 282 000
BW OFFSHORE ASA	13 779 618 850	13 762 618 850	16 107 728 740	16 100 728 740	16 194 225 720	16 193 125 720	5 973 007 920	5 972 707 920
OLAV THON EIENDOMSSELSKAP ASA	26 162 067 000	24 434 856 000	25 450 201 000	25 014 627 000	24 838 774 000	24 630 736 000	19 412 877 000	19 195 563 000
HEXAGON COMPOSITES ASA	758 648 000	748 393 000	806 150 000	793 946 000	711 196 000	711 196 000	800 711 000	800 711 000
GC RIEBER SHIPPING ASA	5 627 933 000	5 470 425 000	5 397 588 000	5 233 295 000	2 191 324 000	2 073 853 000	2 503 749 000	2 298 336 000
OCEANTEAM SHIPPING ASA	1 555 033 161	613 113 262	3 546 421 104	2 606 824 786	1 771 592 550	1 592 452 225	1 098 263 059	1 098 263 059
ODFJELL SE	15 537 929 304	14 721 051 539	25 503 799 409	23 157 733 096	12 855 710 915	12 271 560 129	13 724 020 065	13 156 245 792

*Appendix 3 – **Collected data from the annual reports of the joint venturers' proportionate shares of asset, liabilities, revenue and expenses***

Company name	Revenue (2009)	Revenue (2008)	Revenue (2007)	Revenue (2006)	Expences th NOK (2009)	Expences th NOK (2008)	Net income th NOK (2009)	Net income th NOK (2008)
AF Gruppen ASA - GM/PC								
Sum	17 232 000	57 202 000	313 829 000	422 963 000	-16 861 000	-51 580 000	371000 (p.b.tax)	5622000 (p.b.t)
AGR Group ASA - EQ								
Sum	359 000	10 000 000					-291 000	-11 000
Aker Biomarine ASA - EQ								
Sum					-3 000 000	-7 000 000		
Aker Solutions ASA - EQ 2009 and PC 2008								
SUM	214 000 000	1 142 000 000				-973 000 000	-36 000 000	-44 000 000
Austevoll seafood ASA - PC							Net result	Net result
SUM	621 679 000	61 046 000	27 365 000	3 096 000	-558 892 000	-89 030 000	62 787 000	-27 984 000
Bergen Group ASA - PC 2009 and GM 2008	2 120 000	13 440 000					759 000	4 233 000
Sum	1 060 000	6 720 000					379 500	2 116 500
Borgestad ASA - EQ								
Sum	6 451 000	15 647 000			-13 601 000	-54 126 000		
BW Offshore Limited - PC								
Sum	111 000 000	77 000 000	104 301 060		-77 000 000	-64 000 000	29 000 000	11 000 000
DOF ASA - PC								
Sum	124 099 000	82 000	68 729 000		-60 167 000	-187 000		
Electromagnetic Geoservices ASA (USD) - EQ							Results	Results
Sum	2 110 000	3 884 000					-1 160 000	379 000
Hexagon Composites ASA - Gross equity method = PC								
Sum	25 670 000	33 300 000	10 271 000		-24 824 000	-31 414 000	348 000	1 079 000
I.M Skaugen SE - PC								
Sum (USD, converted!)	250 599 000	157 424 000			-94 175 000	-128 667 000		24 594 000
Norsk Hydro ASA - EQ								
Sum	4 470 000 000	7 214 000 000					-1 594 000 000	-258 000 000
Odfjell SE - PC								
Sum	248 896 704	337 082 522	0		-51 123 048	-86 648 481	64 865 246	85 385 556
Olav Thon Eiendomsselskap ASA - PC								
Sum	156 212 000	97 809 000	96 825 000		-349 815 000	-70 691 000	-184 254 000	27 118 000

Company name	Non Current Liabilities th NOK (2009)	Non Current Liabilities th NOK (2008)	Total Liabilities th NOK 2009	Total Liabilities th NOK (2008)	Total Liabilities th NOK (2007)	Total Liabilities th NOK (2006)
AF Gruppen ASA - GM/PC						
Sum	3 933 000	11 174 000	7 858 000	20 808 000	123 276 000	136 071 000
AGR Group ASA - EQ						
Sum			1 859 000	4 404 000		
Aker Biomarine ASA - EQ						
Sum						
Aker Solutions ASA - EQ 2009 and PC 2008						
SUM		-263 000 000	453 000 000	70 000 000		
Austevoll seafood ASA - PC						
SUM	185 282 000	37 617 000	340 085 000	127 586 000	601 831 000	59 857 000
Bergen Group ASA - PC 2009 and GM 2008	710 000	3 193 000	3 975 000	8 662 000		
Sum	355 000	1 596 500	1 987 500	4 331 000		
Borgestad ASA - EQ						
Sum	326 997 000	183 620 000	254 974 000	208 462 000		
BW Offshore Limited - PC						
Sum	0	0	17 000 000	7 000 000	1 100 000	300 000
DOF ASA - PC						
Sum	1 198 415 000	127 627 000	1 228 063 000	137 641 000	192 276 000	162 481 000
Electromagnetic Geoservices ASA (USD) - EQ						
Sum	0	0	1 136 000	860 000		
Hexagon Composites ASA - Gross equity method = PC						
Sum	4 291 000	2 410 000	10 255 000	12 204 000		
I.M Skaugen SE - PC						
Sum (USD, converted!)	286 888 000	64 114 000	392 525 000	132 153 000		
Norsk Hydro ASA - EQ						
Sum	17 331 000 000	10 815 000 000	41 173 000 000	48 321 000 000		
Odfjell SE - PC						
Sum	722 441 208	800 960 721	816 877 765	2 346 066 313	584 150 786	567 774 273
Olav Thon Eiendomsselskap ASA - PC						
Sum	1 617 152 000	374 543 000	1 727 211 000	435 574 000	208 038 000	217 314 000

Company name	Non Current Liabilities th NOK (2009)	Non Current Liabilities th NOK (2008)	Total Liabilities th NOK 2009	Total Liabilities th NOK (2008)	Total Liabilities th NOK (2007)	Total Liabilities th NOK (2006)
AF Gruppen ASA - GM/PC						
Sum	3 933 000	11 174 000	7 858 000	20 808 000	123 276 000	136 071 000
AGR Group ASA - EQ						
Sum			1 859 000	4 404 000		
Aker Biomarine ASA - EQ						
Sum						
Aker Solutions ASA - EQ 2009 and PC 2008						
SUM		-263 000 000	453 000 000	70 000 000		
Austevoll seafood ASA - PC						
SUM	185 282 000	37 617 000	340 085 000	127 586 000	601 831 000	59 857 000
Bergen Group ASA - PC 2009 and GM 2008	710 000	3 193 000	3 975 000	8 662 000		
Sum	355 000	1 596 500	1 987 500	4 331 000		
Borgestad ASA - EQ						
Sum	326 997 000	183 620 000	254 974 000	208 462 000		
BW Offshore Limited - PC						
Sum	0	0	17 000 000	7 000 000	1 100 000	300 000
DOF ASA - PC						
Sum	1 198 415 000	127 627 000	1 228 063 000	137 641 000	192 276 000	162 481 000
Electromagnetic Geoservices ASA (USD) - EQ						
Sum	0	0	1 136 000	860 000		
Hexagon Composites ASA - Gross equity method = PC						
Sum	4 291 000	2 410 000	10 255 000	12 204 000		
I.M Skaugen SE - PC						
Sum (USD, converted!)	286 888 000	64 114 000	392 525 000	132 153 000		
Norsk Hydro ASA - EQ						
Sum	17 331 000 000	10 815 000 000	41 173 000 000	48 321 000 000		
Odfjell SE - PC						
Sum	722 441 208	800 960 721	816 877 765	2 346 066 313	584 150 786	567 774 273
Olav Thon Eiendomsselskap ASA - PC						
Sum	1 617 152 000	374 543 000	1 727 211 000	435 574 000	208 038 000	217 314 000

Company name	Revenue (2009)	Revenue (2008)	Revenue (2007)	Revenue (2006)	Expences th NOK (2009)	Expences th NOK (2008)	Net income th NOK (2009)	Net income th NOK (2008)
Oceanteam ASA - PC								
Sum (EUR-Converted!)	152 669 344	142 730 236	1 751 750		-112 860 960	-231 608 568		
Orkla ASA								
Sum	572 000 000	678 000 000			-528 000 000	-622 000 000	-20 000 000	32 000 000
Renewable Energy Corporation ASA - PC								
Sum	325 000 000	601 000 000	371 413 000		-387 000 000	-473 000 000	-1 042 000 000	48 000 000
GC Rieber Shipping ASA - PC								
Sum	52 256 000	32 437 000	31 648 000		-32 507 000	-18 570 000	10 833 000	5 475 000
Schibsted ASA - EQ								
Sum	674 000 000	672 000 000			-625 000 000	-641 000 000	30 000 000	24 000 000
Stolt-Nielsen Limited - EQ								
Sum (USD Converted!)	293 163 000	262 819 000			211 027 000	187 970 000	38 628 000	45 574 000
Solstad Offshore ASA - PC								
Sum	284 990 000	362 522 000	171 221 000		-235 932 000	-164 167 000		
Storebrand ASA - PC								
Sum	137 000 000	128 000 000	105 300 000				6 000 000	3 000 000
Telenor ASA - PC								
Sum	636 000 000	586 000 000	574 000 000	533 000 000	-685 000 000	-688 000 000	-40 000 000	-86 000 000
TTS Group ASA - EQ								
Sum	379 090 000	472 786 000					21 641 000	17 712 000
Wilh. Wilhelmsen - EQ								
Sum (USD)	1 429 000 000	2 097 000 000			-1 315 000 000	-1 941 000 000	113 000 000	48 000 000
Veidekke - EQ								
Sum	287 900 000	295 700 000			-257 200 000	-246 100 000	22 200 000	37 900 000

Company name	Total Current Assets th NOK (2009)	Total Current Assets th NOK (2008)	Fixed Assets th NOK (2009)	Fixed Assets th NOK (2008)	Total assets th NOK (2009)	Total assets th NOK (2008)	Total Current Liabilities th NOK (2009)	Total Current Liabilities th NOK (2008)	Non Current Liabilities th NOK (2009)	Non Current Liabilities th NOK (2008)
Oceanteam ASA - PC										
Sum (EUR-Converted!)	54 131 768	122 760 237	771 263 585	816 826 214	825 395 353	939 586 451	99 143 374	116 524 546	726 251 979	823 071 772
Orkla ASA										
Sum	424 000 000	368 000 000	1 358 000 000	1 107 000 000	1 782 000 000	1 475 000 000	424 000 000	368 000 000	818 000 000	483 000 000
Renewable Energy Corporation ASA - PC										
Sum	269 000 000	578 000 000	107 000 000	1 091 000 000	376 000 000	1 669 000 000	792 000 000	819 000 000	4 000 000	186 000 000
GC Rieber Shipping ASA - PC										
Sum	21 507 000	26 879 000	213 179 000	222 673 000	234 686 000	249 552 000	45 440 000	50 108 000	112 068 000	114 185 000
Schibsted ASA - EQ										
Sum	396 000 000	505 000 000	537 000 000	622 000 000	933 000 000	1 127 000 000	279 000 000	422 000 000	127 000 000	240 000 000
Stolt-Nielsen Limited - EQ										
Sum (USD Converted!)	148 262 000	148 719 000	839 404 000	746 503 000	987 666 000	895 222 000	168 059 000	208 296 000	456 712 000	354 197 000
Solstad Offshore ASA - PC										
Sum	196 056 000	204 060 000	1 121 314 000	1 085 170 000	1 317 370 000	1 289 230 000	403 352 000	287 440 000	693 637 000	724 949 000
Storebrand ASA - PC										
Sum					168 000 000	158 000 000				
Telenor ASA - PC										
Sum	203 000 000	188 000 000	1 512 000 000	1 984 000 000	1 715 000 000	2 172 000 000	135 000 000	102 000 000	1 468 000 000	1 929 000 000
TTS Group ASA - EQ										
Sum	261 180 000	311 545 000	27 506 000	27 650 000	288 686 000	339 195 000	194 725 000	251 763 000	0	0
Wilh. Wilhelmsen - EQ										
Sum (USD)	401 000 000	412 000 000	1 012 000 000	973 000 000	1 413 000 000	1 385 000 000	280 000 000	365 000 000	682 000 000	611 000 000
Veidekke - EQ										
Sum	496 300 000	814 200 000	1 050 400 000	735 100 000	1 546 700 000	1 549 300 000	129 600 000	419 200 000	1 157 000 000	810 300 000

Company name	Total Liabilities th NOK 2009	Total Liabilities th NOK (2008)	Total Liabilities th NOK (2007)	Total Liabilities th NOK (2006)
Oceanteam ASA - PC				
Sum (EUR-Converted!)	941 919 899	939 596 318	179 140 325	0
Orkla ASA				
Sum	1 242 000 000	851 000 000		
Renewable Energy Corporation ASA - PC				
Sum	796 000 000	1 005 000 000	640 496 000	270 511
GC Rieber Shipping ASA - PC				
Sum	157 508 000	164 293 000	117 471 000	205 413 000
Schibsted ASA - EQ				
Sum	406 000 000	662 000 000		
Stolt-Nielsen Limited - EQ				
Sum (USD Converted!)	624 771 000	562 493 000		
Solstad Offshore ASA - PC				
Sum	1 096 989 000	1 012 389 000	825 375 000	771 438 000
Storebrand ASA - PC				
Sum	100 000 000	104 000 000	0	0
Telenor ASA - PC				
Sum	1 603 000 000	2 031 000 000	2 180 000 000	2 336 000 000
TTS Group ASA - EQ				
Sum	194 725 000	251 763 000		
Wilh. Wilhelmsen - EQ				
Sum (USD)	962 000 000	976 000 000		
Veidekke - EQ				
Sum	1 286 600 000	1 229 500 000		

Appendix 4 – Convertion and ratios under proportionate consolidation and the equity method

	Profit margin (PC) 2009	Profit margin (EQ) 2009	Profit margin (PC) 2008	Profit margin (EQ) 2008	Profit margin (PC) 2007	Profit margin (EQ) 2007	Assets turnover (PC) 2009	Assets turnover (EQ) 2009	Assets turnover (PC) 2008	Assets turnover (EQ) 2008	Asset turnover (PC) 2007	Asset turnover (EQ) 2007
TELENOR ASA	0,0659	0,0664	0,0829	0,0834	0,2077	0,2090	0,5529	0,5550	0,5527	0,5560	0,5977	0,6028
REC ASA	-0,2563	-0,2658	0,3741	0,4037	0,2007	0,2126	0,2846	0,2824	0,3402	0,3264	0,4059	0,3909
AUSTEVOLL SEAFOOD ASA	0,0879	0,0931	0,0405	0,0412	0,1470	0,1482	0,6963	0,6675	0,3242	0,3289	0,4409	0,4567
AF GRUPPEN ASA	0,0500	0,0501	0,0371	0,0374	0,0315	0,0334	1,7275	1,7299	2,0588	2,0913	2,3523	2,3483
DOF ASA	0,1856	0,1911	0,0230	0,0230	0,0642	0,0655	0,2080	0,2089	0,2373	0,2395	0,2523	0,2505
SOLSTAD OFFSHORE ASA	0,4103	0,4624	0,0122	0,0146	0,3171	0,3436	0,2250	0,2204	0,2152	0,1976	0,2385	0,2408
BW OFFSHORE ASA	-0,0215	-0,0226	-1,1229	-1,1496	0,0824	0,0849	0,1575	0,1502	0,2055	0,2008	0,3231	0,3137
OLAV THON EIENDOMSSELSKAP ASA	0,2590	0,2787	-0,0991	-0,1036	1,8417	2,0060	0,0858	0,0833	0,0900	0,0872	0,0534	0,0495
HEXAGON COMPOSITES ASA	0,0708	0,0730	-0,0128	-0,0134	0,0061	0,0062	1,1088	1,0917	1,0113	0,9753	0,7929	0,7793
GC RIEBER SHIPPING ASA	0,0417	0,0431	-0,1036	-0,1057	1,3125	1,4001	0,3061	0,3055	0,4222	0,4296	0,2156	0,2171
OCEANTEAM SHIPPING ASA	-2,4501	-7,1690	-1,7108	-7,6974	-0,2247	-0,2265	0,0909	0,0492	0,0690	0,0194	0,1489	0,1575
ODFJELL SE	0,0958	0,0992	0,1109	0,1135	-0,0082	-0,0082	0,3547	0,3711	0,7547	0,7981	0,5040	0,5268

	Leverage ratio (PC) 2009	Leverage ratio (EQ) 2009	Leverage ratio (PC) 2008	Leverage ratio (EQ) 2008	Leverage ratio (PC) 2007	Leverage ratio (EQ) 2007	ROCSE 2009	ROCSE 2008	ROCSE 2007
TELENOR ASA	2,0342	2,0133	2,1321	2,1063	2,2524	2,2195	0,0741	0,0977	0,2796
REC ASA	1,9252	1,8713	1,7034	1,6452	1,4614	1,4328	-0,1405	0,2168	0,1191
AUSTEVOLL SEAFOOD ASA	2,5384	2,5016	2,5179	2,4439	1,9909	1,9067	0,1554	0,0331	0,1291
AF GRUPPEN ASA	3,6934	3,6765	4,2624	4,1555	4,2650	4,0301	0,3189	0,3254	0,3163
DOF ASA	3,3812	3,2702	3,6377	3,6049	3,4902	3,4449	0,1305	0,0199	0,0566
SOLSTAD OFFSHORE ASA	2,6993	2,4460	2,7684	2,5206	2,7003	2,4686	0,2492	0,0073	0,2042
BW OFFSHORE ASA	2,5404	2,5384	2,2080	2,2075	2,0972	2,0971	-0,0086	-0,5096	0,0558
OLAV THON EIENDOMSSELSKAP ASA	3,1228	2,9919	2,9084	2,8712	2,7675	2,7409	0,0694	-0,0260	0,2724
HEXAGON COMPOSITES ASA	3,4109	3,3619	3,7488	3,7186	3,6853	3,6853	0,2678	-0,0485	0,0177
GC RIEBER SHIPPING ASA	1,7835	1,7315	1,7085	1,6451	1,8956	1,7653	0,0228	-0,0747	0,5365
OCEANTEAM SHIPPING ASA	3,6966	2,3332	3,6943	2,9171	2,6523	2,4867	-0,8236	-0,4362	-0,0887
ODFJELL SE	3,3288	3,0722	3,5693	3,2966	3,2932	3,1505	0,1131	0,2987	-0,0135

Appendix 5 – Calculations to Table 1

	Telenor	REC	Austevoll	AF	DOF	Solstad	BW	Thon	Hexagon	GC	Ocean	Oddfjell	Sum	Mean
Joint Venture Current Assets / Venturer Current Assets	0,01	0,04	0,05	0,0042	0,03	0,09	0,03	0,09	0,03	0,01	0,17	0,01	0,55	4,57 %
Joint Venture Total Assets / Venturer Total Assets	0,01	0,01	0,06	0,0018	0,08	0,11	0,00	0,07	0,04	0,04	0,53	0,02	0,97	8,05 %
Joint Venture Current Liabilities / Venturer Current Liabilities	0,00	0,19	0,05	0,0021	0,01	0,34	0,01	0,01	0,04	0,09	0,01	0,13	0,90	7,47 %
Joint Venture Total Liabilities / Venturer Total Liabilities	0,02	0,01	0,04	0,0037	0,08	0,14	0,00	0,10	0,01	0,06	0,85	0,08	1,41	11,71 %
Joint Venture Sales / Venturer Sales	0,01	0,04	0,06	0,0032	0,03	0,11	0,05	0,07	0,03	0,03	0,66	0,03	1,11	9,27 %
Joint Venture Expenses / Venturer Expenses	0,01	0,04	0,06	0,0033	0,20	0,11	0,05	0,42	0,03	0,02	0,20	0,01	1,15	9,58 %

Appendix 6 – Statistics including negative net income

Table 2 Panel A - Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROCSE 2009	9	0,023	0,319	0,156	0,101
Profit margin (PC) 2008	9	-0,104	0,111	0,010	0,073
Assets turnover (PC) 2008	9	0,090	2,059	0,630	0,609
Leverage ratio (PC) 2008	9	1,709	4,262	3,028	0,836
Profit margin (EQ) 2008	9	-0,106	0,114	0,010	0,075
Assets turnover (EQ) 2008	9	0,087	2,091	0,634	0,618
Leverage ratio (EQ) 2008	9	1,645	4,156	2,929	0,825
Valid N (listwise)	9				

Correlations

		ROCSE 2009	Profit margin (PC) 2008	Assets turnover (PC) 2008	Leverage ratio (PC) 2008	Profit margin (EQ) 2008	Assets turnover (EQ) 2008	Leverage ratio (EQ) 2008
ROCSE 2009	Pearson Correlation	1	.756**	,478	,062	.901**	,492	,273
	Sig. (2-tailed)		,004	,116	,849	,000	,104	,391
	N	12	12	12	12	12	12	12
Profit margin (PC) 2008	Pearson Correlation	.756**	1	,324	-,149	.888**	,339	,017
	Sig. (2-tailed)	,004		,305	,645	,000	,281	,958
	N	12	12	12	12	12	12	12
Assets turnover (PC) 2008	Pearson Correlation	,478	,324	1	,516	,285	.999**	.599*
	Sig. (2-tailed)	,116	,305		,086	,368	,000	,040
	N	12	12	12	12	12	12	12
Leverage ratio (PC) 2008	Pearson Correlation	,062	-,149	,516	1	-,262	,507	.969**
	Sig. (2-tailed)	,849	,645	,086		,411	,092	,000
	N	12	12	12	12	12	12	12
Profit margin (EQ) 2008	Pearson Correlation	.901**	.888**	,285	-,262	1	,305	-,043
	Sig. (2-tailed)	,000	,000	,368	,411		,334	,894
	N	12	12	12	12	12	12	12
Assets turnover (EQ) 2008	Pearson Correlation	,492	,339	.999**	,507	,305	1	.594*
	Sig. (2-tailed)	,104	,281	,000	,092	,334		,042
	N	12	12	12	12	12	12	12
Leverage ratio (EQ) 2008	Pearson Correlation	,273	,017	.599*	.969**	-,043	.594*	1
	Sig. (2-tailed)	,391	,958	,040	,000	,894	,042	
	N	12	12	12	12	12	12	12

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

Appendix 7 – Results from regression model with negative net income

a) Regression: $ROCSE_{2009} = ROCSE_{2008}$

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.568[a]	,322	,254	,2581611

a. Predictors: (Constant), ROCSE 2008
b. Dependent Variable: ROCSE 2009

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,317	1	,317	4,751	.054[a]
	Residual	,666	10	,067		
	Total	,983	11			

a. Predictors: (Constant), ROCSE 2008
b. Dependent Variable: ROCSE 2009

b) Regression: $ROCSE_{2009} = ROCSE_{2008} + PM_{EQ(2008)} + ATO_{EQ(2008)} + LEV_{EQ(2008)}$

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.969[a]	,938	,903	,0929937

a. Predictors: (Constant), Leverage ratio (EQ) 2008, Profit margin (EQ) 2008, Assets turnover (EQ) 2008, ROCSE 2008
b. Dependent Variable: ROCSE 2009

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,923	4	,231	26,670	.000[a]
	Residual	,061	7	,009		
	Total	,983	11			

a. Predictors: (Constant), Leverage ratio (EQ) 2008, Profit margin (EQ) 2008, Assets turnover (EQ) 2008, ROCSE 2008
b. Dependent Variable: ROCSE 2009

c) Regression: $ROCSE_{2009} = ROCSE_{2008} + PM_{PC(2008)} + ATO_{PC(2008)} + LEV_{PC(2008)}$

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.910[a]	,829	,731	,1551114

a. Predictors: (Constant), Leverage ratio (PC) 2008, Profit margin (PC) 2008, Assets turnover (PC) 2008, ROCSE 2008
b. Dependent Variable: ROCSE 2009

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,815	4	,204	8,465	.008[a]
	Residual	,168	7	,024		
	Total	,983	11			

a. Predictors: (Constant), Leverage ratio (PC) 2008, Profit margin (PC) 2008, Assets turnover (PC) 2008, ROCSE 2008
b. Dependent Variable: ROCSE 2009

d) Regression: $ROCSE_{2009} = ROCSE_{2008} + PM_{EQ(2008)} + ATO_{EQ(2008)} + LEV_{EQ(2008)} + PM_{EQ(2008)} + ATO_{EQ(2008)} + LEV_{EQ(2008)}$

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.985[a]	,969	,916	,0868291

a. Predictors: (Constant), Leverage ratio (EQ) 2008, Profit margin (PC) 2008, Assets turnover (PC) 2008, Profit margin (EQ) 2008, ROCSE 2008, Leverage ratio (PC) 2008, Assets turnover (EQ) 2008
b. Dependent Variable: ROCSE 2009

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,953	7	,136	18,056	.007[a]
	Residual	,030	4	,008		
	Total	,983	11			

a. Predictors: (Constant), Leverage ratio (EQ) 2008, Profit margin (PC) 2008, Assets turnover (PC) 2008, Profit margin (EQ) 2008, ROCSE 2008, Leverage ratio (PC) 2008, Assets turnover (EQ) 2008
b. Dependent Variable: ROCSE 2009

Appendix 8 – Calculations for Table 1 Panel C

	Method	Telenor	REC	Austevoll	AF	DOF	Solstad	BW	Thon
Joint Venture Total Assets / Venturer Total Assets (%)	PC	1,03 %	1,10 %	5,54 %	0,18 %	8,22 %	10,74 %	0,32 %	6,60 %
	EQ	1,04 %	1,13 %	5,66 %	0,18 %	8,71 %	11,79 %	0,32 %	7,07 %
Revenue / Total Assets	PC	0,58814318	0,055146328	0,68977772	1,76559196	0,19863845	0,20620173	0,17079591	0,08467026
	EQ	0,590009	0,264892915	0,66551009	1,7644914	0,20446827	0,20093841	0,16294155	0,08426229
Net Income / Revenue (%)	PC	10,35 %	-	8,79 %	5,00 %	18,56 %	41,03 %	-2,15 %	25,90 %
	EQ	6,64 %	-	9,31 %	5,01 %	19,11 %	46,24 %	-2,26 %	27,87 %
Net Income / Total Assets (%)	PC	6,09 %	-	6,06 %	8,82 %	3,69 %	8,46 %	-0,37 %	2,19 %
	EQ	31,31 %	-	6,19 %	8,85 %	3,91 %	9,29 %	-0,37 %	2,35 %

	Method	Hexagon	CG	Ocean	Oddfjell	Sum	Mean
Joint Venture Total Assets / Venturer Total Assets (%)	PC	3,53 %	4,17 %	53,08 %	2,04 %	96,56 %	8,05 %
	EQ	3,58 %	4,29 %	134,62 %	2,15 %	180,55 %	15,05 %
Revenue / Total Assets	PC	1,14353692	0,29980456	0,14915281	0,46839175	5,81985159	0,48498763
	EQ	1,1249063	0,29888427	0,12928806	0,47747549	5,96806806	0,49733901
Net Income / Revenue (%)	PC	7,08 %	4,17 %	-	9,58 %	128,31 %	10,69 %
	EQ	7,30 %	4,31 %	-	9,92 %	133,43 %	11,12 %
Net Income / Total Assets (%)	PC	8,10 %	1,25 %	-	4,49 %	48,78 %	4,07 %
	EQ	8,21 %	1,29 %	-	4,74 %	75,76 %	6,31 %

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Preliminary

- Proportionate Consolidation vs. The Equity method-

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1 Introduction

The aim of this paper is to present our research problem, theory and method which will be used for the further study. The question whether the proportionate consolidation method should be eliminated or not has been an ongoing discussion for several years. The current legislation allows for a choice between the use of the equity method and proportionate consolidation when accounting for joint venture. We want to examine the effects an elimination of the latter method will have on the decision usefulness of financial statements. In our preliminary we have presented a draft of the research question. The literature is mainly based on articles and regulations regarding proportionate consolidation and the equity method. The method of our thesis is not yet determined, but we have examined prior research with similar research questions in order to see if this is possible to implement in a Scandinavian/European study.

2 Research question

The problem to be addresses in this preliminary is based on an exposure draft presented in third quarter of 2007 regarding change of IAS 31 Investments in joint ventures. It proposed a suggestion for elimination of the proportionate consolidation for joint ventures. Today, the Norwegian law of accounting require use of the equity method or proportionate consolidation as accounting method. As a result our temporary research question is:

What are the effects on Scandinavian/European companies of elimination of the proportionate consolidation in regards to decision usefulness on financial statements?

We want to examine accounting methods of joint ventures, which allows the use of both proportionate consolidation and the equity method. Our thesis shall

examine what effect an elimination of the proportionate consolidation have on the *decision usefulness* of financial statements. We want to do a research of Scandinavian and/or European companies. FASB have explained the concept of decision usefulness as follows: *"*For information to relevant, the information must have the capacity to help users make decisions*"* (FASB 1980).

The decision usefulness approach in accounting theory intends to help the users of financial statements by giving the user information tailored to their needs. If their decision making has improved, the information has been useful (Scott 2008:59).

There are different approaches to decision usefulness; the information approach and the measurement approach. The information approach "*recognises individual responsibility for predicting future firm performance…this approach assumes market efficiency, recognizing that market will react to useful information's from any source, including financial statements"*. In the measurement approach the *"accountants undertake a responsibility to incorporate values into the financial statements, leading to increased obligation to assist investor to predict firm performance and value"*. (Scott 2008:177)

In this paper we will not go into the discussion of which approach that yields the best financial statements. This is an endless discussion, not to be examined in this paper.

2.1 Joint ventures

The definition of joint venture varies across countries. The United States generally defines this term as "operated by a small group of businesses (the joint ventures) as a separate and specific business or project for the mutual benefit of the members of the group". Canada utilize a more specific definition; "A joint venture is an arrangement whereby two or more parties (the ventures) *jointly control* a specific business undertaking and contribute resources toward its accomplishment" (Graham, King and Morrill 2001:2).

The Norwegian accounting act § 5-18 defines joint venture as a business entity that is regulated by a contract between two or more participants in a way that they have joint control over the entity. This is almost the same definition as the IAS

which defines the term as:"A joint venture is a contractual arrangement whereby two or more parties undertake an economic activity which is subject to joint control." The Norwegian accounting act defines joint venture in accordance to IAS.

2.2 Accounting of joint ventures

The accounting methods of joint ventures differ across nations. Nations like the US, UK, Japan, Australia and New Zealand requires the equity method, while nations like Canada require the proportional consolidations method. A third alternative is to allow firms to choose between the two methods, which is the case for Norwegian companies (Graham, King and Morrill 2003:126).

The IAS 31 defines proportional consolidation as follows:

> Under proportionate consolidation, the balance sheet of the venturer includes its share of the assets that it controls jointly and its share of the liabilities for which it is jointly responsible. The income statement of the venturer includes its share of the income and expenses of the jointly

Under the equity method the investor's net interest in joint ventures are shown as a single line items in the income statement and balance sheet (Kothavala 2003:518). Hence, the investor's net investment is shown as the single line item in the balance sheet, while the investor's net income or loss is shown as a single line item on the investors's income statement (Graham et al 2003:124).

3 Background/Motivation

"This debate is neither new nor likely to be resolved quickly"
(Kothavala 22 (2003) 517-538)

The flexibility of accounting methods in joint ventures has been discussed internationally over several years. One possible reason for this could be that the use of joint ventures has expanded significantly over the last twenty years.

Different methods of accounting can significantly impact the financial statements; hence the debate is timely and important for the decision usefulness. Post Enron there has been significantly focus on investments of which liabilities remain off balance sheet (Graham, King and Morrill 2001).

There are two main articles used as inspiration for our preliminary;

(i) *Decision Usefulness of Alternative Joint Venture Reporting methods* (Graham, King and Morrill 2003)
(ii) *Proportional consolidation versus the equity method: A risk measurement perspective on reporting interests in joint ventures* (Kothavala 2003)

The Norwegian NOU 2003:23 is also an important document and inspiration to our preliminary. This document is a proposal to several changes of the Norwegian Accounting Act, where our focus specifically has been on the accounting of joint ventures. There are also different political views of which accounting method to be the most propitiate and informative to the users of financial statements.

4 Theory

The foundation of our preliminary is the International Accounting Standard (IAS) 31 – Investments in joint ventures. The International Accounting Standards Board (IASB) develops this standard. IASB is the standard setting body of the IFRS foundation which engages closely with investors, analysts, regulators, business leaders and other stakeholders around the world. (http://www.ifrs.org/The+organisation/IASCF+and+IASB.htm)

IAS (31) applies to the following:

> Accounting for all interests in joint ventures and the reporting of joint venture assets, liabilities, income, and expenses in the financial statements of venturers and investors, regardless of the structures or forms under which the joint venture activities take place. However, it does not apply to venturers' interests in jointly controlled entities held by:
>
> (a) venture capital organizations, or

(b) mutual funds, unit trusts and similar entities including investment-linked insurance funds that upon initial recognition are designated as at fair value through profit or loss or are classified as held for trading and accounted for in accordance with IAS 39 Financial Instruments: Recognition and Measurement (www.ifrs.org/NR/rdonlyres/13E1409D-1100-4AF5-A7D9-B5AC69E40CB1/0/IAS31.pdf)

The standard identifies three types of joint venture – with different kinds of requirements in the financial statements;

(i) jointly controlled operations
(ii) jointly controlled assets
(iii) Jointly controlled entities

Operations of joint ventures regard the use of the assets and resources of the ventures. The venturer's utilize their own property, plant and equipment and acquire their own expenses, liabilities and finance. When there are interests in jointly controlled operations, the financial statements shall present the assets that the venture controls, the liabilities and expenses it requires, and its share of income from sale in the joint venture.

Jointly controlled asset is characterized by joint control or joint ownership of assets related to the joint venture. A venture with interests in jointly controlled assets shall in the financial statements recognize; its share of the assets, the liabilities that is acquired, and its share of liabilities acquired with the other part relative to the joint venture and the income/ expenses from the joint venture.

A jointly controlled entity is a joint venture that involves the establishment of a corporation, partnership or other entity in which each venture has an interest. The entity operates in the same way as other entities, except that a contractual arrangement between the venturers establishes joint control over the economic activity of the entity.
(http://www.ifrs.org/NR/rdonlyres/13E1409D-1100-4AF5-A7D9-B5AC69E40CB1/0/IAS31.pdf)

A venture with interest in a jointly controlled entity should either use the proportionate consolidation or the equity method.

The Norwegian accounting act's definition of joint venture does not use the three types of joint venture, but it is not in conflict with the definition from IAS 31. There is a possibility that there will be a similar definition of three types of joint venture in a Norwegian standard setting in the future. The Norwegian accounting act requires use of either the equity method or the proportional consolidation for accounting in joint venture.

The Norwegian Accounting act § 5-18 – Investments in Joint Ventures

> Dersom to eller flere deltakere ved avtale i fellesskap kontrollerer en virksomhet (felleskontrollert virksomhet), skal deltakelse i virksomheten regnskapsføres etter generelle vurderingsregler, bruttometoden eller egenkapitalmetoden i selskapsregnskapet.Deltakelse i felleskontrollert virksomhet skal regnskapsføres etter bruttometoden eller egenkapitalmetoden i konsernregnskapet. Midlertidig deltakelse i felleskontrollert virksomhet kan likevel ikke regnskapsføres etter egenkapitalmetoden eller bruttometoden. Regnskapsføring etter bruttometoden innebærer at deltakeren regnskapsfører sin andel av inntekter, kostnader, eiendeler og gjeld.
>
> (http://lovdata.no/all/tl-19980717-056-010.html#5-18)

The use of proportionate consolidation will most likely not be an option in the company- or group accounts in the future, according to NOU 2003:23 (NOU 2003:23, 10.5.2.3) One important reason for this is that the users of proportionate consolidation recognize items on the balance sheet which is not under its control – the assets is per definition with joint control.

The proportional consolidation method can still be used in the group accounts since there are no changes in IAS 31. The current legislation makes it possible to use the proportionate consolidation method for both the company and group

accounts. But as mentioned earlier, international progress seems to head to an elimination of the proportionate consolidation. (NOU 2003:23, 10.5.3)

4.1 Research on proportional consolidation vs. the Equity Method

The article by Graham, King and Morrill 2001 and 2003 is the first study that provides empirical comparison of the proportionate consolidation and equity methods of accounting for joint ventures. Graham et al examines financial reports of Canadian Firms with interest in joint ventures to provide evidence concerning the use of proportionate consolidation and its effects relative to the use of the equity method. The article questions which of the two methods that presents the most informative statements for companies using joint venture. They compare the ability to predict accounting return on common shareholders equity of financial statements reported under the proportionate consolidation with the financial statements under the restated equity methods.

The following study by Kothavala examines the relevance of proportionate consolidation and the equity method in relation to the explained market risk. This study examines 117 Canadian companies and concludes that proportional consolidation is more risk relevant than the equity method when it comes to explaining daily price volatility. Proportional consolidation also satisfies the information needs of a broader spectrum of financial statement users.

The proportional consolidation and the equity method present the same net income, but result in differences in other parts of the financial statement. Proportionate consolidation presents the venturer's share of the assets, liabilities, expenses and revenues in the balance sheet and the income statement. The equity method shows an investment in a joint venture as single line items on the venturer's balance sheet and income statement. Under the equity method only the net investment is included as an asset. Therefore, total assets and liabilities are larger under proportionate consolidation. Thus, proportionate consolidation may provide more specific information about a joint venture than does the equity method (Graham, King and Morrill 2003)

4.2 Pros and cons

The article by Kothavala found that the proportionate method gave more useful information on predicting future probabilities for a set of Canadian firms. Still, supporters of the equity method argue that there is no theoretical basis for including jointly *controlled assets and liabilities with those fully controlled buy investors*. Further they argue that investors do not guarantee for the debt and financial obligations in the company, therefore one should report the net interest as a single line in the net income statements and (balance sheet). Debt and financial obligation should not be included in the investor's liabilities. In other words they mean that these obligations are the responsibility of creditors. The equity method is more creditor-oriented than the proportional consolidation method. Proponents of the latter method argue the opposite and state that debt actually is often the responsibility of an investor. (Kothovala 2003:518-519)

Proponents of the equity method also argue that it can conduct a misleading picture of the company's financial situation. Bierman (1991) concludes that the equity method may report unlevered and levered companies as equivalent investments. Further, assets and liabilities are larger under proportionate consolidations, the same for revenues and expenses. This implies an understatement of cash and other assets when using the equity method. While the shareholders equity and net income (loss) are the same regardless of which method being used (Graham, King and Morrill 2003:124-125)

Further, Kothavala 2003 found that proportionally consolidated accounting has higher risk relevance in explaining price volatility, which represents a broader spectrum of financial statement users. Whereas the equity method have higher risk relevance for explaining bond ratings, which might represent a smaller but more sophisticated set of users (Kothovala 2003:535).

"The primary arguments for proportionate consolidation reflect the assumption that the components provide better predictions of future profitability than the equity method's single line presentation" (Graham et al 2003:124). The primary argument for the equity method focus on the lack of a theoretical basis for recording the proportionate share of joint venture accounts because resources and

claims subject to joint control do not fit with traditional definitions of assets and liabilities.

4.3 Other considerations to the accounting standards

For instance, when exploiting the inherent flexibility of the standard, managers may choose the accounting method that maximizes reported earnings to extract private benefits from bonus contracts or choose the earnings minimizing alternative to reduce the firm's political costs. In a survey paper on the relationship between financial disclosure and stock prices, Healy and Palepu (1993) ask for more research on what type of accounting principles will facilitate the communication between the firm and the stock market. ''For example, is communication more effective when standards are detailed but rigid, as in the United States, or is it more effective to have broad guidelines, leaving managers considerable reporting discretion?'' (Healy & Palepu, 1993, pp. 8–9). The article suggests that flexible accounting standards may create noisy and confusing communication (Bøhren, Hauge and Morrill 2004).

5 Method

In this part of the preliminary we have summarized research methods in several articles in order to ensure the feasibility of a similar research in Norwegian/ Scandinavian/ European companies.

5.1 Article by Graham, King and Morrill 2003:

Graham et al 2003 restates the financial statements of the Canadian firms from proportional consolidation method to the equity method, makes it possible to compare the two methods.

They started with a sample of 158 companies from the S&O's Disclosure file of Canadian companies. The used financial report which included the keyword of "proportionate consolidation". About 50 % of these companies did not report joint ventures or did not report specific data. Graham et al examined the period from

1995-2001. They categorized their remaining companies by two digits SIC code industry. (Graham, King and Morrill 2003:127-126)

Graham et al creates pro forma equity methods from proportionate consolidation balance sheets by subtracting joint venture liabilities from the investor's total assets and liabilities. Similar for the income statements (Graham, King and Morrill 2003:127)

The research design is the DuPont Model where they calculate the rate of return on the common shareholders equity (ROCSE). The variables in their model consists of profit margin, asset turnover and leverage ratio. Each ratio is calculated twice, first using the proportionate consolidation data and then converting the financial statements into the equity method. The predictive ability is found by a set of regression models (Graham, King and Morrill 2003).

5.2 Article by Kothavala 2003:

The sample size in this study is 117 Canadian companies in the period 1995-2000. All of the companies have investments in joint ventures where at least one year of relevant data is. Financial statements data/information is collected from Compustat's Canadian Industrial Annual files. Detailed information about the investors share in the joint venture is collected from footnotes in the annual reports. Price volatility is gathered from daily stock prices in Datastream. Bond ratings are gathered from Dominon Bond Rating Service. Price volatility is measured by the standard deviation of the stock price calculated over 250 trading days. They have developed two models:

$$\text{(E) } \mathbf{RISK}_{it} = \alpha_0 + \alpha_1 \mathbf{TA}_{Eit} + \alpha_2 \mathbf{LEV}_{Eit} + \alpha_3 \mathbf{ROA}_{Eit} + \alpha_4 \mathbf{SRA}_{Eit} + \alpha_5 \mathbf{PM}_{Eit} + \alpha_6 \mathbf{VR}_{Eit} + \varepsilon_{it} \quad (1)$$

$$\text{(P) } \mathbf{RISK}_{it} = \gamma_0 + \gamma_1 \mathbf{TA}_{Pit} + \gamma_2 \mathbf{LEV}_{Pit} + \gamma_3 \mathbf{ROA}_{Pit} + \gamma_4 \mathbf{SRA}_{Pit} + \gamma_5 \mathbf{PM}_{Pit} + \gamma_6 \mathbf{VR}_{Pit} + \theta_{it} \quad (2)$$

The independent variables are total assets, total liabilities divided by shareholder equity, ROA and the standard deviation of return on total assets.

5.3 Article by Bøhren, Haug and Michalsen :

The research question in this article is: Does flexible GAAP ensure that the observed accounting method choice reflects the firm underlying economic reality in the way intended by the regulator? Financial statements are informative if they reflect the underlying economic condition of the firm. They compare the cost method and the equity method.

The sample consists of listed firms on the Oslo Stock Exchange from year 1986-1994. The also collected some data from electronic sources and hand-collected some information from annual reports, all firms were asked to supply missing information. Børen, Haug and Michalsen have made seven hypothesis which test influence, duration, size of investment, change in the investment, related operations, previous consolidation, materiality and intent and industry. They use the UN international clissification standard ISIC to assign firms to industries.

In another article Bøhren and Haug "explore to what extent firms delibilaterly manage their financial reports by exploiting the flexibility of generally accepter accounting principles". They develop a model with the following variables: concentration (fraction held by insiders), leverage, interest coverage, size, taxes, performance and industry (Bøhren and Hauge 2006: 671).

5.4 How to measure decision usefulness

There can be a challenge to measure decision usefulness. Accounting research has not succeeded in coming up with an undisputed or definite measure of the term. There has been a survey with respect to decision usefulness where user groups like investors and their advisors ranked market-tomarket fair values as most decision-useful. (http://web.ebscohost.com/ehost/detail?hid=9&sid=8a4a8cb9-1960419eb04eaa392de38409%40sessionmgr12&vid=1&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#db=bth&AN=53538864)

6 Progression/ working plan

In the following weeks our main focus will be to read more about the discussion of proportionate consolidations vs the equity method. We will specifically read

articles and literature which Graham et al and Kothavala has referred to. Then we will figure out how we can do a similar research in Norway/Scandinavia / Europe. We have to figure out which method and databases to use. Further we have to find out how to measure decision usefulness.

7 Sources/ literature to be used

Books:

Scott, William R. *Financial Accounting Theory.* Canada: Prentice-Hall.

Journals/Articles:

Graham, Roger, Raymond D. King and Cameron K. J. Morrill. 2003. *Accounting Horizons.* Decision Usefulness of Alternative Joint Venture Reporting methods, 17 (3): 123-137.

Kazbi Kothavala. 2003. *Journal of Accounting and Public Policy.* Proportional consolidation versus the equity method: A risk measurement perspective on reporting in joint ventures, 22 (2003): 517-538.

Bøhren, Øyvind, Jørgen Haug and Dag Michalsen. 2004. *The international journal of accounting.* Compliance with flexible accounting standards, 39 (2004): 1-19.

Bøhren, Øyvind and Jørgen Hauge. 2006. *The journal of Business Finance and accounting.* Managing Earnings with Intercorporate Investments, 33 (5) and (6): 671-695.

Working paper:

Graham, Roger, Raymond D. King and Cameron K. J. Morrill. 2001. *Proportionate consolidation vs the equity method: A Decision Usefulness Perspective on Reporting Interests in Joint ventures.*

Webpage:

http://www.ifrs.org/The+organisation/IASCF+and+IASB.htm

www.ifrs.org/NR/rdonlyres/13E1409D-1100-4AF5-A7D9-B5AC69E40CB1/0/IAS31.pdf

http://www.ifrs.org/NR/rdonlyres/13E1409D-1100-4AF5-A7D9-B5AC69E40CB1/0/IAS31.pdf

http://web.ebscohost.com/ehost/detail?hid=9&sid=8a4a8cb9-1960-419eb04eaa392de38409%40sessionmgr12&vid=1&bdata=JnNpdGU9ZWhvc3QtbGl2ZQ%3d%3d#db=bth&AN=53538864

Article by FASB: Reporting Interests in Joint Ventures and similiar (Milburn and Chant 1999)