

Accounting Conservatism

The association between bondholder-shareholder conflicts over dividend policy and accounting conservatism, the effect on the cost of debt and the influence of the implementation of IFRS in 2005

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Abstract

This Master Thesis contains a research on accounting conservatism for firms in French and Scandinavian countries. I have chosen for those two European samples with differences in the institutional setting and therewith, differences in the research outcomes. A similar research has already been done in the United States and for comparison a research with European samples is interesting.

For the two groups of countries a research is done on three associations. In the first place I investigated the association between accounting conservatism and bondholder-shareholder conflicts about dividend policy. Also, I investigated whether there is an association between accounting conservatism and the cost of debt. Finally, attention is given to the effect of the introduction of the International Financial Reporting Standards (IFRS) in 2005 on the mentioned associations. This is done by using a sample period before the implementation (2001-2004) and a sample period after the implementation (2005-2008).

It is interesting to know whether those associations exists, because then you get information about the benefits of being more conservative in your accounting practices. If so, you will get lower cost of debt whereby accounting conservatism might be a solution for firms with strong severity of bondholders shareholders conflicts about dividend policy.

To investigate the associations I used two regression formula's. The expectation was that the French countries would be more conservative and would face less bondholder shareholder conflicts and also would incur lower cost of debt than the Scandinavian countries. Also the expectation was that after the implementation of IFRS in 2005 these differences between the groups of countries would decrease.

The first part of the assumptions turned out to be true. There is a weak positive association between accounting conservatism and bondholder shareholder conflicts and a weak negative association between accounting conservatism and the cost of debt. To compare the results from the two sample periods a t-test is used. It turned out that there is no significant effect on the associations as a result of the introduction of IFRS.

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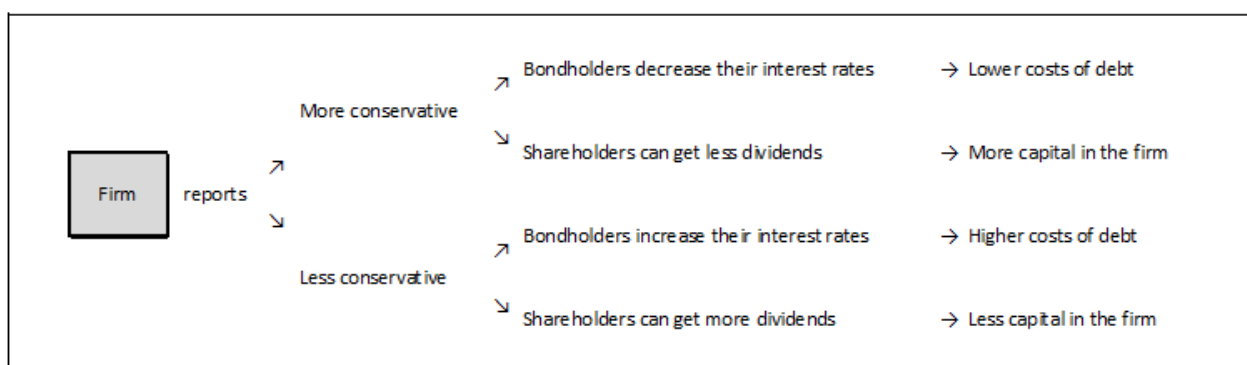
1 Introduction

1.1 Introduction of the study

Accounting conservatism has been a part of accounting practice and theory for centuries. Historical records show that accounting in medieval Europe already was conservative (Basu, 1997). Also Sterling (1970) stresses the impact of accounting conservatism on the principles of valuation in accounting. For several decades a lot of researchers have done research on the subject of accounting conservatism and proved the existence of it. In most cases the research was done to investigate the relation between accounting conservatism and another subject like earnings management, corporate governance or the cost of capital/debt. About the last one an interesting paper is written by Ahmed et al. (2002) which is about the role of accounting conservatism in mitigating bondholder-shareholder conflicts over dividend policy and in reducing cost of debt. That subject did not receive a lot of attention in earlier research.

The research is about the conflicts over dividend policy that can arise between bondholders and shareholders of a firm when the firm pays excessive dividends to the shareholders (which is an outflow of capital). The bondholders do not get dividends and thus do not profit in such a situation of payment of excessive dividends. However, when a firm gets in trouble and get payment problems, the bondholders will bear the burden. A conclusion of this is that bondholders experience dividends as a risk.. And therefore they actually don't want it and might require some ratio requirements to safeguard the continuity of the firm and therewith their interest payments and repayment of the bond.

The contradicting interests of bondholders and shareholders might lead to conflicts and therefore accounting conservatism can be a way to solve the problem. For example bondholders want more conservative accounting and in return they will cut their interest rates. If their requirements are not met, they might increase their interest rates to compensate the described risk of dividends. A firm has to find the right balance. The relation between more and less conservative reporting and the influence of it on the interest rates and available capital in the firm are shown below in the figure.



The mentioned research of Ahmed et al. (2002) was performed in the United States, but for Europe no relevant research on this topic has been found. Therefore it is interesting whether this relations exists in the European context.

Another aspect which makes it more interesting to investigate the situation in Europe is the implementation of the International Financial Reporting Standards (IFRS) in 2005. From that year all

listed companies in the European Union are required to report their consolidated statements according to those standards. In general the standards of IFRS are more based on fair value accounting than the standards of most national GAAP's (General Accepted Accounting Principles) (Ball R., 2006) and therefore you would expect less conservative accounting from 2005.

Regarding the results of the study of Ahmed et al. (2002) from the United States it looks like that there is a quite strong association between accounting conservatism and the cost of debt and the severity of bondholders-shareholders conflicts over dividend policy. Also because of the scarcity of research on this topic in Europe and the implementation of IFRS in 2005 this research will deal with the European situation.

For this research the problem is defined by the following research question:

Is there an association between bondholder-shareholder conflicts over dividend policy with accounting conservatism and the cost of debt? And has that association changed after the implementation of IFRS in 2005?

1.2 Structure of the study

This master thesis consists of three parts. The first part is a descriptive research that consists of an examination of the theoretical background, institutional setting and an extensive literature review.

A theoretical background is important for a delineation of the subject. In the first place accounting conservatism will be defined and the two kinds of accounting conservatism, conditional and unconditional, will be discussed. In the second place an elaboration of the explanations for accounting conservatism will be given. One of the reasons for conservatism is the contract theory which is based on the demand from lenders that firms report conservative. Finally, a part is about the measures of accounting conservatism.

The institutional setting is about the legal/judicial regimes, securities law, political economy and tax regimes (Bushman & Piotroski, 2006). All those factors might create incentives that influence the behavior of corporate executives, investors, regulators and other market participants. As result of that it might influence the quality of information in financial reporting and thus it can be of importance for this research.

To provide a theoretical basis for this research an extensive literature review will be presented with relevant prior research on the subject. This will cover studies on conservatism and debt as well as the topic of bondholder-shareholder conflicts over dividend policy and costs of debt.

The second part of this thesis consists of the research design and the hypothesis development. This part will connect the descriptive research to the research question and the hypotheses of the study. The sample, collected data and descriptive statistics will be discussed.

The final part of this thesis concerns the results of the research and the analyses of the outcomes. The steps taken to test the hypotheses with the regression analysis will be presented and after that the outcomes of the regression analysis will be stated and analyzed. At the end the limitations of this study will be mentioned and subsequent recommendations for further research will be made. The last chapter

deals with an overview of this master's thesis and contains a small summary. Also the main research question of this study will be answered in that last chapter.

1.3 Purpose of the study

The main purpose of this study is to investigate whether accounting conservatism solve the bondholders-shareholder conflicts over dividend policy or not. And whether this results in a change of the cost of debt. This can be split up in the following two purposes. The first purpose of this study is to investigate if there is an association between bondholders-shareholders conflicts over dividend policy and accounting conservatism for European listed companies. In this study I will provide an empirical investigation whether accounting conservatism is a solution for the conflict of interests between the bondholders and shareholders over dividend policy.

The second purpose of this study is to investigate the association between accounting conservatism and the cost of debt for European listed companies. I want to investigate if firms that are more conservative incur a lower cost of debt than companies which are less conservative. Because, if a firm is more conservative I expect that there are less bondholder-shareholder conflicts over dividend policy and therefore they might be satisfied with a lower return on their investment.

My last purpose of this study is to investigate the effect of the implementation of IFRS on the association between bondholders-shareholders conflicts over dividend policy and accounting conservatism. And of course, I will also have a look on the possible change of the association between accounting conservatism and the cost of debt after the implementation of IFRS. IFRS is more based on fair value accounting than e.g Dutch GAAP and therefore I expect that firms will report more on fair value based accounting standards and therefore will be less conservative

1.4 Relevance of the study

There are a number of empirical studies performed on accounting conservatism and debt. I present a few of them in my literature study. Most of the research was done in the USA and for some research they used firms all over the world. Also, the research of Ahmed et al. (2002) was done in the USA. Therefore, I think that it is better to use European firms, because of the little amount of research done in Europe and when I use European firms it is interesting to compare my European results with the results of Ahmed et al. (2002) from the USA.

After the implementation of IFRS the listed companies changed their reporting system from national GAAP to IFRS. I expect more use of fair value accounting by IFRS reporting and thus I expect that firms will report less conservative. Therefore, it is interesting to investigate whether the implementation of IFRS has an effect on the associations between bondholders-shareholders conflicts over dividend policy, accounting conservatism and the cost of debt.

With this study I want to emphasize the benefits of accounting conservatism with regard to the relation between firms and lenders. With empirical research I will prove the importance of accounting conservatism as a solution for bondholders-shareholders conflicts over dividend policy and as a way to reduce the cost of debt.

2 Accounting Conservatism

2.1 Usefulness of financial statement information

Financial statements are published to inform people about a company. This information should be useful otherwise it does not make sense to prepare and publish the financial statements. There have been several investigations on this topic. For example Ball and Brown (1968) investigated the usefulness of accounting income numbers. Other users of the financial statements are for example shareholders, suppliers, customers, government and lenders. Further on this paper I will examine the last one in more detail.

A way to measure the usefulness of financial statement information is to investigate the impact of new information on stock prices. When there is a significant effect on the stock prices after the disclosure of new information, it means that the information apparently was useful. Several studies (Amir & Lev, 1996 and Lev & Zarowin, 1999) have shown that there is a decrease in the value relevance of financial statement information. One of the reasons for the decline in value relevance is timeliness. Sometimes information becomes public through other sources and so the financial statement information is not timely anymore (Ball & Brown, 1968). The information is already captured in the stock prices and therefore is the information content of the financial statements not so high anymore. Another reason for the decrease in value relevance is accounting conservatism, which will be examined in the next section.

2.2 Accounting conservatism

An early definition of “accounting conservatism” is given by Bliss (1924), who explains it as “*anticipate no profit, but anticipate all losses*”. This means that profits are not acknowledged before there is a verifiable legal claim that these profits will actually be generated. However, this does not mean that absolutely no profit is being recognized before the revenues are actually received. The recognition depends on the verifiability.

Another definition given by Basu (1997) is “*the accountant’s tendency to require a higher degree of verification to recognize good news as gains than to recognize bad news as losses*”. This implies that the greater the verification needed to recognize profits, the greater the conservatism will be. This conceptual background is used quite often in literature reviews.

The last definition I would like to note is the definition given by Watts (2003). He states that “*conservatism is defined as the differential verifiability required for recognition of profits versus losses*”. This definition tallies with the other two stated above. I therefore conclude that accounting conservatism is about an asymmetry between the verification of positive and negative income streams. Profits are being reported far more prudent while losses are being overestimated.

This asymmetric treatment of profits and losses results in an understatement of net asset values which can lead to an overstatement of earnings in the future due to understatement of future expenses.

2.2.1 Types of accounting conservatism

Accounting conservatism is defined in different ways. Based upon the Basu definition debt holders and other creditors demand timelier information about bad news than good news. Ball et al. (2000) refer to this definition as income/earnings conservatism. Another definition is balance sheet conservatism which

means an understatement of shareholders' equity (Garcia Lara & Mora, 2004). Beaver and Ryan (2005) make a distinction between unconditional and conditional accounting conservatism.

Unconditional conservatism:

Unconditional conservatism is news independent (ex ante). The book value of net assets on the balance sheet is understated due to stringent recognition criteria and specific accounting methods (for measurement) being used. This means that at the beginning of an asset's life cycle a specific accounting method is being used which leads to a lower book value than the market value during the lifetime of the asset. The underlying idea is that accountants want a greater verification (stringent recognition criteria) to report assets than to report liabilities (Jarva, 2009). Beaver and Ryan (2005) give a few examples of unconditional conservatism which are also mentioned by Eisen (2003): accelerated depreciation (depreciation of property, plant and equipment that is more accelerated than economic depreciation) and historical cost accounting for positive net present value projects. An important reason for unconditional conservatism is that it is quite difficult to give a correct estimation of the assets value.

Conditional conservatism:

Conditional conservatism does depend on news (ex post) and has impact on the income statement. For example depreciations will be taken as soon and as much as possible to lower the results. An example of this that under unfavorable circumstances, the book value of assets will be written down. However, under favorable circumstances, the opposite is not true. The book value of assets will not be written up then. This asymmetric way of treating the value changes represents conservatism and has an effect on the income statement. The idea behind this is that accountants want a greater verification for reporting good news, than for reporting bad news. An example of conditional conservatism is the impairment test. This type of conservatism is an effective tool to restrain managers from reporting a higher profit in unfavorable circumstances.

2.2.2 Explanations for accounting conservatism

Accounting conservatism has been part of accounting for a lot of years and increased in the last 30 years. An important question is why accounting conservatism is still applied and what are the advantages for firms? Watts (2003), Qiang (2007) and others mention all the following explanations:

1. Contracting explanation:

This is probably the most important reason for accounting conservatism. Watts and Zimmerman (1986) argue that many contracts between parties and firms make use of accounting numbers to reduce agency costs associated with the firm. The most attentive contract is the relationship between managers and debt holders. The problem is that the firm wants to invest in very high-risk projects because then it can make the highest profits and when the project fails the loss of the firm is relatively small compared to the loss of the debt holder. On the other hand when the project becomes a success the debt holder does not share in the profits, so the debt holder suffers the consequences of any significant losses (the downside) and does not share in the profits (the upside) (Deegan & Unerman, 2006). Therefore lenders prefer most of the time conservative accounting. This is supported by Zhang (2008) who found 'that lenders lower the interest rates they charge to conservative borrowers'. I will explore on this subject later on in section 4.3.

2. Litigation explanation:

If you are overstating net assets the chance to make litigation cost is higher than when you understate your net assets. An example of litigation costs are costs of lawsuits from shareholders against a firm from which they think that the firm committed fraud in their bookkeeping. If the net assets are estimated too low, the risk of litigation costs are lower. Therefore Beaver (1993) and Watts (1993) both note that litigation under the Securities Acts in the United States encourages conservatism.

Another part of litigation costs are political cost. If a firm (particularly larger ones) generate excessive profits, government and other interest groups find that unacceptable (Deegan and Unerman, 2006). It draws the attention of them and they are wondering whether the firm does make such a profits due to excessive prices or maybe the firm damage the environment with their production. Also when the firm makes a lot of profits, trade unions may claim higher wages. Therefore it is better for some firms to report lower profits and therewith draw less attention through and therewith keep the litigation costs low.

3. Income tax explanation:

Another reason for firms to be conservative in measuring their accounting income numbers is the taxes that have to be paid. A lower accounting income number leads to lower taxes; therefore firms adopt for example depreciation methods whereby the depreciation of an asset is taken as fast as possible. Watts (1977), Watts and Zimmerman (1979) and Shackelford and Shevlin (2001) suggest that taxes are an incentive for managers to be conservative in their reporting accounting income. With the timeline of money it is important to pay the taxes as late as possible. However, this is only the case when the profit and the taxable profit are measured in the same way or more or less the same way. In some countries (e.g. The Netherlands) these two are separated.

4. Regulatory explanation:

Also politics and regulators can cause incentives to be conservative in accounting methods. Overvalued net assets lead to bigger problems than undervalued net assets. The overvaluation in the stock market is an example of what can happen if the accounting methods are not conservative (Benston, 1969). Therefore standard setters are conservative in the standard setting of accounting standards. However, due to IFRS, the last couple of years there is a trend of less conservative standards and more standards based upon fair value.

2.2.3 Measures of accounting conservatism

Accounting conservatism is a concept which is difficult to observe or to measure. So there is no one specific method which is always used to measure it. However there are a few proxies to indicate how conservative firms are. The most important ones are the following.

1. The book to market ratio:

Beaver and Ryan (2000) discuss a method where conservatism is measured by the difference between the net assets and the market value of the shares. A big difference between the two results in a low book to market ratio which indicates a high degree of conservatism. The bigger the difference between the net assets and the market value of the shares, the more conservative a company is. Using this proxy it is possible to compare the degree of conservatism of firms.

2. Skewness in cash flows and earnings

Givoly and Hayn (2000) state that the sum of cash flows in the total lifetime of a company should be equal to the sum of net income in the total lifetime of the company. The difference between cash flows from operations and net income are the accruals. After a period of negative accruals you expect a period of positive accruals. A long period of negative accruals can be a signal of conservative accounting. Such a period of negative accruals is often caused by a faster recording of expenses than the recording of profits, which results in a lower net income. In case of fast growing companies negative accruals for a longer time does not mean that there is accounting conservatism.

3. Earnings measure

This measure is sometimes called the Basu measure. Basu (1997) explains that bad news is much faster incorporated in earnings than good news. An example is a change in an asset lifetime. When the lifetime decreases an extra depreciation is processed. When the lifetime of the asset increases you do not make a positive adjustment to the value on the balance sheet, but you slow down the depreciation. To measure this different treatment he made a regression model which shows that negative earnings more often reverse in the next period than positive earnings. When you study this for several years and find out that negative earnings are more often corrected in the next period, than that points out that the costs were not fully verifiable. Positive earnings are much less corrected in the next period which indicates that they were quite sure about it. A lot of reverse negative earnings indicates that a company is conservative.

4. Earnings/stock returns relation measure

This measure is based on the assumption that asset value changes are reflected in the prices of shares on the stock market at the time these changes occur (Watts, 2003). It does not matter whether the value of the assets increase or decrease. When a firm reports conservative losses are directly reported in earnings, but to report profits more assurance is needed. Therefore you see that profits are processed later in earnings. So losses are recognized on a timelier basis than profits. For a company with negative stock returns this negativity is also reflected in earnings. However, when a firm has positive stock returns than there is a possibility that these profits are not yet recognized in earnings. When you compare stock returns and annual earnings in the same year in a regression model, than a company with a lot of negative stock returns should have a higher correlation than a company with a lot of positive stock returns.

There are a few more measures mentioned in the literature which all measure accounting conservatism in a different way with little differences, but the four measures described above are the most mentioned and the most common ones.

2.3 Accounting theory

There are two important accounting theories: the positive and the normative accounting theories. If positive accounting theories are used in research, than the investigator tries to predict and explain a particular phenomena. Normative research is not based on observations but is prescriptive. How should accounting be done in particular circumstances. Normative research is more based on the assumptions of the researcher, how they think it should be (Deegan & Unerman, 2006).

The purpose in this master thesis is to do empirical research which means that the research is based on observations. Thus, in this master thesis I make use of the positive accounting theory (PAT). PAT focuses on how accounting is used to assist in functioning of relations between the firm and the individuals that deliver resources (Deegan & Unerman, 2006).

An important theory which can be classified as a PAT is the agency theory. The theory is based upon the assumption that every party acts in their own self interest. Then there can exist asymmetrical information between two parties. For example, the agent (director of a firm) has more information about the company than the principal (owner of the firm, shareholder). When the interest of both is not the same there could be a conflict of interest. The costs related to the conflict of interest and the information asymmetry are called the agency costs (Deegan & Unerman, 2006).

A part of the agency theory, which is applicable for my research, is the debt contracting theory. The bank lends money to the firm and wants interests for that during the term of the loan. After the term of the loan ends, the bank wants the full amount of money back. However, the bank does not have as much information about the company as the directors of the company have and therefore they use safeguards to assure that they will get their money back. An example of such a safeguard is that the lender forces the firm to use conservative accounting methods in the debt contract. When a firm does not want such a safeguard, the risk for the lender is higher and therefore the firm must compensate that increased risk and pay a higher interest rate (Smith & Warner, 1979).

2.4 Summary

This chapter was about accounting conservatism. In general it can be seen as a different treatment of good news (profits) versus bad news (losses). Two types of accounting conservatism can be distinguished: unconditional and conditional. The first one concerns the balance sheet and the second one concerns the income statement. Reasons for accounting conservatism can be found in the use of accounting numbers in contracts. Also anxiety for litigation costs can be a reason for firms to report conservative. The other two explanations are the income tax explanation and the regulatory explanation.

There is no specific method which is used to measure accounting conservatism. In the literature four kinds of measures are regularly mentioned. The book to market ratio measures the difference between the book value and the market value. Another measure is to look at the lag of reported income in relation to the cash flow from operations. The so called 'Basu measure' is about the reversals of positive and negative earnings in the next period. When negative earnings reverse more often in the next period than positive earnings it indicates accounting conservatism. A last measure is also about a time lag. It measures whether positive stock returns and negative returns are reflected in the same way in earnings. In case of conservatism it takes longer before positive stock returns are recognized in earnings.

Finally, the accounting theories which are applicable for my research has been discussed. In this research I make use of the positive accounting theory which means research based upon observations. The agency theory, which is a PAT, is about the asymmetric information between principal and the agent. A part of that is the debt contracting theory. When lenders lend money to a firm they take some risks, because they do not know the same about the company as the directors. Therefore they may force the company to report conservative to be sure that there is enough money to pay the loan back.

3 Institutional setting

3.1 Introduction

In this chapter attention will be given to the institutional setting of this research through an overview of law and rules, capital markets characteristics and accounting practices in the selected countries (Stone, 2008). An interesting and useful article in relation to the institutional setting and accounting conservatism is Bushman and Piotroski (2006). They focus on the financial reporting incentives related to accounting conservatism generated by existing institutions. Therefore they examine the impact of institutions which they group around four institutional groupings: legal judicial regimes, securities law, political economy and tax regimes. After that attention will be given to the laws and regulation of the European Union concerning the institutional factors. Finally, IFRS will be discussed at the end of this chapter.

3.2 Legal/judicial regimes

Definitions of accounting conservatism are already presented in this thesis and one of them was about the reflection of good and bad news in earnings. When good news is reflected slowly and bad news really fast, a company is more conservative. Of course this differs between companies, but it also differs between countries. Bushman and Piotroski (2006) state in their study that this is due to the legal/judicial system in a country. Companies operating in countries with stronger investor protection and high quality judicial systems reflect bad news in reported earnings in a more timely fashion than companies in countries with the opposite characteristics and thus they report more conservative.

Part of the legal/judicial regime is the investor protection embodied in corporate law (Bushman & Piotroski, 2006). The protection is a mechanism that safeguards outside investors from expropriation by the controlling shareholders or managers. It is also a remedy for other violations of investor rights (Shleifer & Wolfenzon, 2002). In countries with a strong judicial system the potential litigation cost of overstating economic performance are supposed to be higher than in countries with weak judicial systems. Therefore, a country with a strong judicial system with strong investor protection will report more conservative.

La Porta et al. (2008) state that a country's legal origin is an important determinant of the country's strategy for protecting shareholders. In an earlier study they have done research on the protection of investor rights and the enforcement of those rights (La Porta, Lopez-de-Silanes, Schleifer, & Vishny, 1998). Based on that research and a statement in the study of Bushman and Piotroski (2006) the expectation is that outside investors' demand for verifiable financial information and their ability to engage in successful litigation increases with the protection of their rights. In general the protection of the rights are stronger in common law countries than in civil law countries. The first one concerns the United Kingdom and former British colonies and is more investor oriented. The civil law countries are derivatives of the roman law and consist of three families: French, German and Scandinavian. The countries in the sample of my research (French origin and Scandinavian origin) are all part of the civil law family and thus a closer look at the civil law countries is needed.

La Porta et al. (1998) have compiled a dataset of legal rules concerning the rights of investors. They divided their sample into the four groups (English-, French-, German- and Scandinavian origin countries). For those four groups they created an index as a measure of investor protection which they named the index of anti-director rights. That index reflects the following aspects of minority rights of shareholders:

1. “the ease of voting for directors;
2. the freedom of trading shares during a shareholders meeting;
3. the possibility of electing directors through a cumulative voting mechanism or proportional representation of minorities on the board;
4. the existence of a grievance mechanism for oppressed minority shareholders, such as a class - action lawsuit or appraisal rights for major corporate decisions;
5. the existence of a preemptive right to new security issues by the firm;
6. the percentage of votes needed to call an extraordinary shareholder meeting.”

(La Porta et al., 1998)

This anti-director’s index with a scale from zero to six, where a higher index means better shareholder rights, results in differences between the legal origin groups. For the French civil law countries the average value of the anti-director index is 2,33. This is a little bit lower than the average score for Scandinavian origin countries which is 3,0. Common law countries scored a four on the anti-director’s index and thus better. However they will not be incorporated in the dataset and therefore not further explained. The difference between 2,33 and 3,0 does not seem to be so much, but the first one is the lowest of the four groups and the 3,0 of the Scandinavian countries scored the second position. Here we can conclude that at least the shareholder protection is better in Scandinavian origin countries than in French origin countries.

La Porta et al. (1998) also had a look at creditors’ rights. Therefore they created also an index which is the creditor rights index. Creditors’ rights in case of reorganization and liquidation are taken into account. The results of that index show that again the rights of the creditors in the French origin countries are less protected than in the Scandinavian origin countries (1,58 vs. 2,0).

Those two indices together show that the outside investors (shareholders and creditors) are better protected in the Scandinavian origin countries. This should have an impact on their willingness to pay for financial assets such as equity and debt. When their rights are better protected you expect that more of the profits of the firm’s comes to them either as interest or dividend.

3.3 Securities law

As a consequence of legal origin a prediction is that investors protection encourages the development of financial markets (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2000). When investors are better protected from expropriation, then they are willing to pay more for securities which makes it more attractive for entrepreneurs to issue these securities. Therefore, La Porta et al. (2000) state that countries which protect shareholder better have more valuable stock markets and also better protection of creditors leads to larger credit markets.

We saw that investor protection differs across countries. However an improvement of it is not easy, because that requires radical changes in the legal system. Securities, company and bankruptcy laws need to be amended (La Porta et al., 1998). One of those laws is also a topic in the research of Bushman and Piotroski (2006). They quote La Porta et al. (2003) that “the nature and structure of existing securities law vary widely across countries”. And thus this might have an impact on the financial reporting incentives and therewith on the accounting numbers.

In the first place they document that securities laws are adopted by countries in an effort to supplement the incentives for good behavior which rely on the reputational capital of issuers, distributors and auditors and from general legal mechanisms grounded in tort and contract law.

Further they state that there are basically two hypotheses about the value of adopting securities laws: the private enforcement hypothesis and the public enforcement hypothesis.

The first hypothesis has to do with securities laws and the cost of private contracting. Due to the securities laws contracts of private contracting are standardized and liability rules for false or missing disclosure to investors are clarified. An example of the standardizing contracts is mandatory disclosures in a prospectus. By explicitly describing the obligations of all parties and the corresponding burdens of proof, the costs of the parties and the cost of establishing liability can be reduced.

The public enforcement hypothesis is for the gaps left by the private enforcement hypothesis. When the private enforcement incentives are not sufficient to evoke honesty from issuers, then the gaps have to be filled by a public enforcer. Bushman and Piotroski (2006) mention four aspects which are important to public enforcement of the public enforcer.

1. “freedom from political interference;
2. investigative powers;
3. scope to impose non-criminal sanctions;
4. scope to impose criminal sanctions.”

(Bushman & Piotroski, 2006)

The relation to accounting conservatism is that a public enforcer could create a regulatory environment which encourages conservative reporting practices. A reason for this can be that public enforcers do not want negative political consequences of their financial reporting standards. For example, when there are financial reporting scandals they rather have been conservative when the cause of the scandals is an overstatement of assets and profits. In that case the political consequences are less severe than when the financial reporting would have been less conservative. Actually, the regulators are self-interested (Bushman & Piotroski, 2006). Another possible reason that Bushman and Piotroski (2006) explain in their study is the increase in demand for verifiable accounting information due to the reductions in the cost of private contracting brought about by strong securities law.

3.4 Political economy

There are two broad views of government participation in financial markets. In the first place political theories. In this view the government acquires control of banks and enterprises in order to provide employment, subsidies and other benefits to supporters. In exchange they receive political contributions, votes, et cetera (Bushman & Piotroski, 2006). The other view about government participation is related to the underdevelopment of economic institutions. Thereby, is it not possible for banks to play a crucial role in development. Hence, government ownership of the bank is necessary for development. Further, it is seen as dealing with market imperfections. For the benefit of the society the state has the duty to intervene or nationalize poor performing firms.

The question is what this has to do with accounting conservatism. It depends on the motives of the government why they interfere in the market. If it is from the point of a self serving government with politicians seeking for evidence that the company is profitable in order to expropriate the owners wealth. In that case managers might make the choice of reporting conservative. Another view in this setting is that the self serving government pressures the company to tilt their reporting decisions. The last reason mentioned in the previous paragraph might result in optimistic reporting decisions to look healthier and therewith prevent their company of government intervention.

In general civil law countries are associated with higher government ownership (La Porta, Lopez-de-Silanes, & Shleifer, 2008). Further, the assumption is that French origin countries have more active governments and thus they will have more government interventions in the market. This assumption is confirmed in the study of La Porta et al. (2008) where they state that French legal origin countries have more entry and labor regulation, higher state ownership of enterprises. Bushman and Piotroski (2006) find that, if there is a risk of expropriation by the government, the firms accounting practices tend to be less conservative. Given that French origin countries have generally more government intervention in the market than the companies in the Scandinavian countries, than they should report less conservative.

3.5 Tax regimes

The tax regime of a country might have influence on the degree of conservatism in reporting. To the degree that financial and tax reporting are linked, Bushman and Piotroski (2006) state that the demand for conservative reporting to minimize the present value of tax payments will be increasing in the firm's expected tax burden. They also mention that tax can be another mechanism to extract wealth from companies and shareholders. Therefore managers have, due to tax regimes, incentives to use conservative accounting practices. Bushman and Piotroski (2006) find that taxation may have a more prominent impact on accounting practices in smaller and less developed economies.

3.6 European laws and regulations

After describing the four institutional groupings: legal judicial regimes, securities law, political economy and tax regimes, the question raises whether those institutional factors differ a lot between the countries. Even more, because most of them are member of the European union and therefore they are subjected to the European law.

However, this has only influence if there are laws and/or regulation on this topic. And if there are laws and/or regulations they should be mandatory to all members. So, even before the question about more or less differences between countries in their institutional setting can be answered, an answer should be found on the question if there are laws and/or regulations and if they are mandatory.

The European Union law consist of three parts (treaties, laws and court judgements) and operates next to the legal systems of the member states. It directly influences member states law and in case of conflicts between the European law and the national law of a member state the European law takes precedence.

The legislation acts of the European Union come in the form of regulations and directives. The difference between those two is that the first one becomes law in every member state after enforcement and overrules the national law. The second one is based upon a certain result which should be achieved and the member state are free in what way they realize that specific goal.

In 1976 the second EEC Directive appeared and concerned coordination measures which apply to capital protection provisions. Those provisions are applied by coordination measures to mainly listed companies (e.g. in the Netherlands: de naamloze vennootschap). You should expect that after the appearance of such a directive the differences between the capital protection of countries will fade away. Obviously, that is not the case. The anti-director rights index of La Porta et al. (1998) showed that there are still differences. A possible reason for this is partly given by Schutte-Veenstra et al. (2005). They state that the Second EEC Directive overregulate in some cases which make the provisions unworkable and in other cases the Second EEC Directive leaves things unregulated. Because of that it is possible that countries regulate such issues in their own national law. Concerning the overregulation it might be possible that countries with strong public enforcement comply the Second EEC Directive better than companies in which the public enforcement is weaker. Regarding the two groups of countries it is more likely that the investors in the Scandinavian countries are better protected, because the anti-directors index score is higher.

3.7 International Financial Reporting Standards

The last part of this chapter is about the International Financial Reporting Standards (IFRS) which is also a subject of the research of this thesis. IFRS are standards issued by the International Accounting Standards Board (IASB) since April 2001. IFRS consist of IAS which were issued by the International Accounting Standards Committee (IASC) (the predecessor of the IASB) from 1973 till 2001, IFRS issued by the IASB since 2001 and SIC and IFRIC which are interpretations of the standards (Nandakumar et al., 2010).

All listed companies in the European Union are required to prepare their consolidated financial statements in accordance with these standards for the years beginning on or after January 1, 2005. Before that date all countries had their own General Accepted Accounting Principles (GAAP) and therefore it was difficult to compare the financial statements from the different countries. The implementation of IFRS does not mean that the financial statements are comparable without making adjustments. The companies in the different countries use the same framework now, but due to e.g. options for valuation, adjustments are still necessary to make financial statements comparable.

Ball (2006) mentions that IFRS are designed to:

1. “reflect economic substance more than legal form;
2. reflect economic gains and losses in a more timely fashion;
3. make earnings more informative;
4. provide more useful balance sheets; and
5. curtail the historical Continental European discretion afforded managers to manipulate provisions, create hidden reserves, “smooth” earnings and hide economic losses from public view.”

A major feature of IFRS standards is fair value accounting. A lot of the standards deal with fair value and both, IASB and FASB have the intention to expand this over time. The fundamental case in favor of fair value accounting is that most economists think that fair value incorporates more information into the financial statements (Ball, 2006). However, conditions for that are that there exist observable market

prices that can not be materially influenced by managers or the existence of independently observable, accurate estimates of liquid market prices.

By incorporating more information in the financial statements, IFRS make them more informative and therewith probably more valuable for investors. Also it has advantages for purposes of contracting with lenders, managers and other parties (Ball, 2006).

However Ball (2006) sees also some problems with the fair value accounting of IFRS. In practice market liquidity might be a potential problem. When there are no liquid market prices available fair value accounting becomes “mark to model” accounting, which means that companies report estimates of market prices. In that case managers can influence the choice of models and/or the parameter estimates. So, by illiquidity of the market there may be influence of managers to manipulate fair value estimates.

Another issue in relation to IFRS is how it actually worked out. A study of Jermakowicz and Gornik-Tomaszewski (2006) is about the implementation of IFRS by companies in the European Union. They examine the process of implementing IFRS by European publicly traded companies and what the impact of that implementation is on the financial statements. It turns out that most of the respondents would not have implemented IFRS if it was not mandatory, but now that it is required by the EU regulation they implemented IFRS in the accounting system across the entire organization. A last notion of Jermakowicz and Gornik-Tomaszewski (2006) is that most companies do not expect to lower their cost of capital by the use of IFRS. This is confirmed by an empirical research of Daske (2004) with a large set of pre-adopters of IFRS. Daske (2004) finds no supporting evidence for the claim that financial reporting under internationally accepted standards lowers the cost of capital. Daske et al. (2008) conclude that there is a decrease in firm’s cost of capital, but only if they account for the possibility that the effects occur prior to the adoption date of IFRS.

The results are not really convincing and show a mixed picture. That’s exactly what (Hail et al., 2007) state in their research. Their descriptive analyses indicate that the effects of IFRS reporting are likely to be modest. Further, they mention that the effects of the mandatory IFRS period is weaker than the effect for the early adopters period. Finally they mention that changes in the cost of capital are not solely attributable to the implementation of IFRS. Many EU countries have changed their enforcement and government regimes in and around 2005.

Armstrong et al. (2009) examined the European stock market reactions to sixteen events associated with the adoption of IFRS in Europe. They find that, in line with the expectations of investors, the IFRS improve the information environment for firms which had lower information quality before the implementation of IFRS. They find the same results for banks. However, for firms in code law countries a negative reaction is observed. This might be due to weaker enforcement of accounting standards.

Overall, Armstrong et al. (2009) conclude that investors expect a lowering of information asymmetry and an increase of information quality by adopting IFRS. They leave it to the future whether that expectations are fulfilled or not. If so, than this will result in a decrease of the cost of capital.

3.8 Summary

By the use of the institutional groupings legal judicial regimes, securities law, political economy and tax regimes of Bushman and Piotroski (2006) attention has been given to the institutional setting of this

research. It turned out that there are differences in legal origin which have influence on the degree of conservatism of companies in countries. Also the development of the market with respect to investor and shareholder protection and enforcement of law has influence. In 1976 the Second EEC Directive appeared which has to be implemented by the member states in such a way that the goal of it will be achieved. Herewith should the capital rights of investors become more equal in the member states. However La Porta et al. (1998) still find differences between the groupings and therefore I can state that the Second EEC Directive might have had the effect of convergence, but that there still remains differences the groups of countries. At the end IFRS has been discussed. An advantage which is also a disadvantage is fair value accounting. It is sensitive for influenced estimates, but with market prices and good estimates it is perceived as more informative information by the investors which may result in lower cost of capital.

In the next chapter a literature study will be presented with relevant articles concerning the (sub)topics in this research.

4 Literature study

4.1 Introduction

In the previous chapters the topic of this research is discussed and background information has been presented. In this literature study, that is based on empirical research, previous studies on the topic will be reviewed. In this chapter I will first review some articles about the relation between conservatism and debt followed by some articles about accounting conservatism and the cost of debt. The last articles that will be reviewed are about the influence of institutional characteristics of countries on conservatism and the consequences of the implementation of IFRS. At the end I give a short summary and conclusion about this chapter.

4.2 Prior research on the relation between conservatism and debt

A few researchers have done research on the relation between conservatism and debt. Two recent studies about the subject are the ones of Beatty and al. and Ball et al. The first one of Beatty, Weber and Yu (2008) is about debt contract that demands conservatism. The second one of Ball, Robin and Sadka (2008) deals with the contracting theory and the value relevance theory. Those two studies are examined below.

Beatty et al. (Conservatism and Debt, 2008) investigate the relation between conservatism and debt contracts. In many studies this relation has been proved. For example, Watts (2003) gives a detailed description about the relation between debt contracts and conservatism. As mentioned earlier in this paper, lenders demand conservative accounting of firms. In this study they argue that when the agency costs of debt are too high and when litigation, tax and equity demands for conservatism are low, than conservative contract modifications are implemented. When the agency cost of debt is high, it is important for the lender that the firm reports conservative. But if other reasons for conservatism (tax reasons for example) are low, than the firm do not report conservative from itself and the lender must enforce this. The lender can enforce conservative reporting through conservative covenants in debt contracts. The conservative contracts modifications in their paper are income escalators.

Income escalators are systematic adjustments that exclude a percentage of positive income when the current covenant threshold is determined (Beatty, Weber, & Yu, 2008). An example of an income escalator is a covenant in a debt contract that states that net assets should be at least one million dollar and that this amount grows with fifteen percent of net income every year. In this way a company can only spend eighty five cent of every euro of net income and has to save fifteen cent of every euro of net income to meet the covenants of the debt contracts. This avoids that firms take too much risk by unwarranted distributing of dividend or a purchase of own shares which leads to a low equity which leads to more risk for lenders. In case that the company faces losses, there will be no growth of the amount stated in the covenant, but also no decline.

The study of Beatty et al. (2008) covers the period 1994-2004. Their sample consists of 2096 firms which are located in the USA. They want to predict the degree of conservatism with the income escalators. Other variables which are taken into account are proxies for litigation demand, tax demand and equity holder demand. At the moment that a firm does not report conservative enough in the opinion of lenders, they will use income escalators to enforce more conservatism.

The main point which is pointed out in this study is that when standard setters like FASB would make accounting standards which are less conservative (e.g. more use of fair value), banks and other lenders will make use of income escalators or other covenants to compensate the decreased conservative accounting standards.

This is also a conclusion of the research of Ball, Robin and Sadka (Is financial reporting shaped by equity markets or by debt markets? An international study of timeliness and conservatism, 2008). Where Beatty et al. (2008) investigated the relation between accounting conservatism and debt covenants, Ball et al. (2008) investigated the relation between conservatism and the debt and equity market. They base their research on two theories which are the contracting theory and value relevance theory. The first one implies that especially conditional conservatism arises because lenders demand that firms recognize losses faster than gains. Thus, lenders demand more conservatism to reduce their downside risk. The other theory is based on value relevance and has to do with the equity market. The theory states that there is a symmetrical relation between earnings and stock returns. The financial statements should give information that help shareholders in their investment decision.

These two theories are contradictory, because lenders desire more conditional conservatism but shareholders want more neutral financial reporting what can be achieved with more fair value accounting. A firm reports more neutral when the valuation on the balance sheet corresponds more with the real value of the assets. So, conservatism and neutral financial reporting are contradictory.

They also investigate whether the size of the equity and debt market influences the degree of conservatism. The assumption is that the larger a debt market, the more conservative financial reporting is desired. The market size is measured with the gross national product of a country.

The study of Ball et al. (2008) covers the period 1993-2003. The research is done in 22 countries and their sample is 80272 fiscal years. Ball et al. (2008) conclude that the debt markets demand conditional conservatism in the financial statements. Companies fulfill this demand from the lender. However, this results in unfulfilled demand of the equity market. They want more neutral reporting and less conservatism. Ball et al. (2008) finally conclude that the contracting theory is more important than the value relevance theory.

Besides this, they conducted research on the influence of the size of the market. The analysis of the data shows that the debt market size has influence. The larger a debt market in a country is, the more conditional conservatism is demanded from the lenders. For the equity market there was no significant relation found.

Ball et al. (2008) show the importance of conditional conservatism for the debt market. Lenders can make requirements in the debt contract whereby borrowers have to report conservative. This is exactly the conclusion of the research of Beatty et al. (2008) that income escalators are used to enforce firms to report conservative. Ball et al. also showed that this demand for conservatism by lenders prevail the demand for neutral financial reporting by the equity market.

4.3 Prior research on accounting conservatism and the cost of debt

In the previous part it has become clear that researchers are unanimous that there exist a relation between conservatism and debt. The next question which should be answered is what the influence is of this relation on the cost of debt. If there exists a strong relation than the cost of debt might decrease. Some studies that are about this subject are examined below.

Zhang (The contracting benefits of accounting conservatism to lenders and borrowers, 2008) continues with the idea that providers of money demand for a certain level of accounting conservatism. He also assumes that if the demand is not met by the accounting standards, the desired level of accounting conservatism will be met by the implementation of covenants.

Based upon those assumptions, Zhang (2008) takes a closer look at the benefits of accounting conservatism to lenders and borrowers. In a lot of studies the benefits of conservatism to lenders are examined and in a few studies the benefits to borrowers are briefly mentioned.

Zhang shows with this empirical study that borrowers benefit ex-ante of accounting conservatism, because interest rates will be lower. On the other hand do lenders benefit ex-post, because the downside risk reduces. This is because a company which is more conservative is more likely to violate the covenants. Zhang (2008) explains it with the following example. Suppose a covenant states that debt divided by EBITDA (earnings before interest, taxes, depreciation and amortization) is not allowed to exceed three. At the moment that a company faces a bad year, EBITDA will decrease and the ratio will probably exceed three and therewith violate the covenant. A firm with conservative accounting methods is more likely to have a lower EBITDA, because they recognize and process losses earlier. In that way the covenant will be earlier violated. When a covenant is violated it is a signal for a lender who can anticipate on it and take steps. For example an increase of the interest rates to compensate the increased risk.

So Zhang (2008) shows in his study that conservative borrowers will violate covenants earlier and that this has advantages for the lenders, because they get sooner an ex-post signal and then they can take action. One thing that we have to mention here is that borrowers should not have the opportunity to manage their earnings as soon as it is likely that they are going to violate covenants. In that case the ex-post advantage of the lender could be gone. However, in other studies several benefits of conservatism to the lender are mentioned, like reducing the downside risk. So when there is earnings management and the benefit described above does not exist anymore to lenders, it does not mean that the lenders have no benefits anymore.

The research of Zhang (2008) covers the period 1994-2003 and consists of 327 USA firms. Zhang investigates how the degree of conservatism predicts the cost of debt. Zhang proves that firms which are more conservative have lower interest rates.

In the conclusion the author states that besides the benefits of accounting conservatism to lenders there also are benefits to the borrowers. This is because the more conservative a company is, the lower the interest rate will be. So, both, lenders and borrowers, benefit of a more conservative way of drafting the financial statements. By figuring out what the best balance of accounting conservatism is they should take

into account that there are also other users of the financial statements for whom more accounting conservatism may be negative.

Zhang (2008) showed that there are benefits of accounting conservatism to lenders and borrowers. Li (Accounting conservatism and cost of capital: International analysis, 2009) studied the degree of conservatism of financial reporting systems in countries all over the world and therewith on the influence of it. She had a look if there is a relation between the degree of conservatism of the financial reporting system and the cost of capital in the country. The result of the research is that the more conservative a country's financial reporting system is, the lower the average cost of capital is.

The uniqueness of this research is that not only the cost of debt is examined, but also the cost of equity. Creditors have an interest in the degree of conservatism of firms so that they have a prevention/protection of excessive dividends distribution. For equity holders it is important that a firm is conservative to reduce the information asymmetry between managers and shareholders. This is contradictory with the conclusion of Ball et al. (2008) because they emphasize that equity holders do not want conservative reporting, but more neutral financial reporting. The managers have incentives to overstate unverifiable gains and understate unverifiable losses. Accounting conservatism can partly prevent this information asymmetry, because the interests of managers are less served.

The research of Li (2009) covers the period 1991 and 2006 and the sample size is 140.774 firm years for the cost of debt and 62.292 firm years for the cost of equity. In this study 31 countries are examined on the degree of conservatism of the financial reporting systems. Therefore Li (2009) used several measures of conservatism and also different measures of the cost of capital. All analyses resulted in the same conclusion that conservative accounting standards in a country lead to lower costs of capital.

The importance of neutral financial information to standard setters has increased the last few years. This is also due to fair value accounting. Conservatism has just the opposite effect and results in less neutral financial information. In this research it is demonstrated that conservatism has its benefits by reducing the average cost of capital.

In addition to the different demands of the lenders and the equity market Ahmed et al. (Accounting Conservatism and Cost of Debt: An Empirical Test of Efficient Contracting, 2000) examined the role of accounting conservatism on mitigating bondholders-shareholders conflicts over dividend policy. Therefore they used the following definition of accounting conservatism: "accounting conservatism is the extent to which *net assets are persistently understated relative to their market values*". To measure this they use the book to market ratio which is described earlier in this paper.

For their study they have two hypotheses. The first states that firms that face more bondholders-shareholders conflicts are more conservative. Shareholders are primarily focused on yield and dividends. A firm can pay a lot of dividends which can lead to a transfer of wealth from bondholders to shareholders, because in case of problems too much dividend has been paid to the shareholders and the assets left for the bondholders have less value. The second one is about the negative relation between accounting conservatism and the cost of debt.

They use four proxies which are: operating uncertainty, leverage, dividend payout and fixed asset intensity. The last one turns out to be not of significant influence on accounting conservatism. For the second hypothesis they use the Standard and Poor's senior debt ratings as proxy for the cost of debt. They find out that there exists a strong relation between the cost of debt and accounting conservatism. As soon as conservatism decreases, bondholders face more risk and ask higher interest percentages. This results in an increase of the cost of debt.

Finally they investigate the role of conservatism in debt contracting. Does, and if so, how does conservatism influence it. An example that they mention is the exclusion of goodwill and other intangibles by determining net worth. This indicates conservatism and shows influence of it in debt contracting.

This study consists of two periods of six years. The first period is from 1987 till 1992 and consists of 581 firms. The second period is from 1993 till 1998 and consist 702. In their conclusion they state that firms that face more and severe conflicts about dividend policy tend to be more conservative. Another outcome of their study is that firms which are more conservative are able to get debt at lower costs. Those results support that accounting conservatism plays a role in efficient contracting.

Two years later Ahmed et al. published an improved version of their research (*The Role of Accounting Conservatism in Mitigating Bondholders-Shareholders Conflicts over Dividend Policy and in Reducing Debt Costs*, 2002). Where they only used the book to market ratio to measure accounting conservatism in their working paper, they also use the accrual measure in this final paper. Another change is about their proxies. The first is the sum of total accruals excluding depreciation. Second the level of dividends and the third and last one is leverage. The proxy for debt is unchanged.

They argue that conservative accounting reduces earnings and retained earnings amounts used in debt contracts which are used to constrain dividends. So the more conservative a firm is, the more unlikely that they will pay firm killing dividends (dividends which are excessive high and might lead to bankruptcy). When bond-shareholders conflicts are more severe, the risk on such dividends is likely to be more important. So when firms are more conservative bondholders will accept lower rate of return in light of the lower risk of excessive dividends.

In their conclusion they state that accounting conservatism seems to mitigate bondholder- shareholders conflict over dividend policy and reduce the cost of debt. They conclude that firms facing more severe bondholder-shareholder conflict over dividend policy choose more conservative accounting. Also the second conclusion of their working paper is the same in the final paper and is in line with other research that more conservative firms are able to get debt at lower costs.

Nikolaev (Debt Covenants and Accounting Conservatism, 2010) treats the topic of accounting conservatism and lower cost of debt in another way. He asks whether firms that rely on covenants in their public debt contracts recognize economic losses in earnings in a more timely fashion. Firms who do so are likely to be more conservative, because he states that debt contracting is a key explanation of

accounting conservatism. Here he refers to Ahmed et al. (2002) which was already been discussed before and was about that accounting conservatism mitigates conflicts between shareholders and bondholders.

He states that there is little evidence about how a given firm's reliance on debt covenants is related to its degree of accounting conservatism. Further he states that based upon prior research public bondholders have more interest by timely loss recognition compared to other creditors/banks. Because they have less control over management actions and have less incentives to monitor managerial actions. After that he also mentions that there is a link between debt covenants and the manager's ability to behave opportunistically with bondholders wealth when a firm faces economic distress. Debt covenants limit value expropriating actions, like unwarranted distribution of dividend, only when the economic performance or the financial performance of the company is recognized by the accounting system. If not, the preventive function of covenants does not work. The efficiency of covenants is expected to be improved by timely loss recognition. Based upon the assumption that accounting serves contracting needs (Watts & Zimmerman, 1986) the use of debt covenants should lead to an increased demand for timely loss recognition.

Nikolaev (2010) makes a distinction between private debt and public debt. Public debt holders (bondholders) are more likely to demand timelier recognition of losses. Therefore he gives three reasons. The first one is that the range of financial ratios that private debt holders require is much tighter than the range required by public debt holders. Because private debt holders have more control due to renegotiations and thus accept a broader range. Second, because public debt holders do not want to renegotiate too fast (due to renegotiation costs), they use negative covenants based upon accounting information to which managers have to comply before undertaking certain actions. In that way managers behavior is restricted and timelier loss recognition is demanded. Third, debt holders require monthly or quarterly compliance, where bondholders require yearly compliance. The consequence of this annually compliance requirement is that managers have more time for opportunistic behavior. Therefore bondholders are likely to be more concerned about loss recognition.

For data he uses the Mergent Fixed Income Securities Database whereby he counts the number of covenants in the contracts. He also constructs proxies to measure the use of accounting in covenants. Finally he uses for his study 5420 firm year observations at 2466 companies in the period of 1986 till 2006. With a few proxies for the use of debt covenants the degree of conservatism is predicted.

Following Basu (1997) he defines timely loss recognition as the degree of recognition of economic losses over economic gains. Finally he concludes that the more a company relies on protective covenants in its public indentures (a written contract between a bond issuer and bondholder) the greater its degree of timely loss recognition. He also finds that debt contracts of firms which use covenants extensively exhibit a significant increase in timely loss recognition in the years after the debt issues. Apparently timely loss recognition is promoted by reliance on covenants. Further the presence of private debt weakens the relation between loss recognition and covenants which is consistent with the lower demand for reporting timeliness in private debt market. As we explained above.

4.4 Conclusion of the prior research

We started with an article of Beatty et al. (2008) which showed that there is a relation between conservatism and debt. Lenders ask for a certain level of accounting conservatism. If it is not met by the accounting standards they make use of covenants to take care that firms will be conservative enough. Also the article of Ball et al. (2008) concludes that lenders make requirements with regard to accounting conservatism. The following articles showed that there are benefits of accounting conservatism to lenders and borrowers. A high degree of accounting conservatism leads to less risk and lower cost of debt. Also bond-shareholders conflicts over dividend policy are mitigated. Thereby, bondholders want timely recognition of losses and thus more conservatism. The contracting theory is served with accounting conservatism but for the value relevance of information accounting conservatism is not desirable. A summary of this empirical has been added as an appendix to this master thesis.

5 Research design and hypotheses

5.1 Introduction

In this chapter I will set out our research design. This is based on the previous research of Ahmed et al. (2002). This study was done in the USA over the time periods 1987-1992 and 1993-1998. I will perform this research in Europe with the research question I already presented in the first chapter which is:

Is there an association between bondholder-shareholder conflicts over dividend policy with accounting conservatism and the cost of debt? And has that association changed after the implementation of IFRS in 2005?

In the first place I have to define the proxies which will be used in my intended research. Therefore, I will start with describing my proxies and explain why I choose them. First the proxy for accounting conservatism will be discussed and after that descriptions of the proxies for bondholders-shareholders conflicts over dividend policy and the cost of debt will be provided. In the subsequent section I present the regressions for my analysis. At the end of the chapter a short summary will be given.

5.2 Hypotheses

As I already mentioned I use the article of Ahmed et al. (2002). They state that there are many prior studies which examine the relation between accounting choices and debt covenants. However the more general role of conservatism in debt contracting has not received a lot of attention. I found in my literature study that debt lenders will change the covenants of debt contracts when they think that GAAP is not conservative enough (Beatty, Weber, & Yu, 2008). Leftwich (1983) finds similar results. He finds that modifications in debt contracts are typically conservative. However, according to Ahmed et al. (2002) this is no direct evidence on the role of accounting conservatism in mitigating bondholder-shareholder conflicts, or on the association between accounting conservatism and the cost of debt.

Jensen and Meckling (1976) state that the agency theory suggests that fixed and residual claimants in a firm have conflicting interests over dividend policy. Bondholders want a low level of dividend payment so that there are enough assets available to meet their claims. When a firm pays high dividends it pleases the shareholders, but the risk for bondholders increases. Assets which were available for their claims are now paid out in dividend to the shareholders and thus are there fewer assets left for their claims. So high dividend payment is typically an example of a possibility how wealth can transfer from bondholders to shareholders. However, according to the efficient contracting theory it is in the interests of all parties to mitigate conflicts about this.

Kalay (1982) finds that firms make use of direct and indirect dividend restrictions in their public debt contracts. The first one specifies a maximum or an upper bound on dividends payments in terms of cumulative net earnings or retained earnings. The second one is about restrictions that require firms to meet some specified balance sheet ratios. An example of such a ratio is a debt to asset ratio. Dividend payments reduces assets and that will result in a higher debt to asset ratio and thus in a move to the upper bound of the ratio stated in the debt contract.

Overall, I expect that firms which face more severe bondholders-shareholders conflicts over dividend policy are more likely to use more conservative accounting. My first hypothesis (from Ahmed et al. (2002)) is as follows:

H1: Firms that face more severe bondholders-shareholders conflicts over dividend policy adopt more conservative accounting.

As I have discussed above, bondholders face more risk when a firm pays high dividends and they face less risk when there is a low level of dividend payment. When the manager's choices of conservative accounting tighten restrictions on dividend policy the risk of excessive/killing dividend payment for the bondholders will decrease. So, I expect that conservatism will result in lower cost of debt. My second hypothesis (from Ahmed et al. (2002)) is as follows:

H2: Firms that adopt more conservative accounting incur a lower cost of debt.

After the adoption of IFRS I expect that there will be more use of fair value accounting. More fair value accounting results in less conservative reporting. The expectation is that this has consequences for the association between bondholders-shareholders conflicts and accounting conservatism. The third hypothesis is as follows:

H3: The association between bondholders-shareholders conflicts and accounting conservatism increases after the implementation of IFRS.

For the association between conservatism and the cost of debt I expect the same. My fourth hypothesis is as follows:

H4: The association between conservatism and the cost of debt increases after the implementation of IFRS.

Those four hypotheses are about the question whether there is accounting conservatism and lower cost of debt and the changes due to the implementation of IFRS. But based upon chapter 3 I would expect differences between the two groups of countries. I expect that the firms in the Scandinavian sample will be more conservative and incur lower cost. Therefore I formulated the following hypotheses:

H5: The firms in the Scandinavian countries are more conservative and incur lower cost of debt than the firms in the French countries.

After the implementation of IFRS in 2005 I expect that the differences between the two groups of countries will converge. My sixth hypothesis is as follows:

H6: The differences between the Scandinavian countries and the French countries converge after the implementation of IFRS.

5.3 Measure of accounting conservatism

Following Ahmed et al. (2002) I have chosen for a broader view of accounting conservatism. They state that the broader conservatism construct “*reflects the cumulative effect of managers accounting choices, including accounting estimates and assumptions, as well as accounting choices.*” Ahmed et al. (2002) relied on the notion of two characteristics and I will do the same. Therefore I use an accrual based measure CONACC for conditional conservatism and a market based measure CONMTB for unconditional conservatism.

The accrual based measure of accounting conservatism is also mentioned by Givoly and Hayn (2000). Therewith they focus on the effects of accounting conservatism over extended periods on the income statement. First they state that the sum of cash flows in the total lifetime of a company should be equal to the sum of net income in the total lifetime of the company. The existence of a negative difference between them in this year is expected to be followed by a positive difference in the following year. If the accruals persistently remain negative in contrast to the expected pattern of accrual reversals it is a signal of conservative accounting. This suggests that the mean of the firm’s accrual over a long time is a proxy for accounting conservatism. Of course, this period has to be long enough and not for one year.

To measure CONACC I use the following formula: *(net income plus depreciation less operating cash flow) deflated by total assets*. This is only for one year, so I average this for each sample period. I multiply the result with -1 to make it positive and then I expect the higher the degree of conservative accounting, the higher the measures are.

The other measure that I will use for this research is the market based measure. The reason for this is that the value on the balance sheet is not the value of all outstanding shares multiplied by the market price. Normally, the balance sheet value will be lower. This is caused by recognition of valuable things by the investors which are not recognized on the balance sheet. A good example is a building which is bought many years ago and is valued on historical cost price. Even if it is not depreciated the value of it on the market has become much more. Therefore you can state that firms which are more conservative will have more stringent recognition criteria and more stringent valuation bases and thus a bigger gap between the market value of the shares and the balance sheet value.

To measure CONMTB I divide the market value of a company by its book value. The higher the value of the outcome, the more conservative a firm is.

5.4 Measure of bondholders-shareholders conflicts over dividend policy

In this section I describe the proxies used in this research to measure the bondholders-shareholders conflicts over dividend policy. They are mainly based upon Ahmed et al. (2002) whom use three proxies which are leverage, the level of dividends (as a percentage of assets) and operating uncertainty. We measure the first one as the ratio of long term debt to assets. A higher leverage implies a relatively larger claim by the bondholders on the firm’s assets. This will result in more severe conflicts with shareholders, because from their perspective a higher leverage will result in a concern about excess distributions. So, for this proxy we can conclude that firms with high leverage will face greater bondholders-shareholders conflicts.

The second proxy is level of dividend as a percentage of total assets. When the firm pays a low level of dividends, then bondholders are expected to be less concerned about dividend overpayment. On the other

hand a high level of dividends payment is likely to concern bondholders and will result in bondholders-shareholder conflicts. So, a low level of dividends results in a decrease of conflicts over dividend policy and conversely a high level of dividend payments results in an increase of conflicts. Ahmed et al. (2002) mention a potential limitation of this proxy. Firms may pay high dividends if they have high, free cash flows together with a low level of positive net present value investment opportunities.

The last proxy for the conflicts over dividend policy between bondholders and shareholders is about operating uncertainty. Firms that face a high degree of operating uncertainty, for example demand or input price uncertainty, are expected to experience large positive or negative shocks in their earnings and assets values. Large positive shocks that are unsustainable will tend to inflate retained earnings, which may possibly result in overpayment of dividends. In that case the risk of wealth transfer from the bondholders to the shareholders is bigger. So, we can conclude that a higher operating uncertainty will lead to more severe bondholders-shareholders conflicts over dividend policy due to an increase in the risk of wealth transfer. To measure this proxy we will use the standard deviation of the return on assets of the firm (STDROA). The more fluctuations in earnings or assets due to operating uncertainty, the higher the standard deviation of the return on assets.

5.5 Measure of cost of debt

To measure firms' cost of debt I would use the same proxy as Ahmed et al. (2002) to keep the study comparable. They used the senior debt ratings assigned by Standard and Poor's (S&P). I would extract that data from the database of Bloomberg, but unfortunately for a lot of European companies the credit ratings are not available and hence another measure for the cost of debt is needed. In one of the studies from my literature study they also use a proxy for the cost of debt. Li (2009) used the expenses on debt of a company divided by its total interest bearing debt as a proxy for the creditworthiness of a company. The higher this score is, the more a company relatively pay for its debt. In this way I can also give a "credit rating" to companies and herewith I think I have a good alternative for the credit ratings of S&P.

5.6 Sample selection

In order to conduct my research and test the hypotheses I have to construct a representative sample of companies. In my research I will focus on European listed companies as I am most interested in them and the research of Ahmed et al. (2002) was done in the United States. I will have one sample period before the implementation of IFRS (2001-2004) and another sample period after the implementation of IFRS (2005-2008). This makes it possible to compare my results with the results of Ahmed et al. (2002) and investigate whether there are differences before and after the implementation of IFRS. For the necessary data I will use the Thomson One Banker, module 'Company analysis'. Only companies from which all data for the sample period is available will be included in the research.

The selected countries are based upon a research of La Porta et al. (1998). They divided the world into some groups based on the characteristics of the countries. For this European sample I picked out the European countries and that results in four groupings: English, French, German and Scandinavian. From those four groups I will only use the second and the fourth group, because they have different institutional settings and the other two groups are part of another research.

In the first place the sample consisted of approximately 2500 companies in the several countries. However, I excluded a lot of companies because not all data were available for all companies and some

companies adapted IFRS earlier than it came mandatory in 2005. That last one is a risk for this research on the effect of the implementation of IFRS in 2005. The effects of more or less bondholder-shareholder conflicts and the increase or decrease of the cost of debt might occur in earlier for those firms. Therefore that early adapters of IFRS are excluded from my sample to avoid a biased outcome. So, only companies which adapted IFRS in 2005 will be selected.

Finally, the sample consist of 1312 firm year observations for the French countries and 872 firm year observations for the Scandinavian countries for the period 2001-2004. For the period 2005-2008, the firm year observations are respectively 1568 for the French countries and 1376 for the Scandinavian countries. An overview of the sample and further explanation can be found in section 6.2.

5.7 Statistical analysis

5.7.1 Used databases

In the previous section I already mentioned that I will use the Thomson One Banker database for the data for this research. Using this database, it is possible to get financial data from the annual reports of listed companies worldwide for several years. The data required for the described measures are available in Thomson One Banker database. In the following section I will explain the variables en describe how to calculate them. Therefore I will use the terms from Thomson One Banker. The variables are mainly based upon Ahmed et al. (2002) to keep the research comparable.

5.7.2 Formula conservatism and bondholders-shareholders conflicts

For the conservatism regression I use the same model as Ahmed et al. (2002) which includes the three proxies for bondholders-shareholders conflicts over dividend policy as well as some control variables. Those variables will be explained.

Relation conservatism and bondholder-shareholders conflicts:

$$\text{CON} = \beta_0 + \beta_1\text{STDROA} + \beta_2\text{DIV} + \beta_3\text{LEV} + \beta_4\text{ROA} + \beta_5\text{Size} + \beta_6\text{Salesgro} + \epsilon$$

β_0 = constant

β_1 tot β_3 = bondholder/shareholder conflicts

β_4 tot β_6 = control

ϵ = residual

The response variable CON stands for conservatism. In this master thesis I will use an accrual based measure and a market based measure for conservatism (CONACC and CONMTB). CONACC is measured by dividing the sum of net income plus depreciation less operating cash flows by total assets. In a lot of cases this will result in a negative value and therefore I multiply it by -1.

CONMTB is the result of the market value of the company divided by its book value. For the market value I will use the year end market cap and for the book value the sum of the common shares outstanding multiplied by the book value per share.

The formula for the relation of conservatism and bondholder-shareholder conflicts contains three explanatory variables which are the proxies for the bondholder-shareholder conflicts. The first one is the standard deviation of the return on assets. The standard deviation gives the variation in return on assets in

a few years. A firm with more fluctuations in their return on assets will have a higher standard deviation of ROA. Most of the time the cause of the difference in return on assets is earnings and in the other cases it is because of an increase or decrease of assets. In a lot of research it is demonstrated that a stable earnings pattern is better for the company than a lot of fluctuations (Burgstahler & Dichev, 1997). Therefore, following Ahmed et al. (2002), I will use standard deviation of ROA as a proxy for bondholders-shareholders conflicts about dividend policy. ROA can be calculated as net income divided by total assets. I calculate this for each year of my sample periods and after that I compute the standard deviation for the first and second period. The higher the standard deviation of ROA, the more severe bondholders-shareholders conflicts are.

The second explanatory variable is dividend. When a firm makes profit it has the possibility to pay out dividend to its shareholders, but it is also a possibility to reserve a part of its earnings. When a firm reserves earnings, its liquidity will increase which is desirable for bondholders. If a company pays a lot of dividend, its liquidity is deteriorated. This can possibly result in bondholders-shareholders conflicts. Thus therefore I will use DIV as a proxy of bondholders-shareholders conflicts. The variable I use from the databank of Thomson One Banker will be the total paid cash dividend in a year. I use cash dividend because of the direct outflow of money. Stock dividend remains in the company and will not lead to a direct outflow of money. Maybe in later years, but not immediately. In case of cash dividend that amount is paid to the shareholders and thus not available for the company anymore and thus has the liquidity of the company decreased with that amount. The calculation for this measure is as follows: total paid dividend divided by the total assets of the company.

The last explanatory variable of this formula is leverage. A firm with relatively more debt compared to its total assets has more risk (Hurdle, 1974). Firms always have to pay interest to its long term debt holders even in unprofitable years, but they do not have to out pay dividend. If a firm has relatively a lot of debt it has more risks for liquidity problems in time of losses through the mandatory interest payments. A high leverage rate has more risk and therefore it can lead to more bondholders-shareholder conflicts. This proxy is computed by dividing the total assets by the long term debt of the company.

For all three proxies a higher value leads to more bondholders-shareholder conflicts over dividend policy. The expectation is that a firm with more conflicts report more conservative.

There are also some control variables incorporated in the formula. The first one is already partly discussed by the explanatory variable STDROA. The control variable is only the return on assets. This is a control variable for profitability. The expectation is that it is easier to report conservative for firms with higher return on assets than for firms with lower returns on assets. The calculation of this control variable is net income divided by total assets.

Another control variable is size. The idea is that larger firms have more political cost (1990). As described earlier in this paper political cost is also a reason for conservatism. Therefore the expectation is that larger firms report more conservative. I compute this variable by taking the natural log of firm i's total assets.

The sixth variable in the model is the control variable sales growth. This is a variable for sales growth which I use because of very fast growing firms. They have more negative accruals and by the use of this control variable I can control that sales growth is not the reason for negative accruals. I compute this by taking the percentage of the annual change in firm i 's sales.

Ahmed et al. (2002) use also a control variable for growth opportunities in their model. They calculate it by adding the Research and Development expenses and advertising expenses. And divide the sum of that by the sales. In the database of Thomson One Banker there is not enough data available about R&D expenses and the data for advertising expenses is not available for any European firm. Therefore I do not use those control variables in my model, but because this variable turned out not to be significant in the research of Ahmed et al. (2002) and therefore I do not think the lack of this variable does has influence on the inferences. The control variable is especially applied to new growing companies and I use only European listed companies which are expected to have less growth.

5.7.3 Formula conservatism and cost of debt

Relation conservatism and cost of debt:

$$\text{CoD} = y_0 + y_1\text{CON}_i + y_2\text{ROA}_i + y_3\text{LEVI} + y_4\text{SIZE}_i + y_5\text{BETA}_i + y_6\text{STDROA}_i + \epsilon$$

This second formula is also based upon the formula from the research of Ahmed et al. (2002). With this formula I want to investigate whether conservatism influences the cost of debt of a company or that conservatism has no significant effect on it. As a response variable Ahmed et al. (2002) used a credit rating from Standard and Poor (S&P). As described in section 5.5 a lot of credit ratings for European companies are unavailable. Due to that I had to look for another proxy for the cost of debt. Li (2009) used the interest expenses on debt of a company divided by its total interest bearing debt as a proxy for the creditworthiness of a firm. Following Li (2009) I use that relation between interest expenses and total debt as response variable. The higher the result of this sum, the higher the cost of debt are for a company.

The response variables from the first formula are explanatory variables in this formula. So, CONACC and CONMTB are predictors for the cost of debt in this formula. These are calculated in the same manner as in the previous formula.

Further, I use several control variables. The first one is a control variable for profitability and is the return on assets. In earlier research is proved that a higher return on assets leads to a better rating (Kaplan & Urwitz, 1979). The cost of debt is expected to be lower because when a firm has better profits it is more able to meets its obligations.

The control variable for equity risk is leverage and is calculated in the same way as in the first formula. Relatively more debt leads to a higher leverage and more risk for the firm. The debt holders want a compensation for the higher risk and thus the cost of debt will increase. So, a higher leverage rate leads to a higher value of interest expenses on debt (CoD).

Size is a control variable for the size of a firm and of course calculated the same as in the first formula. In the previous formula a larger firm was expected to be more conservative. Another expectation for this

formula is that larger firms are more able to payback their debt. A larger firm is expected to go bankrupt less fast than a smaller firm. Therefore, the expectation is that larger firms have relatively higher rates of CoD than smaller firms.

The fifth control variable is the BETA which measures the systematic equity risk. Systematic risk are risks which are applicable for the whole market (Bowman, 1979). So this risk is the same for all firms in a market. In Thomson One Banker this will be measured through an investigation of the relationship between the volatility of the stock and the volatility of the market. Eventually, you investigate with this number what the influence is of market changes on the rating. If it is going bad in a country, the BETA will go down and therewith the systematic risk increases, which result in a relatively increase of CoD. For this an additional required variable in Thomson One Banker is BETA.

The last control variable is the standard deviation of the return on assets. This is calculated the same as in the first formula. STDROA is a control variable for idiosyncratic equity risk. The idiosyncratic risk is the counterpart of the systematic risk and is called also unsystematic risk. Idiosyncratic risks are firm specific. A firm with a higher standard deviation of ROA has a relatively higher firm specific risk and thereby a higher value of CoD.

For both formulas (from 5.7.2 and 5.7.3) a regression will be made. The first regression investigates how bondholders-shareholders conflicts over dividend policy predict the degree of conservatism in the report of the firm. The second regression formula will be made to investigate how the degree of conservatism influences the level of the rating and thus how conservatism is associated with the cost of debt.

5.8 Summary

In the above part I described the hypothesis development and after that I presented the measures of accounting conservatism, bondholders-shareholders conflicts over dividend policy and the cost of debt. I will use two regression formulas: one for the relation between accounting conservatism and bondholder-shareholder conflicts and one for the relation of accounting conservatism and the cost of debt. Therefore I have many variables and need a lot of data for these variables. That data will be extracted from the database of Thomson One Banker. The sample consist of European listed companies in the French and Scandinavian origin countries. In next chapter the results of the regressions will be presented and analyzed.

6 Results and analysis

6.1 Introduction

In the first part of this master thesis the topic of accounting conservatism was introduced by a general exploration followed by a literature study. After designing the research design, the results will be set out in this chapter. I will start with a closer look at the sample for this research. After that an overview of the descriptive statistics will be given. In the third place some attention will be given to the correlation statistics which will be followed by the table with the results of the first formula. The results of the second formula are set out in the fifth table. Finally some concluding remarks will be made. By analyzing the results, the outcomes of the study of Ahmed et al. (2002) will be taken into account and therefore I will often refer to them.

6.2 Sample, descriptive statistics and correlations

In contrast to Ahmed et al. (2002) the sample of this research consists of two groups. This makes it possible to compare the results with not only the outcomes of the study of Ahmed et al. (2002), but also a comparison between the two groups is possible. In first instance a lot of firms were available in the Thomson One Banker database, however by using the average of four years a lot of data was lost. For a lot of firms for some years some data items were missing. Also the sample decreased due to outliers. Outliers influence a sample by biasing the mean and therewith the standard deviation. To avoid that this would biases my sample I determined the outliers by making a box plot of each variable and marking every observation out of the range of Q one and Q three as an outlier.

Data and final sample				
	French countries <u>2001-2004</u>	French countries <u>2005-2008</u>	Scandinavian countries <u>2001-2004</u>	Scandinavian countries <u>2005-2008</u>
Available firms in TOB:	1821	1821	940	940
One or more missng values for a firm	1622	1576	812	741
Outliers	35	49	19	27
Final sample size:	164	196	109	172
Final sample (countries)		2001-2004		2005-2008
The Netherlands		17		16
Belgium		14		10
France		81		86
Spain		12		18
Portugal		9		11
Italy		20		35
Greece		11		20
Total French countries		164		196
Norway		16		38
Sweden		37		61
Finland		30		44
Denmark		26		29
Total Scandinavian countries		109		172

(Amounts are in firms)

The reduction of the sample by the missing values is relatively large. However, the sample still contains of more than 100 companies per group.

The final sample size and the distribution of it are shown in table 1. The smallest sample is the Scandinavian sample for the period 2001-2004 with 109 firms. Also for the French countries the sample is smaller in the first period. In the second period the samples increase.

In the second table the descriptive statistics for the samples of both groups are given for the period 2005-2008. The descriptive statistics of the period 2001-2004 are not very different and therefore I omitted those tables here and included them to this master's thesis as an appendix. The lower part of the table contains the used abbreviations and where they stand for.

Variable	French countries					Scandinavian countries				
	Mean	Standard deviation	First quartile	Median	Third quartile	Mean	Standard deviation	First quartile	Median	Third quartile
CONACC	-0,005	0,034	-0,021	0,000	0,012	-0,011	0,030	-0,027	-0,011	0,005
CONMTB	1,973	1,095	1,260	1,786	2,488	2,292	1,411	1,298	1,884	2,777
COD	5,951	1,612	4,933	5,761	6,753	6,500	4,166	4,464	5,310	6,996
ROA	0,035	0,044	0,008	0,040	0,055	0,049	0,057	0,019	0,048	0,077
STDROA	0,027	0,029	0,013	0,019	0,034	0,029	0,023	0,012	0,023	0,042
DIV	3,184	7,554	0,137	0,822	2,839	0,028	0,040	0,004	0,018	0,035
LEV	0,169	0,119	0,081	0,143	0,235	0,186	0,143	0,068	0,156	0,276
SIZE	20,280	2,113	18,652	20,008	21,793	19,866	1,992	18,397	19,757	21,194
SALESGR	13,499	17,829	4,899	10,330	17,641	19,595	27,606	6,424	13,000	23,620
BETA	0,737	0,732	0,507	0,768	1,033	10,424	63,826	0,273	0,606	1,152

For the measures of accounting conservatism higher degrees mean more conservatism. As we can see the values for CONACC are for both groups negative which means that, when we take zero as neutral point, companies are on average not conservative. However when we have a look at the values of CONMTB the

opposite is true. For an average company the market value is higher than the book value. The average cost of debt does not differ a lot between the two groups. In both periods the average of the Scandinavian countries is slightly higher. A more interesting point is the difference between the levels of dividend. In both periods is the mean of the percentage of dividend higher for the French countries. This might result in more bondholder-shareholder conflicts for those countries, because more cash flows out of the company (in case of cash dividends).

A last thing I want to mention about these descriptive statistics is the sales growth which is lower in the first period for the Scandinavian countries, but increases a lot in the second period and is more than six percent points higher in the second period than in the French countries. This might be caused by the institutional factor that investors in the Scandinavian countries are better protected and therefore are more willing to invest in an earlier stadium of a company. Than such a company has an advantage of being one of the first in a market for a particular product. When investors later on invest in a company in the French countries, than that company has less ability to grow fast, because there are already other companies and the fast growing opportunities has already been gone.

The third table contains the result of the test on the correlation among the variables for the period 2005-2008. The results of the first period can be found in the appendix. Above the diagonal the results of the French countries are shown and below the diagonal the results of the Scandinavian countries are shown. The correlation coefficient shows the relationship between the variables where the value 1 means a perfect positive relation and -1 a perfect negative relation. The value zero means no correlation at all.

Variable*	CONACC	CONMTB	COD	STDROA	DIV	LEV	ROA	SIZE	SALESGR	BETA
CONACC		0,280 (0,000)**	-0,555 (0,000)**	0,345 (0,000)**	-0,143 (0,045)*	0,040 (0,575)	-0,100 (0,162)	0,182 (0,011)*	-0,010 (0,893)	-0,075 (0,297)
CONMTB	0,076 (0,217)		-0,305 (0,000)**	0,356 (0,000)**	0,064 (0,374)	0,034 (0,633)	0,442 (0,000)**	0,221 (0,002)**	0,097 (0,175)	0,029 (0,682)
COD	-0,057 (0,352)	-0,137 (0,026)*		0,247 (0,000)**	0,073 (0,311)	-0,213 (0,003)**	-0,014 (0,844)	-0,232 (0,001)**	-0,129 (0,072)	0,045 (0,533)
STDROA	0,137 (0,026)*	0,273 (0,000)**	0,078 (0,204)		-0,043 (0,552)	0,005 (0,946)	0,445 (0,000)**	-0,275 (0,000)**	0,176 (0,014)*	0,047 (0,516)
DIV	-0,032 (0,602)	0,240 (0,000)**	0,144 (0,019)*	-0,081 (0,190)		-0,019 (0,794)	0,202 (0,005)**	-0,138 (0,055)	0,021 (0,772)	0,072 (0,313)
LEV	0,129 (0,036)*	-0,185 (0,003)**	-0,346 (0,000)**	-0,021 (0,736)	-0,210 (0,001)**		-0,108 (0,132)	0,350 (0,000)**	0,063 (0,381)	-0,152 (0,033)*
ROA	-0,259 (0,000)**	0,398 (0,000)**	0,063 (0,305)	-0,160 (0,000)**	0,368 (0,000)**	-0,216 (0,000)**		0,204 (0,004)**	-0,030 (0,681)	0,050 (0,487)
SIZE	0,121 (0,049)*	0,049 (0,430)	-0,188 (0,002)**	-0,165 (0,007)**	0,050 (0,420)	0,175 (0,004)**	0,090 (0,143)		0,067 (0,351)	0,112 (0,118)
SALESGR	0,141 (0,022)*	-0,007 (0,908)	0,059 (0,344)	0,036 (0,561)	-0,113 (0,067)	0,035 (0,567)	-0,043 (0,484)	-0,061 (0,324)		0,570 (0,430)
BETA	-0,060 (0,334)	0,129 (0,037)*	-0,005 (0,930)	-0,080 (0,197)	0,047 (0,444)	-0,047 (0,442)	0,056 (0,364)	-0,055 (0,372)	-0,048 (0,435)	

Correlations for the French countries above the diagonal and correlations for the Scandinavian countries below the diagonal
 ° See table 2 for variable definitions.
 * = significant at 0,05 level, ** = significant at 0,01 level

The correlation between the accounting conservatism estimates shows different results for the two groups. For the Scandinavian countries the correlation is respectively 0.090 and 0.076 and not even significant too. For the French countries the relationship is a little stronger and significant (0,179 and 0,280).

However, even the highest value of 0,280 is not really high and this is probably contributable to different character of the measures where CONACC is a flow measure and CONMTB is a stock measure (Ahmed et al., 2002).

In the first place we have a look at the French countries for only the shown period. CONACC has a significant positive correlation with the standard deviation of ROA and with dividend. Also the stock based measure, CONMTB, shows a significant positive correlation for the standard deviation of ROA. However, that is the only significant proxy. The situation for the Scandinavian countries is quite different. CONMTB is significantly positively correlated with all three proxies and also two of the three proxies are significantly positively correlated with CONACC. Therefore, we can conclude that there is more correlation between accounting conservatism measures and the proxies for bondholder-shareholder conflicts about the dividend policy in the Scandinavian countries than in the French countries.

Concerning the cost of debt we expect that higher values of accounting conservatism will lead to lower cost of debt. Therefore, there should be a negative correlation between COD and CONACC and between COD and CONMTB. This assumption is supported by the correlation coefficients from the third table where, excluding COD-CONACC for the Scandinavian countries, the accounting conservatism measures and COD are significantly negatively correlated. This supports the second hypothesis.

6.3 Accounting conservatism and bondholder-shareholder conflicts

In table 4, which is shown on the next pages, the results of the regression concerning accounting conservatism and the bondholder-shareholder conflicts over dividend policy are given. In the first part the result with CONACC as dependent variable are shown and in part 2 the results of the regression with the market based measure CONMTB are given.

When we first focus on the results regarding the accrual based measure CONACC from part 1, we see that the R^2 is quite similar to the results of Ahmed et al. (2002). For three of the four periods is the explanatory power of the model at least twenty percent. A remarkable point is the low value of R^2 in the second period of the Scandinavian countries. Compared to the other periods the same variables do not explain so much and thus there might be another variable which explains more of the model.

In contrast with the results of Ahmed et al. (2002) a lot of the variables do not have a significant effect. In their research the standard deviation of ROA and dividend from the explanatory variables turned out to be significant with a positive sign. In this research only the standard deviation of ROA is significant. As expected the sign is positive which means that a higher value leads to more conservatism. This is to compensate the volatility on returns from operations and therewith the risk on bondholder-shareholder conflicts.

The influence of the standard deviation of ROA on accounting conservatism increases for both groups of countries. However, is remarkable that in the first place the French countries had the lowest value and in the second period they have by far the highest value. Based upon the political economy you might expect that volatility of returns is of more influence on countries with governments who intervene in the market. To present a stable earnings pattern or to prevent themselves of government intervention they make more

use of conservative accounting methods. Probably has the situation more changed in the French countries than in the Scandinavian countries and that they therefore report more conservative to protect.

DIV and LEV are not significant in any period. So, the expected effect that dividend has influence on the severity of bondholder-shareholder conflicts does not appear. Neither, the leverage ratio plays an important role in the conflicts.

A possible explanation for the absence of the effect of dividends can be that the paid dividends are low or that dividends are not paid at all, especially for the Scandinavian countries. A reason for the low and insignificant value of leverage can be that bondholders prefer to see the company financed by long term debt instead of short term debt. Therefore they be more interested by the ratio of debt to equity.

Variable*	Predicted sign	French countries		Scandinavian countries	
		All variables measured in levels	All variables measured in levels	All variables measured in levels	All variables measured in levels
		2005-2008	2001-2004	2005-2008	2001-2004
Intercept	?	-0,190 <i>(0,435)</i>	-0,101 <i>(0,000)**</i>	-0,041 <i>(0,052)</i>	-0,011 <i>(0,718)</i>
Proxies for BS conflicts:					
STDROA	+	0,560 <i>(0,000)**</i>	0,169 <i>(0,022)*</i>	0,249 <i>(0,006)**</i>	0,349 <i>(0,001)**</i>
DIV	+	0,000 <i>(0,205)</i>	0,000 <i>(0,856)</i>	0,071 <i>(0,150)</i>	0,130 <i>(0,271)</i>
LEV	+	-0,011 <i>(0,591)</i>	0,020 <i>(0,297)</i>	0,011 <i>(0,398)</i>	0,021 <i>(0,306)</i>
Control variables:					
ROA	?	-0,245 <i>(0,000)</i>	-1,650 <i>(0,000)</i>	-0,188 <i>(0,000)</i>	-0,297 <i>(0,000)</i>
SIZE	+	0,002 <i>(0,119)</i>	0,005 <i>(0,000)</i>	0,002 <i>(0,051)</i>	0,001 <i>(0,516)</i>
SALESGR	+	0,000 <i>(0,364)</i>	0,000 <i>(0,002)</i>	0,000 <i>(0,011)</i>	0,000 <i>(0,658)</i>
Sample size		196	164	172	102
R ²		0,224	0,269	0,142	0,256

Return on assets has a significant negative effect on the accounting conservatism for both periods for both groups. In an earlier part of this research I stated that it would be easier to report conservative for firms with higher values of return on assets than for firms with lower return on assets. Therefore, I expected a

positive sign in the first place. On the other hand, negative accruals do have a diminishing effect on the return of assets (Ahmed et al., 2002). Obviously, the diminishing effect of negative accruals does have more influence than the positive effect of the high values of ROA. These outcomes are in line with the results of the research of Ahmed et al. (2002). Also Van Aller (2010) who has done a similar research found that return on assets has a negative effect on accounting conservatism.

For the control variable size has only one significant positive coefficient for the four periods. However, really small and even the beta is small (0,032) and therefore it has actually not a large effect on the degree of accounting conservatism. For the last control variable the same conclusion can be drawn. Sales growth is significantly positive for two periods, but with coefficients of 0,000 it has no influence on accounting conservatism. Firms in my sample are all listed firms which are in general bigger and older. That might explain why size and sales growth doesn't have a big impact on accounting conservatism.

Part 2: dependent variable - market based measure of accounting conservatism, CONMTB					
Variable ^o	Predicted sign	French countries		Scandinavian countries	
		All variables measured in levels	All variables measured in levels	All variables measured in levels	All variables measured in levels
		2005-2008	2001-2004	2005-2008	2001-2004
Intercept	?	0,990 (0,187)	-0,831 (0,567)	2,296 (0,002)**	1,000 (0,198)
Proxies for BS Conflict:					
STDROA	+	7,977 (0,005)**	7,408 (0,093)	12,552 (0,000)**	4,499 (0,104)
DIV	+	-0,001 (0,910)	0,055 (0,002)**	2,638 (0,139)	9,492 (0,003)**
LEV	+	0,364 (0,564)	1,552 (0,177)	-0,863 (0,072)	0,139 (0,795)
Control Variables:					
ROA	+	8,543 (0,000)**	7,747 (0,005)**	7,053 (0,000)**	1,667 (0,394)
SIZE	+	0,036 (0,344)	0,005 (0,114)	0,000 (0,995)	0,019 (0,624)
SALESGR	+	0,008 (0,034)*	-0,015 (0,005)**	0,001 (0,615)	0,004 (0,078)
Sample size		196	164	330	102
R ²		0,256	0,182	0,223	0,243

^o See table 2 for variable definitions.
* = significant at 0,05 level, ** = significant at 0,01 level

The second part of table 4 contains the outcomes of the regression with the market based measure of accounting conservatism. The results are slightly different from the results of the regression with CONACC. STDROA is not significant in the period 2001-2004 for both groups. This is remarkable because in the first period there is no relation between STDROA and CONMTB and in the second period there appears to be a relation between them. This might mean that the volatility of returns on assets in the

first period was not really important and in the second period lenders paid more attention to it which resulted in an association between STDROA and CONMTB. This is even more remarkable because of the increase in values for the accrual based measure of accounting conservatism. Probably, this is the result of the implementation of IFRS in 2005. Due to more fair value accounting the results might fluctuate more and therefore STDROA might become more important and significant. For dividends the opposite could be true, because DIV is positively significant in the first period for both groups and is not significant in the second period.

In my research is leverage also with the market based measure of accounting conservatism not significant. The results of Ahmed et al. (2002) of leverage and the market based measure were more significant. They conclude that the results suggest that conservatism plays a role in efficient debt contracting. I think that it is not that easy for me to make the same conclusion on the results I found. At least it is not as clear as in the research of Ahmed et al. (2002).

The results of the control variables are more comparable to the results of Ahmed et al. (2002). ROA has a significant positive effect on CONMTB. In this case there is no effect of negative accruals and thus the values should be positive, which they are. The control variable is not significant, but sales growth is significant for the French countries in both periods. However, in the first period the sign is negative and in the second period positive. Ahmed et al. (2002) had also negative signs, but for two periods. They explain the negative coefficient by stating that there is a relation between realized growth and the book to market ratios. When there is a lot of realized growth, there might be more new assets. As a result of that the ratio of new assets compared to the old ones increases and thus the difference between the book value and market value of the assets decreases. This results in a lower value of accounting conservatism and might cause the negative sign. Overall the effect of sales growth is not really big, because it is not significant at all with CONACC and in case of CONMTB it is only significant for the French countries, but then it has contradictory signs.

Summarizing, there is not such a clear relation between accounting conservatism and bondholder-shareholder conflicts over dividend policy as Ahmed et al. (2002) found in the United States. Hypothesis one that there exists a relation is weakly supported by my results. The only proxy which is significant in most cases is STDROA. Therefore, I can conclude that a stable pattern of earnings is important to prevent conflicts between the bondholders and shareholders of a firm.

To see whether the association between accounting conservatism and the bondholder-shareholder conflicts over dividend policy has increased over time, I calculated the T values of the variables which are significant in one of the two periods. It turns out that, in the formula with CONACC, the proxy STDROA significant increases for the French countries after the implementation of IFRS (t-value: 4,39), but the control variable ROA turns the other way and decreases significantly. Also the t-values regarding the market based measure of accounting conservatism shows a contradictory view. So, I got no clear evidence that supports the third hypothesis that the association between bondholders-shareholders conflicts and accounting conservatism has increased after the implementation of IFRS in 2005.

Remains the question whether the firms in the French countries are more conservative than firms in the Scandinavian countries or not. This question will be answered in section 6.5 together with the question whether they incur lower cost of debt or not. Also the changes before and after the implementation of IFRs will be discussed.

6.4 Accounting conservatism and the cost of debt

The next part of this research contains the results of the regression for the relation between accounting conservatism and the cost of debt. These are the tests for, in particular, my second and fourth hypotheses which state that more conservative accounting leads to lower cost of debt and that the relation between those two increases after the implementation of IFRS in 2005. I have set up table 5 in the same way as table 4 by the previous subject.

<u>Variable*</u>	Predicted <u>sign</u>	French Countries		Scandinavian Countries	
		All variables measured in levels	All variables measured in levels	All variables measured in levels	All variables measured in levels
		<u>2005-2008</u>	<u>2001-2004</u>	<u>2005-2008</u>	<u>2001-2004</u>
Intercept	?	7,057 (0,000)**	7,089 (0,000)**	15,564 (0,000)**	9,059 (0,000)**
Proxy for acc. cons: CONACC	-	-25,488 (0,000)**	-18,236 (0,000)**	-17,037 (0,048)*	-20,111 (0,003)**
Control variables:					
ROA	-	-2,523 (0,324)	-5,962 (0,036)*	3,380 (0,519)	-8,234 (0,041)*
LEV	+	-2,485 (0,005)**	-0,289 (0,798)	-10,124 (0,000)**	-3,218 (0,014)**
SIZE	-	-0,037 (0,482)	-0,075 (0,327)	-0,355 (0,015)*	-0,085 (0,395)
BETA	+	-0,035 (0,796)	-0,092 (0,786)	-0,001 (0,703)	-0,002 (0,394)
STDROA	+	1,056 (0,799)	17,542 (0,000)**	0,007 (0,441)	-4,693 (0,511)
Sample size		196	164	330	102
R ²		0,355	0,295	0,154	0,166

The coefficients of the proxy CONACC in the first part of the table are just as expected negative. They are significant at the one percent level for the French countries in both periods and they are also significant for the Scandinavian countries in both periods (at five percent level). Therefore, I can conclude

that there exists a significant negative relation between accounting conservatism and the cost of debt concerning the accrual based measure of accounting conservatism.

For the market based measure of accounting conservatism the same conclusion can be made. Except for the second period of the Scandinavian countries CONMTB is significant negatively related to the cost of debt. So, once again the results suggest that firms which use more conservative accounting have lower costs of debt.

Part 2: CON variable - market based measure of accounting conservatism, CONMTB					
Variable*	Predicted sign	French Countries		Scandinavian Countries	
		All variables measured in levels 2005-2008	All variables measured in levels 2001-2004	All variables measured in levels 2005-2008	All variables measured in levels 2001-2004
Intercept	?	8,170 (0,000)**	9,112 (0,000)**	14,091 (0,000)**	9,757 (0,000)**
Proxy for acc. cons:					
CONACC	-	-0,440 (0,000)**	-0,296 (0,000)**	-0,381 (0,110)	-0,563 (0,022)*
Control variables:					
ROA	-	7,868 (0,007)**	12,123 (0,000)**	-2,428 (0,657)	0,120 (0,976)
LEV	+	-1,874 (0,058)	-0,048 (0,967)	-9,625 (0,000)**	-3,600 (0,007)**
SIZE	-	-0,082 (0,157)	-0,161 (0,027)*	-0,324 (0,025)*	-0,088 (0,384)
BETA	+	0,053 (0,722)	0,117 (0,734)	-0,002 (0,533)	-0,001 (0,676)
STDROA	+	11,690 (0,007)**	22,969 (0,000)**	0,010 (0,306)	0,517 (0,940)
Sample size		196	164	330	102
R ²		0,195	0,295	0,150	0,135

° See table 2 for variable definitions.
* = significant at 0,05 level, ** = significant at 0,01 level

Compared to the results of Ahmed et al (2002) and Van Aller (2010) this results are quite the same. They found also a relation between the cost of debt and accounting conservatism. A big difference between my results and the findings Ahmed et al. (2002) is R² which they have of about 65%-70% indicating that their model explains a substantial part. Van Aller (2010) have lower values of about 25%-30%,

The results from my research show quite the same picture about the explanatory power of the model as Van Aller (2010). For the French countries on average 30% of the variation in firms cost of debt are explained by the model. For Scandinavian countries this amount is lower and only 15% on average. These lower values may be due to a different measure of the cost of debt. Ahmed et al. (2002) used the S&P

credit ratings, where Van Aller (2010) and I used the interest expenses on debt of a firm divided by its total interest bearing debt. It can also be due to the differences between the United States and Europe.

Summarized, there is evidence that, despite the lower values of R^2 , a relation exists between accounting conservatism and the cost of debt. So, the second hypothesis that firms that adopt more conservative accounting incur a lower cost of debt is supported by the results of this research.

The fourth hypothesis that the association between the cost of debt has increased after the implementation of IFRS in 2005 is hard to say when we only have a look at the coefficients of the values of CONACC and CONMTB. The values for the French countries increase, which suggests an increased association. However, the change of the values for the Scandinavian countries is contradictory and could be interpreted as a decrease of the association. To test whether there is an effect and what the effect is, I calculated the t-values for the variables. The only change which is significant is the change of CONACC for the French countries (t-value 2.33). The other three changes are not significant and thus no conclusions about an increase or decrease can be made upon that data. For the French countries the implementation of IFRS thus suggests a significant effect and therefore I can conclude that the fourth hypothesis is weakly supported by the results from my research.

6.5 Differences between the countries and the effect of the implementation of IFRS

In the previous sections the associations between accounting conservatism and the bondholders-shareholders is investigated. Also the relation with the cost of debt is discussed. It turned out that the associations are less strong than the results found by Ahmed et al. (2002) in the United States. The results are more in line with the research of Van Aller (2010). However that the associations are not really strong I investigated the differences between the first and second with a t-test. Further I investigated the differences between the two groups of countries.

A t-test is used to see whether a difference between two values is a real difference or that it is caused by coincidence. Here for I calculated the difference between the two B-values and divided the outcome by the standard error. This results in a value and with N of the sample you can see whether the difference is significant or not. For this research with my sample a t-value of 1,96 or higher means that the difference is significant at 5% level.

In table 6 the t-values are shown for the differences between the first and the second period and between the two groups of countries. A major restriction here is the insignificance of quite a lot of variables in the regression. If one of the two values from the regression is not significant a t-test doesn't make any sense, because the outcome of it is than based upon values which are not significant itself. Due to that a lot of the t-values are not relevant.

Based upon the institutional settings of both groups of countries I expect that the Scandinavian countries are less conservative. However the only significant values of CONACC shows a mixed picture. In the first period the French countries were less conservative and in the second period the Scandinavian countries were less conservative. It is even more confusing when the t-values are calculated and we can see that in both cases the differences are significant. For the market based measure of accounting conservatism DIV is significantly higher for the Scandinavian countries.

Based upon those data no relevant conclusion can be made. A lot t-values can not be calculated due to insignificance and the ones who are significant are contradictory. Probably had the Second EEC Directive already influenced the law and regulations of the European Union member states. Another effect can be that the countries are too comparable due to the fact that both groups are part of the bigger continental group in Europe. It is possible that some countries have a mix of the institutional factors of the French and the Scandinavian characteristics which cause a divergence.

The difference between the first and second period is significant for the French countries. The STDROA has significantly changed and this would mean more bondholders-shareholders conflicts and thus this will result in more conservatism. However, this can be due to IFRS. An increase of the standard deviation of ROA means that the volatility of earnings has increased. With fair value accounting it is reasonable that earnings will fluctuate a more. And now that they are mandatory to report conform the IFRS's, they can't smooth earnings and thus will their earnings fluctuate more.

Table 6							
Results of the t-test on changes of association between accounting conservatism and bondholders-shareholders conflicts and the cost of debt.							
Part 1: accrual based measure of accounting conservatism, CONACC							
		STDROA		DIV		LEV	
		T-value	Significance	T-value	Significance	T-value	Significance
T1 French	T2 French	4,393	0,01 level	NR	NR	NR	NR
T1 Scandinavian	T2 Scandinavian	1,111	not sign.	NR	NR	NR	NR
T1 French	T1 Scandinavian	2,045	0,05 level	NR	NR	NR	NR
T2 French	T2 Scandinavian	3,475	0,01 level	NR	NR	NR	NR
Part 2: market based measure of accounting conservatism, CONMTB							
		STDROA		DIV		LEV	
		T-value	Significance	T-value	Significance	T-value	Significance
T1 French	T2 French	NR	NR	NR	NR	NR	NR
T1 Scandinavian	T2 Scandinavian	NR	NR	NR	NR	NR	NR
T1 French	T1 Scandinavian	NR	NR	6,030	0,01 level	NR	NR
T2 French	T2 Scandinavian	1,517	not sign.	NR	NR	NR	NR
Part 3: both measures for the cost of debt, COD							
		CONACC		CONMTB			
		T-value	Significance	T-value	Significance		
T1 French	T2 French	2,328	0,01 level	1,309	not sign.		
T1 Scandinavian	T2 Scandinavian	0,358	not sign.	0,768	not sign.		
T1 French	T1 Scandinavian	0,336	not sign.	1,679	not sign.		
T2 French	T2 Scandinavian	1,444	not sign.	0,340	not sign.		

° See table 2 for variable definitions.
 * = significant at 0,05 level, ** = significant at 0,01 level
 NR = not relevant, because one or both of the values of the variables is not significant in the regression

In the second part of the table the results regarding the cost of debt are shown. The only significant difference is the difference between period one and two for the French countries. All the other associations do change but I can not state whether they are real differences or differences caused by coincidence. In relation to the change of accounting conservatism it is probably the case that the French countries were slightly more conservative than the Scandinavian countries and that they become less conservative and got a decrease in the cost of debt. However, the results are not unambiguous and in my opinion no clear evidence is found for my fifth and sixth hypothesis.

H5: The firms in the Scandinavian countries are more conservative and incur lower cost of debt than the firms in the French countries.

H6: The differences between the Scandinavian countries and the French countries converge after the implementation of IFRS.

6.6 Summary

In this part the results of my research are presented and analyzed. Compared to the outcomes of the study of Ahmed et al. (2002) my results are not so strong. However I can conclude that the a stable pattern of earnings is important for the conflicts between bondholders and shareholders of a firm. When there is a more stable pattern, there is more accounting conservatism which results in less bondholder-shareholder conflicts over dividend policy.

Further on, the relation between accounting conservatism and the cost of debt is examined. The results showed a significant relation between them. And therefore I can conclude that firms which are more conservative face lower costs of debt.

Finally, I investigated the differences between the two groups of countries on the implementation of IFRS in 2005 on the mentioned associations. For the association between accounting conservatism and bondholder-shareholder conflicts no supporting evidence was found. For the relation with the cost of debt a little bit of evidence supports that the relation has increased after the implementation of IFRS. For the differences on the degree of accounting conservatism and the cost of debt between the French and Scandinavian countries no clear evidence was found. Therewith I can state that IFRS did not have a significant effect on the topic of my research.

7 Summary and conclusion

In this master thesis I investigated if there is an association between bondholder-shareholder conflicts and accounting conservatism. Further I questioned whether accounting conservatism has influence on the cost of debt and finally I took the implementation of IFRS in 2005 into account whether it has influence on the associations or not. Therefore I presented the following research question in the first chapter of this master thesis:

Is there an association between bondholder-shareholder conflicts over dividend policy with accounting conservatism and the cost of debt? And has that association changed after the implementation of IFRS in 2005?

This research and the research question is based upon the results of a study of Ahmed et al. (2002). The results from their study supported an association between accounting conservatism and the cost of debt and the severity of bondholder-shareholder conflicts over dividend policy for firms in the United States. This research is designed to investigate whether there also exists such an association for firms in Europe. I did not take all countries in Europe into account. I choose for a group French countries and for a group Scandinavian countries. Finally, the implementation of IFRS in 2005 was mentioned in the introduction chapter of this thesis.

In the second chapter an elaboration is given on the subject accounting conservatism. Most definitions contain that it can be seen as a different treatment of good news (profits) versus bad news (losses). This asymmetric treatment of good and bad news can be explained by four main explanations: contracting-, litigation-, income tax- and regulatory explanation. This research is mainly focused on the first explanation. Namely, the use of accounting numbers in contracts to enforce accounting conservatism, which is supported by the agency theory about the asymmetric information between the principal and agent.

Two types of accounting conservatism that can be distinguished are balance sheet conservatism (balance sheet) and conditional conservatism (income statement). In this research measures for both kinds of accounting conservatism are used. The accrual based measure CONACC for conditional conservatism and the market based measure CONMTB for unconditional conservatism.

The used measures for this research are an accrual- and market based measure. There are also two other measures (skewness in cash flows and earnings measure and the earnings/stock returns relation measure), but they are less useful in my opinion and because I already had two measures, they are not used for my research.

In the following chapter the difference between the institutional setting of the two groups of countries are discussed. I used the four institutional groupings of Bushman and Piotroski (2006): legal/judicial regimes, securities law, political economy and tax regimes. It turned out that differences in legal origin have influence on the degree of conservatism. Another important aspect concerning the institutional setting is the protection of investors and shareholders. In countries with strong enforcement of laws less accounting conservatism is expected.

In the final part of the chapter the implementation of IFRS has been discussed. The main advantage is fair value accounting, which is also a disadvantage. Estimations has become more important after the introduction. However, the regimes were already converging and therefore the effect is not enormously.

The research of Ahmed et al. (2002) is often mentioned in this master thesis, but it is not the only prior research on accounting conservatism in relation to bondholder-shareholder conflicts over dividend policy and the cost of debt. Beatty et al. (2008) and others showed that there is a relation between accounting conservatism and the cost of debt. Ball et al. (2008) mentions that lenders make requirements with regard to accounting conservatism. The general outcome of the articles included in the literature study is that there exists an association between accounting conservatism, bondholder-shareholder conflicts and the cost of debt. Further, you can state that contracting theory is served with accounting conservatism in contradiction to the value relevance of information.

Chapter five is an important part of this master thesis and was about the research design. The measures and proxies were presented and explained. They are used in two regression formula's. The first one to investigate the association between accounting conservatism and the bondholder-shareholder conflicts over dividend policy. The formula is set up for the association between accounting conservatism and the cost of debt.

But even more important the hypotheses are developed in the fifth chapter. By using them the results of chapter six will be analyzed. The first hypothesis was as follows:

- H1. Firms that face more severe bondholders-shareholders conflicts over dividend policy adopt more conservative accounting.

Based upon the results of the research of Ahmed et al. (2002) I expected that this also would be the case for European firms. It turned out that the situation is a little bit different. For the French and Scandinavian countries there is only a weak support that there is a relation between accounting conservatism and the bondholder-shareholder conflicts over dividend policy. The only proxy that is significant is standard deviation of the return on assets. Therefore, I can conclude that a stable earnings pattern is important, but the other two explanatory variables, dividend and leverage, does not have such an impact on the association. This might be due to the low dividends and that lenders are more interested in the debt to equity ratio.

The second hypothesis was about the association between accounting conservatism and the cost of debt and is as follows:

- H2. Firms that adopt more conservative accounting incur a lower cost of debt.

The first support for this hypothesis was in the third table. Because, when a company is more conservative, the cost of debt should be lower which means that there should be a negative relation between them. That was the case and thus the first support for the second hypothesis. Further on in my research it turned out that both measures of accounting conservatism were significantly negative related to the cost of debt. However, in comparison to Ahmed et al. (2002) the explanatory power of the model was a lot lower. This can be caused by the different measure of the cost of debt. Ahmed et al. (2002) used the credit ratings of Standard & Poor's, but that ratings were not available for me. Therefore I had to use another measure which might be the reason of the lower explanatory power of the model. Nevertheless it

still shows an association between accounting conservatism and the cost of debt and therefore the second hypothesis became true.

The third and fourth hypothesis were the following:

- H3: The association between bondholders-shareholders conflicts and accounting conservatism increases after the implementation of IFRS.
- H4: The association between conservatism and the cost of debt increases after the implementation of IFRS.

The implementation of IFRS in 2005 was expected to have influence on the associations. To measure whether those associations has been changed I used the t-test and calculated the t-value of the significant variables from the regressions. For the third hypothesis I got contradictory results and thus I have no clear supporting evidence. For the fourth hypothesis only CONACC of the French countries turned out to be significantly changed. This is a little bit of weak support for the fourth hypothesis.

To test whether there exists differences between the two groups of countries in the sample and whether those differences changes after the implementation of IFRS I formulated the following two hypotheses:

- H5: The firms in the Scandinavian countries are more conservative and incur lower cost of debt than the firms in the French countries.
- H6: The differences between the Scandinavian countries and the French countries converge after the implementation of IFRS.

For the fifth and sixth hypothesis I calculated the t-values of the differences between the groups of countries and between the first and second period. It turned out that a lot of needed variables from the regression formula were not significant and therefore a lot of t-values are not relevant. The other t-values which remained were not always ambiguous. In my opinion these two factors result in the conclusion that no supporting evidence has been found for the fifth and sixth hypotheses. A note to this concerns the cost of debt for the French firms. They decreased significantly from the first to the second period, but only for the accrual based measure.

Concluding I can state that there exist associations between accounting conservatism and bondholder-shareholder conflicts over dividend policy and between accounting conservatism and the cost of debt. Actually, there is no really strong support that those associations has changed after the implementation of IFRS. This can be due to anticipating actions of companies to the introduction of IFRS. Before the implementation of IFRS they could have changed their way of reporting to the upcoming reporting rules and therefore is their transition of the national GAAP to IFRS more gradually. This can also be the result of the convergence projects. The implementation of IFRS was not suddenly. Before the first of January 2005 there were already introduction of general standards like the IAS. Also the Second EEC Directive can be a reason for the absence of a significant change. Finally, a possible explanation can be that the two groups both consist of a lot of European countries and however they are different, they both are primarily based upon roman law. Therefore it is a possible reason that no evidence is found for differences between the two groups.

8 Limitations of the study and recommendations for further research

In this chapter I mention the limitations of this study. I investigate a period before the implementation of IFRS and a period after the implementation and see what effect it has on the bondholders-shareholders conflicts over dividend policy, conservatism and the cost of debt. However, the effects are not solely contributable to the implementation of IFRS. There are also other rules, laws and economic events which have influence on my response variables.

One of them in the first period (2001-2004) are the corporate governance codes. Due to those rules more information becomes public and that may possible affect our outcomes and make them less comparable with the outcomes of Ahmed et. al. (2002). Unfortunately it is hard to use control variables for that, because corporate governance is not easy to measure.

In the second period (2005-2008) a small part of the global crisis is captured. That might have effect especially on the cost of debt. Nevertheless, I do not think that is a main limitation, because it is only for a small time in the sample period. Another limitation in the second period is that I do not take into account that there might be important changes of standards of IFRS after its implementation in 2005.

A last possible limitation I would like to mention is the measure for the cost of debt. Therefore I used the interest expenses on debt of a firm divided by its total interest bearing debt, while Ahmed et al. (2002) used the credit ratings of S&P. The explanatory power of the model was a lot lower in this research, which might be caused by these different measures. It might be interesting to conduct research with as sample a European group and a American group. In that case a comparison is better possible.

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Appendices

Appendix 1 Summary prior empirical research

<u>Author(s)</u>	<u>Object of study</u>	<u>Sample</u>	<u>Methodology</u>	<u>Outcome</u>
Beatty et al. (2008)	Influence conservatism on debt contracts.	<u>Sample size:</u> 2096 firms <u>Country:</u> USA <u>Research period:</u> 1994-2004	Regression analysis: Response variable: conservatism Explanatory variable: income escalators	If a company is not conservative enough in the opinion of the lender than contract modifications meet their demands for conservative financial reporting
Ball et al. (2005)	How companies deal with conflicting interest between the contract and the value relevance theory	<u>Sample size:</u> 80272 fiscal year earnings <u>Country:</u> 22 countries <u>Research period:</u> 1993-2003	Regression analysis: Response variable: conservatism Explanatory variable: Debt market size and equity market size	Through the contracting theory of the debt market, firms report more conditional conservative and comply therefore less to the value relevance of the equity market
Zhang (2009)	Research benefits of accounting conservatism for lenders and borrowers	<u>Sample size:</u> 327 firms <u>Country:</u> USA <u>Research period:</u> 1994-2003	Regression analysis: Response variable: average interest rate Explanatory variable: conservatism	Borrowers profit from accounting conservatism through lower interest rates and lenders profit through reduce downside risk
Li, X. (2009)	Association between accounting conservatism and the cost of capital	<u>Sample size:</u> 140.774 firm years cost of debt and 62.292 firm years cost of equity <u>Country:</u> 31 countries all over the world <u>Research period:</u> 1991-2006	Two regression analysis: Response variable: cost of debt and cost of equity Explanatory variable: conservatism	A higher level of conservatism in the financial reporting system of a country reduces the cost of equity and debt

<p>Ahmed et al. (2000)</p>	<p>Role of accounting conservatism in mitigating shareholders/ bondholders conflicts over dividend policy.</p>	<p><u>Sample size:</u> 581 firms 702 firms <u>Country:</u> USA <u>Research period:</u> 1987-1992 1993-1998</p>	<p>Two regression analysis: Response variable: conservatism and rating Explanatory variable: proxies for bondholder /shareholder conflicts and conservatism</p>	<p>Firms that face more and severe conflicts about their dividend policy tend be more conservative. Another outcome of their study is that firms which are more conservative are able to get debt at lower costs. Those results support that accounting conservatism plays a role in efficient contracting.</p>
<p>Ahmed et al. (2002)</p>	<p>Role of accounting conservatism in mitigating shareholders/ bondholders conflicts over dividend policy.</p>	<p><u>Sample size:</u> 484 firms 568 firms <u>Country:</u> USA <u>Research period:</u> 1987-1992 1993-1998</p>	<p>Two regression analysis: The same as in Ahmed et al (2000)</p>	<p>Accounting conservatism seems to mitigate bondholder-shareholders conflict over dividend policy and reduce the cost of debt. Firms who face more severe bondholder-shareholder conflict over dividend policy choose more conservative accounting. And more conservative firms are able to get debt at lower costs.</p>
<p>Nikolaev V.V. (2010)</p>	<p>Whether firms that rely on covenants in their public debt contracts recognize economic losses in earnings in a more timely fashion.</p>	<p><u>Sample size:</u> 5420 firm year observations by 2466 companies <u>Country:</u> Mainly USA <u>Research period:</u> 1986-2006</p>	<p>Regression analysis: Response variable: conservatism Explanatory variable: Proxies for use of covenants</p>	<p>The more a company relies on protective covenants in the public indentures, the greater the degree of its timely loss recognition. Second firms which use covenants in debt contracts exhibit a significant increase in timely loss recognition in the years after the debt contracting. And finally, public debt holders demand for timely loss recognition is much more than private debt holders demand for it.</p>
<p>Bushman and Piotroski (2006)</p>	<p>Exploration of how reported accounting numbers are shaped by the institutional structure of the country in which the firms are domiciled.</p>	<p><u>Sample size:</u> 86927 firm year observations <u>Country:</u> 38 countries all over the world <u>Research period:</u> 1992-2001</p>	<p>Regression analysis: Response variable: Income Explanatory variable: Proxies for institutional factors</p>	<p>Identification of institutions is important because they ultimately create the set of incentives of the explanations for conservative accounting practices. They find high quality judicial systems leads to less conservatism. Strong public enforcement aspect of securities law slow down the recognition of good news and leads to more conservatism. Political economy is a factor which result in less conservative accounting and it looks like that tax regimes does not have a lot of influence.</p>

<p>Jermakowicz and Gornik-Tomaszewski (2006)</p>	<p>What are the consequences of the implementation of IFRS by EU listed companies</p>	<p><u>Sampel size:</u> 112 companies <u>Country:</u> Countries from Europe which are member of the European Union <u>Research period:</u> 2005 and 2006</p>	<p>Questionnaires with questions to gain information about the perspective of firms about the implementation of IFRS</p>	<p>The received responses indicate that most respondents adopted IFRS for more than just the mandatory consolidation purposes. Further it is a costly and complex process which does not lead to lower cost of capital. However, the companies do expect more volatility in financial results. If the adoption of IFRS would not have been required, a majority of the correspondents would not have adopt it.</p>
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Appendix 2 Tables complements

Variable	French countries					Scandinavian countries				
	Mean	Standard deviation	First quartile	Median	Third quartile	Mean	Standard deviation	First quartile	Median	Third quartile
CONACC	-0,010	0,029	-0,025	-0,006	0,007	-0,007	0,029	-0,020	-0,008	0,010
CONMTB	2,072	1,665	1,092	2,021	2,625	1,601	0,773	1,152	1,439	1,791
COD	6,334	1,768	5,229	5,927	6,860	6,359	1,848	5,241	5,961	6,927
ROA	0,025	0,064	0,013	0,036	0,052	0,036	0,047	0,012	0,038	0,066
STDROA	0,030	0,042	0,008	0,013	0,033	0,034	0,025	0,016	0,028	0,044
DIV	3,297	7,365	0,035	0,645	3,121	0,026	0,029	0,006	0,014	0,036
LEV	0,169	0,113	0,073	0,161	0,238	0,219	0,134	0,126	0,200	0,288
SIZE	20,032	1,924	18,649	19,842	21,298	19,405	1,723	18,171	19,180	20,690
SALESGR	12,180	23,768	2,100	8,050	15,857	11,095	30,074	-0,999	4,670	13,359
BETA	0,736	0,382	0,456	0,769	0,986	16,491	70,868	0,351	0,731	1,276

Variable*	CONACC	CONMTB	COD	STDROA	DIV	LEV	ROA	SIZE	SALESGR	BETA
CONACC		0,179 (0,022)*	-0,427 (0,000)**	0,156 (0,046)*	-0,121 (0,123)	0,194 (0,013)*	-0,103 (0,190)	0,385 (0,000)**	-0,234 (0,003)**	0,145 (0,064)
CONMTB	0,090 (0,351)		-0,268 (0,001)**	0,164 (0,035)*	0,247 (0,001)**	0,099 (0,207)	0,280 (0,000)**	0,139 (0,077)	-0,191 (0,014)*	0,074 (0,345)
COD	-0,256 (0,007)**	-0,232 (0,015)*		0,349 (0,000)**	-0,089 (0,256)	-0,195 (0,012)*	-0,059 (0,456)	-0,321 (0,000)**	-0,037 (0,635)	-0,142 (0,070)
STDROA	0,272 (0,004)**	0,169 (0,080)	0,085 (0,378)		-0,166 (0,034)*	-0,252 (0,001)**	-0,699 (0,000)**	-3,730 (0,000)**	0,129 (0,100)	-0,049 (0,532)
DIV	-0,169 (0,079)	0,425 (0,000)**	-0,134 (0,165)	-0,088 (0,361)		0,033 (0,671)	0,236 (0,002)**	-0,109 (0,166)	0,133 (0,090)	0,026 (0,742)
LEV	0,142 (0,141)	-0,044 (0,649)	-0,260 (0,006)**	-0,142 (0,139)	-0,264 (0,006)*8		0,044 (0,573)	0,267 (0,001)**	0,070 (0,372)	0,032 (0,688)
ROA	-0,363 (0,000)**	0,383 (0,000)**	-0,077 (0,428)	-0,136 (0,160)	0,630 (0,000)**	-0,067 (0,486)		0,203 (0,009)**	-0,110 (0,161)	-0,140 (0,074)
SIZE	0,046 (0,636)	0,044 (0,653)	-0,127 (0,188)	-0,024 (0,802)	-0,059 (0,541)	0,153 (0,113)	0,047 (0,625)		-0,083 (0,288)	0,330 (0,000)**
SALESGR	-0,191 (0,047)*	0,156 (0,106)	-0,102 (0,289)	0,181 (0,060)	-0,019 (0,845)	0,038 (0,697)	0,211 (0,028)*	0,060 (0,538)		-0,082 (0,296)
BETA	-0,085 (0,377)	0,115 (0,234)	-0,035 (0,719)	0,005 (0,957)	-0,030 (0,757)	-0,780 (0,418)	0,058 (0,550)	-0,133 (0,167)	0,264 (0,005)**	

° See table 2 for variable definitions.
* = significant at 0,05 level, ** = significant at 0,01 level