Erasmus University Rotterdam

The relationship between accounting conservatism and West-European bank performance during the recent financial crisis

An empirical study of conservatism in the West-European banking sector

Tarik El Allali
Master Thesis
Juli 2013

The relationship between accounting conservatism and West-European bank performance during the recent financial crisis

An empirical study of conservatism in the West-European banking sector

Tarik El Allali

Abstract

Accounting conservatism is a well acknowledged and important concept in accounting and prior research indicates its significance. This research examines the relationship between accounting conservatism and bank performance. There is no prior research of which I am aware of that investigated this relation. This research focuses itself on the West-European banking sector. The conditional type of conservatism is measured in this research. There are three sample periods in this research the full sample period, pre-crisis period and crisis period. The degree of conservatism will be measured for all these periods. Subsequently the banks will be divided in good performing and bad performing banks. Finally the relation between conservatism in the pre-crisis period and bank performance in the crisis period will be examined. The most significant result of this research was that good performing banks in the crisis periods were conservative in the pre-crisis period (at the 10% significance level).

Key words: *conditional conservatism, financial crisis, West-European banks*

Erasmus University Rotterdam
Erasmus School of Economics
Master Accountancy, Auditing and control
Master Thesis

Name: Tarik El Allali
Number: 302206
Supervisor: Ms. Dr. Y. Wang
Co-Reader: Mr. Dr. C. Knoops

Acknowledgements

Writing this master thesis and performing the research was a great learning opportunity in the field of conducting scientific research. Furthermore it was a great joy and wonderful experience hence I have been interested in accounting for a long time. The last couples of weeks were very challenging for me but in the end conducting a proper research and graduating with a good mark for the thesis is all worth the effort. This year I have had the opportunity to discuss accounting and economic subjects during the seminars with students from all over the world under the guidance of experienced teachers.

During the course of making this thesis I have had help from students and teachers who provided comments and gave advises to improve my thesis. The first thanks go out to Ms. Yue Wang, she was my lecturer during the seminar and guided me through the whole writing process with comments and advises, she provided a huge contribution. Second I would like to thank my co-reader Chris Knoops in advance for his efforts in reading and judging the thesis.

I also would like to thank KPMG for their support and providing me an internship to write the thesis in their office. Especially my KPMG-supervisor; Marjolijn Heemskerk who helped me a lot and was very kind.

And also I would like to thank my relatives and friends for their support in me. Without the kindness and patient of especially my parents I would have never made it this far.

Thanks,

Tarik El Allali **26-07-2013**

Table of contents:

1 Introduction

This thesis examines the relationship between performance in the West-European banking sector and the accounting conservatism principle. The focus of my thesis is the West-European Banking sector that subsequently performed well or disastrous during the pre-crisis and crisis periods. The financial crisis had a massive impact on companies and especially the financial sector in significant parts of the world. Business operations of financial institutions were largely based on the presumptions of stable economic environments and strong economic performance. Nevertheless these optimistic business practices led to an economic crisis that emerged in 2007 and the negative distortions are still felt today.

I will discuss the accounting conservatism principle, elaborate on evidence of conservatism in different scientific papers and then empirically investigate the degree of conservatism of the West-European banks before and during the crisis. Subsequently the relationship between bank performance during the recent financial crisis and conservatism before the crisis will be examined.

This research will be based on the Basu model and I will make an innovative analysis by researching conservatism and its relation on the performance of large West-European banks before and during the recent financial crisis. This thesis will be of value and importance for practitioners, financial analysts, accounting students and other generally interested readers. This thesis will contribute and extend prior literature by providing empirical evidence on the relationship between accounting conservatism and performance of banks for pre-crisis and crisis periods. This thesis will introduce a basis for examining the link between accounting conservatism and bank (firm) performance. Previous studies regarding accounting conservatism suchlike Basu (1997) examined the conservatism principle and the asymmetric timeliness by using the firm's stock returns. The main conclusion of this research was that the sensitivity of earnings to negative returns (proxy for bad news) is at least two times larger than the sensitivity of earnings to positive returns (proxy for good news). Dietrich et al. (2007) designed a research in which stock returns are incorporated to assess whether "bad" news is recognized more timely than "good" news. Mcleay and Raonic (2004) presented additional proof on timeliness and conservatism using one dataset of European firms that traded their equity on exchange markets in multiple European countries. Ross L. Watts (2003) studied conservatism in accounting for decades and in his two-part series paper of 2003,

Watts extensively elaborates on the main explanations for accounting conservatism and presents arguments that the accounting conservatism principle still is very significant in improving financial reporting.

1.1 Introduction to accounting conservatism

Accounting conservatism refers to the understatement of assets and revenues and the overstatement of liabilities and expenses. The recognition of losses should take place when it is assumed that these losses will occur, even when there is no legal claim for this. Recognition of gains on the other hand should only take place when there is a legal claim for it (Watts 2003). The conservatism principle states that in reporting the financial statements, a more pessimistic picture (understate) than an optimistic picture (overstate) will be described, due to this it is less probable that users of financial information will be hurt relying on prepared financial statements. The conservatism principle is one of the most significant and longstanding principles in the accounting. Conservatism has been influencing accounting for hundreds of years (Basu 1997). Sterling (1970) described conservatism as the most influential principle of valuation in accounting theory. Watts (2003) stated in his paper concerning conservatism in accounting, that future research on conservatism would be of big interest for the accounting science and practice.

In my opinion it would be of great scientific benefit to further explore the effects of this important and longstanding principle in relation with the performance of West-European banks before and during the financial crisis.

1.2 Introduction to recent financial crisis

The recent financial crisis emerged in 2007 and at the moment of writing this thesis the effects and economic consequences are still visible and active. A discussion will be provided concerning the principal factors that contributed to the crisis and made the crisis resilient.
First of all the financial crisis emerged in the United States in the end of 2007. The risky and incorrect lending procedures of US top banks are considered to be the principal factors of the financial crisis. US banks provided risky financial products to their clients, mainly mortgages. The clients were given the tag; prime borrowers, without taken the lending proceedings into consideration. Hence had the banks done this then a great part of the clients would have never obtained a loan or mortgage from the bank (Mishkin 2008).

The risks incorporated in the securities that functioned as a cover for the mortgages were difficult to estimate. Institutions and bank clients that were illiquid obtained credit from the banks. Repayment of the loans in future periods by the clients and institutions was assumed by the banks. While examining the liquidity status of these groups they had no chance to repay the loans. Bank managers only aimed at gaining bonuses by selling the financial products and only had a short term horizon. These immoral lending practices are considered to be unconservative and have led to major failure and bankruptcy of many banks and financial institutions across the world.

These dubious lending practices were strengthened by an increase in petrol and food prices, a credit boom and a speculative bubble in real estate and equities (Roubini 2009). The beginning of a financial crisis in 2007 was a fact when immense losses were made on the risky loans. Due to these losses and the fall of Lehman Brothers in mid-2008 the financial world was turned upside down and hysteria overruled. From this point on a huge decrease of stock prices and real estate prices caused major financial complications and even bankruptcy of numerous banks and investment companies in Europe and The US.

1.3 Economic consequences of the crisis

This global crisis translated itself in several economic distortions; rapidly increasing unemployment rates, a mitigation of commodity prices, a fall of international trade and one of the most important consequences of all is a lack of trust of the public in financial institutions and banks. The public began to set question marks on management policies, strategies and ethical behaviour. Economists predict that this crisis will be the greatest since the Great Depression of 1930 (Lightman 2009; Finch 2009). This crisis stimulates scientists and practitioners to investigate the causes, possible prevention methods and regulations for banks to prevent a crisis of this scale in the future.

Below a further elaboration on the causes of the economic crisis is given, I will mention some of them while others that are more significant for my research will be presented more elaborately. It is argued by practitioners and researchers that the below mentioned economic effects are the main causes of the financial crisis:

- Over-leveraging (Credit Default Swaps and Collaterized Debt Obligations)
- Increase of oil prices
- Weakened regulation activities by the government
- Improper and deficient functioning of the Federal Reserve Bank CEO; Alan Greenspan

The degree of risk in the Collateralized Debt Obligation (CDO) and Credit Default Swaps (CDS) was estimated incorrectly by a significant amount of banks. CDO´s are obligations covered by collateral. A Contractual agreement between two parties that assign the credit risk to another party are referred to as a CDS. With these instruments banks and investors were able to benefit of the low interest rates and borrow massive sums of money that they only could pay back if the housing market continued to increase in value (Salmon 2009). Banks depended on future earnings such as the gains they assumed to make of the mortgages, what they didn't take into consideration is the level of risk incorporated in these mortgages. The banks overstated their future earnings; these earnings were not verifiably realized, even though the banks and managers continued to count themselves rich. This is an unconservative and improper way of accounting and an inappropriate way of banks doing business.

1.4 Introduction of main research question and sub-questions

I introduced a brief definition of accounting conservatism and gave a short explanation of the recent financial crisis. With the above mentioned information evidence is provided to further investigate if there is a link between the accounting conservatism principle and the performance of West-European banks during the economic crisis. Later in this chapter more evidence will be provided regarding researching the above mentioned link. Having enriched myself with this information I am interested in investigating what the influence of accounting conservatism is on the performances of West-European banks.

The main research question of the thesis is:

What is the relationship between the conditional conservatism principle and the performance of the West-European banking sector during the financial crisis?

In order to answer the main research question the following sub questions are formulated:

- What is accounting conservatism?
- What are the main causes of the financial crisis?
- Which prior research was conducted on accounting conservatism?
- What type of conservatism is relevant for this research?
- What are measures for accounting conservatism?
- What other factors influence accounting conservatism?
- What are measures for bank performance?
- Are West-European banks conservative?
- What is the relationship between accounting conservatism and the performance of European banks?

1.5 Validation research question

In my understanding a research of the relation between accounting conservatism and bank performance in West-Europe during the recent financial crisis has not been performed before. There are studies that have investigated the impact of financial crises on conservatism. During a financial crisis financial reporting is less conservative and timely (Vichitsarawong et al. 2010). Companies that suffer from a financial crisis communicate much positive financial information to shareholders to reduce the negative effects of the crisis. This presided in the worry that management would exaggerate in publishing more positive information than normal and postpone publishment of negative information hence contemptuous investors respond faster to bad news than good news (Kodres and Pritsker 1998; Kaminsky and Schmukler 1999). When examining post-crisis periods an increase in conservative accounting that is even greater than the level of conservatism in the pre-crisis period is seen. (Givoly and Hayn 2000). Hence I assume that there is a positive relationship between accounting conservatism and bank performance. I assume that in times of financial crisis, thus times in which there is a lower degree of conservative accounting the performances of banks will be

more negative than in normal periods. Conservatism means that gains and losses are recognized differently. Losses should be recognized immediately and gains only when it is verifiable that they will be realized (Watts 2003). Thus for less conservative banks it is much more likely that gains would be recognized before it is sure that these gains will be obtained. Or in the case of losses that losses would not be taken immediately when they are recognized but will be postponed. Taking the above mentioned into consideration it is more likely for a bank with a low degree of conservatism to interlace in financial discomforts than a bank with a high degree of conservatism. This is the main motivation to conduct a research on bank performance linking it to conservatism; my assumption is that there will be a positive relationship between the degree of conservatism in the pre-crisis period and the performances of banks in the crisis-period. Hence the prudence of the conservatism principle will contribute to enhancement of bank performances by declining financial discomforts.

1.6 Methodology

In order to answer the sub-questions 1, 2, 3, 4, 5, 6 and 7. I will do an extensive literature review on accounting conservatism and elaborate on previous studies concerning accounting conservatism. I will provide information about the link between accounting conservatism and bank performance and about the recent financial crisis. In order to answer sub-questions 8 and 9 an empirical research is conducted. The data that will be used for this research exist of financial information from West-European banks from the period 1997-2009 and within this period 2 sub-periods; 1997-2006 and 2007-2009. This information will be extracted from the Bankscope Databank and Thomson One banker. The Basu-model (Basu 1997) is used to measure the degree of conservatism. The data consists of earnings and returns data and performance measurement data.

In this research I provide evidence for the existence of conservatism in the West-European banking sector during the period 1997-2009. Further my results indicate conservatism in the pre-crisis period (1997-2006), subsequently I found no significant sign of conservatism in the crisis period (2007-2009). These results are in line with my assumptions concerning the existence of conservatism in the different sample periods. Furthermore evidence is provided for the positive relationship between conservatism and bank performance. Hence good performing banks (in the crisis period) were conservative during the pre-crisis period and bad

performing banks were not conservative. A remark must be made that this relationship is only significant at the 10 percent confidence level.

1.7 Structure

The remainder of this thesis is structured as follows: First economic background of the countries in the sample and background on banking regulation is provided in chapter 2. In order to gain insight into previous literature studies and results and get a thorough understanding of the conservatism concept I will conduct an extensive elaboration on this concept in chapter 3 of the paper, in this chapter I will describe accounting conservatism in a way that is relevant for my research. The 4th chapter presents the literature review which will generate a basis for my empirical research and I will introduce several approaches to assess accounting conservatism; I will discuss a variety of measurements for conservatism and specific approaches to assess this accounting principle. Furthermore in this chapter I will explain the Basu model, which will be the basis for the empirical research. Chapter 5 provides the hypotheses development and explanation of the regression model and elaboration on data and sample periods. Chapter 6 shows the analyses and results of the research. Chapter 7 summarizes and concludes.

2 West-European countries

In this chapter relevant economic background will be provided of the countries and the effects of the financial crisis. This will be done separately for each country in the sample in order to give more insight in the economical and financial situations of the countries. Furthermore two significant Accords concerning banking policies and regulations on an international level will be extensively discussed.

2.1 Economic background West-European countries

The bank sample in this research consists of 15 Western-European countries. The following European countries will be part of the sample that is chosen to select banks from: Austria, Belgium, Germany, Denmark, Spain, Finland, France, Great-Britain, Ireland, Lithuania, Luxembourg, Netherlands, Norway, Portugal and Sweden.

Austria

The economy of Austria belongs to the top economies of the world in terms of development and total gross income of the country (International Monetary Fund 2009). Austria has a high level of prosperity. The most significant parts of the economy are the high-tech industry and international touristry. Since Austria has entered the European Union, the occupation of trade within Europe expanded and the dependency with the conventional commodity relations has been mitigated (Austrian National bank).

The increase of the Austrian economy was mitigated by the financial crisis in the middle of 2007. When comparing this downturn in economic progression with other developed European countries; the mitigating effect on the economy in Austria was less significant (Economic survey Austria 2009). The main negative effects of the crisis in Austria where restrictions of credit.

Belgium

The economy of Belgium traditionally focuses itself on the mining and steel industry, commercialization and its dedicated and advanced transporting system. The main succesfactor in this is the centred location of Belgium within Europe (US Department of State 2010). Belgium mainly imports raw-materials and exports them when fabricated. Belgium has almost

no agricultural sector and the national debt is almost equivalent to its GDP (CIA World Fact Book 2010).

Belgium was heavily struck by the recent financial crisis. The most relevant and important negative effects were the rigorous complications with the biggest banks of the country; Fortis and Dexia. Fortis, the largest bank in the Benelux suffered heavy liquidity problems and the stock value swiftly declined, the take over of ABN-AMRO strengthened these negative effects (International Herald tribune 2008).

Germany

The economy of Germany is the largest of Europe and de fourth largest in the world. Since the early 1800's Germany has a sublime highly innovative economy. The export trade of Germany contributes to more than thirty percent of the national income (CIA Worls Fact Book). The main products that Germany produces are cars, engineering goods, machinery and chemicals.
Germany has little natural resources; more than sixty percent of the oil, gas and raw materials that Germany needs for production are imported from other countries (Federal Ministry of Economics and Technology 2009). In contrast to for example France and The United Kingdom the economic headquarter of Germany is not centred around one city but among a number of cities. These economic centres are Frankfurt, Wolfsburg, Stuttgart and München (Gürtler, Detlef Wirtschaftsatlas Deutschland).

The effects of the financial crisis decreased the national income during the final half of 2008. From this point Germany entered a financial recession (Bloomberg). The industry production of Germany decreased with more than 3 % during this period and the president of Germany authorized more than 50 billion to help stir up the economy (France 24 2009).

Denmark

The economy of Denmark is driven by the services sector. This sector provides the majority of employment and economic activities in the country. The economy of Denmark is characterized by industrial companies, import of resources and international exchange of

products. The prosperity level of Denmark is equal to that of other West-European countries (Human Development Index).

The economy of Denmark has been struck by the recent financial crisis. The major fall down in international business; the culmination of construction activities has had a huge negative impact on the Danish economy. Furthermore the employment has been heavily mitigated (Economic Survey Denmark 2009).

Spain

The economy of Spain could be seen as a highly impulsive economy that is very able in obtaining international financing (La Moncloa 2008). Within the last ten years Spain created a significant part of the jobs in the European Union. Unfortunately this dynamic trend of growth and prosperity has strongly been declined the last years. The economy of Spain heavily depends on the agricultural and construction sector, during the recent financial crisis this last mentioned sector has suffered much (Tremlett and Giles 2006).

The main cause of the financial crisis in Spain is the long term issued debt, the collapse of the property market which went together with the liquidation of many large firms. Another significant negative effect caused by the crisis is the expansion of the unemployment to more than 14% (Economia 2009).

Finland

The economy of Finland has a mixed character with both large industries and a large services sector. The output per head is comparable with economies like those of France, Germany and the UK (Statistics Finland 2007). The Industrial sector is very important for the export of Finland. Finland is ranked high within Europe as a know-how economy and has excellent international connections for distribution of its products (Embassy of Finland 2008).

The financial crisis has mitigated and restricted the resources of banks and financial institutions to acquire financing. The forecasts are that the unemployment will increase and the economy will decline. Also the private expenditures will decline (Bank of Finland).

France

The economy of France has a mixed character; it is the fifth strongest economy in the world and the second of Europe (World Bank 2010). Traditionally the economy of France is defined by much government regulation. Many companies and private banks were nationalized. Although during the recent two decades much of this regulation was declined and liberalization expanded, the government remains having significant shares in sectors like the banking, communication and services. France has a mix of both a highly industrialized and agricultural economy.

The economy of France also has been hit by the financial crisis. The principal negative effect of the financial crisis in France is that many citizens have problems with repaying their credit loans. Many citizens in France relied on debt and credit loans to support them. Because of the decreasing economy, increasing unemployment and mitigated economic activities these people are aren't able to repay the credit that was provided to them. Also international financing and credit companies are closing in France.

Great-Britain

Great Britain is a big producer of engineering goods, cars, airplanes and fabrics. Besides this, the financial sector is one of the most important drivers of the British economy. London belongs to the top concerning financing, banking and insurances. Today the services sector is the most significant driver of welfare in Britain whereas the influence of the fabricating industries on the economy is decreasing (CIA World Fact Book 2010).

One of the most significant financial centres in the world is situated in London. The recent financial crisis especially struck the segments in which the financial services sector of London was specialized namely securitization and derivatives (Hutchinson 2009). Subsequently the damage will cause huge losses in the financial sector, which will ultimately lead to a mitigation of the financial services sector of London. A significant part of these loses will be accounted for by the tax-payers (Hutchinson 2009).

Ireland

The economy of Ireland has undergone a transformation during the last couple of years, the main economic activity lied in the agricultural sector but Ireland has shifted to a highly

technical international exchange economy. Ireland is considered to be one of the richest nations in Europe (OECD). A remarkable fact is that the GDP of Ireland is significantly greater than the GNP. Since mid-ninety's the economy of Ireland has made great progression, this has mainly to do with a lowering of tax rates which stimulated consuming and trade (Smith 2009).

The current financial crisis had a huge impact on the economy of Ireland; this has mainly to do with national economic problems that are linked with the downfall of the housing market. Ireland was the first country in the European Union that officially moved into a recession (Central Statistics Office). Ireland is now associated with disconcerted countries in Europe like Italy, Portugal, Greece and Spain due to the bad financial position and large debt of the country (Evans-Pritchard 2008).

Lithuania

Lithuania has fortunate regulations for business activities hence the country has a high position in the Eastern-European region concerning economic freedom (World Bank group 2010). This factor stimulates the growth and expanding of economic activities in the country. Another factor that stimulated growth in Lithuania is the fact that it was the first country that separated itself from the Soviet-Union which improved capitalism and independence.

Analysts project that the firms of Lithuania will feel the negative effects of the crisis in the foreign trade market and that the growth will mitigate. It is expected that suppliance of credit will be restricted. Also investing capital will be lower (Pavilenene 2008).

Luxembourg

The economy of Luxembourg heavily depends on the steel and financial sector. The GDP of Luxembourg is one of the highest in the world and a large part of the country's economy depends on international trade. Furthermore the economy has a splendid growth (CIA World Fact Book 2007). Financing contributes to the most important and significant part of the economy.

The economy of Luxembourg mainly experienced the negative effects of the crisis in the financial sector by restricting credit supply. Also the fabricating sector of the economy has

been struck due to the decline in international export; this has led to a lower GDP (OECD Observer).

Netherlands

The Dutch economy is the sixteenth largest economy in the world according to GDP. The Dutch economy is strongly dependent on international trade; which is stimulated by the open character of the Dutch economy. On the Index of Economic Freedom the Netherlands is the thirteenth most laissez-fairs economy. The main economic activities lie in the highly advanced agricultural sector, oil refinement and transport sector (CIA World Fact Book).

The main negative effect caused by the financial crisis in the Dutch economy is the increase of the mortgage rates. Considering the fact that the prices of property are already high this increase in mortgage rates further breaks down the real estate market. Subsequently this will lead to less construction of properties and a lower demand for construction companies (De Stentor 2007).

Norway

Norway's economy runs mainly on its resources. These resources are exploration of petrol and fabricating this petrol into fuels. Also the fishing industry and agricultural sector are grand pillars of the Norwegian economy. The social security system and level of welfare in Norway are significant to that of other developed Western countries (Economic Survey Norway 2010).

The financial crisis had mitigated negative effects on the economy of Norway. This is translated into a relative low decrease in employment and a low drawback in economic activities. The financial sector of Norway is passing the crisis with relatively little devastations (Economic Survey 2010).

Portugal

Portugal has a mixed-economy, in the mid-ninety's the fishing and agricultural sector made up a significant part of the economy, during the last thirty years these sectors have declined from 25 percent to 4 percent of the economy. The economy depends on export mainly within the borders of Europe.

Due to the recent crisis the growth will be slowed down, the state debt will increase and the unemployment will increase significantly. Other effects are lower trade and investing activities (OECD Observer).

Sweden

The economy of Sweden consists of the exploration of resources (mainly steel and wood), production and export of medicines, communication products and automobiles. Hence the economy of Sweden is significantly dependent on the export of these products and resources. A significant fact is that almost half of the GDP of Sweden consists of tax income.

The Swedish economy has faced a major decline in export levels due to the crisis. The unemployment is rising in the country. The consummation is expected to fall. The projection is that the economy will recover when the trade will revive (OECD Observer).

2.2 The capital Basle Accords

In this sub-chapter the Basle Accords will be discussed and elaborated on. The Basle Accords are very influential concerning banking policies in the Western-World. Hence in this research a sample of West-European banks is used. Relevant information concerning the Basle Accords will be provided.

The capital Basle accord is a cooperation agreement between Western banks. In 1930 the joint cooperation; the Bank for International Settlements (BIS) was founded. BIS was founded because Germany struggled with very high debts caused by the War. Since the Second World War BIS guards the solvability levels of Central Banks to guarantee financial health in the Western World (Capital Basle Accord 2003).

2.2.1 Basle Accord I

Nowadays there are 2 Basle Accords; Basle I and Basle II. Basle I was founded in 1988 in Basel, Switzerland. The focus of Basle I was mainly to set a borderline for the capital standards of banks (Capital Basle Accord 2003). The Basle I Accord first only was applicable in the G-10 countries; France, Germany, Canada, Belgium, Italy, Sweden, Switzerland, the United Kingdom, The Netherlands and Japan.

The Capital Basle Accord was designed for banks and markets operating in these well developed countries. The Capital Basle Accords are explicitly not designed for upcoming and developing economies (B. Balin 2008). Basle I mainly concentrates itself on the providence of minimal standards of capital for banks in order to mitigate the credit risk of the banks. Basle I does not authorize capital for protection against volatility of currency's or economic recessions (B. Balin 2008). Basle I promotes banks and governments to obtain and maintain more conservative banking laws and regulations. Basle I consists of four pillars which will be discussed:

- The Constituents of Capital; this pillar describes what class of on-hand capital could be classified as banks reserves and the amount of each class that a bank can maintain. This pillar contains two Tiers see table 1 below:

Table 1. Tiers of the constituents of capital pillar (Capital Basle Accord 2003)

Tiers:	**Types of fund**				
Tier 1 Capital	Cash reserves	Sale of Bank equity			
Tier 2 Capital	Reserve	→	Loan losses	Holdings of subordinated debt	Hybrid debt/equity instrument holdings

- Risk Weighting; this is a scheme to measure the risk in the assets of a bank. There are five types of risk schemes to measure the risk in the assets (B. Balin 2008). See table 2 below:

Table 2. Risk types of assets

Risk type	Percentage risk assets	Example
1 Riskless	0 %	Bank cash
2 Low risk	20 %	Non-OECD bank debt < 1yr
3 Moderate risk	50 %	Residential mortgages
4 High risk	100 %	Non-OECD bank debt >1yr
5 Variable risk	Variable 0, 10, 20 or 50%	Claims on domestic public entities

- The Target Standard Ratio; this pillar converges the first two pillars of the Basle Accords. It provides a general rule whereby 8% of the risk-weighted assets of the bank must be assured by the capital reserves in Tier 1 and 2 (Basle Capital Accord 2003).

- The Transitional and Implementing Agreements; this could be seen as an inspection and control system to assure perseverance of the Basle Accord (B. Balin 2008).

2.2.2 Basle Accord II

Because of the rapidly changing and dynamic economy the Basle Committee introduced a more broad agreement. This agreement is known as Basle II (Capital Basle Accord 2005). The second Basle accord enlarges the reach, technicality and profundity of Basle I. The original frame and pillars of the Basle I accord are strongly enlarged and broadened to cover new positions to credit risk, operational, and interest risk, and include market control (B. Balin 2008).

The significant and complex improvements in Basle II are in the first pillar: *Minimal Capital Requirements.* Basle II introduces a more detailed way of measuring risk in the bank's assets. Also Basle II attempts to mitigate the flaws in Basle I concerning bank's increasing risk while falsely displaying minimum capital requirements (Basle Capital Accord 2005).

There are three methods to classify the risk in the bank's assets; these will be shown in the table 3 below:

Table 3. Standardized approach

Rating of debt by authorized rating institution	AAA till AAA-	A + till A -	BBB + till BBB -	BB+ till BB -	< B -
Percentage risk	**0%**	**20%**	**50%**	**100%**	**150%**

Besides the above mentioned method there are two alternative methods for measuring the risk in capital. These two methods are *Internal Ratings Bases Approaches* (IRB) which will be presented briefly:

- *The Foundation IRB;* following this method banks themselves estimate the risk rate of their assets. Policy makers present the possibility of this risk.

- *The Advanced IRB;* this method is equal to the Foundation IRB besides the fact that banks and not policy makers present the possibility of the risk (B. Balin 2008).

Concerning the operational risk Basle II also provides more advanced and precocious methods. There are three methods that will be elaborated in the table below:

Table 4. Methods to asses operational risk (Basle II 2006)

.

Methods	Elaboration
Basic Indicator Approach	**Hold Capital equal to 15% of income**
Standardized Approach	**Splits a bank units to state cash amount needed for protection**
Advanced Measurement Approach	**Banks themselves prepare the reserve amounts needed**

Concerning market risk Basel II tries to asses the amounts of reserves that banks need to protect themselves from this risk. Basel II distinct between the two primary risks that lead to market risk; interest rate and volatility risk (B. Balin 2008).

The improvements and changes of the second and third pillar of the Basle Accord are fewer than pillar one, hence these two pillars are smaller and less complicated than pillar one. The second pillar of the Basle II Accord mainly concerns the banking regulations (Basle Capital Accord 2005). In Basle II the rights of regulators concerning bank control and oversight have been improved and prolonged. If top management presents an inappropriate risk analyses regulators have the right to hold them responsible.

The third pillar in Basle II attempts to improve and extend disclosures concerning the bank's capital and risk analyses. Basle II proposes to present this information quarterly to the main public. Basle II tries to incentive shareholders to revoke and punish banks when they undertake inappropriate risks and too low reserves (B. Balin 2008).

The Basle Accords mitigate the differences between rule setting and standards of big international banks. Basle I has been widely adapted. The definite Basle II Accord was settled in 2006 in Spain. A major dispute was that the majority of the European countries wanted that Basle II was applicable for all banks, while the U.S. and Canada wanted Basle II just to be applicable for big global banks (B. Balin 2008). Finally the last option was chosen.

The major critics on Basle II is that developing economies and their banks are not taken into consideration in the Accord. This exclusion of developing economies and financial markets indicates ignorance of these countries (B. Balin 2008).

2.2.3 Significance of the Basle Accords in the banking sector

The Basle Accords are elaborated in this research hence their influence on the Western banking sector (G-10 economies) is very significant. In this research a sample of the West-European banking sector is used, a number of countries in the sample apply the Basle Accords. The Basle Accords try to develop policies, standards and regulations that preserve a more cautious and conservative way of banking. Hence the Basle Accord imposes regulations and policies for banks which are mainly focussed in providing incentives for banks to operate in a more prudent way. Taken the above mentioned into consideration then the Basle Accords mitigate improper and unjust bank behaviour and thus mitigate financial distortions.

2.3 Summary

In this chapter economical theoretical background is provided of the West-European countries that are used in the sample. Also the effect of the financial crisis on the economy of each country is discussed. The following countries are used in the sample; Austria, Belgium, Germany, Denmark, Spain, Finland, France, Great-Britain, Ireland, Lithuania, Luxembourg, Netherlands, Norway, Portugal and Sweden. Furthermore the Basle Accords are discussed; Basle I and Basle II. These accords were made to mitigate risks and improve control on banking policies in the G-10 countries. The two Basle Accords are significant in this research hence they incentive banks to operate in a more prudent way and thus mitigate improper and unjust bank behaviour that increases the probability of financial crises.

3 Accounting conservatism

In this part of the thesis an introduction to the general theory concerning accounting conservatism will be made. The accounting conservatism principle will be defined. Furthermore a discussion will be given on the importance of the accounting conservatism principle and its effects.

3.1 Definition

Conservatism is the difference between the recognition of profits against losses. In its most extreme manner all loses should be expected and no gains should be expected (Watts 2003; Bliss 1924). Thus gains should only be recognized if there is a legal claim to the revenues creating them. The recognition of losses should take place when it is assumed that these losses will occur, even when there is no legal claim for this. Practically this means that auditors need a higher degree of confirmation to recognize good information as gains than bad information as losses (Basu 1997). This interpretation of conservatism is found in many accounting standards and concepts. For instance, in the Statement of Financial Accounting Concepts (FASB 1980) it is stated that in the case of equally like estimations of payments or receiving's in the future conservatism obliges to use the less optimistic estimation. The Accounting Research Board (ARB) states that transitions in cost predictions should be instantly recognized by firms if these transitions result in future expected losses, while not if they result in future gains. Thus conservatism results in a greater probability of timely accounting recognition of bad news than for good news (Basu 1997). Alternatively conservatism implies reporting the highest values of liabilities and costs and reporting the lowest values of assets and revenues (Belkaoui 1985).

3.2 Conditional and unconditional accounting conservatism

In this part two different types of accounting conservatism will be discussed. There is a distinction between conditional and unconditional conservatism. When bad information is recognized in a timelier fashion than good information, conditional conservatism is mentioned; also known as news-dependent or ex-post conservatism (Beaver and Ryan 2005). Net assets are depreciated faster when receiving bad information than wrote-up upon receiving good information under conditional conservatism. Conditional accounting conservatism refers to the application of accounting methods and policies that recognize bad news in earnings on a timelier basis than good news (Basu 1997; Pae 2007). Conditional

conservatism is more coherent to contracting than unconditional conservatism. Conditional conservatism differs from unconditional conservatism, which is also known as news-independent or ex-ante conservatism. In the case of unconditional conservatism firms recognize book values of net assets which are understated during their course of life due to the adoption of accounting standards and rules in bringing forth the financial statements. That's why unconditional conservatism is also referred to as balance-sheet conservatism (Beaver and Ryan 2005). The higher coherence with contracting makes conditional conservatism more suitable for this research. The general contracting explanation is when conservative reporting is used as a tool to approach moral hazard produced by interested parties to the company, because of the lack of business and payoff information of these parties (Watts 2003; Rees 2004).

3.3 Explanations of accounting conservatism

To explain the origin of the accounting conservatism principle several causes that are mentioned in the literature will be elaborated. In the literature the following explanations for conservatism are given (Watts 2003; Rees 2004):

- Contracting (e.g. management behavior)
- Shareholder litigation (e.g. reduce lawsuits)
- Taxation (e.g. reduce tax payments by earnings underestimation)
- Accounting regulation (e.g. setting standards)

These explanations that are given for accounting conservatism will be discussed.

3.3.1 Contracting

Accounting conservatism under the contracting explanation arises because different interested parties in an organization have unequal providence of information. This asymmetry in information causes moral hazard. Conservative accounting is a means of approaching moral hazard caused by interested parties to the firm because these parties have less business information and information about the payoffs (Watts 2003). The limited liability and constricted horizon of the management also contributes to moral hazard (Watts 2003; Rees 2004). Normally managers overstate financial figures to obtain higher rewards. Conservatism

restricts this opportunistic behavior with its asymmetrical verifiability requirement; obtain all loses and gains only if they are verifiably realizable (Hayn 1995).

The next cause of moral hazard is the limited liability of the manager. The managers limited working period and limited liability play a principal part in explaining the need for accounting conservatism's differential verifiability (Watts 2003). From the manager's point of view conservatism makes it very difficult to recover of excess compensation payments and repair for excess investments when the manager departures the firm before cash flow realization (Basu 1997).

The final explanation of moral hazard is the manager's limited horizon. Managers with a limited horizon will not have the incentive to undertake negative NPV-projects (in t=1) that will be profitable in the long run (t=2, t=n). The net present value of such a project is calculated as follows:

$$NPV = Rt \ / \ (1+i)\ ^{\wedge}t \qquad (1)$$

t represents the time of the cash flow
i represents the discount rate
Rt represents the net cash flow at time t

The NPV is an important financial model used to estimate the value an investment adds to the company. The above mentioned projects (negative NPV at t=1) will not be executed by managers if conservatism is not applied in their benefit contracts. The managers will then only look at the short run and choose NPV projects that generate the highest amount of earnings in the first period(s) (Watts 2003). Appliance of conservatism in the benefit contracts will expand the horizon of the managers. This means they will also execute projects that have negative NPV's in the first period(s) but will generate positive NPV's in the future. Hence profitable NPV projects over the long-run that initially were negative contribute to a maximization of shareholders value and continuity of the business operations (Watts 2003). Subsequently conservatism obligates managers to maximize the value of the company instead of enriching themselves with bonuses. Conservatism delays the recognition of profits that stimulate managers to only focus and execute short term positive NPV-projects (Watts 2003; Smith and Warner 1979).

3.3.2 Shareholder litigation

The next explanation for accounting conservatism is shareholders litigation. Companies that overstate their net assets probably will have higher litigation costs than companies that understate net assets. Overstatement of net assets means that the computed value for these net assets by the company is higher than the market value of the net assets (Beaver 1993). Thus the company is now more sensitive for acquisitions of shareholders that the firm presents false or biased information. Conservative companies most probably will understate their net assets which implies lower litigation costs (Kellog 1984; Watts 1993).

3.3.3 Income tax & Firm governance

The third explanation for accounting conservatism is income tax. Applying conservatism means instant recognition of losses and gains only if it is verifiable that they are going to be realized. This enables managers of profitable firms to reduce the present amount of tax payments and increase the value of the company (Rees 2004; Watts and Zimmerman 1979).

Accounting conservatism could also be caused by firm governance. The asymmetric verifiability requirement of accounting conservatism could be caused by employment contracts or firm governance reasons. Normally losses are hided by managers to prevent being fired before the end of their contracts (Watts 2003). Due to the asymmetry between recognizing gains and losses, losses will be recognized faster than gains which informs the board of directors and shareholders immediately about these losses. This could lead to an investigation for reasons of these losses and could result in discharging the manager (Watts 2003).

3.3.4 Accounting Regulation

The final explanation of accounting conservatism is the regulatory explanation. Regulations provide incentives for companies to report conservative financial statements. Losses as a result of overvaluation of assets and income are more observable in the political process than lost gains as a result of assets or income that are below value (Watts 1977). The above mentioned situation incentives standards setters and regulators to be conservative. This also caused the SEC for many decades to prohibit upward valuations on assets (Zeff 1972; Walker 1992). Standard setters and regulators will be criticized if companies are able to overstate net

assets in contrast to understating net assets. Several accounting standards show this matter for example:

e.g. The International Financial Reporting Standards (IFRS) 2004 describe prudence (conservatism) as a certain amount of attentiveness that is necessary when making the predictions under conditions of uncertainty, for example not overstating income and net assets and not understating liabilities and expenses.

It is noticed that today there are incentives to substitute the conservatism principle for other less qualitative and objective accounting measures. For instance the fair value method of IFRS, which enables managers to overstate net assets. SFAS No. 142 for instance replaces the amortization of goodwill with periodic assessment of whether goodwill is impaired. The impairment is addressed by estimating the future cash flows. It remains however the question if these cash flows will be realized. Accounting rules and regulations are internationally shifting from a more rule based to principle based setting.

3.4 Summary

The influence of conservatism on the accounting practice has been for centuries. The principle causes of accounting conservatism have been mentioned and extensively elaborated these are; contracting, shareholder litigation, taxation and accounting regulation. The notification is made that financial reporting tends to shift from conservative accounting to other valuation methods and principles, implying more principle based approaches.

4 Literature review

In this chapter several measures to asses accounting conservatism will be discussed. The literature is used to elaborate on different measures to research conservatism. Subsequently various specific research approaches: time-series, cross-sectional, contracting and previous findings of researches will be discussed.

4.1 measures for accounting conservatism

In this section of the paper a variety of measures to asses accounting conservatism will be discussed namely:

- Net assets measures
- Earnings and accrual measures
- Earnings/stock returns measures

All the above measures rely on the conservatism principle; losses are recognized directly and gains only when they are verifiably realized. This means that net assets are always understated (Watts 2003). One type of method to investigate this understatement are net assets measures. Researchers have developed different net asset models to estimate this understatement. They use models to value the firm's shares and/or the ratio of the firm's book value of net asset to its equity value (Watts 2003).

4.1.1 Net assets measures (Feltham and Ohlsen models)

A special type of net assets measures are the Feltham-Ohlson valuation models. (Feltham and Ohlson 1995, 1996). These models focus on estimating the degree of undervaluation of net assets. The above mentioned specific models use parameters that represent the amount of understatement of operating assets. The models make the assumption that accounting depreciation is higher than economic depreciation.

4.1.2 Net asset measures (book-to-market and conditional conservatism)

The next types of net asset measures are the book-to-market measures. Book-to-market ratios are the fundamentals for book-to-market measures.

Valuating a company by comparing its book value to its market value leads to the book-to-market ratios (Beaver and Ryan 2000). Beaver and Ryan (2000) assumed that conservative accounting leads to understatement of net assets and hence understatement of the book-to-market ratios. To measure conservatism they regressed the book-to-market ratios on each separate year and on the companies dummy variables and on the companies returns for the current and previous couple of years. The variation between the book value of the firm and market values of equity is predicted by the coefficients of the dummy variables. The lower the coefficient (biased component) of the dummy variables, the more the book value of net assets is distorted downward indicating a higher degree of conservative accounting (Beaver and Ryan 2000).

There are a lot of scientific papers that investigated the effect of conditional conservatism and market-to-book ratios. For instance Collins and Kothari (1989) and Easton and Zmijewski (1989) have made predictions that there is a relationship between the slopes of Basu and the market-to-book ratio. Also evidence is provided for the negative relation between the timeliness coefficient of Basu and the market-to-book ratio (Pae et al. 2005; Roychowdhury and Watts 2007). These papers provide evidence for the asymmetry between the recognition of profits and losses.

4.1.3 Earnings/Accrual Measures

Other methods to estimate conservatism are earnings/accrual measures. Gains are probably more persistent than losses according to earnings measures of conservatism. For example; future cash flows that will be generated by the value of an asset will be recognized in the periods when they are realized and not when they occur. This means that losses are recognized instantly while profits only will be realized when they are verifiable even if there is an equal chance of occurrence. This causes a significant decrease of earnings when the loss is recognized instead of a mitigated flow of earnings in the future (Basu 1997; Elgers and Lo 1994). Companies with negative earnings are more likely to have recognized losses, but when these losses do not recur in the future negative earnings are less likely to persist than positive earnings. Earnings measures to estimate conservatism concern predicting that negative earnings changes are more probable to reverse in the future period(s) than positive earnings changes Brooks and Buckmaster (1976) and Elgers and Lo (1994).

Secondly the accrual measure of conservatism will be discussed. Accrual accounting (accruals) refers to recognizing earned revenues or incurred expenses without taken into consideration the receiving or disbursement of cash. Hence the asymmetry between gains and losses leads to an asymmetry in accruals. This implicates that losses will be completely accrued while gains are not. Accumulated accruals have the tension to be understated and periodic accruals tend to be negative. These two groups of accruals (negative and accumulated) are used to measure conservatism (Givoly and Hayn 2000). In the paper of Givoly and Hayn (2000) it is stated that accounting conservatism lowers summed up earnings over time. And make the suggestion that the signal and enormity over time are measures of conservatism.

4.1.4 Earnings/stock returns relation measures

The final method of measuring accounting conservatism are the earnings/stock returns relation measures. The changes of net asset value tend to be indicated by stock prices in a timely manner, independent of whether it is a positive or a negative change. Because of the fact that conservatism predicts recognizing losses in a timelier fashion than gains; accounting losses are reflected better by stock prices than gains (Ball et al 2000; Holthausen and Watts 2001). In the Basu paper (1997) one of the main conclusions is that companies with negative stock returns posses a higher stock return's coefficient and a higher R-squared than companies with positive returns. The 1997 paper of Basu was used as the bases for research concerning measuring conservatism by a lot of scientists suchlike Ball et al (2000) and Holthausen and Watts (2001).

4.2 Alternative measures of conditional conservatism

The scientific literature provides many alternative measures of accounting conservatism. These alternative measures are useful hence they improve and extend evidence for the asymmetric timeliness of the coefficients based on returns measures. A brief elaboration on three research approaches that are merely based on book and not market estimators will be given (Ball et al. 2009). These approaches show results that correspond to those of the return based approaches.

4.2.1 Measures based on asymmetric reversion

It is less likely that positive changes in earnings will reverse to the mean than negative earnings changes (Basu 1997). The prediction for the asymmetry in this measure is based on the belief that economic income is not correlated over time (Ball et al. 2009), this means that positive turnings in income are negatively correlated. Conservatism therefore implicates that reversals in accounting income are more transitory when they are integrating negative accounting income than positive accounting income.

The above mentioned measure has both advantages and disadvantages in comparison with the use of returns as an indicator for income. This measure doesn't predict timeliness of the asymmetry between recognizing gains and losses. Also this measure doesn't make a distinction between economic income and disturbances in accounting income.

In spite of these disadvantages the results of this measure are both foreseeable and very likewise to results from returns-based measures. This advantage has been evidenced across countries, companies and auditors liability in several papers; Ball et al. (2003), Ball and Shivakumar (2006) and Krishnan (2005).

4.2.2 Accruals-based asymmetry measures

When focusing on conditional conservatism in relationship with cash flows and accruals we see a linear relation among accruals and cash flows. In several studies it is concluded that accruals function in foreseeable manners to integrate losses in a more timely way than gains (Nikolaev 2009 and Wittenberg-Moerman 2008). These findings are very significant and exciting because several non-price proxies could be used to forecast economic income.

4.2.3 Left skew in accounting income

The amount of left skew in accounting income compared to the skew in returns and cash flows is the last alternate measurement of conservatism (Ball et al. 2000; Givoly and Hayn 2000). The left skew could influence conditional conservatism (Ball et al. 2003 and Krishnan 2005).

4.3 Empirical evidence on accounting conservatism

When conducting research there are certain research approaches. These approaches will be discussed briefly. These different approaches have implications for and subsequently justify the existence of conservatism and that conservatism has increased in recent times. Also these different approaches provide a possibility to discriminate among the four explanations (contracting, litigation, taxation and accounting regulation) of conservatism. The three specific approaches that will be discussed are:

- Time-series variation
- Cross-sectional variation
- Contract variation

These three research approaches will be elaborated and linked with the explanations and measures of accounting conservatism.

On average the time-series variation in the earnings/stock return relation is consistent with all four explanations for conservatism.

Little evidence is provided that the cross-sectional variation is consistent with the contracting explanation (Beaver and Ryan 2000). In the paper of Ball et al. (2000) a significant amount of cross-country evidence is provided by comparing firms in code law and common law countries that supports the contracting explanation. The contract variation is based on the contracting explanation of conservatism. In conclusion it could be stated that there is more evidence to research the contracting and litigation explanations. Tax and regulation explanations are also consistent with the evidence; however these explanations are not addressed directly in any studies (Watts 2003).

Vichitsarawong et al. (2010) studied the relationship between conservatism and timeliness of earnings of companies in the countries Hong Kong, Malaysia, Singapore and Thailand during the 1997 Asian financial crisis. Their research focused on conservatism and timeliness of accounting earnings in the pre-crisis, crisis and post crisis periods. Hence they performed a time-series analyses by measuring the degree of conservatism over different periods and a cross-sectional analyses by measuring the degree of conservatism between different countries.

The conclusions of this paper were that during the crisis period the degree of conservatism and the timeliness of accounting earnings was smaller than during periods of normal economic activity. Next, they concluded that after the crisis conservatism was improved and this could be due to an enhancement in corporate governance and stronger regulatory controls in the examined countries..

4.4 International institutional factors effect on accounting earnings

In this paragraph the differences between accounting regulations and country regulation and the influence of these institutional factors on the timeliness of income recognition.

4.4.1 Differences due to different GAAP regulations

In the research paper of Pope and Walker (1999) the variations in earnings recognition between the United-States and United-Kingdom are investigated. The Basu-model is used to assess the degree of change in income recognition (Basu 1997). Several papers have concluded that variations in information content are related to institutional factors (Amir et al. 1993; Pope and Rees 1992).

Ball et al. (1997) examine several GAAP regimes and conclude that there are significant differences in the timeliness of recognition of earnings. They address these differences to legal and institutional factors. Pope and Walker 1999 find out that income before extraordinary items in the United-States is significantly timelier in recognizing bad news than income before extraordinary items in the United-Kingdom. This has to do with the higher judicial proceeding and regulative costs in the United-States. When looking at income after extraordinary items a different conclusion is seen, the United Kingdom is significantly timelier in recognizing bad news than the United-States (Pope and Walker 1999). For the United-States the degree of conservatism is equal for both types of earnings (before- and after extraordinary items). In the UK GAAP there is more latitude for extraordinary items. When looking at good news, the UK GAAP is more timely in recognizing this than the US GAAP (Pope and Walker 1999).

Giner and Rees (2001) focused on variations in GAAP between the UK, France and Germany. These countries are expected to have little variation in economical and societal factors, so that these could be minimized in the research. The relationship between bad news and earnings is

much stronger than between good news and earnings (more timely recognition) in all the countries (Ginger and Rees 2001). The highest degree of conservatism was measured in the United-Kingdom followed by France and then Germany. These variations concerning conservatism between the three countries were not significant.

4.4.2 Legal differences

In the study of Ball et al. (2000) international deviations between France, Canada, Australia, The United Kingdom, The United States, Japan and Germany are examined. In this investigation they make a differentiation between common law and code law countries. The degree of political influence represents the difference between common law and code law countries. Code law countries are characterized by a higher level of political influence than common law countries. It is concluded in this paper that common law countries are faster in recognizing losses than code law countries. Probably the character of code law countries contributes to solve the information asymmetry by institutional aspects rather than conservative reporting. Subsequently in common law countries there is a higher degree of conservatism. Conservatism and timeliness have a big share in the transparency of financial reporting. Because of the more timely recognition of losses, conservatism contributes to stimulate managers to show the losses faster (Ball et al. 2000). Hence Conservatism controls management, debt (because conservatism interlaces leverage and dividends more timely), and it is a significant feature of corporate governance. In the sample that Ball et al. (2000) use; the common law countries are The U.S, The UK and Australia. The code law countries are Germany, Japan and France. The political influence on accounting standards in code law countries is seen at national and firm level. The accounting regulations of a country are settled with the representation from important political groups like financial institutions, laborers and business institutions. This is referred to as the stakeholder model. The former mentioned groups have agents that are contracting with the company. When a comparison is made with common law countries we see that in code law countries the accounting earnings are more influenced by the payouts predilections of these different groups of agents and little by the request for public disclosure. Common law countries have a more shareholder concept, in which the information asymmetry between management and shareholders is more answered by public disclosure (Ball et al. 2000). The overall conclusion is that the degree of conservatism in code law countries is significantly smaller than in common law countries.

Others like Garcia et al. (2004) also investigated conservatism in: Italy, Spain, The Netherlands, Belgium, Switzerland, Germany and the UK. In this investigation both the Basu-model and book-to-market measures are used to measure conservatism. Both balance sheet conservatism as well as conditional conservatism occurs in all the countries. In all the above mentioned countries (except Italy) bad news in accounting earnings is timelier recognized than good news in accounting. This investigation (Garcia et al. 2004) doesn't incorporate the influence of institutional factors besides the fact that the UK is a common law country and the other countries are code law countries.

4.5 Accounting conservatism and IFRS

In this sub-chapter a brief introduction of IFRS will be given and subsequently accounting conservatism under IFRS will be discussed. Hence the main focus of the research is the relationship between bank performance and conditional conservatism the relevant theory concerning IFRS will be discussed briefly.

4.5.1 Introduction to IFRS

IFRS (International Financial Reporting Standards) was set mandatory for European listed countries since begin 2005. This doesn't implicate that all these countries as of that date first applied IFRS. Besides the European countries several other countries apply IFRS. IFRS are uniform standards set up by the International Accounting Standards Board (IASB). IASB is an international autonomous organ that provides standards and regulations concerning financial reporting (Ball 2006). Financial statements have to guarantee some qualitative characteristics, mainly concerning reliability, comparability and a fair representation of the figures. IFRS maintains and improves these characteristics. Furthermore IFRS improves making comparisons of firm reports in different countries. The principal factor is that IFRS tends to a fair value approach; valuation depends on market estimates (Ball 2006). Main critiques on IFRS are that it is principle based and hence appliance of the standards relies on human judgments and interpretations of management.

4.5.2 Conservatism and IFRS

Considering the conservatism principle under IFRS some friction is seen. Conservatism implies systematically understating assets and revenues and overestimating liabilities and expenses (Watts 2003). Hence conservatism maintains a more backward-looking approach.

IFRS on the other hand primarily wants to guarantee reliable, relevant and comparable financial reporting. Thus IFRS doesn't favor the systematic understatement of assets and overstatement of liabilities (Hellman 2007). In IFRS conservatism is not mentioned by name, hence it doesn't contribute to the fair value approaches of IFRS. However this doesn't mean that conservatism is no longer applied. Conservatism is a concept that incentives a more prudent way of reporting and especially in these dynamic economic times this prudent way of reporting is appreciated by the stakeholders. Furthermore the implementation of the standards of IFRS must be done by auditors. In many cases conservatism is part of the culture of these auditors (Hellman 2007). Hence it strongly remains a question if the standards of IFRS will be executed "properly."

This research

Considering this research the main objective is to measure conservatism and then link it with bank performance. It is expected that conservatism determines performance and not the other way around. Assuming this it is less relevant what causes the conservatism hence the principal factor for the research is the presence of conservatism and from that point on examining its effect on performance. The motivation for the assumption that conservatism has a positive influence on bank performance is that less conservative banks will more likely recognize gains before it is sure that these gains will be obtained. Or in the case of losses that losses would not be taken immediately when they are recognized but will be postponed. Thus it is more likely for such a bank to experience bad performance or financial distress than a more conservative bank.

4.6 The Basu model

Probably the most significant research concerning conservatism is the 1997 paper of Basu.
This paper, which is cited more than 260 times is one of the most principal and important in the accounting science. Until recently there were few scientists that recommended the use of the model presented in Basu's 1997 paper. However in 2009 a working paper by Ball. et al. presented innovative arguments and empirical evidence to use the model in the Basu paper. Basu presented hypotheses and assumptions concerning the influence of conservatism on the timeliness of earnings and the effect on the persistency of earnings in his paper. The result of the research is that for samples with negative unexpected returns the regression coefficient is higher than for samples with positive returns. Thus the recognition of bad information by earnings is more timely than good information.

Basu also predicted that the increase in the timeliness of earnings over cash flow is greater for negative unexpected returns than for positive unexpected returns; accruals point of view. Cash flow measures are less timely than earnings measures. Hence accruals will be recorded when evidence is provided of contractual performance before the actual payments have been made (Dechow 1994). From the cash flow point of view Basu stated that the consequences of earnings and cash flows to bad information differ from the effects of earnings and cash flows to good information. The results of the earnings and cash flow regressions show that the regression coefficient for bad information is higher for earnings than for cash flows. Also the persistency and timeliness of earning are examined. These are various measurements for the same problem. Similar results are found in several scientific papers: Brooks and Buckmaster (1976) and Elgers and Lo (1994).

Finally the information content of earnings releases and conservatism are measured by Basu. This is done by the earnings response coefficient (ERC). The ERC represents the abnormal return of earnings at announcement. The relation between positive earnings and abnormal returns is more significant than that between negative earnings and abnormal returns. This shows how conservatism influences the recognition of information and that markets learn from different sources. Basu concludes that the higher the liability of the accountant the higher the degree of conservatism will be (Skinner 1994)

4.7 The Basu model limitations

When performing this research the limitations of the Basu model have to be considered. Despite the enormous benefits of researchers using this model and finding greater asymmetric timelines for various samples, a couple of limitations have been developed through time. The main limitations of the Basu model are:

- **Returns are not equivalent to non-earnings news**
  Depending on the firms disclosure policy good and bad information could be presented in different manners. It is possible that returns aren't able to include all non-earnings information (Givoly et al 2007)**.**

- **Conditional conservatism is applied less frequently by unconditional conservatism** (Beaver and Ryan 2005).

- **Bad news may not be immediately recognized in earnings**
  Although conditional conservatism is replaced by unconditional conservatism, this does not automatically lead to incorporation of bad news in earnings because of buffers to impairment write-offs in GAAP, practical difficulties in assessing impairment and discretionary accounting behavior (Beaver and Ryan 2005).

- **It can be hard to observe conservatism empirically when multiple shocks are aggregated in returns and earnings**
  This is an important limitation, because accounting data is very amalgamate of origin (Givoly et al 2007).

- **Specific economic phenomena – Generate asymmetric timeliness**
  Asymmetry could also be caused by the abandonment option and the smoothing out of tax payments by winners and realizing losses for tax purposes more quickly by losers (Watts 2003).

- **Specific types of discretionary accounting behavior – Generate asymmetric timeliness** (Hanna 2003).

- **Little time series consistency in estimates of conditional conservatism at firm level**
  This limitation specifically provides troubles for researchers, hence the predictions concerning the contracting and other explanations of conservatism usually are most naturally framed and tested as differences across firms (Givoly et al 2007) **.**

4.8 Summary

There are three different methods to assess conservatism; net assets measures, earnings and accruals measures and earnings/stock returns measures. All these measure depend on the asymmetric verifiability concept of accounting conservatism. Next, international institutional factors could influence the degree of conservatism. For instance common law countries are

more conservative than code law countries (Ball et al. 2000). Finally the Basu model is very significant and important to measure conservatism. Many scientist conducted their research concerning conservatism based on the Basu model.

5 Research design

In this chapter, the hypothesis development and research design will be described and explained. First the research approach and hypotheses will be elaborated on. Then a visual overview of the hypotheses will be given. Subsequently the proxies used to measure the variables in the model will be elaborated. Finally the used model will be discussed with the data samples and sample periods.

5.1 Research approach

In this empirical study of the European banking sector the relationship between the accounting conservatism principle and the bank performance during the recent financial crisis is examined. This research is innovative and will contribute evidence of the link between conservatism and bank performance. The empirical part of the research is executed by using a time-series regression. In the first part of the literature review the distinction was made between conditional and unconditional conservatism. Conditional accounting conservatism is referred to as earnings conservatism. Unconditional accounting conservatism is addressed to as balance sheet conservatism (Ryan 2006). In this research conditional conservatism will be measured with the Basu model. In order to determine the link between conditional conservatism and bank performance, the banks will be classified as either bad performing or good performing banks on the bases of performance measures.

5.1.1 Research type

This research is a time series analyses; assumptions and relations between the variables are measured in a time period to asses the influence and examine the relationships. First these relations and assumptions will be presented as hypotheses and then an empirical study will measure the relationships and estimate the significance of these relations

5.2 Hypotheses

This empirical analysis of the relationship between firm performance and accounting conservatism is based on several hypotheses:

H1: Conditional conservatism exists in West-European banks during the full sample period (1997-2009)

The influence of conservatism on the accounting practice has been for centuries. Conditional conservatism plays an important role in recent financial reporting (Basu 1997). Also when the recent stock developments are evaluated, it is seen that there are a lot of fluctuations in the stock values which could be an indicator for the existence of conditional accounting conservatism, hence conditional conservatism has the aspect that it gives a high variability in earnings. Basu presented in his research empirical evidence for the presence of conditional conservatism (Basu 1997). Prolonging on this evidence it could well be that conditional conservatism exists in the West-European banks. Subsequently Nichols et al. (2008) empirically indicate the use of conditional conservatism by banks on which is added that for public banks the magnitude of conservatism is even greater. Therefore I claim that conditional conservatism exists in West European banks.

H2: The degree of conditional conservatism in the pre-crisis period (1997-2006) is higher than in the crisis period (2007-2009)

During the crisis period the performance of the banks was significantly lower than during the pre-crisis period. A significant number of banks went bankrupt during the crisis period. The assumption in this research is made that conservatism is positively linked with bank performance; meaning that a high degree of conservatism (in the pre-crisis period) will lead to good (better) performing banks (in the crisis period). Otherwise a low degree of conservatism will lead to bad (less) performing banks. Hence I assume that the degree of conservatism in the crisis period was lower than for the pre-crisis period. I assume that conservatism is positively related with performance, thus in periods of good performance (pre-crisis period) the degree of conservatism will be higher than in periods of bad performance (crisis period).

H3: Conditional conservatism in the pre-crisis period (1997-2006) has a positive influence on the performance of West-European banks in the crisis period (2007-2009)

Conservatism means that there is a difference between the recognition of profits and losses. Losses should be recognized immediately and gains only when it is verifiable that they will be realized (Watts 2003). Thus in firms in which there is a low degree of conservatism it is much more likely that gains would be recognized before it is sure that these gains will be obtained or in the case of losses that losses would not be taken immediately when they are recognized but will be postponed. Taking the above mentioned into consideration I could state that it is more likely for a bank with a low degree of conservatism to interlace in financial discomforts than a bank with a high degree of conservatism. Hence the assumption is made that there will be a positive relationship between the degree of conservatism in the pre-crisis period (1997-2006) and the performances in the crisis-period (2007-2009). Because the prudence of conservative banks in the pre-crisis period will contribute to enhancement of firm performances by declining the financial discomforts in the crisis-period. In my understanding there is no scientific article that measures the link between conditional conservatism and bank performance.

5.3 Visual overview of the hypotheses:

In the following tables a visual overview will be provided of the hypotheses in order to clarify the used models.

Table 5. Visual overview of hypotheses 1:

Sample:	**Sample West-European Banks (Bank scope)**	**Measuring Conservatism** →	Degree of Conservatism
Period:	1997-2009	↓	
Model:	Basu model		

Table 6a. Visual overview of hypotheses 2 (1997-2006):

Sample:	**Sample West-European Banks (Bank scope)**	**Measuring Conservatism** →	Degree of Conservatism
Period:	1997-2006	↓	
Model:	Basu model		

Compare ↕

Table 6b. Visual overview of hypotheses 2 (2006-2009):

Sample:	**Sample West-European Banks (Bank scope)**	**Measuring Conservatism** →	Degree of Conservatism
Period:	2007-2009	↓	
Model:	Basu model		

Table 7a. Visual overview of hypotheses 3 (Performance):

Divide banks:	**Good performing**	**Bad performing**
Measure:	ROA/ROE	ROA/ROE
Period:	2007-2009	2007-2009

Table 7b. Visual overview of hypotheses 3 (Good banks):

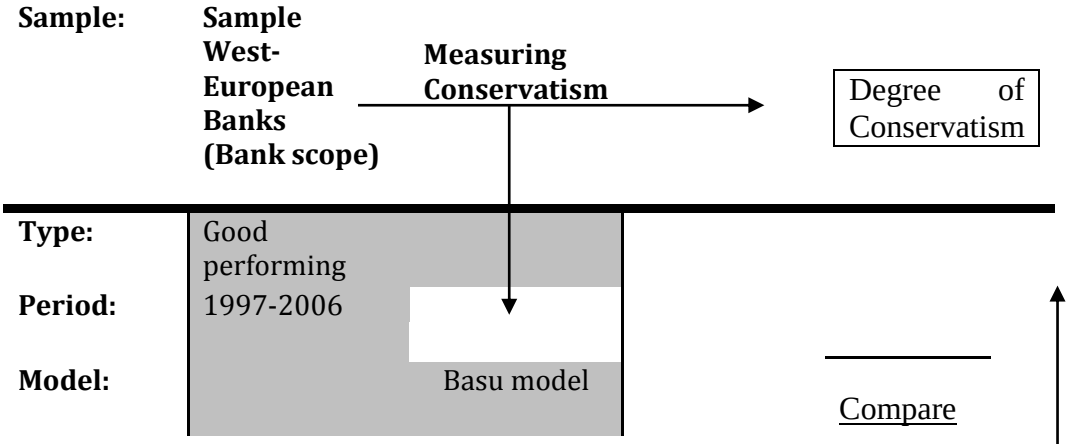
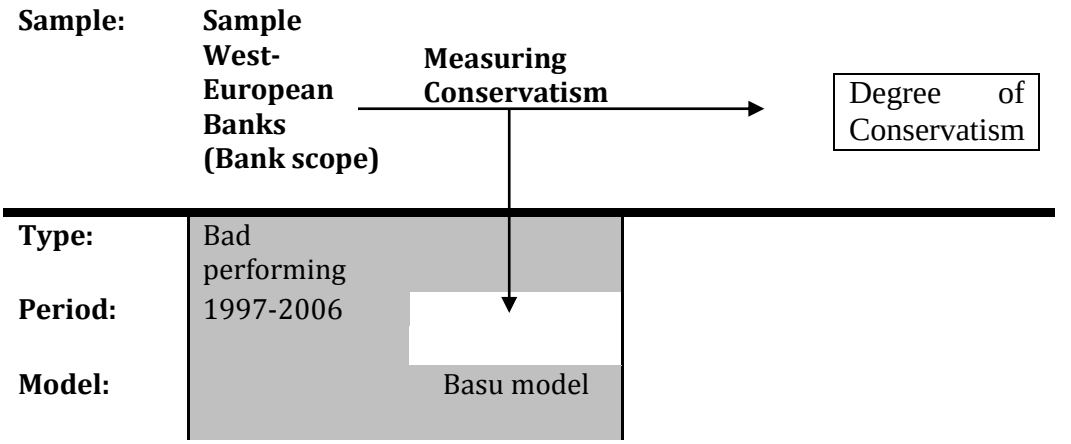


Table 7c. Visual overview of hypotheses 3 (Bad banks):



5.4 Research model

To investigate if there is a relationship between conditional conservatism and firm performance the Basu regression model will be used. This model and its variables will be discussed in detail.

5.4.1 Model motivation

In this research the Basu model is chosen to examine the degree of conditional conservatism in earnings. This is consistent with Basu (1997) and Pae (2007). The focus of the Basu model is on conditional conservatism instead of general conservatism like the Feltham-Ohlson model does. In this empirical study the main focus is on measuring conditional conservatism. Furthermore the Basu model measures the degree of conditional conservatism through the earnings/stock returns relation. The Feltham-Ohlson makes use of net asset measures. Hence net asset information is less (easily) available than earnings/stock information the Basu model (1997) is better in use. Finally when comparing the Basu model with earnings/accruals measures it could be stated that the Basu model is more appropriate to use when examining conditional conservatism, hence conditional conservatism results in more variability and skewness in earnings.

5.4.2 Basu regression model

The Basu regression model:

$$NI = \beta 0 + \beta 1\ DRit + \beta 2\ Rit + \beta 3\ Rit \times DRit + \varepsilon it \qquad (2)$$

- **NI** represents the earnings yield, which are the earnings per share at the beginning of the fiscal year.

- **R** indicates the stock return on the firm from 9 months before fiscal year-end to three months after fiscal year-end (in this research the stock return at the beginning of the fiscal year is used).

- **RD** is a dummy variable and is 1 when R < 0 and is 0 otherwise. When R is negative, this is assumed to be because R is aggregating bad news about the future. The dummy

variable has a value of 0 when R is not aggregating future bad news, and has a value of 1 when R is incorporating future bad news.

- **Coefficient B2** presents the relationship between E and R when both E & R indicate current performance and future good performance is anticipated by R but not by E.

- **Coefficient B3** reflects the increase in the strength of the relationship between E & R when E (as well as R) anticipates bad performance in the future (Basu 1997). Coefficient B3 is the Basu measure of earnings conservatism, since it is entirely due to earnings reflecting anticipated bad performance in the future. The estimate of B3 in Basu is around 0.166 (Basu 1997). In the article of Vichitsarawong et al. (2010) the B3 coefficient measures the incremental sensitivity of accounting income to the integration of bad information than good information.

- **Coefficient B2 + B3** measure the absolute sensitivity of income to negative returns. Subsequently (B2 + B3 / B2) measures the amount that earnings is more sensitive to negative returns as to positive returns (Basu 1997; Vichitsarawong et al. 2010)

- **Adjusted R2** reflects the timeliness of financial reporting in the Basu regression model.

- ε represents the error which is the part that is beyond the explanatory power of the model.

5.5 Proxies for the variables

The proxies for the variables of the Basu model and firm performance are elaborated in this part of the thesis. The variables of the Basu model were elaborated in subchapter 5.2; subsequently the proxies for the net income and returns variables will be presented:

- **NI**; this variable is measured by the *earnings per share of bank i, deflated by the beginning of the period share pr*ice: (like in Basu 1997; Vichitsarawong et al. 2010).

Xit / Pit

(3)

Xit; represents the earnings per share of bank i and Pit-1 represents the beginning of the period share price of each bank i. In this research Xit deflated by Pit-1 is noted as NI.

- **R**; this variable is represented by the *holding period returns of bank i including dividends* (like in the Basu 1997; Vichitsarawong et al. (2010).

For measuring the bank performances in this research the ROA (return on assets) and ROE (return on equity) are used.

The ROA is formulated as:

$$ROA = \frac{(Net\ income + Interest\ tax\ savings)}{Average\ total\ assets} \qquad (4)$$

The ROA is the principal measure for bank performance hence the ROA gives a measurement of the earnings in comparison with the whole investment. The ROA is a stable measure of performance; this is of importance hence part of this research is conducted during a crisis period. In order to guarantee the robustness of measuring performances, a second measure will be used. Hence the performance of the banks will be checked by two measurement indicators. This second measure is the ROE. The ROE measures a company's efficiency at making gains from each part of equity (Woolridge et al. 2006).

The ROE is calculated as follows:

$$ROE = Net\ income / Shareholders\ equity \qquad (5)$$

Al the above mentioned proxies and performance measures are obtained from the Thomson One Banker Databank.

5.6 Sample selection, periods and data

In this thesis a sample of West-European Banks from the following countries; Austria, Belgium, Deutschland, Denmark, Spain, Lithuania, Finland, France, Great-Britain, Ireland, Luxembourg, Netherlands, Norway, Portugal and Sweden will be used. The main

geographical focus of the research is West-Europe. Former Soviet countries are excluded from this data sample. The countries Latvia and Estland are excluded due to the fact that no data was available for these countries. Switzerland is excluded because of the Bank secrecy policy (1934) that this country has, for this reason and comparability the banks in Switzerland are excluded from the data sample. Italian banks are excluded from the data sample; the main reason for this is because Italy has a lot of small private banks and conglomerations of small banks hence the focus is on bigger independent banks Italian banks are excluded from the sample.

Sample size

A sample of public banks in 15 West-European countries is chosen; the banks will be commercial banks to exclude any governance or regulatory influences. No distinction is made in this research between commercial and investment banks because of the fact that the differences between these two types of banks is faded away and a lot of investment banks are incorporated in commercial banks and vice versa.

Sample periods

There will be two sample periods in this research. The first sample period will be from 1997-2006; this is a period of 10 years before the recent financial crisis. Thus this sample period is referred to as the pre-crisis period. The reason this period is chosen is to obtain a large time span to improve the reliability of the research.

The second sample period is from 2007-2009; this is referred to as the crisis period. The performances of the banks will be measured in this period to measure the relationship between performance in the crisis period and conditional conservatism in the pre-crisis period.

Data sample

The data that is used in this research is obtained from the Thomson One Banker Databank. It concerns several proxy data for the variables in the regression models and several indicators to represent the firm performance.

There are data sets for the regression periods 1997-2009 and the two sub periods 1997-2006 and 2007-2009.

In the case of missing values for a specific year, all variables of this year will be excluded from the research. The observations are presented in table 8 below; there is not much variance between the observations by year. In the case of the observations by country Great Britain delivers the most data, followed by France. This is as expected because these countries belong to the biggest economies in Europe.

Table 8. Observations by year and by country 1997-2009

Country	Observation	Year	Observation
Austria (AUT)	*115*	*1997*	*142*
Belgium (BEL)	*76*	*1998*	*143*
Deutschland (DEU)	*214*	*1999*	*153*
Denmark (DNK)	*406*	*2000*	*157*
Spain (ESP)	*111*	*2001*	*164*
Finland (FIN)	*60*	*2002*	*173*
France (FRA)	*402*	*2003*	*177*
Great-Britain (GBR)	*542*	*2004*	*178*
Ireland (IRL)	*25*	*2005*	*181*
Lithuania (LTU)	*11*	*2006*	*181*
Luxembourg (LUX)	*23*	*2007*	*184*
Netherlands (NLD)	*50*	*2008*	*186*
Norway (NOR)	*38*	*2009*	*176*
Portugal (PRT)	*62*		
Sweden (SWE)	*60*		
TOTAL	*2195*	*TOTAL*	*2195*

5.7 Summary

This chapter presents the used research methods. First the hypotheses are presented; H1: *conditional conservatism exists in West-European banks during the full sample period (1997-2009)*, H2: *the degree of conditional conservatism in the pre-crisis period (1997-2006) is*

higher than in the crisis period (2007-2009) and H3: *Conditional conservatism in the pre-crisis period (1997-2006) has a positive influence on the performance of West-European banks in the crisis period (2007-2009)* and elaborated. Also these hypotheses are visualized. This research consists of public banks in 15 West-European countries. The sample period is 1997-2009 which is sub-divided in 2 sub-periods; 1997-2006 and 2007-2009. The data that is used in this research is extracted from Thomson One Banker.

6 Analysis and results

In this chapter the results of the empirical analyses will be discussed and elaborated on. First the descriptive statistics of the variables used in the different samples will be presented and elaborated. Next, the regression model for the full sample period, two sub-periods and subsequently the good/bad bank samples will be discussed. Finally the conclusions will be drawn.

6.1 Regressions

In the following section the four regressions that are going to be used in this research will be tested, first the variables in the regression will be tested with descriptive statistics. Subsequently a table will be made of each regression model which will be discussed.

6.1.1 Hypotheses 1

In order to empirically test the first hypotheses a sample of banks from the Bank Scope Databank will be used, these Banks are West-European commercial banks. The variables of the Basu-model that are used in this regression will be obtained from Thomson One Banker. Having obtained these variables of the Basu-model for the full sample period (1997-2009) the degree of conditional conservatism will be measured. This research will be a time-series analyses in which conservatism is measured over the period (1997-2009).

Table 9. Correlationmatrix Basu-model variables

	NI	**RD**	**Returns**
NI	1	0.2259	0.2166
RD	0.2259	1	0.5772
Returns	0.2166	0.5772	1

Table 9 shows the correlation between the Basu-model variables. The reason to incorporate this table is to test for multicollinearity; this concept is described as the relationship between the dependent variables in a regression model. This is very dangerous; hence the explanatory power of the independent variable and the relationship between the dependent and independent variable will be endangered. Thus to test for this phenomenon a correlation table is made with the use of Eviews to examine what the relations are between the individual

variables. In table 9 it is seen that none of the variable show a high correlation with each other. Subsequently there is no reason to assume multicollinearity (Brooks 2008)

Assumptions for reliable regression

The regressions that have been performed are tested and present reliable outputs. The regressions are tested for heteroskedasticity and at the same time corrected in Eviews with the Newey-West algorithm. Furthermore the residual plots have been examined to look for indications of autocorrelation. The Newey-West algorithm also corrects for autocorrelation. The above mentioned methods give certainty that the regression models are BLUE; Best Linear Unbiased Estimator (Brooks 2008).

- **Regression model H1 (Basu model):**

$$NI = \beta 0 + \beta 1\ DRit + \beta 2\ Rit + \beta 3\ Rit \times DRit + \varepsilon it \qquad \textit{(1997-2009)} \qquad \textit{(6)}$$

6.1.2 Descriptive statistics regression 1

In table 10 below an analyses of the variables used in the Basu-model will be made. Each variable will be analyzed on outliers, normality and other descriptives. Then the variables will be corrected for skewness and other factors in order to obtain a qualitative and accurate data sample. The final results are presented in the table below.

Table 10. Basu-model descriptive statistics and number of observations for the West-European banks sample for the period 1997-2009

Variable	*Mean*	*Median*	*Std Dev*	*Min*	*Max*	*N corrected*	*N*
NI	*0.2281*	*0.0932*	*0.48529*	*-3.1638*	*3.8829*	*2150*	***2219***
R	*0.1602*	*0.0863*	*0.5453*	*-0.9980*	*3.8658*	*2150*	***2219***
*R*D*	***-0.0927***	***0.000***	***0.1874***	***-0.9980***	***0.000***	***2150***	***2219***

Table 10 reports the descriptive statistics for returns and net income variables for the sample period 1997-2009. The sample observations are 2150 after corrections have been made for outliers. The outliers have been rejected manually with Eviews, this method is chosen because

it provides a way to individually select and delete the outliers. The outliers are specified separately for each data sample. The returns are more volatile than net income hence this is reflected by the fact that the standard deviation of the returns is higher than the standard deviation of net income.

6.1.3 Conditional conservatism in the West-European banking sector during full sample period

In the previous section an explanation was provided of the first regression model and the research method was presented. Next the regression model and the descriptive statistics of the variables used in the Basu-model (1997-2009) were presented. Subsequently an analysis of the results regarding conditional conservatism during full sample period will be provided.

Table 11. Degree of conservatism during the full sample period in West Europe

The following regression model is made in the table below: $NI = \beta0 + \beta1DRit + \beta2Rit + \beta3Rit*DRit + \varepsilon it$. Ni is the net income before extraordinary items per share of the bank i. This variable is deflated by the beginning of the period share price; Rit are the banks returns including dividends over year t. DRit is the dummy variable which is one if the returns are negative and zero in the case of positive returns. Rit*DRit is the interactive variable which represents the effect between negative returns times returns. N is the amount of observations. The values in the first 4 columns are the unstandardized coefficients.

Period	***β 0***	***β 1 (rd)***	***β2 (returns)***	***β3(returns*rd)***	***(β 2+β 3)/ β 2***	***R2***	***Adj. R2***	***N***
1997-2009	*0.2564****	*0.7150****	*0.1506****	*0.4879****	*4.2*	*0.0640*	*0.0627*	*2149*

**significant at 10% confidence level*

*** significant at 5% confidence level*

**** significant at 1% confidence level*

Table 11 provides the results of the Basu regression model during the full sample period. In this model the stock prices are the leading variables and the earnings are the lagging variables. Stock prices indicate information gathered by more factors than only earnings, hence stock prices lead accounting earnings (Ball and Brown 1968; Beaver et al. 1980; Kothari and Sloan, 1992). Statistically the test outputs and standard errors are better presented when the leading variable is the independent variable in the model and the lagging variable is the dependent

variable (Basu 1997). Earnings are the dependent variable in this model and returns the independent variable. The β3 coefficient in this model measures the incremental sensitivity of accounting income to the integration of bad information than good information (Vichitsarawong et al. 2010). The β3 coefficient measures conservatism. Table 11 shows that the β3 coefficient is both positive and has a high enormity; 0.488. The β3 coefficient in the Basu article (1997) is around 0.166. Furthermore the β3 coefficient is significant at the 1%, 5% and 10 % significance level; indicating that there is a high degree of conservatism during the whole sample period. Earnings is 4,2 times more sensitive for bad news as it is for good news (β2 + β3 / β2).The adjusted R2 in this model represents the timeliness in financial reporting (Vichitsarawong et al. 2010). The adjusted R2 is 6,27% for the full sample period.

6.1.4 Hypotheses 2

To test the second hypotheses the sample of banks will be divided in two periods. This will be the pre-crisis period from 1997-2006 and the crisis period from 2007-2009. Then two regressions will be made of these two sub-periods. The results of these two regressions will be compared to examine the degree of conservatism between these two sub periods.

- **Regression models H2 (Basu model):**

$$NI = \beta 0 + \beta 1\ DRit + \beta 2\ Rit + \beta 3\ Rit \times DRit + \varepsilon it \qquad \textit{(1997-2006)} \qquad \textit{(7a)}$$

$$NI = \beta 0 + \beta 1\ DRit + \beta 2\ Rit + \beta 3\ Rit \times DRit + \varepsilon it \qquad \textit{(2007-2009)} \qquad \textit{(7b)}$$

6.1.5 Descriptive statistics regression 7a & 7b

In the tables 12a en 12b the descriptives of the variables used in the pre-crisis and crisis Basu model are presented. Each variable will be analyzed on outliers, normality and other descriptives. Then the variables will be corrected for skewness and other factors in order to obtain a qualitative and accurate data sample. The final results are presented in the tables below.

Table 12a. Basu-model descriptive statistics and number of observations for the Western European banks sample for the pre-crisis period 1997-2006

Variable	*Mean*	*Median*	*Std Dev*	*Min*	*Max*	*N corrected*	*N*
NI	*0.2803*	*0.1136*	*0.5738*	*-3.1639*	*5.4975*	*1629*	***1667***
R	*0.2606*	*0.1450*	*0.6456*	*-0.8721*	*5.5026*	*1629*	***1667***
*R*D*	***-0.0477***	***0.0000***	***0.1242***	***-0.8721***	***0.0000***	***1629***	***1667***

Table 12b. Basu-model descriptive statistics and number of observations for the Western European banks sample for the crisis period 2007-2009

Variable	*Mean*	*Median*	*Std Dev*	*Min*	*Max*	*N corrected*	*N*
NI	*0.05338*	*0.05459*	*0.21809*	*-1.4607*	*1.3736*	*440*	***452***
R	*-0.02983*	*-0.12309*	*0.62045*	*-0.9981*	*3.7379*	*440*	***452***
*R*D*	***-0.2296***	***-0.12309***	***0.26214***	***-0.9980***	***0.0000***	***440***	***452***

Table 12a shows the descriptive statistics for the pre-crisis period (1997-2006) for the net income and return variables. The sample observations are 1629 after corrections have been made for outliers.[1] The returns are more volatile than the net income, which corresponds with the full sample period. Comparing net income and returns with the full sample period, the net income and returns of the pre-crisis period are higher than of the full sample period. This is as expected hence the full sample period also takes into consideration the crisis period which has a mitigating effect on returns and income.

Table 12b presents the descriptive statistics for the crisis period (2007-2009). The sample observations are 440 after corrections. The returns are more volatile than net income; the magnitude of this volatility is greater than for the pre-crisis sample period. Subsequently the net income and returns are lower than those of the pre-crisis and full sample period; this is in line with the expectations hence during crisis periods companies perform less well.

[1] For rejecting outliers the method for the full sample period is used for all sample periods.

6.1.6 Conditional conservatism in the West-European banking sector during the pre-crisis and crisis period

In the table 13 the results of the pre-crisis and crisis Basu model regressions are presented which will be discussed.

Table 13. Degree of conservatism during the pre-crisis and crisis sample period in West Europe

The following regression model is made in the table below: $NI = \beta0 + \beta1DRit + \beta2Rit + \beta3Rit*DRit + \varepsilon it$. Ni is the net income before extraordinary items per share of the bank i. This variable is deflated by the beginning of the period share price; Rit are the banks returns including dividends over year t. DRit is the dummy variable which is one if the returns are negative and zero in the case of positive returns. Rit*DRit is the interactive variable which represents the effect between negative returns times returns. N is the amount of observations. The values in the first 4 columns are the unstandardized coefficients.

Period	*β 0*	*β 1 (rd)*	*β 2 (returns)*	*β3(returns*rd)*	*(β 2+β 3)/ β 2*	*R2*	*Adj. R2*	*N*
1997-2006	*0.3038****	*0.8747****	*0.112****	*0.5289***	*5.7*	*0.0462*	*0.0444*	*1629*
2007-2009	*0.093****	*0.1129*	*0.00566*	*-0.11196*	*-18.8*	*0.0593*	*0.0528*	*440*

**significant at 10% confidence level*

*** significant at 5% confidence level*

**** significant at 1% confidence level*

Table 13 presents the results of the regressions for the pre-crisis and crisis-period. In the pre-crisis period the β3 coefficient is positive and significant at the 10% and 5% confidence levels. Thus banks are conservative during the pre-crisis period. In the crisis period the β3 coefficient is negative and not significant. Also the magnitude of the β3 coefficient is bigger in the pre-crisis period than in the crisis period (0.5289 > -0.1196); implicating that the banks are not conservative during the crisis period. This could have to do with the fact that banks are pressured to show more positive information to diminish the negative effects of the crisis (Vichitsarawong et al. 2010) and is in line with the expectations. Also the magnitude of the β3 coefficient for the pre-crisis period is greater than for the full sample period (0.5289 > 0.4789) indicating more conservatism in the pre-crisis period. Earnings is 5,7 times more sensitive for bad news as it is for good news during the pre-crisis period (β2 + β3 / β2), hence earnings are

more sensitive for bad news than good news in the pre-crisis period compared with the full sample period (5,7 > 4,2). The adjusted R2 in this model for the pre-crisis period is smaller than for the crisis period (5,28% > 4,44%). This indicates that bad news is more timely incorporated in the crisis period than in the pre-crisis period. A possible reason for this could be that the market is faster in recognizing during a bad economic situation which is consistent with the paper of Vichitsarawon et al. (2010).

6.1.7 Hypothesis 3

It is expected that banks with a high degree of conservatism in the pre-crisis period will perform better in the crisis period. Banks that performed well and survived are more conservative; meaning that they recognized losses as they occurred and gains only when they are verifiably realized. Hence the assumption is made that the degree and existence of conservatism is positively related with firm performance. Also conservatism promotes a more cautious manner of recording gains. To empirically test these hypotheses, the bank sample of the pre-crisis period (1996-2006) will be divided in two different samples. The banks will be divided into good or bad performing banks on the bases of their performances during the crisis period (2007-2009). The performances will be measured by the ROA and ROE of these banks. Banks that have a negative ROA (ROE) or banks that had a significant drawback in ROA (ROE) will be classified as bad performing banks. If the ROA (ROE) is positive or doesn't reduce significantly the bank will be classified as a good performing bank, otherwise the bank is classified as a bad performing bank.

Subsequently two Basu-model regressions will be formed; one good performing banks regression and one bad performing banks regression. The results of these regression models will be compared to judge if conservatism has a significant influence on bank performance.

- **Regression models H3 (Basu model):**

$$NI = \beta 0 + \beta 1\ DRit + \beta 2\ Rit + \beta 3\ Rit \times DRit + \varepsilon it \quad \textit{(Good banks)} \quad \textit{(8a)}$$

$$NI = \beta 0 + \beta 1\ DRit + \beta 2\ Rit + \beta 3\ Rit \times DRit + \varepsilon it \quad \textit{(Bad banks)} \quad \textit{(8b)}$$

6.1.8 Descriptive statistics regression 8a & 8b

In the tables below the descriptives of the variables used in the good performing banks regression and bad performing banks regression are presented. Also the descriptives of the variables used to measure bank performance are presented. Each variable will be analyzed on outliers, normality and other descriptives. Then the variables will be corrected for skewness and other factors in order to obtain a qualitative and accurate data sample.

Table 14a. descriptive statistics pre-crisis good performing banks

Variable	*Mean*	*Median*	*Std Dev*	*Min*	*Max*	*N corrected*	*N*
NI	*0.1793*	*0.0655*	*0.3422*	*-0.8169*	*2.5280*	*606*	***614***
R	*0.1944*	*0.1147*	*0.5577*	*-0.8677*	*6.8016*	*606*	***614***
*R*D*	***-0.0519***	***0.000***	***0.1191***	***-0.8677***	***0.000***	***606***	***614***

Table 14b descriptive statistics pre-crisis bad performing banks

Variable	*Mean*	*Median*	*Std Dev*	*Min*	*Max*	*N corrected*	*N*
NI	*0.2082*	*0.1212*	*0.3295*	*-3.1639*	*1.3492*	*629*	***694***
R	*0.2246*	*0.1535*	*0.4778*	*-0.8721*	*3.664*	*629*	***694***
*R*D*	***-0.0485***	***0.000***	***0.1301***	***-0.8721***	***0.000***	***629***	***694***

Table 14c Performance indicators descriptive statistics 2007-2009

Variable	*Mean*	*Median*	*Std Dev*	*Min*	*Max*	*N corrected*	*N*
ROA	*2.2870*	*1.5156*	*3.4284*	*-15.789*	*21.6587*	*429*	***452***
ROE	*7.4869*	*7.0429*	*10.4678*	*-46.858*	*48.0733*	*429*	***452***
EBIT	***4.7302***	***1.8249***	***7.6370***	***-18.591***	***40.3440***	***429***	***452***

Table 14a and 14b present the results of the descriptive statistics of respectively good performing and bad performing banks. The observations (after correction) for the good banks sample is 606 and for the bad banks sample 629. Hence the number of bad banks is greater than good banks. For both the bad banks as well as the good banks the returns are more volatile than the earnings (higher standard deviation) this is in correspondence with all the previous sub-samples. Both net income and earnings for bad banks are slightly higher than for good banks (0.1793 and 0.1944 > 0.2082 and 0.2246). A possible reason for this could be that the volatility in earnings and net income of the bad banks sample is greater than that of the good banks sample.

Table 14c shows the results of the descriptive statistics of the performance measures during the crisis period. The number of observations is 429 after corrections. The table shows that the ROE is more volatile than ROA hence the standard deviation of ROE is higher than the ROA.

6.1.9 Conditional conservatism in the West-European banking sector and the relationship with firm performance.

In table 15 below the results of the regression models of both bad performing and good performing banks are shown which will be discussed.

Table 15. Relationship between conditional conservatism and bank performance

The following regression model is made in the table below: $NI = \beta0 + \beta1DRit + \beta2Rit + \beta3Rit*DRit + \varepsilon it$. Ni is the net income before extraordinary items per share of the bank i. This variable is deflated by the beginning of the period share price; Rit are the banks returns including dividends over year t. DRit is the dummy variable which is one if the returns are negative and zero in the case of positive returns. Rit*DRit is the interactive variable which represents the effect between negative returns times returns. N is the amount of observations. The values in the first 4 columns are the unstandardized coefficients.

Period	*β 0*	*β 1 (rd)*	*β 2 (returns)*	*β3(returns*rd)*	*(β 2+β 3)/ β 2*	*R2*	*Adj. R2*	*N*
Good Banks	*0.1758****	*0.503***	*0.1101***	*0.4892**	*5.44*	*0.0586*	*0.0539*	*606*
Bad Banks	*0.1935****	*0.2187*	*0.1220****	*-0.1108*	*0.09*	*0.0624*	*0.0579*	*629*

**significant at 10% confidence level*

*** Significant at 5% confidence level*

**** Significant at 1% confidence level*

Table 15 shows the results of the two Basu-regression models for both good banks and bad banks. The β3 coefficient is positive and significant for the good banks regression, this implicates that the 'good' banks are conservative (hence only at the 10% level). The banks that performed well during the crisis period were conservative in the pre-crisis period. The β3 coefficient of the bad banks regression is negative and not significant implicating that the bad performing banks were not conservative during the pre-crisis period. This result is as expected hence conservative accounting in the pre-crisis period helps diminishing the financial discomforts in crisis periods. Earnings are 5,44 times more sensitive for bad news as they are for good news for the good banks sample. For bad banks this is only 0.09. The adjusted R2 of the good banks sample is lower than of the bad banks sample (5,79% > 5,39%) implicating that bad performing banks are timelier in incorporating bad news than good performing banks. These results are consistent with prior theory of this research. Although the relationship is only significant at the 10 percent confidence level.

6.2 Summary

The results of the analyses provide evidence in support of the hypotheses. First the results indicate that conditional conservatism occurs during the full sample period. This implies that the West-European banks were conservative in the period 1997-2009. Next, the results indicate that the degree of conservatism in the pre-crisis period (1997-2006) was high. Subsequently there is evidence that in the crisis period there are no significant signs of conservatism. This is in line with the theory of this research and the assumptions that I made. Hence I assumed (in the previous literature sections) that in the pre-crisis period (period with relative good performance of banks) the degree of conservatism will be higher than in the crisis period (period with relative bad performance of banks).

Finally the results of the bad banks and good banks regression show that the banks with significant good results during the crisis period were conservative during the pre-crisis period. This result was predicted throughout the thesis hence the assumption was made that there is a positive link between conservative accounting and bank performance. The results of the bad banks regression show that there is no link between bad performance and conservative

accounting; hence the banks that performed bad during the crisis period were not conservative in the pre-crisis period.

7 Summary and conclusions

7.1 Summary

Accounting conservatism refers to the underestimation of assets and the overestimation of liabilities and expenses (Watts 2003). Accounting conservatism has four principal causes; contracting, shareholders litigation, taxation and accounting regulation. Conservatism consists of unconditional and conditional conservatism. This research focuses on conditional conservatism which recognizes negative information in earnings more quickly than positive information in earnings.

In this research the degree of accounting conservatism in the West-European banking sector is measured. Subsequently the link between conservatism and the performance of these banks during the recent financial crisis is examined.

The principal causes of the crisis are the risky and unsustainable lending practices of a number of US top banks. The crisis caused a worldwide economic downfall. The public no longer had trust in the management policies, strategies and ethical behaviour of banks.

I investigate banks in the following West-European countries; Austria, Belgium, Deutschland, Denmark, Spain, Lithuania, Finland, France, Great-Britain, Ireland, Luxembourg, Netherlands, Norway, Portugal and Sweden. Considering banks in the Western World the Basle Accords are very significant and influential on banking policies and regulations. Two Basle Accords have been developed mainly to guarantee a minimal standard of capital for banks to mitigate credit risks. Basle I is considered outdated, that is the reason for the improved and technical enhanced Basle II (Basle Capital Accord 2005).

Conservatism can be measured by different measures for instance net assets measures, earnings and accruals measures and earnings/stock measures. To measure conditional conservatism in this thesis the Basu model is chosen (earnings/stock returns measure). The Basu model uses a regression model to measure the degree of conservatism. The model was much criticized till recently in 2009 the working paper of Ball et al. provided technical evidence for the model.

ROA (return on assets) and ROE (return on equity) are the indicators for bank performance in this thesis.

This research first examines the degree of conservatism in West-European banks. (1997-2009). Subsequently the research examines if there are significant differences in the level of conservatism for the pre-crisis (1997-2006) and the crisis period (2007-2009). Finally the performance of banks in the crisis period is examined with the degree of conservatism in the pre-crisis period to see if there is a significant relation between conservatism and bank performance.

7.2 Conclusions

The main objective of this research was examining the relationship between bank performance and conservatism in West-Europe. Considering the research I performed and my results I feel that I have contended this goal by providing sufficient and relevant theory and (empirical) evidence from previous scientific papers. Furthermore by performing a sound and qualitative empirical analysis to examine the research questions. A note must be made that I haven't seen a paper in the scientific literature that links conservatism with firm performance (during crisis periods); thus in that way this thesis is innovative and original.

The most important conclusion of the research is that I found significant results that there is a relationship between conservatism and bank performance. I have to state however that this significant relation was only at the 10 percent confidence level.

However the main research question:

What is the relationship between the conditional conservatism principle and the performance of the West-European banking sector during the financial crisis?

could be answered. Namely, there is a positive relationship between the conditional conservatism principle and the performance of the West-European banking sector during the financial crisis

Furthermore I have also found an answer on the first two assumptions (hypotheses 1 and 2) of mine. Evidence is provided in this research that during the (full sample) period 1997-2009 West-European banks were conservative. This evidence is provided for the 1, 5 and 10 percent confidence levels. The second assumption states that during the pre-crisis period the level of conservatism was higher than during the crisis period. Evidence is provided for this assumption at the 5 and 10 percent confidence level. This indicates that the level of conservatism in the pre-crisis period was higher than during the crisis period. A possible explanation for the low (no) level of conservatism during the crisis period is because managers in periods of crisis have incentives to show more optimistic figures.

In conclusion this research examined the link between bank performance and conditional conservatism. I found evidence for a positive relationship between good bank performance and conditional conservatism. Additionally evidence is presented for the existence of conservatism in the pre-crisis and full sample period in West European banks.

7.3 Scope, constraints of the research and suggestions for further research

The principal objective of this research is measuring conditional conservatism and providing evidence for the (positive) relationship between conservatism and bank performance. The scope of the research is mainly linking conservatism with performance during periods of crisis. Important is that the above mentioned link dominates in this research and hence all effort is put in examining this link as reliable as I can. Another important factor in this research is that conservatism is expected to determine performance and not the other way around. Assuming this it is far less relevant what causes the conservatism hence the principal factor for me is the presence of conservatism and from that point examining its effect on performance.

Constraints of this research could be the period taken to measure the degree of conservatism in the pre-crisis period. Maybe a larger time span would be even better for the reliability of the data. Another constrain could be that maybe two models should have been used to asses conservatism to improve the robustness of the research.

There are a lot of suggestions for further research, first students and scientists can reply this research after the financial crisis to see what the post-crisis effects are on conservatism and its

link with bank performance. Also because I haven't seen a paper that researched conservatism and the link with firm performance, a similar research could be performed with a larger dataset; for instance the banking sector of Europe. Subsequently a similar research could be performed in markets where earnings and returns are more volatile to see if the relationship between conservatism and performance still holds.

Appendix 1 Reference List

Accounting Principles Board (APB), 1965. Accounting Principles Board Opinion No. 6, Status of Accounting Research Bulletins. American Institute of Certified Public Accountants (AICPA), New York.

Accounting Principles Board (APB), 1973. Accounting Principles Board Opinion No. 30, Reporting the results of operations. American Institute of Certified Public Accountants (AICPA), New York.

Amir, Trevor S. Harris and Elizabeth K. Venturi *Journal of Accounting Research*, Vol. 31, Studies on International Accounting (1993), pp. 230-264 Published by: Blackwell Publishing on behalf of Accounting Research Center, Booth School of Business, University of Chicago

Ball, R., Brown, P., 1968, An empirical evaluation of accounting income numbers, Journal of Accounting Research 6, 159-177.

Ball, R., Robin, A., 1999, Time-series properties of accounting earnings: International evidence, unpublished, University of Rochester and Rochester Institute of Technology, May.

Ball, R., S.P. Kothari, and A. Robin (2000), The effect of international institutional factors on properties of accounting earnings, *Journal of Accounting and Economics*, vol. 29, pp. 1-51.

Ball R. Kothari S. P. Nikolayev V. (2009) "Econometrics of the Basu Asymmetric Timeliness Coefficient and Accounting conservatism" *Chicago Booth School of Business Research Paper Series* No. 9-16

Ball, R., and L. Shivakumar (2005), The role of accruals in asymmetrically timely gain and loss recognition, *Journal of Accounting Research*, vol. 44, no. 2, pp. 207-242. Guay, W., Discussion, pp. 243-255.

Ball, R., A. Robin and J. Wu, ''Incentives Versus Standards: Properties of Accounting Income in Four East Asian Countries, *Journal of Accounting and Economics* (2003), pp. 36: 235–270.

Balin B, *Basel I, Basle I, and emerging markets a nontechnical analyses* (2008)

Basu, S. 1995. Conservatism and the asymmetric timeliness of earnings. Ph.D. thesis. University of Rochester, New York.

Basu, S. 2005. Discussion of "Conditional and unconditional Conservatism: Concepts and Modeling", *Review of Accounting Studies*, 10, 311-321

Basu, S. (1997), The conservatism principle and the asymmetric timeliness of earnings. *Journal of Accounting and Economics*, vol. 24, no. 1, pp. 3 – 37.

Basu, S., Hwang, L., Jan, C., 2001a, Auditor conservatism and quarterly earnings, Working Paper, Baruch College, CUNY.

Basu, S., Hwang, L., Jan, C., 2001b, Differences in conservatism between big eight and non-big eight auditors, Working Paper, Baruch College, CUNY.

Beaver, W. H. 1993. Conservatism. Working paper, Stanford University (presented at the American Accounting Association Annual Meeting, San Francisco, CA).

Beaver, W., Lambert, R., Morse, D., 1980, The information content of security prices, *Journal of Accounting & Economics* 2, 3-28.

Beaver, W. H., and S. G. Ryan. 2000. Biases and lags in book value and their effects on the ability of the book to-market ratio to predict book return on equity. *Journal of Accounting Research* 38 (Spring): 127.148.

Beaver, W.H., and S.G. Ryan (2005), Conditional and unconditional conservatism: concepts and modelling, *Review of Accounting Studies*, vol. 10, pp. 269-309.

Belkaoui, A., 1985. Accounting theory. 2nd edition., Harcourt Brace Jovanovich, Orlando, Florida.

Bliss, J, H, 1924, *Management through Accounts.* New York, NY: The Ronald Press Co.

Brooks, L., and D. Buckmaster. 1976. Further evidence of the time series properties of accounting income. *Journal of Finance* 31 (5): 1359.1373.

Brooks, C. "Introductory econometrics for Finance", 2nd edition

Dechow, P.M., 1994. Accounting earnings and cash flows as measures of firm performance: The role of accounting accruals. *Journal of Accounting and Economics* 18, 3 42.

Dietrich, J.R., K.A. Muller III, and E.J. Riedl (2007), Asymmetric timeliness tests of accounting conservatism, *Review of Accounting Studies*, vol. 12, pp. 95-124.

Easton, Peter E., and Mark E. Zmijewski, 1989, Cross-sectional variation in the stock market response to accounting earnings announcements, *Journal of Accounting and Economics* 11, 117-141.

Elgers, P. T., and M. H. Lo. 1994. Reduction in analysts. annual earnings forecast errors using information in prior earnings and security returns. *Journal of Accounting Research* 32 (Autumn): 290.303.

Feltham, G., and J. A. Ohlson. 1995. Valuation and clean surplus accounting for operating and financial activities. *Contemporary Accounting Research* 11 (Spring): 689.731.

Feltham, G. and J. A. Ohlson. 1996. Uncertainty resolution and the theory of depreciation measurement. *Journal of Accounting Research* 34 (Autumn): 209.234.

Financial Accounting Standard Board, Qualitative Characteristics of Accounting Information. Statement of Financial Accounting Concept No. 2, Stamford, CT. (1980).

Finch, J. (2009), Twenty-five people at the heart of the meltdown, *The Guardian*

Joos, P., and M. Lamg "The effects of Accounting Diversity: Evidence from the European Union." *Journal of Accounting Research* (Supplement 1994): 141-176

García Lara, J.M., B. García Osma and A. Mora (2005), The effect of earnings management on the asymmetric timeliness of earnings, *Journal of Business Finance & Accounting*, Vol. 32 (3), pp. 691-726.

Giner, B. and W.P. Rees (2001), On the asymmetric recognition of good and bad news in France, Germany and the United Kingdom, *Journal of Business Finance & Accounting*, vol. 28, nos. 9&10, pp. 1285–332.

Givoly, D. and C. Hayn (2000), The changing time-series properties of earnings, cash flows and accruals: Has financial reporting become more conservative? *Journal of Accounting and Economics*, vol. 29, no. 3, pp. 287-320.

Givoly D., Hayn C.K., and Natarajan A.,(2007) "Measuring Reporting Conservatism" *The Accounting Review*, Vol. 82, No. 1, pp. 65-106.

Hayn, C, 1995. The information content of losses. *Journal of Accounting & Economics* 20 (September): 125-153.

Hellman N, 2007 Accounting conservatism under IFRS.

Holthausen, R. W., and R. L. Watts. 2001. The relevance of value-relevance literature for financial accounting standard setting. *Journal of Accounting & Economics* 31 (September): 3.75.

International Financial Reporting Standards (IFRS). Framework for the Preparation and Presentation of Financial Statements (London: IASCF, 2004).

Kaminsky, G.L. and S.L. Schmukler, *"What Triggers Market Jitters"?* A Chronicle of the

Asian Crisis,'' Policy research working paper. The World Bank Development Research Group. (1999)

Kodres, L. and M. Pritsker, *"A Rational Expectations Model of Financial Contagion"* Board of Governors of the Federal Reserve System. Mimeo. October. (1998)

Kothari, S.P., Sloan, R., 1992. Information in prices about future earnings: Implications for earnings response coefficients. Journal of Accounting and Economics 15, 143-172.

Kellogg, R, L, 1984, Accounting activities, security prices, and class action lawsuits. *Journal of Accounting & Economics 6 (Decemher):* 185-204,

Krishnan, G., 2005b, The association between big 6 auditor industry expertise and asymmetric timeliness of earnings, *Journal of Accounting Auditing & Finance* 20, 209-228.

Leftwich, R. W. 1983. Accounting information in private markets: Evidence from private lending agreements. *The Accounting Review* 58 (January): 23.42.

Lightman, D. (2009), Congressional Budget Office compares downturn to Great Depression, McClatchy Washington Bureau, January 27.

Nichols, D.C., J.M. Wahlen and M.M. Wieland (2008), Publicly traded versus privately held: implications for conditional conservatism in bank accounting, *Review of Accounting studies*, Vol. 14, pp. 88-122.

Nikolaev, V., 2009. Debt covenants and accounting conservatism: Complements or substitutes? Working paper, University of Chicago.

Mishkin, F. S. (2009), *Is Monetary Policy Effective During Financial Crises?*, National Bureau of Economic Research, Working paper, Vol. W14678.

Pae J. (2007), Unexpected Accruals and Conditional Accounting Conservatism, *Journal of Business Finance & Accounting*, Vol. 34 (5) & (6), pp. 681–704.

Pae, J., D. Thornton and M. Welker (2005), The Link between Earnings Conservatism and Balance Sheet Conservatism, *Contemporary Accounting Research*, Vol. 22 (3, Fall) pp. 693-717.

Penndorf, B., 1930. The relation of taxation to the history of the Balance Sheet. The Accounting Review 5, 243 251.

Pope P.F., and Journal of International Financial Management and Accounting 21:1 2010 W. Rees. "International Differences in GAAP and the pricing of Earnings." *Journal of Accounting and Economics* (September 1995): 155-92

Pope, P.F., and M. Walker (1999), International differences in the timeliness, conservatism, and classification of earnings, *Journal of Accounting Research*, vol. 37, Supplement, pp. 53-87.

Raonic, I., S. McLeay, and I. Asimakopoulos (2004), The timeliness of income recognition by European companies: an analysis of institutional and market complexity, *Journal of Business Finance & Accounting*, vol. 31, nos. 1 and 2, pp. 115-148. Rees, B. (2004), Discussion, pp. 149-165.

Rees, B. 2004, *Discussion of* The Timeliness of Income Recognition by European Companies: An Analysis of Institutional and Market Complexity, Journal of Business Finance & Accounting, 31(1) & (2)

Reilly, F.K. & Brown, K.C. 2003. *Investment analysis portfolio management.* 7thedition.
Cincinnati, Ohio: Thomson-South Western.

Roychowdhury, S. and R.L. Watts (2007), Asymmetric timeliness of earnings, market-to-book and conservatism in financial reporting, *Journal of Accounting and Economics*, Vol. 44, pp. 2–31.

Ryan, S.G. (1995), A model of accrual measurement with implications for the evolution of the book-to-market ratio, *Journal of Accounting Research*, vol. 33 (Spring), pp. 95-112.

Ryan, S.G., 2006, Identifying conditional conservatism, European Accounting Review 15, 511-525.

Ryan, S.G and P. A. Zarowin (2003), Why has the contemporaneous linear returns-earnings relation declined, *The Accounting Review*, vol. 78, no. 2, pp. 523-553.

Salmon, F. (2009), Recipe for Disaster: The Formula that Killed Wall Street, *Wired Magazine*, Vol. 17.03.

Skinner, D.J., 1994. Why firms voluntarily disclose bad news. Journal of Accounting Research 32,
38 60.

Spiegel J. G. Shim. J. K., Dictionary of Accounting Terms, 4th edition.

Smith, C. W., and J. Warner. 1979. On financial contracting: An analysis of bond covenants. *Journal of Financial Economics* 7 (June): 117-161.

Stewart, G.B. III 1991. *The quest for value*. New York: Harper-Collins.

Walker, R. G. 1992. The SEC's ban on upward asset revaluations and the disclosure of current values. *Abacus* 28: 3-35.

Watts, R. L. 1977. Corporate fmancial statements, a product of the market and political processes. *Australian Journal of Management 2* (April): 53-75.

Watts, R. L. and J. L. Zimmerman. 1979. The demand for and supply of accounting theories: The market for excuses. *The Accounting Review* 54 (April): 273-305.

Watts R. L. . 1993. A proposal for research on conservatism. Working paper, University of Rochester (also presented at American Accounting Association Annual Meeting, San Francisco, CA).

Watts, R.L. (2003), Conservatism in accounting. Part I: explanations and implications, Part II: evidence and research opportunities, *Accounting Horizons*, vol. 17, no. 3, pp. 207-221, and vol. 7, no. 4, pp. 287-301.

Wittenberg-Moerman, R., 2008. The role of information asymmetry and financial reporting quality in debt contracting: Evidence from the secondary loan market, Journal of Accounting & Economics 46, 240-260.

Woolridge, J. Randall and Gray, Gary; Applied Principles of Finance (2006

Vichitsarawong, T. Eng Li and Meek G, 2010 The Impact of the Asian on Conservatism and Timeliness of Earnings: Evidence from Hong Kong, Malaysia, Singapore and Thailand *Journal of International Financial Management and Accounting*

Zeff, S. A. 1972. *Forging Accounting Principles in Five Countries: A History and Analysis of Trends 1971*. Arthur Andersen Lecture Series. Champaign, IL: Stipes Publishing Company.

Websites:

www.bloomberg.com
www.cia.gov
www.finland.org
www.france24.com
www.hdr.undp.org
www.oecd.org
www.stat.gov
www.stats.oecd.org
www.worldbank.org
www.destorn.nl

Reports and articles:

Austrian National Bank

Basle Capital Accord 2003, 2005 and 2006.

Bloomberg: *"Germany enters worst recession in twelve years."*

CIA World Fact Book 2010 Belgium, 2005 Germany (power purchasing parity), 2010 France and the Netherlands

Charles Smith, article: *'Ireland' in Wankel*, C. Encyclopedia of Business in Today's World, California, USA, 2009.

Danuta Pavilenene, *"Impact of the global financial crisis to be felt in Lithuania too"* Vilnius, 18.09.2008.

Economia, 2009, *El Pais*, Madrid.

Embassy of Finland 2008.

Evans-Pritchard 2008 *"Irish banks may need life-support"*

Federal Ministry of Economics and Technology (Germany) Retrieved 30 November 2006.

Gürtler, Detlef: "*Wirtschaftsatlas Deutschland*" Rowohlt Berlin, 2010.

Human Development Index; "*list of countries."*

Hutchinson M. 2009 *Great-Britain-The "Rust Belt" of global finance* Money Morning.

International Herald Tribune 2008; *"Fortis chief executive out; chairman now faces shareholder anger."*

International Monetary Fund 2009, Austria.

La Moncloa, *Official report on Spanish recent Macroeconomics*, including tables and graphics, retrieved 2008.

OECD Economic Survey Austria 2009 (*facing the financial crisis*), Denmark 2009 (*the crisis and beyond*), and Norway 2010

OECD Observer Ireland and Sweden.

Roubini 2009 *"Risks to Global Growth"*

Tremlett, Giles Economic statistics, London, Guardian, retrieved 2008-08-13.

US Department of State 2010.

Appendix 2: Literature table and list of banks

Literature table:

study	Title	Author	Object of study	Sample(size, country, period)	Methodology	Conclusion
1	Conservatism in Accounting Part I: Explanations and Implications	Ross L. Watts 2003	Examination of alternative explanations for conservatism in accounting and their implications for accounting regulators.	This paper is based on existing literature(literature study), thus there is no test information included, September 2003	This paper studies conservatism in accounting and is divided in two parts. The first Part discusses explanations for conservatism and draws implications for regulation and standard setting. The paper draws a general contracting explanation for conservatism and predicts that other contracts employed within the firm, will also generate conservatism. It offers also a new argument: that an information perspective produces conservatism once the information costs of changed managerial	**The main conclusion of this paper is that conservatism is essential. Managers will bias and noise value estimates, because there is a lack of verifiability, managers have limited tenures and limited liability's. If regulators want to improve financial reporting, they must recognize the importance of verification, problems that conservatism's asymmetric requirement evolved to address and regulators should concentrate on the accounting's**

					behavior are introduced even without contracting considerations.	**core competence.**
2	Conservatism in Accounting Part II: Evidence and Research Opportunities	Ross L. Watts 2003	Summary of the empirical evidence on conservatism, its consistency with alternative explanations, and opportunities for future research.	This paper is based on existing literature(literature study), thus there is no test information included, September 2003	This is Part II of the literature study of conservatism in accounting. This part summarizes the empirical evidence on the existence of conservatism. Ross L. Watts elaborates several measurements for conservatism, draws evidences on alternative conservatism explanations and on non-conservatism explanations. Further this article discusses some research opportunities.	**In this paper the writer concludes that existing evidence for accounting conservatism is most consistent with the contracting and litigation explanations. Further the writer concludes there is a reason to believe that the four explanations for conservatism (contracting, litigation, tax and regulation) are not independent. Also conservatism is driven by a concern with overpayment by contracting parties, courts and government and this principle will not**

						exclude earnings management or abandonment options.
3	The conservatism principle and the asymmetric timeliness of earnings	Sudipta Basu 1997	Re-examination of the conservatism principle. Investigation of the effects of the conservatism principle on reported financial statements.	The samples implemented for the test in this paper consist of all firm-year observations from 1963 - 1990 with returns data on the center for research in security prices NYSE/AMEX monthly files, and with necessary accounting data on the Compustat annual industrial and research files. (United States).	The paper extends research on the timeliness of earnings by pointing out that the timelines is asymmetrically greater for bad news than for goods news. S. Basu states that in efficient markets, stock returns symmetrically and quickly reflect all publicly available news, so he uses returns to measure news. The research of the conservatism principle is based on four predictions. For the first prediction: earnings is more timely or concurrently sensitive in reflecting publicly available bad news than good news the researcher used negative and positive	**S. Basu investigated the effects of the conservatism principle on reported financial statements and interprets conservatism as resulting in earnings reflecting bad news more quickly than good news. He indicated that the concurrent sensitivity of earnings to negative returns is two to six times as large as the concurrent sensitivity of earnings to positive returns and he also showed that positive earnings changes tend to persist whereas negative earnings changes**

					unexpected annual stock returns to proxy for bad news and good news. For the other three predictions S.Basu used empirical tests.	**show a marked tendency to reverse. The conclusion of this paper is that earnings are timelier in reporting publicly available bad news about future cash flows than good news.**
4	Discussion of "Conditional and Unconditional Conservatism: Concepts and Modeling"	Sudipta Basu 2005	Further investigation of a model of Beaver and Ryan. Basu takes this model as a basis to give an answer on the research question: Why unconditional and conditional conservatism are more than mere substitutes, and provide evidence from the historical record.	This is a discussion paper about conservatism that investigates a previous model of Beaver and Ryan. No test information is included. 2005	In this article Basu further react to a previous test model of Beaver and Ryan. They model, simulate and graph the effects of various factors on the nonlinear earnings-return relation induced by conditional conservatism. They integrated in their model two separate algebraic analyses of unconditional and conditional conservatism. (e.g. Beaver and Ryan, 11; Ryan and Zarowin, 38) They made use of Monte Carlo analyses	**Because this is a discussion we will give a brief summary: Basu extends the model of Beaver and Ryan and says that in the future researchers should carefully consider the frictions between actual accounting practice and previous simple theoretical models. He stated that application of nonlinear estimation techniques is likely to improve the**

					to simulate the flow of market value innovations into reported earnings. Basu arguments that unconditional conservatism isn't a substitute for conditional conservatism and state that researchers can learn a lot more by consideration of the frictions between actual accounting and their simple models.	**understanding of how accounting works in the real world. The biggest of Beaver and Ryan is the contribution in ordinary exploring new ways to formalize and generate intuition for future research.**
5	The Timeliness of Income Recognition by European Companies: An analysis of Institutional and Market Complexity	Ivana Raonic, Stuart McLeay, Ioannis Asimakopoulos 2004	Analyze of the asymmetric timeliness of income recognition of good and bad news in the earnings of 366 European firms between 1987 and 1999	First sample: Consist of All European companies(709firms) that traded their equity on exchanges in more than one European country between 1987 and 1999 Second sample: Consist 366 European firms and 3724 firm-year observations; Earnings Yield and Stock Return. (Resource: Datastream) January/March 2004	In this research paper they followed previous work of practitioners like: Basu, Ball et al, Givoly and Hayn, Giner and Rees, and Pope and Walker. Through algebraic modeling they conduct a regression analyses. With the results they present additional evidence on conservatism and timeliness. In this	**This study provides evidence of accounting conservatism with respect to different regulatory areas. They documented a trend towards greater conservatism for firms domiciled and listed in different markets. The main conclusion of this paper is that in**

					paper researchers suggests two methodological improvements: (1) modeling international exposure to different jurisdictions as a firm-specific effect. (2) Incorporating changes through time as an interaction effect in the full model.	**general equity market exposure appears to be positively associated with greater timeliness in earnings recognition, while regulatory enforcement is positively associated with the bias towards conservatism.**
6	Discussion of The Timeliness of Income Recognition by European Companies: An analysis of Institutional and Market Complexity	Bill Rees 2004		Sample consists of 366 European firms. Period: 1987-1999. In this paper the researchers restrict their sample to cross-listed firms and incorporate measures of the scope of accounting disclosure, importance if the equity market, and the strength of the enforcement system in the various markets in which the firms are listed. January/March 2004	It's a discussion about a model that is elaborated in section 5 of this table. The researchers attempted to develop our understanding of asymmetric recognition by incorporating causal factors into the model. Their underlying approach remains mostly based on the Basu model.	**The main conclusion is: in general, capital market pressure and regulatory impact each appear to lead to more conservative accounting, the joint effect being mitigated when both influences are strong and a trend towards greater conservatism has been documented for firms domiciled and listed in different markets.**

						Bill Rees concluded in his discussion
7	Asymmetric timeliness of accounting conservatism	J. R. Dietrich, K. A. Muller III, E. J. Riedl 2007	Research on the relationship between earnings and stock returns to examine whether "bad" news is incorporated into earnings on a timelier basis than "good" news.	The research evaluates the research designs of previous researchers. 2007	This research is based on the Basu model. The underlying intuition is the conclusion of the Basu model: stock returns are driven by information. In the first section they demonstrate that the asymmetric timeliness research design induces biases in coefficient estimates and R^2 measures except under very restrictive conditions. In the second section the researchers provide estimates of the magnitude of biases in three empirical specifications that use both simulated and actual data series.	**The conclusion of the research is that the evidence strongly suggests that results from prior studies that employ the asymmetric timeliness research design are attributable to biases test statistics arising from the research design, and thus cannot be interpreted as evidence of conservatism. The main conclusion is that alternative research designs: Givoly and Hahn (2000), Feltham and Olson (1995), and Easton & Pae (2004) may offer more fruitful avenues for future investigations of accounting**

						conservatism.
8	International Differences in the Timeliness, Conservatism, and Classification of Earnings	Peter F. Pope , Martin Walker † 1999	Analyze of the differences in the timeliness of income recognition between the U.S. and U.K. GAAP financial reporting regimes	The sample consists of data for all December fiscal year-end nonfinancial firms listed in the U.S. (NYSE/AMEX) and UK (London Stock Exchange) during 1976-1996. Resources: Datastream and Compustat. 1999	This study compares conservatism of two measures of reported earnings across the US and UK accounting regimes.. With the basis of the Basu model (1997) they present a formal model in which the response of reported earnings to changes in market value varies according to whether the value change is good news or bad. In this design they present pooled results , annual cross-section results, and write-offs of large transitory losses were tolerated in the research design	**The research presents several suggestions to measure accounting conservatism in income recognition. Mainly the practitioners suggest that when evaluating comparative conservatism, it is important to capture two distinct properties of conservative accounting: delays in reporting good news and early recognition of bad news. The results of the model show that the degree of conservatism displayed by earnings before extraordinary items under US GAAP was higher than under UK GAAP and the results also indicate that under US GAAP conservatism is**

						relatively slow in recognizing good news in earnings.
9	**Econometrics of the Basu Asymmetric Timeliness Coefficient and The Accounting Conservatism. (Working Paper)**	**Ray Ball, S. P. Kothari, Valeri Nikolaev 2009**	**Analysis of the econometrics of the Basu asymmetric timeliness coefficient. The analysis addresses the conceptual and econometric challenges to the measure raised in the recent literature.**	**This paper only proposes a model. No tests are done. First Draft : May 2006, Current version April 2009**	**The researchers present a model of prices leading earnings to analyze the econometrics of the Basu model (1997). The analysis addresses conceptual and econometric challenges to the measure raised in the recent literature and show that the Basu measure is unbiased under the null hypothesis of zero asymmetry. In this paper they demonstrate that any differential persistence in economic gains and losses does not explain the Basu coefficient and an extension of the Roychowdhurry and Watts (2007) analyze is made.**	**Main conclusion of the paper is that the market to book ratio does not per se determine asymmetric timeliness; its effect arises because it is correlated with the amount of price revision associated with revisions in "unbooked" components such as growth option expectations.**

10	The Impact of the Asian Financial Crisis on Conservatism and Timeliness of Earnings: Evidence from Hong Kong, Malaysia, Singapore, and Thailand.	**Vichitsarawong, Eng Li and Gary k. Meek 2010**	**Measuring conservatism and timeliness of earnings during the financial crisis in the late ninety's in Hong Kong, Malaysia, Thailand and Singapore.**	**Data about stock returns and earnings is obtained from the Global Vantage database. For the countries Hong Kong, Malaysia, Thailand and Singapore. For the years 1995 till 2004.**	**The Basu-model is used to measure conservatism. This is done for the crisis and post-crisis period to asses the degree of conservatism during these periods and compares the crisis and post-crisis period.**	**The level of conservatism during the crisis period is low as is the timeliness of earnings. During the post crisis period the level of conservatism increases**
11	The changing time-series properties of earnings, cash flows and accruals: Has financial reporting become more conservative	**Givoly D. and Hayn C. 2000**	**Fluctuations in the properties of earnings, accruals and cash flows are investigated over time in order to examine if these fluctuations are in line with the increase in the degree of conservatism.**	**The data (obtained from compustat) contains 896 companies for 1968 till 1988.**	**The methods used to asses conservatism are the Basu model, accrual based measures and book-to-market measures. The research consist of US firms.**	**The researches indicate that the last 20 years the degree of conservatism has increased significantly.**

12	The effect of earnings management on the asymmetric timeliness of earnings	**Garcia, Lara et al. 2004**	**The effect of code law and common law mechanisms on the degree of conservatism.**	**The data consists of earnings data (EBIT). For the United Kingdom, France and Germany. The sample period is from 1990 till 2000**	**The Basu model is used to measure the degree of conservatism. Also a model is build to assess the effects of earnings management**	**The asymmetric verifiability in earnings in the code law countries (Germany and France) is significantly decreasing.**
13	The effect of international institutional factors on properties of accounting earnings	**Ball et al. 2000**	**In this research it is assumed that the degree of conservatism in the United Kingdom is less conservative than normally expected in common law countries, hence still more conservative than in code law countries.**	**Accounting income is gathered from 1985 till 1995. The following countries were examined; Japan, France, The United States, The United-Kingdom, Australia, Germany and Canada.**	**The Basu model is used in this research to measure conservatism.**	**Common law countries are significantly more conservative than code law countries. And the in the UK the level of conservative reporting was the lowest of the common law countries.**

List of banks:

	Bank names:
1	BKS Bank AG
2	BTV (3 Banken Gruppe)-Bank für Tirol und Vorarlberg AG
3	Erste Group Bank AG
4	Immofinanz AG
5	Oberbank AG
6	Oesterreichische Volksbanken AG
7	Raiffeisen International Bank-Holding AG
8	Raiffeisenlandesbank Oberösterreich AG
9	Volksbank Vorarlberg e.Gen.
10	Wiener Privatbank SE
11	Ageas
12	Dexia
13	Fortis SA/NV
14	Groupe Bruxelles Lambert
15	KBC Group-KBC Groep NV/ KBC Groupe SA
16	Aarhus Lokalbank
17	Alm. Brand A/S
18	Amagerbanken, Aktieselskab
19	Gronlandsbanken A/S-Bank of Greenland
20	BankNordik P/F
21	Danske Bank A/S
22	DiBa Bank A/S
23	Djurslands Bank A/S
24	Holdingselskabet af 1958 A/S
25	Hvidbjerg Bank Aktieselskab
26	Jyske Bank A/S (Group)
27	Kreditbanken A/S
28	Laan & Spar Bank A/S

29	Lollands Bank
30	Max Bank A/S
31	Moens Bank A/S
32	Morsoe Bank
33	Noerresundby Bank A/S
34	Nordfyns Bank
35	Nordjyske Bank A/S
36	Oestjydsk Bank A/S
37	Ringkjoebing Landbobank
38	Salling Bank A/S
39	Skaelskor Bank
40	Skjern Bank
41	Spar Nord Bank
42	Sparbank A/S
43	Sparekassen Faaborg A/S
44	Svendborg Sparekassen A/S
45	Sydbank A/S
46	Toender Bank A/S
47	Totalbanken A/S
48	Vestfyns Bank A/S
49	Vestjysk Bank A/S
50	Vinderup Bank A/S
51	Vordingborg Bank A/S
52	Aktia Plc
53	Bank of Aland Plc-Alandsbanken Abp
54	Amanda Capital Plc
55	Norvestia Oyj
56	Pohjola Pankki Oyj-Pohjola Bank plc
57	Sampo Plc
58	Affine
59	Altarea
60	Banque de la Réunion

61	Banque Tarneaud
62	BNP Paribas
63	Boursorama
64	Crédit Agricole Atlantique Vendée-Caisse Régionale de crédit agricole mutuel Atlantique Vendée
65	Credit Agricole Alpes Provence-Caisse régionale de credit agricole mutuel d'Alpes-Provence
66	Crédit Agricole de l'Ille-et-Vilaine-Caisse régionale de crédit agricole mutuel de l'Ille-et-Vilaine
67	Credit Agricole de la Touraine et du Poitou-Caisse régionale de credit agricole mutuel de la Touraine et du Poitou
68	Caisse régionale de crédit agricole mutuel de Normandie-Seine
69	Crédit Agricole d'Ile-de-France-Caisse régionale de crédit agricole mutuel de Paris et d'Ile-de-France
70	Crédit Agricole du Morbihan-Caisse régionale de Crédit Agricole mutuel du Morbihan
71	Crédit Agricole Loire Haute-Loire-Caisse régionale de crédit agricole mutuel Loire Haute-Loire
72	Crédit Agricole Nord de France-Caisse régionale de crédit agricole mutuel Nord de France
73	Credit Agricole Sud Rhône Alpes-Caisse régionale de credit agricole mutuel Sud Rhône -Alpes
74	Crédit Agricole Mutuel Toulouse 31 CCI-Caisse Régionale de Crédit Agricole Mutuel Toulouse 31
75	CFCAL Banque-Crédit Foncier et Communal d'Alsace et de Lorraine (Banque)
76	Cofitem - Cofimur
77	Crédit Agricole S.A.
78	Crédit Industriel et Commercial - CIC
79	Eurosic
80	FALA
81	I.R.D. Nord Pas-de-Calais-Institut Régional de Développement de la Région Nord Pas-de-Calais
82	Initiative & Finance Investissement SA

83	Locindus
84	Natixis
85	Paris Orléans SA
86	SDR Bretagne
87	SIIC de PARIS
88	SIIC de PARIS 8ème
89	Société financière pour le financement de bureaux et d'usines SOFIBUS
90	Société Générale
91	Union Financière de France Banque
92	Aareal Bank AG
93	Ahag Wertpapierhandelsbank AG
94	Baader Bank AG
95	Bankverein Werther AG
96	Bausparkasse Mainz AG BKM
97	Berlin Hyp-Berlin-Hannoverschen Hypothekenbank AG
98	Comdirect Bank AG
99	Commerzbank AG
100	Concord Investmentbank AG
101	DAB Bank AG
102	Deutsche Bank AG
103	Deutsche Postbank AG
104	DF Deutsche Forfait Aktiengesellschaft
105	DVB Bank SE
106	F.I.B. Frankfurter Investmentbank AG
107	Gontard & Metallbank AG
108	HSBC Trinkaus & Burkhardt AG
109	IKB Deutsche Industriebank AG
110	LBB Holding AG-Landesbank Berlin Holding AG
111	Merkur-Bank KGaA
112	mwb fairtrade Wertpapierhandelsbank AG
113	NORDAKTIENBANK AG
114	Oldenburgische Landesbank - OLB

115	quirin bank AG
116	UmweltBank AG
117	Varengold Wertpapierhandelsbank AG
118	Wüstenrot & Württembergische
119	Allied Irish Banks plc
120	Latvian Savings Bank-Latvijas KrajBanka
121	AB DnB NORD Bankas
122	AB Ukio Bankas
123	Bankas Snoras
124	Siauliu Bankas
125	Brait SA
126	Espirito Santo Financial Group S.A.
127	IdB Holdings SA
128	BinckBank NV
129	Delta Lloyd Group-Delta Lloyd NV
130	Fortis NV
131	ING Groep NV
132	Robeco NV
133	SNS Reaal NV
134	Van Lanschot NV
135	ABG Sundal Collier Holding ASA
136	DnB Nor ASA
137	Storebrand ASA-Storebrand Group
138	Banco BPI SA
139	Millennium bcp-Banco Comercial Português, SA
140	Banco Espirito Santo SA
141	BANIF SGPS SA
142	Finibanco Holding SGPS SA
143	Banco Bilbao Vizcaya Argentaria SA
144	Banco de Sabadell SA
145	Banco de Valencia SA
147	Banco Guipuzcoano SA

148	Banco Pastor SA
149	Banco Popular Espanol SA
150	Banco Santander SA
151	Bankinter SA
152	Avanza Bank Holding AB
153	HQ AB
154	Nordea Bank AB (publ)
155	Skandinaviska Enskilda Banken AB
156	Svenska Handelsbanken
157	3i Group plc
158	Aberdeen Asset Management Plc
159	Alliance Trust Plc
160	Arbuthnot Banking Group Plc
161	Baillie Gifford Japan Trust Plc (The)
162	Baillie Gifford Shin Nippon Plc
163	Bankers Investment Trust Plc
164	Barclays Plc
165	Brewin Dolphin Holdings Plc
166	British Assets Trust Plc
167	Close Brothers Group Plc
168	Dunedin Enterprise Investment Trust plc
169	Dunedin Smaller Companies Investment Trust
170	Edinburgh Investment Trust Plc (The)
171	Edinburgh Worldwide Investment Trust Plc
172	Electra Private Equity Plc
173	Foreign & Colonial Investment Trust Plc (The)
174	HSBC Holdings Plc
175	Intermediate Capital Group Plc
176	International Personal Finance Plc
177	Investec Plc
178	Jupiter Primadona Growth Trust Plc
179	Lloyds Banking Group Plc

180	London Capital Group Holdings Plc
181	Man Group Plc
182	Mercantile Investment Trust plc (The)
183	Mid Wynd International Investment
184	Monks Investment Trust Plc
185	Murray International Trust Plc
186	Northern 2 VCT Plc
187	Northern 3 VCT Plc
188	Northern Aim VCT Plc
189	Northern Investors Company Plc
190	Northern Venture Trust Plc
191	Pacific Horizon Investment Trust plc
192	Paragon Group of Companies Plc
193	Polar Capital Technology Trust Plc
194	Rathbone Brothers Plc
195	RIT Capital Partners Plc
197	Schroders Plc
198	Scottish Investment Trust Plc
199	Scottish Mortgage Investment Trust Plc
200	Standard Chartered Plc
201	Throgmorton Trust PLC
202	Witan Investment Trust Plc