

Sanna Hämäläinen

**THE EFFECT OF INSTITUTIONAL SETTINGS ON
ACCOUNTING CONSERVATISM – EMPIRICAL
EVIDENCE FROM THE NORDIC COUNTRIES AND
THE TRANSITIONAL ECONOMIES OF EUROPE**

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ABSTRACT

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The purpose of the dissertation is to investigate how different institutional settings affect accounting conservatism. These aspects are of interest because prior studies show that accounting quality is influenced not only by accounting standards, but also by incentives from the financial reporting environment. Accounting quality could be defined as the usefulness of financial reporting to investors and other parties in contractual relationships with the firm. In this thesis it is measured by a single, but important attribute, accounting conservatism. Conservatism is understood as asymmetric timeliness of loss and gain recognition.

The study examines the role and the users of financial statements, and how changes in both respectively affect accounting conservatism. These two questions are explored in two different research environments, the Nordic countries and the transitional economies of Europe.

The results of the dissertation indicate that the degree of accounting conservatism increases the closer the financial statement comes to fulfilling the informational role of financial reporting. Secondly, it is also implied that foreign investors demand conservative accounting numbers in order to mitigate the problem of information asymmetry. Overall, the findings suggest that earnings conservatism is useful and increases the quality of financial information for the purpose of decision-making and contracting. These results are of relevance to managers, investors and other users of financial reporting information, as well as to standard setters.

Keywords: accounting conservatism, timely loss recognition, accounting quality, institutional settings, foreign direct investments, Nordic countries, transitional economies

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Lappeenranta, April 2011

Sanna Hämäläinen

TABLE OF CONTENTS

ABSTRACT

ACKNOWLEDGEMENTS

LIST OF TABLES

LIST OF FIGURES

1	INTRODUCTION	11
1.1	Background.....	11
1.2	Positioning the study	14
1.3	The purpose and motivation of the study	16
1.3.1	Financial reporting in the transitional economies of Europe.....	19
1.3.2	Financial reporting in the Nordic countries.....	22
1.4	Research questions and methods	25
1.5	Contribution of the study.....	28
1.6	Structure and main results	30
2	THEORETICAL FRAMEWORK.....	33
2.1	Information asymmetry between managers and investors	33
2.2	The informational role of financial reporting	37
2.3	The contracting role of financial reporting.....	41
2.4	Accounting concepts and the qualitative characteristics of accounting information	44
2.5	Explanations for accounting conservatism.....	49
2.6	Differences in the degree of conservatism across countries.....	53
2.7	The interaction between conditional and unconditional conservatism.....	57
2.8	Summary.....	60
3	THE RESEARCH ENVIRONMENT	62
3.1	The role and reliability of financial accounting in transitional economies	62
3.2	The role of foreign investments in emerging markets.....	66
3.3	The role of accounting information in the Nordic countries	68
3.3.1	Denmark	70
3.3.2	Finland.....	71
3.3.3	Norway	72
3.3.4	Sweden	73
3.4	The role of foreign investments in developed markets.....	74
3.5	Summary.....	78

4	DATA AND METHODS	79
4.1	The transitional economies of Europe.....	79
4.2	The Nordic countries	87
5	EMPIRICAL RESULTS	92
5.1	The reliability of earnings figures and conditional conservatism in the transitional economies: empirical results	92
5.2	The effects of the investment environment on conditional conservatism in the transitional economies of Europe: empirical results.....	101
5.3	The impact of a changing regulatory environment on conditional conservatism in the Nordic countries: empirical results.....	107
5.4	The effect of FDIs on the interaction between conditional conservatism and market-to-book ratio: empirical results	116
5.5	Robustness check.....	127
5.6	Summary.....	131
6	CONCLUSION	133
6.1	The new, informational role of accounting numbers in transitional economies .	134
6.2	The role of FDIs in affecting the demand for high-quality financial information in emerging markets	135
6.3	The effect of changes in accounting regulations on earnings quality in the Nordic countries	136
6.4	The effect of FDIs on the demand for high-quality financial information in developed markets	137
6.5	Limitations.....	138
6.6	Further research.....	139
	REFERENCES	141

LIST OF TABLES

Table 1. The legal and political characteristics of the transitional economies	65
Table 2. Sample selection in firm-years, 2000-2006	79
Table 3. Descriptive statistics of the data on the transitional economies in Europe	80
Table 4. Correlation matrix for the variables describing progress in transition and EU membership	84
Table 5. Correlation matrix for the variables describing economic freedom and FDIs	87
Table 6. The Nordic sample in firm-years, 1995-2006	88
Table 7. Descriptive statistics of the data on listed companies in the Nordic countries	88
Table 8. Conditional conservatism in the transitional economies of Central and Eastern Europe.....	93
Table 9. The effect of legal origin on conditional conservatism in the transitional economies	94
Table 10. The effect of the transition phase on conditional conservatism	96
Table 11. The effect of European Union membership on conditional conservatism	99
Table 12. The effect of institutional quality on conditional conservatism	102
Table 13. Levels of foreign direct investments affecting conditional conservatism	104
Table 14. The effect of FDI growth on conditional conservatism.....	106
Table 15. Conditional conservatism in the Nordic countries	109
Table 16. Average levels of conditional conservatism in the Nordic countries	110
Table 17. Conditional conservatism by year in the Nordic countries	112
Table 18. The increase in conservatism following the adoption of IAS/IFRS in the Nordic countries	114
Table 19. The effects of market- versus bank-oriented financing.....	115
Table 20. The relationship between conditional conservatism and the market-to-book ratio	117
Table 21. The effect of foreign direct investments on conditional conservatism.....	119
Table 22. The relationship between FDIs and conditional conservatism in different MTB categories	120
Table 23. The relationship between FDIs and conditional conservatism in different sales-growth categories.....	124
Table 24. The relationship between FDIs and conditional conservatism in different categories of R&D intensity	125
Table 25. Timely loss recognition ($\alpha_{2it} + \alpha_{3it}$).....	128
Table 26. Incremental loss recognition slope (α_{3it})	129
Table 27. The relationship between FDIs and conditional conservatism in the USA.....	130

LIST OF FIGURES

Figure 1. Accounting research from a measurement and an informational perspective (adapted from Beaver 1996, 116).....	15
Figure 2. The research problem.....	16
Figure 3. The overall determinants of accounting quality and the focus of the study (adapted from Soderstrom and Sun, 2007, p. 688).....	26
Figure 4. The separable natures of hidden information and hidden action, and different accounting reactions to these problems (combining Cataldo 2003, p. 29 and Scott 2003, p. 10).....	34
Figure 5. Financial and information flows in a capital market economy (adapted from Healy and Palepu, 2001, p. 408).....	39
Figure 6. The contracting role of financial information in financial reporting environment (source: Pratt 2009, p. 15).	42
Figure 7. Conditional conservatism in the Nordic countries on an annual basis	113
Figure 8. Transitory gains and losses incorporated into income during times of decreasing and increasing foreign investments in the Nordic countries.....	118
Figure 9. Transitory gains and losses incorporated into income: during times of decreasing and increasing foreign investment for firms in low, medium, and high market-to-book- value categories	122

1 INTRODUCTION

1.1 Background

Financial accounting statements have an important economic role. Investors and creditors demand that management provide financial accounting information, and the demand is two-fold. Firstly, investors and creditors use the information in deciding how to allocate their funds. Secondly, financial numbers help in the monitoring of company management and the enforcing of debt and compensation contracts (Pratt, 2009). All parties involved are concerned about the quality and usefulness of information for decision-making and contracting purposes.

There are several favorable properties that measure earnings quality: accrual quality, persistence, predictability, smoothness, value relevance, timeliness, and conservatism. These characteristics are desirable because they reduce information risk and therefore have economic consequences in capital markets, such as reducing the cost of equity (Francis *et al.*, 2004) and debt (Zhang, 2008). In addition, as Bushman, Piotroski and Smith (2006) argue, there is an association between accounting quality and capital allocation. High-quality financial reporting affects the firm's investment behavior and discourages managers from making negative NPV investments. Furthermore, Young and Guenther (2002) provide evidence that a financial-reporting environment that enhances high-quality financial information is also likely to have higher capital mobility.

Attributes of earnings quality have recently been the main focus of interest among researchers in the field of international accounting. Accounting quality could be defined as the usefulness of financial reporting to investors and other parties in a contractual relationship with the firm. In this thesis it is measured by a single but important attribute, namely accounting conservatism. Conservatism is one of the earnings attributes affecting the quality of earnings. It is also one of the major reasons for international differences in financial reporting. The literature describes two types of conservatism, unconditional and conditional. Traditionally, conservatism is interpreted as the undervaluation of assets and earnings and the overvaluation of liabilities, and in this form is also referred to as

unconditional conservatism and a primary source of unrecorded goodwill (Beaver and Ryan, 2005). Basu (1997) launched a new stream of research that interprets conservatism as the asymmetric recognition of good and bad news. This is conditional conservatism, according to which bad news is incorporated into earnings faster than good news. The implication is that book values are written down under sufficiently adverse circumstances but not written up under favorable circumstances, the latter being the conservative behavior (Beaver and Ryan, 2005).

These two types of conservatism have somewhat similar purposes, such as capturing investors' perceived asymmetric loss functions, minimizing firms' litigation, tax or regulatory costs, and enabling accounting and industry regulators to minimize economic instability and avoid criticism. However, the literature on unconditional conservatism highlights the difficulty of valuing certain types of economic assets and liabilities and determining their effects on future income. On the other hand, the literature on conditional conservatism emphasizes the improvement in contracting efficiency given managers' incentives to report upward-biased accounting numbers. Despite the long history and ongoing use of conservatism, however, the debate on whether it is desirable goes on, especially with regard to unconditional conservatism (Beaver and Ryan, 2005).

Consistent undervaluation of shareholders' equity is possible due to historical cost accounting and the non-recognition of certain intangible assets. It is not always possible to undervalue earnings, however, because accruals tend to reverse and gains (or losses) that are not recognized now will be recognized later on. Thus and in the long run, accounting earnings will tend to reflect economic earnings (Garcia Lara and Mora, 2004). Standard setters try to eliminate conservatism from financial reporting. However, recent studies (e.g., Ball and Shivakumar, 2005; LaFond and Watts, 2008) document the usefulness of conditional conservatism in mitigating problems of information asymmetry. They produce evidence that the total elimination of conservatism is harmful, but suggest that more research is needed in order to convince setters of global standards. The asymmetric recognition timeliness view of conservatism is adopted in this study.

Conservatism has existed for centuries (Maltby, 2000), and recent studies show that it has increased in degree during the last 30 years in the USA (e.g., Givoly and Hayn, 2000) and Europe (Grambovas *et al.*, 2006). Accounting research also shows that conservatism varies across firms, industries, and countries. Accounting conservatism has considerable implications for standard-setters, regulators, investors, financial analysts and other users of financial reporting. The quality of the reporting affects the use of financial reports for investment decisions, for contracting purposes, and for the indirect assessment of the quality of accounting standards.

Institutional factors such as contracting, shareholder litigation, taxation, and accounting regulation have been reported to affect the level of conservatism (Watts, 2003a; Watts, 2003b). Ball, Kothari and Robin (2000) examine the effect of institutional factors on accounting earnings and present evidence that earnings are considerably more timely in common-law countries than in code-law countries due to higher levels of earnings conservatism. Bushman and Piotroski (2006) extend earlier cross-country research by examining the influence of legal and political institutions on accounting conservatism. Their results indicate that, after controlling for legal origin, conservatism is significantly related to a variety of other country-level institutions.

This dissertation focuses on the institutional factors and changes in the financial reporting environment that affect accounting quality measured as accounting conservatism in both emerging and developed markets. As discussed in more detail in Chapters 1.3.1 and 1.3.2, the transitional economies of Europe and the Nordic countries provide a unique research environment. There has been a significant change in the purpose of financial statements as well as in the users of financial information in both settings, which nevertheless are totally different in terms of their analytical bases. The transitional economies are emerging markets in which financial reporting has been very unreliable, whereas the Nordic countries comprise stable and sophisticated markets with high-quality financial reporting, but in which financial statements have differed distinctly from IFRS reporting. The financial reporting in both research environments has now converted to IFRS standards.

1.2 Positioning the study

This dissertation builds on the tradition of positive (empirical) accounting. As Beaver (1996) states, other disciplines such as finance, information economics and behavioral sciences have significantly influenced accounting research. Data availability and the developments in computer technology have dramatically increased the amount of empirical research, and the financial reporting environment has influenced the research questions that are explored. Changes in this environment provide significant research opportunities in accounting.

Various empirical studies on international accounting have focused on the determinants of accounting quality. This study examines the determinants of accounting conservatism in institutional settings in two different financial reporting environments, the rapidly changing and emerging markets of Central and Eastern Europe, and the stable and developed markets of the Nordic countries.

Accounting research can be approached from an informational perspective or a measurement perspective, as illustrated in Figure 1. This dissertation focuses on the former, in which accounting data is conceived of as information. Cristensen and Demski (2003) define *information* as some observable thing that reveals something and reduces uncertainty. Accounting is a formal financial measurement system designed to record an organization's financial history and to measure its value. The measurement perspective emphasizes the importance of a formal system that measures value properly, whereas the information-content approach stresses the importance of a formal measurement system that conveys information that is useful for decision-making.

Accounting information can be used for investment-decision and contracting purposes. It is a way of conveying information from insiders to outsiders in non-strategic settings, or in more strategic settings as a choice of accounting method to affect the outcome of contracts (see Figure 1).

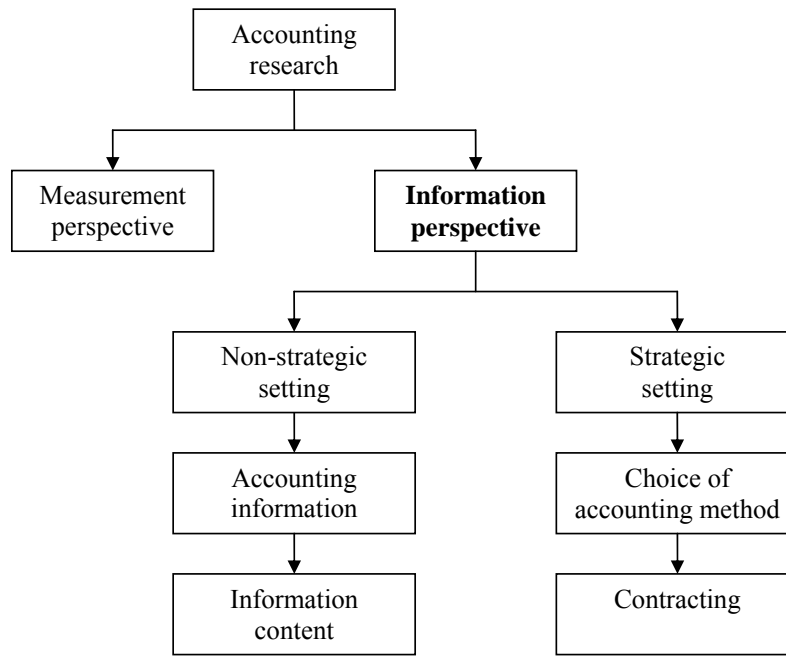


Figure 1. Accounting research from a measurement and an informational perspective (adapted from Beaver 1996, 116)

The essential difference between these perspectives is in the recognition of changes in asset values. The measurement perspective adopts present value accounting and is focused on the balance sheet. Increases and decreases in the value of assets and liabilities are recognized as they occur. On the other hand, the information perspective is historical, cost-based accounting and focuses on the income statement. Unrealized increases in asset values are not recognized on the balance sheet, and net income lags behind real economic performance because the accountant waits until increases in value are realized. In this case, income calculation is a process of matching revenues with the costs of earning them. Matching these costs and revenues under uncertainty is a real accounting challenge (Scott, 2003).

1.3 The purpose and motivation of the study

The objective in this dissertation is to investigate how different institutional settings affect accounting conservatism. These aspects are of interest because prior studies show that accounting quality is influenced not only by accounting standards, but also by incentives from the financial reporting environment.

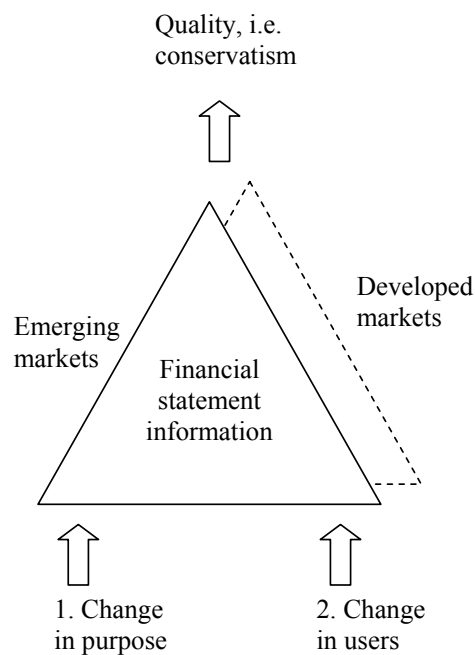


Figure 2. The research problem

The aim of the dissertation is two-fold: to examine firstly the role, and secondly the users of financial statement information, and how changes in both respectively affect accounting conservatism. These two questions are explored in two different research environments, the Nordic countries and the transitional economies of Europe.

Firstly, the role of accounting information has been changing in both of the above-mentioned environments. Firms in the transitional economies have traditionally relied on state finance and the need to deliver financial information to state administration has been minor. Firms in the Nordic countries, on the other hand, have been primarily debt financed. The banks have had access to inside information, and therefore financial statements have primarily served the need to calculate taxable income. Now there has been a shift in purpose towards delivering information about the firm's ability to generate profit and its financial position to investors in both of the research environments.

Secondly, there has been a change in the users of accounting information in both environments. Foreign direct investments are now the primary source of capital for companies in the transitional economies, and given the small size of the capital markets, firms in the Nordic countries also need foreign investments. Firms in both environments therefore have to provide high-quality and publicly disclosed financial information in order to attract foreign investors, and these changes are expected to affect accounting quality, more precisely accounting conservatism. Figure 2 depicts the research problem.

There are four main hypotheses to be tested in this study:

1. The changed purpose of financial reporting increases the degree of conservatism in the transitional economies. The reason for this is that the reporting system no longer serves the purposes of the state administration, but is targeted on attracting investors. Attractiveness to investors is heavily based on the quality and reliability of the system.
2. Foreign direct investments increase the demand for accounting conservatism in the transitional economies. The reason for this is that FDIs are a crucial source of finance in emerging markets, and the system needs to guarantee the investments to the country in question.
3. The changed purpose of financial reporting also increases the degree of conservatism in more sophisticated markets. Thus the change in purpose from

creditor protection towards serving the information needs of investors enhances conservatism in the Nordic markets.

4. The increase in foreign direct investment also increases the demand for accounting conservatism in the Nordic countries even though FDIs are relatively less important in developed than in emerging markets. This is because Nordic firms have shifted from inside towards outside financing.

The first hypothesis is built on the notion that financial statements did not have an informational role during the era of the command economy, but with the change towards a market economy firms need to attract investors by providing high-quality financial information. The financial reporting is thus expected to be more conservative after these changes. Ball *et al.* (2000) and Bushman and Piotroski (2006) provide empirical evidence of this, suggesting that various institutions, such as legal systems and incentives that stem from financial market development, ownership and taxation, affect the degree of conservatism.

The second hypothesis stems from the first one. Given that foreign direct investments are the main source of capital for firms in the transitional economies, it is to be expected that foreign investors will demand high-quality information and that firms will report increasingly conservative earnings. This supposition is based on previous empirical evidence provided by Ball and Shivakumar (2005) that market demand increases the degree of conservatism. Moreover, LaFond and Watts (2008) suggest that conditional conservatism alleviates information-asymmetry problems, and this is applied to foreign investments in the emerging markets covered in this study.

The third hypothesis is based on the assumption that the role of financial reporting in the Nordic countries has traditionally been to protect creditors, and that recent changes in accounting regulation have brought local accounting more in line with IFRS, according to which the ultimate purpose of financial reporting is to provide useful information for investors and other users of the information. Therefore it is assumed that the change in accounting regulation has increased the degree of accounting conservatism in financial

reporting in these countries. As with the first hypothesis, this is based on previous empirical evidence supplied by Ball *et al.* (2000) and Bushman and Piotroski (2006) suggesting that various institutional actions, such as accounting legislation, affect the degree of conservatism.

The fourth hypothesis builds on the third one. There has also been a change in the providers of finance in the Nordic countries. The relative importance of FDIs is lower than in the transitional economies, but they are assumed to increase the demand for accounting conservatism in the developed markets, too. Firms in these countries traditionally relied on debt finance and investors were seen as insiders with no need for high-quality financial information because they had access to the firm's internal accounts. The trend nowadays is to turn more to outside investors, who demand publicly disclosed, high-quality financial information. The Nordic countries are small equity markets and therefore firms need to attract foreign investors. As with the second hypothesis, this is based on Ball and Shivakumar's (2005) evidence that market demand increases the degree of conservatism, and on LaFond and Watts' (2008) notion that conditional conservatism alleviates information-asymmetry problems.

The following two sub-sections elaborate on the research problems and hypotheses presented above, focusing in turn on institutional changes in the transitional economies of Europe and the Nordic countries.

1.3.1 Financial reporting in the transitional economies of Europe

Accounting in Central and Eastern Europe has undergone an enormous and rapid change since the late 1980s. The absence of privately owned enterprises and market-determined prices was characteristic of these countries before the economic transition from a centrally planned to a free-market economy, and the main objective of accounting systems was to provide financial statistics in terms of quantities rather than values. Accountability, a crucial element of a market-based economy, did not have very significant role and the concepts of "fair presentation" and a "true and fair view" did not exist. Financial reporting

was addressed mainly to the state, and financial reports flowed upwards through the administrative structure rather than outwards into the market (Nobes and Parker, 2006).

The former communist countries have made an effort to advance the integration of the European continent. Eight of them joined the European Union in 2004, and two more at the beginning of 2007. They had to amend their legislation to comply with EU Directives, and required listed companies to prepare their consolidated financial statements according to International Financial Reporting Standards. However, harmonization with EU accounting directives and the adoption of IFRS is not yet complete. There are problems with the implementation and enforcement of new legislation, and difficulties in following these regulations in practice. There is a growing amount of research documenting the problems faced in this legislative change, and in the education of accountants and auditors (e.g., Bailey, 1995; McGee and Preobragenskaya, 2006; Nobes and Parker, 2006 and Alexander and Bailey, 2003) in the transitional economies. However, there is also a need for empirical evidence of the reliability and quality of earnings in these emerging markets.

A great challenge for the firms concerned is to access non-governmental sources of both debt and equity finance. Given the low level of domestic savings, activity on the stock exchanges has been dominated by foreign capital. In order to attract foreign investors in particular, these firms need to produce high-quality earnings data and have a financial reporting system that is based on International Accounting Standards (Nobes and Parker, 2006; Alexander and Bailey, 2003). Cairns (1999, p. 8) describes changes that the transition from a planned economy to a market economy demands as follows. *“One of the necessary changes is the adoption of a financial reporting system that is appropriate to a market economy. Without such a system, enterprises will not be able to attract capital, particularly from foreign investors”*.

This thesis investigates earnings quality in the transitional economies of Central and Eastern Europe. The focus of interest is on the extent to which progress in the transition process and EU membership affect earnings conservatism. Accounting assumes a different role during the transition from a centrally planned to a market-driven economy. Moreover, the transition process changes the economic and political institutions that affect financial

reporting practices and earnings quality. A higher quality of financial reporting is to be expected in countries that have progressed further in the transition process, and in EU member countries.

Firms in emerging markets during the shift from a planned to a market-based economy face a significant change in their financial reporting environments. As a result of privatization they can no longer rely on governmental financing and have to attract capital from various sources. Even though the national institutions have developed in accordance with the transition towards market-based economy, institutional weaknesses persist and the level of corruption is high (Alexander and Bailey, 2003). In this kind of institutional environment foreign investments are mostly in the form of foreign direct investments (FDIs) because investors want to retain control. FDIs are therefore the major source of capital in the countries of Central and Eastern Europe (Daude and Fratscher, 2008; Galego *et al.* 2004).

FDIs are more sensitive to information deficiencies than foreign portfolio investments (Daude and Fratscher, 2008). Foreign investors cannot rely on the financial statements that firms produce in these transitional economies, thus information asymmetry between them and company managers is high (Alexander and Bailey, 2003). The information asymmetry is mostly attributable to the fact that managers know more about the firm and about the institutional structures. When the institutional structures and the regulatory environment are of poor quality, the foreign investor cannot assess the true quality of the information. The same analytical structure applies to domestic investors vs. foreign investors: domestic investors could be seen as better informed than foreign investors, especially in an emerging market environment (Galego *et al.*, 2004).

Earnings conservatism is a useful property of accounting quality because it prevents managers from manipulating accounting numbers and reporting excessive earnings. A recent study by LaFond and Watts (2008) provides evidence that information asymmetry generates conditional conservatism in financial reporting. The role of accounting conservatism in mitigating information asymmetry between firm insiders and outside equity investors is an important issue, especially in transition economies, because foreign investors demand high-quality financial information in exchange for their investments.

Given the acknowledged importance of FDIs in the economic development of emerging markets, and of conservatism as a measure of accounting quality, this study investigates how various institutional factors, including FDIs, affect accounting quality in transitional economies. Firms have to produce high-quality accounting information to meet the information needs of foreign investors in order to attract FDIs. The study also examines how this demand decreases the information asymmetry between better-informed and less well-informed investors, thereby affecting accounting quality.

1.3.2 Financial reporting in the Nordic countries

This dissertation also examines accounting quality in the Nordic countries, in which the markets are developed and more stable than in transitional economies. The aim is to assess the extent to which change in accounting regulation affects earnings quality as measured in accordance with conditional conservatism. Conditional conservatism is therefore investigated in the Nordic countries (Denmark, Finland, Norway and Sweden), where the accounting legislation has the same German origin, but has recently moved towards the Anglo-Saxon reporting model. Given the evidence in the literature that there is less need for conservative accounting numbers if information flows through closer relations between major shareholders and firms rather than through publicly disclosed high-quality financial information, the focus is on changes in earnings conservatism as the national regulations move towards the common-law tradition in code-law countries.

Ball and Shivakumar (2005) argue that the quality of financial information varies due to demands for high quality. They show that private access to insider information resolves information asymmetry in private companies. By way of contrast, shareholders in public firms, who do not have access to inside information, demand high-quality, publicly available financial information in order to reduce information asymmetry. Private access to inside information and high-quality financial reporting are substitutes for each other in terms of reducing information asymmetry between managers and other parties.

The Nordic countries offer a good and reliable environment in which to investigate this issue, for several reasons. There has been a notable shift from private access to insider

information towards the provision of high-quality and publicly available financial information, in other words towards financial reporting that favors conditional conservatism. The latest changes in national accounting regulations in particular are expected to increase conservatism in the Nordic countries. Moreover, it is assumed that earnings conservatism exists regardless of the accounting standards followed. The respective accounting legislative developments have proceeded at different speeds towards Anglo-Saxon reporting practices.

The seminal paper of La Porta *et al.* (1998) is used as a framework for this study. The authors classify legal families according to the origin of the rules. The two major traditions are the common-law family with its English origins and the civil-law families that originate from Roman law. Civil-law families can be further classified as French, German or Scandinavian. Scandinavian laws are described as similar to each other but distinct from the other families, and the Scandinavian family as having the best law-enforcement practices. La Porta *et al.* (1998) also measure the quality of a country's accounting standards on a privately constructed index based on the examination of company reports from different countries: Scandinavia also comes out on top for quality of accounting standards. Hence, the impact of changing accounting regulation should be easily detectable in Scandinavia, where the enforcement and quality of accounting standards are highest. Nevertheless, the trend towards global and efficient capital markets and the consequent need for reliable and high-quality information demand changes in accounting legislation and internationalization through the adoption of International Accounting Standards.

The third aim of this thesis is to investigate how information asymmetry between firm insiders and outside equity investors generates conservatism in financial statements in developed markets. LaFond and Watts (2008) show how firms with higher information asymmetry report more conservative earnings. Foreign investors need to base their decisions on reported financial statements and public information to a higher degree than domestic investors, who have the advantage of knowing their home markets.

There are various levels on which alternative locations for investing FDI capital and institutional environments are evaluated: the investment environment on the macro level,

incentives for specific sectors on the industry level, and incentives for investment on the level of the individual firm (Sethi *et al.*, 2002). The strategic goals of investors, and the institutional factors of the host country all affect FDIs. Institutional factors, the so-called pull factors, include political and economic stability, the rule of law, investment and taxation incentives, and minimal restrictions on foreign investments (Sethi *et al.*, 2002). Thus, foreign direct investment involves high political or country risk. The Nordic countries are politically and economically stable, and are among the best in the world in terms of the low level of risk associated with foreign market entry (Euromoney, 2005). The markets are developed and the accounting systems are advanced, and consequently there are no macro-economic obstacles to FDIs in these countries.

On the firm level, conservative reporting can reduce information asymmetry between better-informed and less well-informed investors. The purpose of this study is to find out whether foreign investors' demand for high-quality information increases earnings conservatism when an increasing amount of investment is in the form of FDIs. Ball and Shivakumar (2005) argue that financial statements are economic goods and their properties are determined by their economic uses. Firms adjust their supply of financial information with respect to the demand for high-quality accounting information. Market forces define the equilibrium outcome of external reporting quality.

Firms in the Nordic countries are turning from insider towards outside financing, and therefore need to produce high-quality financial information in order to attract less well-informed investors. In addition, the domestic financial markets are quite small and they need to attract foreign investments. (Fagerström and Lundh, 2006). Less extensive and lower-quality financial information suffices in closed financial markets because local investors have private access to information and are less demanding. The need for high-quality information increases with the involvement of international investors, who are not as well informed and need to reduce information asymmetry.

1.4 Research questions and methods

The main research question addressed in this thesis is: *How do different institutional settings affect accounting conservatism?* This is divided into the following four sub-questions, reflecting the motivation for the research as discussed in the preceding section:

1. How does change in the purpose of financial information affect accounting conservatism in emerging markets?
2. How does change in the users of financial information affect accounting conservatism in emerging markets?
3. How does change in the purpose of financial information affect accounting conservatism in developed markets?
4. How does change in the users of financial information affect accounting conservatism in emerging markets?

Figure 3 depicts the determinants of accounting quality as introduced in the accounting literature. Financial information is shaped by legal and political systems and accounting standards, and also by incentives stemming from developments in financial markets, capital structures, (foreign) ownership, and tax systems. All these determinants, in turn, shape accounting standards. This study investigates their effect on accounting quality, defined as accounting conservatism. Research question 1 focuses on legal and political systems as well as on developments in the financial market; research question 3 investigates the effect of accounting standards; and research questions 2 and 4 focus on the effect of foreign ownership, but are also related to segmentation in financial markets. Research question 2 also explores the effect of taxation on accounting conservatism.

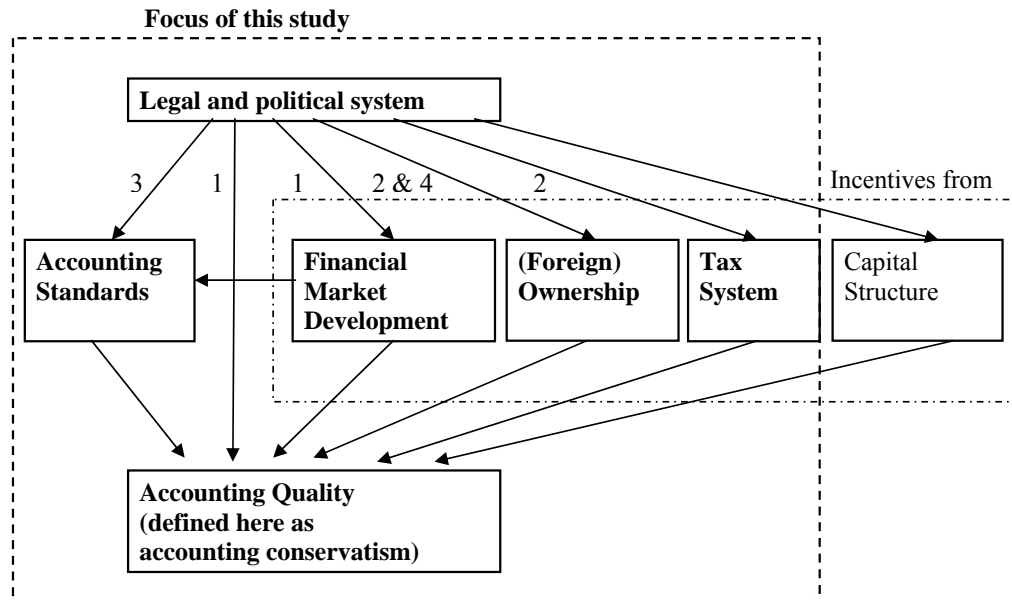


Figure 3. The overall determinants of accounting quality and the focus of the study (adapted from Soderstrom and Sun, 2007, p. 688)

Conservatism is measured in accordance with the market-independent measure developed by Ball and Shivakumar (2005). The data used throughout the dissertation consists of listed companies, and therefore the primary measure of conservatism introduced by Basu (1997) could also have been useful. Basu's (1997) model is a widely used in the accounting literature as a measure of conditional conservatism: annual earnings are regressed on current annual returns, positive and negative stock returns are used as a proxy for good and bad news, and different slopes are allowed for the responsiveness of earnings to good and bad news. Earnings are expected to show incremental sensitivity to bad news under conservative reporting. However, the limitations on data availability in emerging market environments constrained the research design of the study. Stock returns that reflect good and bad news in Basu's (1997) model are not available for the majority of firms in transitional economies, especially those that are still closer to planned economies. But even if they were available, the measurement of good and bad news based on stock prices would have been problematic.

Basu's model has also met with criticism, however (see Dietrich *et al.*, 2007 and Givoly *et al.*, 2007). Ball *et al.* (2008) explain why a high market-to-book ratio biases Basu coefficients towards zero and causes a negative association with conditional conservatism. Moreover, the stock returns the Basu (1997) model uses may not reflect economic events equally quickly across countries (Holthausen 2003). Ryan (2006, p. 513) argues that

“[t]his reverse regression approach should work well *if* returns summarize news from sources other than earnings that becomes available to the markets during the period *and* this news in principle could be recognized in earnings in that period.”

Stock prices in developed countries move independently in a firm-specific way and indicate the value of investments, whereas in transitional economies they move up and down en masse and incorporate little information about individual firms (Durnev *et al.*, 2004). There were therefore two reasons for not using Basu's (1997) model, the one quoted above and the limitations on data availability in emerging market environments. One alternative approach, a version of which is adopted in Ball and Shivakumar (2005), is to estimate asymmetric timeliness using non-returns-based measures of news instead of or in addition to returns, but this has also attracted criticism. The main potential drawback is the difficulty of identifying variables that convey news anywhere near as comprehensively as returns, and moreover does not introduce other model-specification problems. The use of cash flows from operations is a natural choice in terms of comprehensiveness, but they exhibit asymmetric timeliness, are affected by a number of accounting choices, are a part of earnings, and are correlated with accruals in a highly contextual fashion (Ryan, 2006).

This study therefore uses Ball and Shivakumar's (2005) measure of market independence, which is based on earnings changes, to measure earnings conservatism. It measures timely gain and loss incorporation as the tendency for increases and decreases in accounting income to reverse. Economic gains tend to be more permanent than economic losses, as they are not recognized until realized. Therefore positive earnings changes tend not to reverse. On the other hand, the more timely recognition of economic losses than gains implies that losses are more transitory in nature, and negative earnings changes tend to

reverse more often over time. Conservatism implies that the coefficient of negative changes is significantly negative relative to the coefficient of positive changes.

A model that is based on changes in income in both emerging as well as developed markets is therefore used to measure conservatism, thereby enhancing the comparability of the results between the two research environments. The model and its extensions are presented in Chapter 4. The data consist of listed firms operating in the transitional economies of Central and Eastern Europe and in the more sophisticated Nordic markets. The research period covering the emerging markets is from 2000 to 2006, and for the developed markets between 1995 and 2006.

1.5 Contribution of the study

This dissertation contributes to the accounting literature in four ways. Firstly, the empirical analysis of the data on listed companies in 12 transition economies in Europe add to the earlier cross-country literature on earnings quality in at least three respects. The findings complement the work of Ball, Robin and Wu (2000) and Harper and McNulty (2008) in showing that in emerging markets the transition affects accounting quality more strongly than the legislative origin. The study also continues the work of Bushman and Piotroski (2006) and Jindrichovska and McLeay (2005) in examining the extent to which the transition process affects earnings quality, and supports the work of Jindrichovska and McLeay (2005) in providing evidence of earnings conservatism in the transitional economies of Central and Eastern Europe. Furthermore, it contributes to research conducted by Joos and Lang (1994) in examining the effect of EU membership on earnings quality.

Secondly, in examining how the quality of the regulatory environment affects accounting conservatism the thesis contributes to the work of Bushman and Piotroski (2006), who argue that financial reporting incentives are created by an economy's institutional structure. Institutional quality is measured here in terms of economic freedom. However, it is not only the institutions but also the market demand for high-quality financial reporting that determines the level of accounting quality, and therefore the effect of FDIs is also

considered. Furthermore, the thesis supports the arguments put forward by Ball and Shivakumar (2005) and LaFond and Watts (2008) that market demand determines the quality of information by examining the demand for high-quality financial reporting with a view to reducing information asymmetry between local and foreign investors.

Thirdly, the analysis of data on listed companies in the Nordic countries extends the work of Ball *et al.* (2000), Ball *et al.* (2003), Raonic *et al.* (2004) and Bushman and Piotroski (2006) to cover not only institutional settings, but also changes therein. Specifically, it focuses on accounting quality (proxied by conditional conservatism) during a major change in accounting regulation. The present study also complements the work of Giner and Rees (2001) in focusing on conservatism in the Scandinavian law family. Furthermore, it contributes to the discussion in Sellhorn and Gornik-Tomaszewski (2006), Raonic *et al.* (2004) and Bushman and Piotroski (2006) in examining conservatism in the Nordic countries, and in conducting separate analyses among firms that report under IFRS and firms that follow their country's rules, with a view to detecting the effect of national legislation on conditional conservatism.

Finally, this dissertation contributes to the studies conducted by Ball and Shivakumar (2005) and LaFond and Watts (2008) in showing that market influence affects earnings quality with regard to foreign direct investments. The results suggest that conditional conservatism increases when FDIs increase. A further contribution is to the work of Roychowdhury and Watts (2007) and Collins and Kothari (1989), and in examining the interaction between conditional conservatism and the market-to-book ratio it enhances understanding of the relationship between the two in the presence of foreign direct investments. The market-to-book ratio is a widely used measure of both unconditional and overall conservatism. In a recent study, however, Roychowdhury and Watts (2007) cast doubt on its usefulness as a conservatism measure. It reflects not only conservative accounting practices, but also investors' growth options and therefore the risk inherent in the investment (e.g., Collins and Kothari, 1989). Information asymmetry between managers and outside foreign investors increases in line with an increase in growth options: the higher the market-to-book ratio, the greater is the information asymmetry.

1.6 Structure and main results

This section gives an outline of the thesis. Chapter 1 introduces the background, purpose and motivation of the study, describes the research design and contribution, and in this section outlines the main results. Chapter 2 develops the theoretical framework; it discusses the concepts of information asymmetry, the informational and contracting roles of financial statements, and the financial reporting environment. It also offers explanations for the existence of accounting conservatism and reviews recent cross-country studies on the subject. Finally, it sheds light on the interaction between conditional and unconditional conservatism.

Chapter 3 describes the research environment of the study. Accounting quality is examined in two divergent financial reporting environments. The transitional economies of Central and Eastern Europe represent emerging markets in which the quality of financial information is relatively poor, whereas the Nordic countries are characterized by markets that are stable and well developed. Finally, Chapter 3 discusses the role of foreign direct investments in creating the demand for high-quality financial information in both environments.

The data and methods used in the study are described in Chapter 4. The data consists of listed companies in the Nordic countries and 12 transitional economies in Central and Eastern Europe. Chapter 5 reports the empirical analysis. The results suggest that accounting quality is improving in line with the recent changes in the role and users of accounting information in both research environments. Chapter 6 concludes the dissertation, and discusses the limitations and options for future research.

The empirical analyses of listed companies in the transitional economies of Central and Eastern Europe show that there are differences in the degree of conservatism between the countries at different stages of the transition process. Financial reporting is of higher quality in countries that are further advanced along the road to a market economy, and in countries that are members of the European Union. The results also show that investment freedom,

especially the free flow of foreign capital, and freedom from corruption increase earnings quality measured in terms of conditional conservatism.

FDIs increase the incentives for high-quality financial reporting, and a high level of FDIs is associated with high conditional conservatism. This could be attributable to firms' attempts to reduce information asymmetry between managers and foreign investors by providing high-quality financial information. However, FDIs only increase earnings conservatism in a weak investment environment, not in a high-quality environment. This implies that high-quality financial reporting is even more valuable in terms of diminishing information asymmetry when the investment environment is of low institutional quality. On the whole, the empirical results concerning the emerging markets of Europe indicate that firms in the transitional economies increase their financial reporting quality in order to alleviate information asymmetry between managers and foreign investors and thus to compete for foreign capital.

The results concerning the Nordic countries also provide evidence of improved accounting quality. It seems that the degree of conservatism increased following the latest changes in national legislation and conversion to IFRS. However, there are no indications of a further increase after the adoption of IFRS: on the contrary, there were signs of a decrease in Norway. These results reflect the dramatic change in accounting legislation in the country.

There is also evidence that increases in foreign direct investments also increase the degree of conditional conservatism in the Nordic countries, even though the FDI share relative to foreign portfolio investments is much smaller in developed than in emerging markets. It thus seems that conditional conservatism reduces information asymmetry among managers and international investors in stable and well-developed markets. The findings also indicate that a high market-to-book ratio causes high information asymmetry due to the elevated risk among high-growth firms. Overall, the results of this dissertation show that increasing foreign investments improves the quality of accounting, and thereby reduces information asymmetry.

On the practical level, the results concerning the properties of financial statements are valuable for managers, investors, creditors, and others who use financial information for decision-making and contracting purposes. They are also of use to policymakers in assessing the quality of regulation.

2 THEORETICAL FRAMEWORK

2.1 Information asymmetry between managers and investors

Information asymmetry is a fundamental issue in accounting theory, and occurs when some parties to business transactions have an information advantage over others (Scott, 2003). Akerlof's (1970) classic paper on information asymmetry relates to quality and uncertainty in the market for used cars. The focus in this chapter is on information asymmetry in an accounting context.

The separation between ownership and control is characteristic of a modern economy. In the company context, the separation of ownership from management creates principal-agent relationships between management and shareholders together with other stakeholders. Jensen and Meckling (1976) define an agency relationship as a contract under which one or more persons, the principal(s), engage another person, the agent, to perform some service on their behalf. This involves delegating some decision-making authority to the agent. Conflicts arise because all parties are assumed to act in their own best interest (see e.g., Cataldo, 2003)

There are two types of situation in which information asymmetry occurs, adverse selection and moral hazard, which as Figure 4 illustrates, derive from hidden information and hidden action, respectively. Hidden information is usually related to pre-contractual issues and moral hazard is typically associated with the post-contractual stage (Cataldo, 2003). In the accounting context information asymmetry inhibits the decision-making of different users of accounting information. Adverse selection is related to investment decisions and moral hazard to contracting, especially management compensation and debt contracts. These problems induce full disclosure and "hard" net income as accounting reactions to information-asymmetry problems (Scott, 2003).

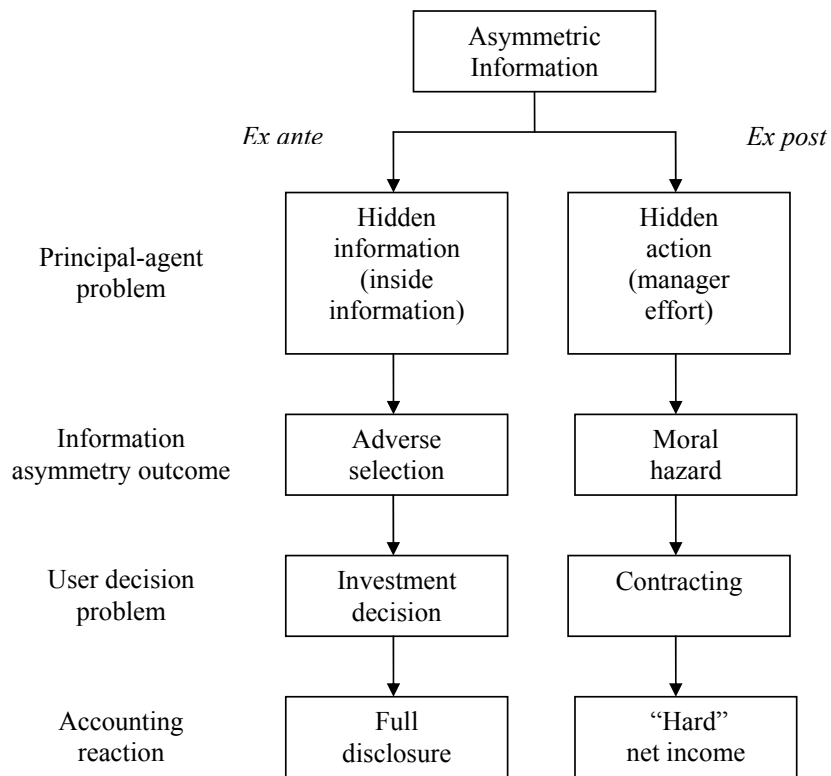


Figure 4. The separable natures of hidden information and hidden action, and different accounting reactions to these problems (combining Cataldo 2003, p. 29 and Scott 2003, p. 10)

Adverse selection relates to the problem of communication from the firm to outside investors. In this case, the role of accounting information is to provide a “level playing field” through full disclosure of relevant, reliable, timely and cost-effective information to investors and other users of financial statements. Investors use financial information to facilitate rational investment decision-making. When a large number of investors interact in a properly working securities market, the market becomes efficient. The accounting reaction to such efficiency is full disclosure. Firms supply a large amount of information to help investors evaluate their future performance (Scott, 2003).

The second information-asymmetry problem, *moral hazard*, derives from the unobservable nature of the manager's effort. Managers are free to decide how much effort they devote to running the firm on behalf of shareholders. They are able to save on this effort because it is unobservable. They may be tempted to bias or manipulate reported net income in order to improve compensation, reputation and covenant ratios. Managers are concerned about which reported income and accounting policies are used to determine net income, and will object to policies that decrease its potential to reflect their efforts. The role of financial information is to motivate and monitor manager performance. Therefore, reported net income should be "hard", in other words highly correlated with manager effort (Scott, 2003).

Under ideal conditions the future cash flows of the firm and the interest rate in the economy are publicly known with certainty. Relevant financial statements are also reliable, and their information content is precise and free from bias: they give information to investors about the firm's future economic prospects. There are two components of reliability in this context. The first is freedom from random errors in the firm's accounting system and in the estimates, and the second is freedom from bias or manipulation. In other words, the information is "hard" (Scott, 2003).

Unfortunately, in reality it is impossible to prepare financial statements that are both completely relevant and completely reliable. Therefore, *under uncertainty* relevance and reliability must be traded off. Complete relevance is not attained because historical cost-based asset values diverge from discounted present values. Complete reliability is not attained, either, because there is a possibility of inaccurate and biased information. The measurement of net income thus becomes a process of matching, rather than the simple calculation of discounted cash flows, and the matching principle usually allows different ways of accounting for the same item. Different users of accounting information usually appreciate different tradeoffs between relevance and reliability. The lack of a well-defined concept of net income requires judgment in the process of asset valuation and income measurement (Scott, 2003).

The decision usefulness approach to financial reporting is adopted as a reaction to the impossibility of preparing theoretically correct financial statements, but leads to problems in *identifying the users of the statement* and selecting the information required for decision-making. The financial reporting environment consists of investors, lenders, managers, unions, information intermediaries, regulators, governments, and auditors, and the roles and interests of each of these *constituents* differ. Financial statements are more useful if the information is tailored to the specific needs of the users, the majority of which are assumed to be investors (Scott, 2003; Beaver, 1998).

The selection of a financial reporting system is a social choice that involves trade-offs among the various constituent parts. Moreover, the individuals in each group are typically heterogeneous with regard to their information demands: investors may be diversified or undiversified, active or passive, and professional or nonprofessional. Information asymmetry is not restricted to managers and investors. It also arises among investors, who could be described as better versus less well informed (Beaver, 1998; Scott, 2003).

Investors also differ in their attitudes towards risk, risk-averse, risk-neutral and risk-taking investors having different utility functions. The usual assumption is of rational, risk-averse investors making decisions to maximize their expected utility. They want information in order to assess the amount, timing and uncertainty of the prospective returns (Beaver, 1998; Scott, 2003).

According to *decision theory*, the rational individual chooses the act that yields the highest expected utility. It is also assumed that the rational investor is risk-averse. The concept of risk aversion is significant in accounting because investors need information concerning the risk, as well as the expected value, of future returns. For a given expected payoff the rational investor wants the lowest possible risk, or for a given risk he or she wants the highest possible expected payoff. The investor therefore adopts a tradeoff between risk and return: a greater risk will be borne only if the expected return is higher, and vice versa. This trade-off is individual-specific and depends on the investor's utility function (Scott, 2003).

Financial reporting could thus be seen as a device to reduce the adverse selection problem, thereby improving the operation of securities markets and minimizing incompleteness. Increasing the information content of financial reporting may reduce the adverse impact of insider information (Scott, 2003). The next section therefore focuses on the informational role of financial reporting.

2.2 *The informational role of financial reporting*

Systematic accounting in the form of double-entry bookkeeping has been vital to the development and evolution of capitalism. The transformation of assets into abstract values and the quantitative expression of the results of business activities made it possible for the capitalist entrepreneur to plan, conduct and measure the impact of business activities and, furthermore, allowed the growth of the corporation through the separation of owners and the business (Riahi-Belkaoui, 1992).

The early purpose of financial statements was the stewardship function of management. Capital providers hand over control of their financial resources, and the financial statements facilitate the evaluation of management performance. Accrual accounting is an essential aspect of proper financial reporting because it yields additional information relative to cash receipts and disbursements. The accruals reflect management's expectations of future cash flows and are based on an information system that covers more than past and current flows. The crucial issue is to define what method is best from among the various options for matching revenues and expenses in the accrual process. Financial accounting theory adopted an economic income approach, *economic income* being defined as the change in the current value of the future cash flows following adjustment for deposits and withdrawals. From the stewardship perspective this approach was useful because it not only reflects the effects of the manager's actions on the current year's operations, but also incorporates their future effects into the current measure of net income (Beaver, 1998).

Financial accounting theory has historically been *normative*, but in the late 1960s the perspective shifted from the measurement of economic income towards the provision of *information*. The concept of economic income was not well defined, and there was no

consensus on what the best accounting method was. According to the new approach, financial statements should provide useful information on the assessment of future cash flows (Beaver, 1998). This information perspective has dominated financial accounting theory ever since Ball and Brown (1968) produced their seminal paper, and empirical research has focused on understanding the information content of financial statements. The results of empirical studies have shown that accounting information is useful to investors in helping them to estimate the expected values and risks of security returns (Scott, 2003). The information perspective has also been adopted by major standard-setting bodies, such as the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB), the standard setter in the world's largest capital markets in the USA.

Figure 5 depicts the flow of information and capital in a market economy. In a capitalist economy, capital is raised and allocated to competing investment needs in securities markets. Information asymmetry impedes the proper working of capital markets, however, and accounting is a mechanism that facilitates the communication of relevant information from inside the firm to the outside (Scott, 2003). The arrow on the right of the figure shows the flow of information from companies to investors, whereas the reverse arrow on the left represents the flow of capital from investors to businesses. Financial information may flow directly from companies to investors through financial reports and other publicly disclosed information, or companies and investors may communicate through financial or information intermediaries. Similarly, two channels facilitate the flow of capital: it may flow directly from investors to companies, or it may be invested through financial intermediaries such as banks, venture-capital funds and insurance companies. Information asymmetry creates a demand for information intermediaries such as financial analysts and rating agencies, who engage in private information production and uncover managers' superior information (Healy and Palepu, 2001).

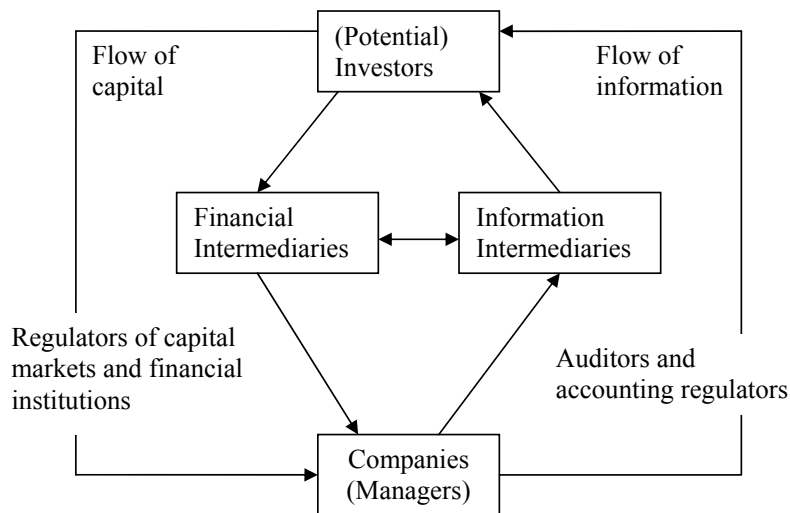


Figure 5. Financial and information flows in a capital market economy (adapted from Healy and Palepu, 2001, p. 408)

Demand for financial reporting and disclosure arises from information asymmetry and conflicts between managers and outside investors. Information and incentive problems impede the efficient allocation of resources in a capital market economy. The optimal allocation of savings to investment opportunities is critical for any economy, however, and many new and existing companies try to attract household savings to fund their business ideas, although matching savings to business-investment opportunities is complicated. Company managers typically have better information about the value of such investment opportunities, and they also have the incentive to overstate the value. Investors and managers value investments in accordance with their own information (Healy and Palepu, 2001).

Regulators, standard setters, auditors and other capital market intermediaries enhance the *credibility of financial information*. Various *economic and institutional factors* determine the extent to which contracts, regulation and information intermediaries can eliminate information asymmetry. Information is credible if the receiver knows that the supplier has

the incentive to disclose it truthfully. The higher the penalties for disclosing false information, the more credibility investors attach to management disclosures. This framework raises a number of relevant research questions. How can institutions facilitate credible financial information? What is the role of financial reporting in mitigating information problems? Why does the degree of informativeness vary systematically depending on certain economic characteristics? How could the value of reliable information in capital markets be enhanced? (Healy and Palepu, 2001; Scott, 2003)

Capital markets have several mechanisms for promoting the proper operation of securities markets. Regulators create and enforce regulations to promote the prompt disclosure of significant events, with penalties for violation. The natural operation of a market may also provide incentives for the release of inside information, even in the absence of penalties for abuse. *Signaling* is one mechanism through which to credibly communicate insider beliefs and information on high-quality projects, direct disclosure being one example. Indirect signals include the choice of accounting policy, audit quality, capital structure, dividend policy, financial policy, and the publication of forecasts. Through their choice of conservative accounting policies, for example, managers signal a confident view of the firm's future. The release of information improves the manager's reputation and lowers the cost of capital, and is therefore beneficial (Scott, 2003).

Scott (2003, p. 138) defines the information perspective on decision usefulness as follows.

“The information perspective on decision usefulness is an approach to financial reporting that recognizes individual responsibility for predicting future firm performance and that concentrates on providing useful information for this purpose. The approach assumes securities markets efficiency, recognizing that the market will react to useful information from any source, including financial statements.”

When a large number of rational individuals interact in capital markets, stock prices are affected by new information. Under non-ideal conditions information is not free, however, and investors need to form their estimates of the firm's future profitability and cash flow subjectively and to revise these estimates as new information appears. Investors need to

balance the costs and benefits associated with the collection of information, and hence a major source of cost-effective information is firms' annual reports. When investors receive new information they should act quickly before other investors receive the same information. The market becomes effective when a lot of informed investors make their investment decisions, and the market value of the security will adjust to reduce or eliminate the benefit of the new information (Scott, 2003).

There are three different forms of market efficiency, the weak, the semi-strong and the strong, which differ according to how the information set is defined. The weak form implies that markets reflect past information, the semi-strong form that they reflect all publicly available information, and the strong form that they reflect not just publicly available information, but everything including inside information (Riahi-Belkaoui, 1992). The semi-strong form of securities market efficiency is realized when the prices of securities traded on a market at all times properly reflect all information that is publicly known about them. Since markets react to publicly known information, this definition does not rule out the possibility of inside information (Scott, 2003). The higher the market efficiency, the lower is the information asymmetry. If markets are not efficient the need for firms to produce high-quality financial information is greater in order to alleviate the information-asymmetry problem.

2.3 The contracting role of financial reporting

A firm can be seen as a nexus of contracts, and according to the theory of the firm, contracts with managers and capital providers are essential to its operations (Jensen and Meckling, 1976). These contracts usually involve accounting variables, and information from financial statements can be used to alleviate moral hazard problems arising from the separation of management and control.

Figure 6 below illustrates the second informational role of financial reporting in facilitating contracting. Debt contracts between firms and providers of capital in particular, as well as compensation contracts between equity investors and managers, are based on accounting numbers. When creditors invest in companies they expect to receive interest, and principal

and equity investors expect to receive returns in the form of dividends or stock price appreciation in exchange, thus contracts protect the interests of creditors or at least encourage management to act in the interests of the shareholders (Pratt, 2009).

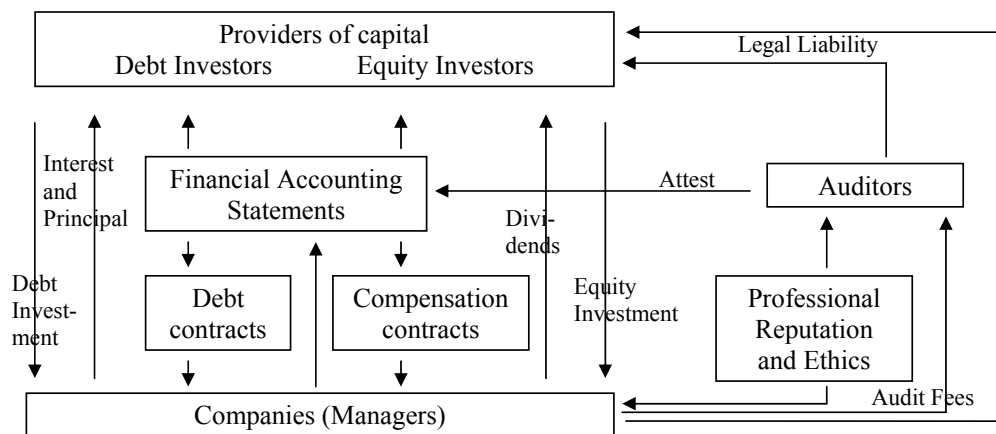


Figure 6. The contracting role of financial information in financial reporting environment (source: Pratt 2009, p. 15)

Positive accounting theory is based on the *contracts* the firm enters into, especially those covering debt and management compensation, and on considerations of political cost. The contracts, in turn, are based on financial accounting variables such as net income and the ratio of debt to equity. Different accounting policies affect the values of these variables, and because management is responsible for the firm’s contracts, it is naturally concerned with the choice of accounting policy (Scott, 2003).

Financial reporting has a number of potential *economic implications* related to the distribution of wealth among individuals, the aggregate level and allocation of risk, aggregate consumption and production, the allocation of resources, including those devoted to publicly available information, regulation and the private search for information, for example (Beaver, 1998).

A variety of accounting methods are used for matching costs and revenues, and they affect the firm's financial statements differently (Beaver, 1998). If *accounting policies* did not matter, the choice of policy would strictly belong to the bodies setting accounting standards, accountants, and auditors. Economic consequences complicate the setting of standards, given the effects of accounting policy choice on the various users of financial statements. Different constituencies prefer different accounting policies, and therefore standard setting also has political considerations (Scott, 2003).

Positive accounting theory assumes that managers, like investors, are rational. They will choose accounting policies that coincide with their own interests, and will maximize their own expected utility rather than the profits of the firm. This kind of opportunistic behavior is anticipated in management compensation contracts. The optimal set of accounting policies is a compromise: strict policies minimize opportunistic behavior in managers, but incur costs because of inflexibility in changing circumstances, whereas having a broad array of policies promotes flexibility but facilitates opportunistic behavior (Scott, 2003).

The motivation of responsible manager performance and the provision of useful information to investors are equally important roles of financial accounting. Implicit in the concept of economic consequences is that accounting policy choices and changes matter, given that there is a choice. Accounting reports can affect the actual decisions managers and others make. The idea behind positive accounting theory is to predict why economic consequences exist and what accounting policies managers will choose in order to maximize the firm's or their own interests (Scott, 2003).

From the contracting perspective, the objective of accounting theory is to explain and predict accounting practice (Watts and Zimmerman, 1986). Positive accounting theory emphasizes the need for empirical investigation to determine how the tradeoff between the cost of capital and the contracting cost varies from firm to firm, depending on its environment. The objective is to understand and predict managerial choice of accounting policy across different firms, and there is no attempt to give normative instructions or to tell individuals or constituencies what they should do (Scott, 2003). Positive accounting as a

theory has faced criticism, however, and accounting with several competing theories can be said to be a multiparadigmatic science (Riahi-Belkaoui, 1992)

It may be very difficult to establish whether a firm's observed accounting policy choices are driven by opportunism or efficiency. A significant body of empirical literature supports the efficient contracting version of positive accounting theory, which rests on the assumption that compensation contracts and internal control systems, including monitoring by the board of directors, limit opportunism and motivate managers to choose policies that minimize the firm's capital and contracting costs. Accounting policies are largely determined by the firm's organizational structure, which in turn is determined by its environment. The choice of policy is therefore part of the overall process of corporate governance (Scott, 2003).

2.4 Accounting concepts and the qualitative characteristics of accounting information

A company that receives capital from investors and creditors, or is seeking new capital, has an obligation, or accountability, to keep its capital providers informed about its performance, condition and prospects. Historically the rules governing what information should be provided and its format have evolved country by country (Kothari and Barone, 2011). Financial accounting involves many professional judgments. Accountants have a very powerful role in society: they provide information that is used in many decisions and they are able to highlight or downplay particular facets of an organization's performance. Financial accounting practices are heavily regulated. Much of the early research involved documenting commonly used accounting practices, and this led to the development and acceptance of broad principles that accountants were expected to follow. Over time, these broad principles gave way to the development of specific accounting standards (Deegan, 2004). The term *generally accepted accounting principles* has become significant in accounting practice, and refers to a consensus within the profession that a given principle is generally accepted as being appropriate to the circumstances in which it is used (Schroeder *et al.*, 2005).

The act of regulating accounting practices through the continual release of new and revised standards has provoked various arguments for and against regulation. Those in favor hold the view that the output of a financial accounting system should be treated like any other good, and if the market is left to operate freely, optimal amounts of information will be produced (the 'free-market' approach). The contrary view is that regulation is necessary to protect the interests of parties with a stake in a reporting entity (Deegan, 2004).

The globalization of capital markets during the last few decades provoked the need to develop international accounting standards. Given that investors seek investment opportunities all over the world, a global set of comprehensive, high-quality accounting standards serves their purposes by making it easier for them to compare investment options and reduce costs to issuers by no longer requiring them to prepare financial statements under more than one standard. The fundamental obstacle to the uniform implementation of these international accounting standards in practice is that the incentives of the preparers and the enforcers remain primarily local, and radical changes in the underlying economic and political forces would be required. A broad consensus of support for 'principles-based standards' seems to have emerged in the last few years. A principle is a general, widely acknowledged statement that is intended to support the true and fair presentation of the economic consequences of business transactions, and acts as an action guide (Kothari and Barone, 2011).

The measurement of financial accounting is based on the following four assumptions: it covers an economic entity, a fiscal period, a going concern, and stable money value. The reports provide information about individual, profit-seeking entities, separate from their owners and all other entities. The need for timely information on the performance of a firm requires the operating life of an economic entity to be divided into short time periods, or fiscal periods, and companies to prepare annual financial statements. However, the shorter the fiscal period, the more arbitrary and subjective is the application of certain accounting methods. The assumption of a going concern implies that the life of the economic entity will extend beyond the current fiscal period. Finally, measurement of the performance and financial position of an entity requires a stable monetary unit that maintains constant purchasing power across fiscal periods (Pratt, 2009).

An entity's financial statements are prepared on an accrual basis. According to this convention, the effects of transactions and other events are recognized when they occur, they are recorded in the accounting records and reported in the financial statements of the periods to which they relate, not the periods in which the cash is received or paid. Consequently, these statements inform users not only of past transactions but also of obligations to pay cash in the future, and of resources that represent cash to be received in the future. This information is of most use in the making of economic decisions (Kothari and Barone, 2011).

There are four basic principles involved in the measurement of financial accounting: objectivity, matching, revenue recognition, and consistency. According to the principle of *objectivity*, the information must be verifiable and reliable, and the values of the transactions and of the assets and liabilities they create must be backed up by documentation, including contractual agreements such as notes receivable and payable. Objectivity ensures that present value is reported only if future cash flows can be objectively determined, and many accounts on the financial statements are therefore valued at the original cost (Pratt, 2009).

The principles of matching and revenue recognition focus on operating performance, which determines net income. The *matching* principle states that the efforts, or expenses, of a given fiscal period should be matched against the benefits, or revenues, they generate. Expenses cannot be matched against revenues until the revenues have been recognized. The principle of *revenue recognition* determines when revenues can be recognized, and hence triggers the matching principle. Although there is considerable choice among accounting methods, under the principle of consistency the methods should be consistent over time. *Consistency* helps investors and other interested parties to compare measures of performance and financial position from one period to the next. If an alternative accounting method is appropriate for the changed circumstances, previous years' financial standards are restated in order to maintain comparability (Pratt, 2009).

However, there are two major exceptions to the above-mentioned basic principles: materiality and conservatism, which apply when the costs of following the principles

exceed the benefits. Sometimes the amounts of money involved are so small, in other words immaterial, that the accounting method has no impact on the financial statements, and in this case the least costly reporting method is preferred, regardless of the accounting principles. The size of an item is always considered when *materiality is determined*, but opinions on whether it would affect the decisions made by users of the information differ considerably (Pratt, 2009).

Secondly, *conservatism* guides accountants, when in doubt, to understate assets, overstate liabilities, accelerate the recognition of losses and delay the recognition of gains. The economic rationale behind it lies in the legal liability of auditors and managers that puts a high potential cost on errors due to overstating assets or understating liabilities (Pratt, 2009).

The same assumptions, principles and exceptions form the basis of generally accepted accounting principles in different countries and accounting regimes. However, there are differences in how these concepts are applied in specific situations (Pratt, 2009). Most countries share the same accounting principles or conventions, but the emphasis may vary.

The IASB Framework for the Preparation and Presentation of Financial Statements recognizes only materiality and cost as constraints that limit the information financial reporting provides (Kothari and Barone, 2011). Hellman (2008) discusses the concept of accounting conservatism under IFRS. Although the 1989 IASB framework included prudence as one of the concepts related to reliability, in an improved version neither prudence nor conservatism is considered desirable information in financial reporting.

The IASB Framework for the Preparation and Presentation of Financial Reports defines the users of financial statements as current and potential investors, employees, lenders, suppliers and other trade creditors, customers, governments and their agencies, and the general public. According to the framework the role of the statements is to provide information about the firm's performance and financial position, and on any changes in financial position, that is useful to a wide range of users making economic decisions. There

is a tension between neutrality and prudence in financial information, which the IASB Framework describes as follows (Bonham *et al.*, 2005, pp. 178-179):

“To be reliable, the information contained in financial statements must be neutral, that is, free from bias. Financial statements are not neutral if, by the selection or presentation of information, they influence the making of a decision or judgement in order to achieve a predetermined result or outcome. ... Prudence is the inclusion of a degree of caution in the exercise of judgements needed in making estimates required under condition of uncertainty, such that assets or income are not overstated and liabilities or expenses are not understated. However, the exercise of prudence does not allow, for example, the creation of hidden reserves or excessive provisions, the deliberate understatement of assets or income, or the deliberate overstatement of liabilities or expenses, because financial statements would not be neutral and therefore, not have the quality of reliability.”

The FASB shares the view that conservatism biases financial information and impairs its usefulness (Barth, 2008; Watts, 2003).

Qualitative characteristics are the attributes that make the information provided in financial statements valuable to users, and include relevance, faithful representation, completeness, neutrality, comparability, verifiability, timeliness, and understandability. The IASB ED *Conceptual Framework for Financial Reporting: the Objective of Financial Reporting and Qualitative Characteristics and Constraints of Decision-Useful Financial Reporting Information* divides these into two categories, fundamental qualitative characteristics, and enhancing qualitative characteristics that complement them (Kothari and Barone, 2011).

Relevant information has the potential to influence the decisions of users of financial statements. It has *predictive value* that helps them to evaluate the potential effects of past, present, and future transactions on future cash flows. Relevant information also has *confirmatory value* that helps them to confirm or revise their previous evaluations. *Faithful representation* requires that information about an economic phenomenon is complete, neutral, and free from material errors. The depiction of an economic phenomenon is

complete if it includes all the necessary information, and any omission may produce false or misleading reports. *Neutral* information is free from bias, and does not color the image it communicates in order to influence behavior in a particular direction. Faithful representation does not imply total freedom from error, however, because financial reporting involves estimates that incorporate managerial judgment. Completeness and neutrality are desirable in estimates, but sometimes it may be necessary to disclose the degree of uncertainty in the reported financial information (Kothari and Barone, 2011).

Enhancing qualitative characteristics distinguish the more useful from the less useful information. The essence of decision-making is in choosing between alternatives, and *comparability* enables users to identify similarities in and differences between sets of economic phenomena. *Verifiability* implies that different knowledgeable and independent observers could reach a general consensus that either the information represents the economic phenomena without material error or bias, or that appropriate recognition of a measurement method has been reached without material error or bias. *Timeliness* implies that information should be available to decision makers before it loses the capacity to influence decisions. Finally, *understandability* is the quality of information that enables users to comprehend its meaning, and is enhanced when information is classified, characterized, and presented clearly and concisely. Comparability can also enhance understandability (Kothari and Barone, 2011).

2.5 Explanations for accounting conservatism

The focus on information content in accounting emphasizes uncertainty (Cristensen and Demski, 2003). Conservatism is a major attribute of accounting quality that has influenced practices for centuries, and is one way of dealing with uncertainty in financial reporting.

There are various definitions of conservatism. According to the traditional definition given by Bliss (in *Management through Accounts*, 1924), it means to “*anticipate no profit, but anticipate all losses*” (Watts, 2003a, p. 208). Basu (1997, p. 7) defines the concept as the “*accountant’s tendency to require a higher degree of verification to recognize good news as gains than to recognize bad news as losses*”. Watts (2003a) further argues that defining

conservatism as the asymmetrical verification requirements for gains and losses makes it possible to define the degree of conservatism: the greater the difference in the degree of verification, the stronger is the conservatism.

The literature distinguishes between two types of conservatism, conditional and unconditional (Beaver and Ryan, 2005). The former is interpreted as asymmetric verification requirements for gains and losses, and the latter as favoring accounting methods that lead to lower values of shareholder equity (Basu, 1997). There has been ample research on accounting conservatism and the determinants of accounting quality since Basu (1997) published his seminal paper, which Ryan (2006) argues was one of the most influential papers in recent accounting literature.

The following points illustrate the difference between conditional and unconditional conservatism (Ryan, 2006).

Conditional conservatism involves:

- lower of cost or market accounting for inventory purposes
- impairment accounting for long-lived tangible and intangible assets

Unconditional conservatism involves:

- recognizing book values of net assets that are below their expected lifetime market values
- immediate expensing of the cost of internally generated intangible assets and the amortization of long-lived assets at a rate above the expected economic amortization rate

Conditional conservatism, meaning the asymmetric timeliness of gains and losses, is also known as earnings or *ex post* conservatism, and unconditional conservatism as balance sheet or *ex ante* conservatism (Beaver and Ryan, 2005).

There are two sources of accounting conservatism, accounting standards and incentives created by different institutional settings. Ball, Robin and Wu (2003) studied institutional factors influencing East Asian financial reporting in Hong Kong, Malaysia, Singapore and Thailand. They argue that accounting standards do not provide sufficient grounds for classifying countries, and do not in themselves determine the quality of financial reporting. The incentives of the managers and auditors, together with market and political forces such as enforcement mechanisms, ownership structures and other institutional features of the economy also affect the outcome of the financial reporting process and must be considered. The authors claim that the quality of accounting standards *per se* is an incomplete or even misleading classification scheme for determining the quality of a country's financial reporting, and if a country wants to increase the quality of its financial reporting, it should change its manager and auditor incentives and other institutional features rather than demand higher-quality accounting standards. They conclude that the pressure to reduce variation in accounting standards across countries will not resolve differences in the quality of financial reporting if there are no changes in other important features that influence the reporting process.

Researchers have identified various reasons for accounting conservatism, concluding that factors such as contracting, litigation, regulation and taxation cause differences in degree and induce certain types of conservatism (García Lara, García Osma and Penalva, 2009b; Qiang, 2007). According to Watts (2003a), the contracting explanation is the oldest one, and other determinants of conservative accounting were not discovered until recently. All these explanations suggest that accounting conservatism is beneficial for different users of financial information. Watts (2003b) also reviews the various measures of conservatism.

Conservatism is helpful in addressing the problem of moral hazard in contracting in that it constrains managerial opportunistic behavior in financial reporting and offsets managerial bias and noise in measures of contractual accounting with its asymmetrical verifiability requirements. The consistent application of conservatism will tend to offset management's positive earnings bias, and will also defer earnings and understate cumulative earnings and net assets. Furthermore, conservatism increases the firm's value by constraining

opportunistic payments by managers to themselves and other parties: the increased value is shared among all parties, thus enhancing everyone's welfare (Watts, 2003a).

Users of the information in financial statements also benefit from accounting conservatism. It facilitates contracting, for example, because it reduces the agency costs associated with information asymmetry and loss among the contracting parties, and the costs related to verifying the more informed parties' private information (LaFond and Watts, 2008). Watts (2003a) points to its usefulness in contracting between firms and debt holders in terms of speeding up the process of making covenant constraints binding. Moreover, relevant parties have asymmetric payoffs from the contracts. Recent studies have shown that conservatism is useful in debt contracting (see e.g., Wittenberg-Moerman, 2008, Beatty *et al.* 2008 and Zhang, 2008).

LaFond and Watts (2008) argue that agency costs attributable to the manager's private information and asymmetric loss are not limited to debt and compensation contracts, and that conservative accounting is also a governance mechanism for reducing information asymmetry between firm insiders and outsider equity investors. They present evidence that firms with higher information asymmetry between insiders and outside investors report more conservative earnings. Information asymmetry thus generates conservatism in financial statements: the greater the asymmetry, the more conservative are the statements. Furthermore, increases in information asymmetry lead to increases in conservatism.

LaFond and Watts (2008) argue that conservative financial reporting is a governance mechanism that curbs opportunistic behavior in managers and their ability to manage earnings. It thereby reduces information asymmetry and the deadweight losses it generates. Moreover, conservatism provides an environment in which alternative sources of information assume significance.

LaFond and Roychowdhury (2007) describe conservatism as a mechanism for alleviating agency problems between managers and shareholders arising from the separation of ownership and control. They report evidence that shareholders demand conservatism. LaFond and Roychowdhury found that conservatism declined as the level of managerial

ownership increased, and García Lara, García Osma and Penalva (2009a) provide evidence of an association between corporate governance and accounting conservatism. Sun and Liu (2011) report that analyst coverage plays an important corporate governance role in the financial reporting process, and is positively associated with accounting conservatism. Suijs (2008) also produces evidence of the usefulness of the asymmetric reporting of good and bad news for investors as it affects the allocation of risk among future generations of shareholders.

Conservatism is an efficient contracting mechanism, but in the absence of contracting it is an efficient financial reporting mechanism. Non-contracting parties in a firm value the conservatism constraint on opportunistic payments to managers and other contracting parties, and conservative accounting numbers also provide important information to investors. Conservative earnings give them control over other sources of information, for example, and if the earnings numbers are unverifiable, the quality of other information decreases (Watts, 2003).

Conservatism has been criticized in that the conservative reporting of current earnings makes future earnings estimates non-conservative. This criticism ignores the contracting explanation of conservatism. Conservatism exists in order to prevent actions by managers manipulating accounting numbers. Future earnings are higher because gains are deferred until there is verifiable evidence that they have been realized (Watts, 2003a).

2.6 Differences in the degree of conservatism across countries

There are considerable differences in financial reporting because of the varying perceptions of the purpose of the financial statement in national regulations. Obviously, the main purpose of the reporting is to provide information about the company, but the divergence appears particularly in the definition of the principal users and of the purpose for which they need the information (Flower, 2004). The Anglo-Saxon model has historically focused on serving the needs of equity holders, permitting discretion in the preparation of financial statements as long as the resulting statements reflect a 'true and fair view' of the state of the company, and separate tax and financial reporting. The Continental model places more

emphasis on protecting debt holders, codified reporting requirements, and the strong linkage between taxation and financial reporting (Joos and Lang, 1994).

Earlier studies have shown that the legal and political environment affects accounting standards, and through them accounting quality. The legal and political system also shapes the development of the financial market, the capital structure, and the ownership and tax system. All these elements have different implications in terms of financial reporting and accounting quality (Soderstrom and Sun, 2007). Studies document significant differences in timely loss recognition between common-law and code-law countries (Ball *et al.* 2000), and between private and public firms (Ball and Shivakumar 2005): according to Ball *et al.* (2000), earnings are significantly more timely and conservative in common-law countries, and the supply of information in code-law countries relies on closer relations between major shareholders and firms rather than on high-quality public sources. Similarly, Ball and Shivakumar (2005) argue that markets served by public companies demand high-quality information in order to reduce information asymmetry, whereas the need for communication in private companies is realized through inside access to information. Ball *et al.* (2008) further state that financial reporting is shaped by debt rather than equity markets.

Ball, Kothari and Robin (2000) studied timeliness and conservatism in different institutional contexts in Australia, Canada, the USA, the UK, France, Germany and Japan. They present evidence that accounting in common-law countries is significantly more timely than in code-law countries due to more timely loss recognition. They argue that there is a strong political influence on accounting standards in code-law countries, whereas under the common-law system accounting practices are determined in the private sector. Accounting income in code-law countries is depicted as a pie to be divided among shareholders, government, managers and possibly employees, and the demand is influenced more by these payouts than by demands for public disclosure. In the 'stakeholder' governance model labor, capital and government agents are represented in corporate governance, and insider communication solves the agency problem between managers and stakeholders. Moreover, code-law accounting standards allow greater discretion in deciding when economic gains and losses are incorporated into accounting income, and permit

income smoothing. In sum, information asymmetry is lower in code-law countries because of closer relations between major stakeholders rather than timely public reporting.

Bushman and Piotroski (2006) contribute to cross-country research on the influence of legal and political institutions in their study of how national legal/judicial systems, securities laws, political economy and tax regimes create incentives for conservative accounting. They found that, after controlling for legal origin, several institutional settings affected accounting quality. Firms in countries with strong investor protection and a high-quality judicial system exhibited more earnings conservatism than firms in countries with weak investor protection and a low-quality judicial system. Moreover, strong public enforcement of securities law led to the slow recognition of good news, whereas private enforcement had no effect on financial reporting. Their results on the effect of the tax burden on earnings quality are mixed, however, whereas Frank *et al.* (2009) report a positive relation between tax-reporting aggressiveness and aggressive financial reporting. Finally in this context, García Lara *et al.* (2009a) observe that taxation pressure and political costs generate incentives for conditional conservatism.

Givoly and Hayn (2000) studied changes in the time-series properties of earnings, cash flows and accruals in the USA from 1950 to 1998. They found that reported profitability declined over the research period, but that this decline was not accompanied by a corresponding decline in cash flows. Moreover, earnings distribution became more dispersed and skewed over time relative to cash flows. They also provide evidence of the more timely recognition of bad news relative to good news. These results indicate an increase in the degree of conservatism over time. Givoly and Hayn (2002) emphasize the implications of this for financial analysis, and Grambovas *et al.* (2006) provide evidence of increased conservatism not only in the USA but also in Europe.

Earlier research focused on conservatism in the world's largest capital markets. Some central European and Asian countries have been studied, but little attention has been paid to the Nordic countries, and especially the transitional economies of Europe. Basu (1997) initiated a new stream of research in examining the asymmetric timeliness of earnings based on US data, and found evidence of earnings conservatism. Pope and Walker (1999)

studied the difference in earnings conservatism between the UK and the USA. They found similar timeliness properties in earnings both before and after the inclusion of extraordinary items under US GAAP, whereas UK GAAP classifies bad news differently. The implication is that in the case of bad news and under UK GAAP, earnings after the inclusion of extraordinary items are more timely than before their inclusion, and timeliness in the case of good news is significantly lower in the USA.

Giner and Rees (2001) studied earnings conservatism in France, Germany and the UK, but their results do not indicate as marked differences between legal families as Ball *et al.* (2000) report. Ding and Stolowy (2006) provide additional evidence of conservatism in France. Raonic, McLeay and Asimakopoulos (2004) also include the Nordic countries in their study on income recognition in Europe, but they examine only cross-listed firms and the research period is 1987-1999. They report that asymmetric timeliness is not a very prominent feature of financial reporting in the Nordic countries.

Cross-country studies on conservatism focus mainly on its determinants in developed markets, although there is some evidence of its existence in developing markets. Jindrichovska and McLeay (2005) studied the timeliness of good and bad news in the emerging market of the Czech Republic and found no evidence of earnings conservatism. They attribute its absence to the economic transition and regulatory conditions such as inflexible accounting rules and close linkage to fiscal requirements that limit market influences on accounting. They also suggest that the Czech Republic is close to stakeholder corporatism, meaning that conservatism is less important because there are fewer managerial incentives to bias earnings.

Bagaeva *et al.* (2008) studied earnings conservatism in listed and non-listed Russian firms, and assessed whether foreign investors created demand for high-quality financial information. They found that listed firms that were co-owned by foreign investors did not engage in incremental earnings conservatism, but non-listed firms with foreign ownership reported more conservative earnings in Russia. Dimitropoulos and Asteriou (2008) explored conservatism in the emerging markets of Greece.

There is only little evidence linking conservatism and IFRS. Several studies on accounting quality related to IFRS examine the value relevance of the reporting. Barth *et al.* (2005) studied the accounting quality of firms adopting IAS, and found evidence of more timely loss recognition and higher accounting quality after its adoption. Their sample comprised a wide range of countries, the strongest representation coming from Switzerland, Germany and China, and the research period was 1990 – 2004.

García Lara and Mora (2004) studied both types of conservatism, and their interaction, in eight European countries: the United Kingdom, Germany, France, Switzerland, the Netherlands, Italy, Spain and Belgium. They report more earnings conservatism in the UK with respect to Germany, but not with respect to the other countries. On the other hand, balance sheet conservatism was lower in the UK. They conclude that the existence of balance sheet conservatism reduces earnings conservatism. Beaver and Ryan (2005) are among the researchers modeling this association between the two different types.

2.7 The interaction between conditional and unconditional conservatism

For the most part, the early studies on accounting conservatism examined the two types separately. Joos and Lang (1994), for example, found significant differences in book-to-market ratios between France, Germany and the UK both before and after the adoption of European Union directives, implying that there had been only little convergence since the issue of new directives to integrate reporting standards. Moreover, Giner and Rees (2001) studied the asymmetric recognition of good and bad news in the same countries. More recently, several studies have investigated the relationship between conditional and unconditional conservatism. Garcia Lara and Mora (2004), and also Pae, Thornton and Welker (2005) document a negative association between conditional conservatism and the market-to-book ratio, for example, and Beaver & Ryan (2005) construct a more profound model of the relationship between conditional and unconditional conservatism. Ryan (2006) gives suggestions for measuring conditional conservatism, and calls for research on interpreting its association with other variables, such as the market-to-book ratio.

Earlier empirical literature adopted the market-to-book ratio as a measure for both unconditional and overall conservatism. Givoly and Hayn (2000) use it as one possible measure of increasing degrees of conservatism, but acknowledge that it may rather reflect market expectations of growth. Gassen *et al.* (2006) use the ratio as a proxy for unconditional conservatism. Their results suggest that the relation between the two is negative, but their alternative measure of unconditional conservatism (the magnitude of accumulated accruals over time) shows a positive relationship between conditional and unconditional conservatism. However, they acknowledge that one limitation of their study is the assumption that their measures correctly capture the underlying economic concepts and are not correlated with other economic factors such as risk. They also concede that the market-to-book ratio measures unconditional conservatism with error, and that it has been used for several different purposes in accounting research.

Pratt (2006) identifies several reasons why the market value of a firm may deviate from its book value. The list is twofold. On the one hand, a great difference between the market and book value reflects the accounting practices: balance sheets are at cost rather than fair market value, the financial statements report on past rather than future events, the important intangibles are ignored on the balance sheet, and/or the accounting methods are conservative. On the other hand, high market-to-book ratios also indicate that investors expect high growth relative to invested capital on the balance sheet. Beaver and Ryan (2000) investigate the bias and lag components of book value, defining bias as book values that are persistently different from market values so that the book-to-market ratio is consistently above or below one. They argue that this bias results from the joint effects of the accounting process and the economic environment. They attribute the accounting effects to conservatism and historical cost, whereas economic aspects are related to expected positive present value projects and inflation.

LaFond and Watts (2008) argue that growth options are unverifiable and induce information asymmetry, which varies in accordance with the firm's investment opportunity set, claiming that information asymmetry between managers and outside investors is greater the greater the growth options are. They use PIN scores, in other words the probability of information-based trade, to measure information asymmetry, and the market-to-book ratio

as a control variable because it reflects both net asset conservatism and growth options. They report a negative association between MTB and conservatism. The present study, in contrast, shows a positive association between MTB and conditional conservatism in the presence of increasing FDI. These results suggest that a high market-to-book ratio is related to growth options and signifies information asymmetry among less well-informed investors, and high risk associated with the investment. A high market-to-book ratio implies high information asymmetry that external financial reporting should relieve. High-risk firms in particular need to reduce information asymmetry by offering high-quality financial information to less well-informed investors.

It is possible to use variables other than the market-to-book ratio to measure information asymmetry between better and less well-informed investors. Firm growth as such creates information asymmetry between managers, better-informed investors and less well-informed investors. The firms themselves create the growth by means of their own strategies. Managers and better-informed investors have the opportunity to scrutinize strategy processes, and therefore have better informed views on how the firm will be able to grow in the future. On the other hand, a less well-informed investor can only observe growth by looking at the realized accounting figures, or trying to predict it from historical financial statements and market information. It is thus obvious that managers and better-informed investors have more information about the firm's future and its potential to create growth. Measures of realized growth include sales and turnover growth, and can also be used as approximations of information asymmetry in accounting information.

Moreover, Lev and Aboody (2000) identify R&D as a source of information asymmetry for several reasons. Firstly, investors cannot compare the performance of different firms on the basis of their R&D projects, whereas it is possible within certain industries to predict the performance of a firm from the performance of other firms. Secondly, there are no organized markets for R&D from which to derive information, and finally, the accounting measurement and reporting rules are different for R&D than for any other form of investment. In addition, Bah and Dumontier (2001) attribute higher information asymmetries in R&D-intensive firms to the fact that outside investors are less likely to appreciate innovative projects, and to the lack of incentive in innovative firms to disclose

information on their investment opportunities given that the value of their projects depends on confidentiality. Hence, R&D intensity is used here as a proxy for information asymmetry between better-informed and less well-informed investors.

Earlier studies document two types of conservatism, conditional and unconditional. The Basu (1997) model is normally used as a measure of conditional conservatism, whereas the market-to-book ratio is used as a proxy for unconditional conservatism. However, there is an ongoing debate about the different measures, and whether they incorporate error. There have been attempts in the literature to explain the negative association between conditional conservatism and the market-to-book ratio, the main argument being that low book values pre-empt conditional conservatism. If a firm's financial reporting is *ex ante* (unconditionally) conservative, in other words the market-to-book ratio is high, there is little need or room for *ex post* (conditional) conservatism when the need to be conservative arises and would otherwise require timely loss recognition.

2.8 Summary

In conclusion, financial reporting plays two distinct, but interrelated informational roles. First, it provides information for decision makers, such as investors, intent on selecting the best action among the alternatives available. Secondly, it facilitates contracting between parties covering debt and management compensation, for example, which is based to some extent on accounting figures. In both cases financial information alleviates problems of information asymmetry.

Financial reporting is prepared in accordance with generally accepted accounting principles. Conservatism is one of the principles guiding accountants, when in doubt, to understate assets, overstate liabilities, accelerate the recognition of losses and delay the recognition of gains. Conservatism has traditionally been interpreted as the undervaluation of assets and earnings and the overvaluation of liabilities, in other words as unconditional. The trend nowadays is to interpret it in terms of asymmetric verification requirements for gains and losses, in other words as conditional. There is an ongoing debate as to whether conservatism, especially in its unconditional form, is desirable. The IASB and FASB have

attempted to eliminate it from financial reporting, and rather highlight neutrality and freedom from bias. However, recent accounting research documents the usefulness of conditional conservatism in mitigating problems of information asymmetry.

Users of the information in financial statements benefit from accounting conservatism. Conditional conservatism, or timely loss recognition, is an effective reporting and contracting mechanism because it prevents opportunistic behavior among managers and allows other information sources to flourish. The incentives for adopting conservative accounting practices vary. There are significant differences in the degree of conservatism across countries, which may be attributable to the varying institutional backgrounds.

3 THE RESEARCH ENVIRONMENT

3.1 The role and reliability of financial accounting in transitional economies

Accounting in the transitional economies of Central and Eastern Europe has undergone considerable changes, and there will be significant changes in the coming years related to the implementation and enforcement of International Accounting Standards in particular. These former Soviet satellite economies were primarily state planned, and are now moving towards a market-based economic system with privately owned assets and market-determined prices. Inevitably there is a conflict in roles between accounting as an instrument of state economic administration in a command economy, and as a provider of information in a market economy (Nobes and Parker, 2006).

Financial reporting has a minor, unsophisticated role in communist accounting practices. It is basically standardized, simplified and routinized recording, and is characterized by inflexibility and unresponsiveness to market innovations. Despite the legislative changes, however, many aspects of command-economy accounting prevail in the current accounting practices of the transitional economies. The system that was created to serve the needs of a centrally planned economy has been modified, but neither radically reformed nor abandoned. Financial reporting and accounting cannot be reformed simply through the adoption of European Union laws and practices, and indeed it is questionable whether Western accounting practices suit the needs of the transition economies. There is also a shortage of capacity for retraining accounting personnel and auditors, and conflicting concepts of the role of accountants and auditors (Nobes and Parker, 2006).

Bailey (1995) describes accounting change in the former communist countries in their early stages of transition. Financial statements and commercial or financial analyses of operating results and financial position were not relevant in the former Soviet Union because the central authorities made all the investment decisions and based them on non-financial criteria. Finance was allocated directly by the state or indirectly by the state bank, and state-owned enterprises were not publicly accountable. By way of contrast, accounting

information has a central role in the decision-making in competitive market economies. The accounting systems in the countries of Central and Eastern Europe were based on the Soviet system. Institutional bodies, such as commercial banks, financial organizations and stock exchanges functioned inefficiently, and contractual relationships were uncertain in both observance and enforcement. There was a focus on personal networks instead, and bribery became a means of reducing uncertainty in business dealings.

Corruption and a low regard for the rule of law are problems in emerging markets. In particular, the inefficiency and ineffectiveness of the legal systems discourage international investors, and the countries remain isolated from international capital markets (Šević, 2005). Harper and McNulty (2008) investigated financial systems in the transition economies, and found that the Russian legal legacy had a strong negative effect on financial development. They also found that transition-economy status was a major explanatory variable in their analysis of the banking systems, even after controlling for legal origin and the rule of law. There was a strong positive relation between the rule of law and the level of financial development.

Pistor, Raiser and Gelfer (2000) discuss law and finance in the transition economies, arguing that the problem of lacking external finance cannot be resolved by improving the legal framework for protecting shareholder and creditor rights. Legal transplants and reforms do not suffice in the evolution of effective legal and market institutions: the effectiveness of the institutions is more important than the quality of law in theory.

Progress in the transition process has varied greatly from country to country. Nations that have joined the European Union have progressed in recent years, but some others are still struggling with the establishment of basic market concepts. Hungary, Poland, the Czech Republic, and the Slovak Republic are regarded as advanced transitional economies (Šević, 2005).

Emerging markets are characterized by low institutional quality. The transition process requires changes in and the creation of institutions (particularly private enterprises), changes in the role of the state and thereby the creation of fundamentally different

governmental bodies, and the promotion of private-owned enterprises, markets and independent financial institutions. Essential components of a market economy include profit-seeking owners of privately owned enterprises, and a well-functioning market as a trading platform, a source of information and a creator of competition. Financial institutions have a central role, being responsible for the allocation of resources over time, for the distribution and assessment of risks, and for the enforcement of financial discipline. The different stages of economic development reflect the demands on the insolvency regime and may require amendments to the insolvency law. Insolvency laws incorporate both the debtor and the creditor perspective, and legislators are charged with balancing the different interests (Falke, 2002). Table 1 summarizes the legal and political conditions in the transitional economies. The effectiveness and sophistication of the legislation vary across the countries and in the national laws.

The immaturity of new institutional arrangements and the presence of illegitimate business activities may lead to ill-understood accounting principles and practices. Corruption in particular impairs the integrity and relevance of financial statements, and a lack of reliability in financial reporting is a severe problem in the transitional economies. How useful are the statutory financial statements for investors, creditors, managers and other parties contracting with the firm during the transition period? It has been observed that “*an enterprise viable at market prices might have negative net assets... administratively adjusted book values may have no necessary relationship to the market value of the capital assets*”. Statutory financial statements cannot be expected to be useful before well-functioning and stable market economies, effective corporate governance, and efficient capital markets are established. Foreign investors prefer non-statutory financial statements reworked by an international accounting firm in accordance with IAS. Stock markets are turbulent and annual financial information is heavily discounted: insider information is what matters. Moreover, there is a general resistance to transparency in financial reporting (Archer and Bailey, 2003).

Table 1. The legal and political characteristics of the transitional economies

Country	EU member	Legal origin *)	Quality of insolvency law	Secured transactions law	Quality of corporate governance law	Quality of securities market laws
Bulgaria	since 2007	French	high	advanced	medium	high
Croatia	candidate	French	high	inefficient	medium	very high
Czech Republic	since 2004	French	medium	inefficient	medium	high
Latvia	since 2004	German	low	advanced	high	high
Lithuania	since 2004	German	very low	advanced	high	high
Moldova	no	Russian	high	some defects	high	low
Poland	since 2004	Russian	medium	some defects	high	high
Romania	since 2007	French	high	advanced	low	medium
Russia	no	Russian	medium	mal-functioning	high	medium
Serbia	potential candidate	n.a.	high	some defects	medium	medium
Slovak Republic	since 2004	French	medium	advanced	medium	high
Ukraine	no	Russian	very low	some defects	very low	high

Notes:

Source: European Bank for Reconstruction and Development (2007). Selected qualitative or institutional developments are used to describe transitional progress.

*) Source: Harper and McNulty (2008).

Young (1999) concentrates on the effect of economic transition on financial statements in former East Germany. He found that, in certain respects, the change was easier there than in other countries under the influence of the former Soviet Union. There was no need to look for the most appropriate accounting model because the accounting system and legal framework of the former West Germany were adopted.

Lesko (2007) discusses the evolution of financial reporting principles in Poland, the shaping of national accounting rules, and how they evolved from the communist times until EU accession. Poland was the first country in Central and Eastern Europe to start the

transition towards a market economy, and has progressed successfully. It is also the most populous new EU entrant.

Ezzamel *et al.* (2007) describe the change in political ideology in China during the transition from Maoism to Dengism, and examine the effect of this change on accounting regulation and especially on the concept of conservatism. Maoism promoted central planning and public ownership, and Western accounting concepts were prohibited: conservatism was understood as a capitalist tool, for instance, and its adoption would have been perceived as recognition of the failure of central planning to eliminate uncertainty. Under Dengism there were market-oriented economic reforms, private ownership was promoted, and accounting lost its bookkeeping role and became a science. It was seen as a neutral, universal technology without ideological bias or national boundaries, and Western accounting concepts, including conservatism, were adopted. Tang and Lau (2000) describe the 1993 accounting reform in China. Before it the financial reporting system was state controlled and tax driven, but it has since become capital-market oriented. The driving forces behind the transition were not only the economic reform of state-owned enterprises and the development of capital markets, but also the increase in foreign direct investments. Changes in the business environment increased the reliability and relevance of accounting information for both domestic and international investors. Moreover, the adoption of conservative accounting practices enhanced comprehensibility and international comparability, and improved the investment environment (Lin and Chen, 1999).

3.2 The role of foreign investments in emerging markets

Information asymmetry is a fundamental concern for investors, and especially in emerging markets in which corporate governance is less developed and legal institutions offer inadequate protection. This kind of environment is particularly challenging for foreign investors, and promotes information asymmetry between them and domestic investors. Consequently, the role of financial reports as a means of reducing information asymmetry between managers and foreign investors is crucial. Frankel and Li (2004) provide evidence that more informative financial reports reduce information asymmetry between firm insiders and outside investors. Bushman and Smith (2001) further argue that timely and

high-quality financial information mitigates investor risk related to trading with better-informed investors. Moreover, firms providing high-quality financial information are able to attract more capital.

Young and Guenter (2003) found that differences in international capital mobility were related to country-specific differences in financial reporting environments. They argue that international capital mobility is likely to be higher in countries in which the financial accounting environments lead to lower information asymmetries among investors. They focus on costs related to financial accounting information because it is more costly for foreign investors than domestic investors to search for private information, and suggest that high-quality accounting information has a positive effect on international capital mobility.

Daude and Fratscher (2008) refer to a pecking order in cross-border investments, in that rich countries with higher growth and better institutions take a greater share of their foreign investments in the form of portfolio investments. Foreign investors trust the institutions and the well-developed markets in these host countries. Foreign direct investments, on the other hand, have stronger ownership implications and greater information sensitivity than portfolio investments. They are less affected by differences in the quality of the institutions and the market developments, and therefore a large proportion of foreign investments in the form of FDIs signals institutional weakness or poorly functioning financial markets.

The major source of capital inflows in the transition economies of Central and Eastern Europe has been FDIs. The competition to attract foreign capital is considerable, and the driving force behind the recent structural reforms in these countries was the need to improve the investment environment for foreign investors (Galego *et al.*, 2004). There is an extensive body of literature exploring elements that affect a corporation's decision to move its FDIs. Sethi *et al.* (2002), for example, document the role of push and pull factors in corporate FDI decisions. They found that push factors were more strategic in nature whereas pull factors owed much to and were contingent upon institutional factors such as political and economic stability as well as investment and taxation incentives. Sethi *et al.* (2003) emphasize the role of governments in establishing the prerequisites for political and economic stability, including the rule of law and a sound infrastructure, thereby providing a

lucrative environment for FDIs. Economic liberalization and improvements in infrastructure have been essential in attracting FDIs to these countries. The present study focuses on institutional aspects that lower the FDI barriers and affect company incentives to provide high-quality accounting information for foreign investors.

According to Pistor, Raiser and Gelfer (2000), FDIs have been a major source of external finance and a catalyst of corporate restructuring. Saudagaran and Diga (1997) argue that the funds available fall far short of the amount needed to stimulate economic development, however. Bebchuk and Weisbach 2010 review the research on corporate governance and the role of cross-border investment and politics in financial reporting. Tand and Lau (2000), in turn, argue that accounting reform in China is the result of a combination of foreign influences and domestic socio-economic reforms. Bagaeva (2008) investigated the impact of international investors on the quality of accounting information in Russia, and found that international investors enhanced the quality of financial accounting and increased the willingness to adopt IFRS.

3.3 The role of accounting information in the Nordic countries

The Nordic countries have economic, cultural and historical ties. They have small equity markets and Germanic accounting traditions, the Germanic influence being particularly evident in the strong association between the financial statement and taxation. However, differences have emerged in the development of financial reporting, and some Germanic traditions have been abandoned. On the other hand, Scandinavian financial reporting is related in some respects to the British approach, for example in the informational role of accounting numbers. On the whole, Nordic accounting is less conservative (in terms of balance-sheet conservatism) and more transparent than in Germanic and Latin countries, but not to the same extent as in Anglo-American countries (Nobes and Parker, 2004; Flower, 2004; Radebaugh and Gray, 2002).

The Nordic countries are traditionally treated as a single group in classification studies: Gray (1988) categorized them as rather optimistic, for example. There was an attempt to promote harmonization between the Nordic Companies Acts and Accounting Acts. The

accounting legislation that was in force during the 1980s had a common origin, but since then each country has developed its own interpretations of that and subsequent legislation and accounting standards (Aisbitt, 2002). The post-harmonization rules were advanced for their time compared with Continental Europe in that they allowed the revaluation of fixed assets, required consolidated financial statements and a compulsory audit, and required the financial statements to conform to undefined 'good accounting practice' (Nobes and Parker, 2004). Good accounting practice generally means compliance with basic accounting principles and the legal framework, as well as with generally accepted practices (Johnsen, 1993).

Accounting in the Nordic countries has developed at different speeds towards the Anglo-Saxon reporting model and the separation of accounting and taxation. Denmark and Norway were already closer to Anglo-Saxon practices in 1993, and Denmark was the first to separate taxation and accounting. Sweden and Finland have closer ties with German traditions (Elling, 1993). The implementation of EU directives in national regulations should have increased the harmony between the Nordic countries, although Joos and Lang (1994) found no evidence of reduced differences following the implementation of EU directives in the UK, France and Germany.

Anglo-Saxon reporting practices emphasize the need for a "*true and fair view*" in financial reporting, which is understood to exclude the use of hidden reserves and to entail a distinction between write-downs of assets made for tax purposes and those made for financial purposes. In the latter case there should be an economic rationale in terms of loss or expiry of value. This concept differs considerably from the tradition in most countries in Continental Europe, in which the emphasis has been on a conservative (again, in terms of balance sheet conservatism) statement of profits and net assets in order to prevent excessive dividend distribution, set up reserves and minimize taxable income (Alexander and Archer, 2003).

The most recent effort to harmonize financial reporting in Europe was the requirement to prepare consolidated financial statements in accordance with IFRS from the year 2005 onwards. The financial reporting of listed firms is expected to become more harmonious

because IFRS standards allow less divergence than EU directives (Flower, 2004). Ball (2006) reviews the advantages and disadvantages of IFRS for investors, and Leuz (2010) emphasizes the enforcement of these standards in the interests of harmonizing accounting practices worldwide.

3.3.1 Denmark

Danish accounting legislation has traditionally been limited and very flexible, allowing many alternatives regarding measurement and disclosure. For many years creditors were the main targets of accounting information, but there has now been a shift towards recognizing investors as an influential user group. Accounting crises and growing internationalization have led to stricter legislation. New regulations brought accounting concepts more in line with IFRS usage, allowed fewer options in reporting and contained a more specific “true and fair view” clause and quality requirements. The most extensive changes in accounting legislation since the implementation of the Fourth Directive in 1981 occurred in 2002 when the Financial Statements Act was reformed based on the IFRS. Because the Financial Statements Act is a framework act, Danish accounting needs supplementary guidelines. The Institute of State-authorized Public Accountants (*foreningen af Statautoriserede Revisorer*, FSR) aims to render Danish accounting policies uniform and to continuously improve the quality of annual reports by publishing IAS/IFRS-based standards, while accommodating the special provisions of the Act. FSR standards are obligatory for companies listed on the Copenhagen Stock Exchange, which is the only one in the country (Hansen and Sørensen, 2003; Fagerström and Lundh, 2006).

Danish financial accounting was closely connected to tax regulation and focused on prudence until changes were made in the legislation in order to achieve compliance with EU Directives and the IFRS. In the spirit of international harmonization, Danish accounting has become more Anglo-Saxon in nature, and focuses on true and fair value. However, there are some differences between Danish standards and the IFRS regarding consolidated financial statements. The most significant of these are: ¹⁾ IFRS 3 requires recognition of negative goodwill directly in the profit and loss statement on the date of acquisition; ²⁾ under IFRS 27 minority interests must be presented as a separate item under equity,

distinct from the parent company's share; and ³⁾ IFRS 27 requires the elimination of intra-group profits and losses in consolidated financial statements even though transactions may have been carried out on an arm's-length basis, and non-elimination would involve disproportionate expenses (Fagerström and Lundh, 2006).

3.3.2 Finland

The expenditure-revenue theory developed by Professor Martti Saario has had a great impact on Finnish accounting practice. In fact, the 1973 Accounting Act and the 1968 Company Income Tax Act were based on his ideas. The purpose of financial reporting was to inform the tax authorities at the expense of investors, and no 'outside' voice was heard (Pirinen, 2005). The role of the financial statement was to calculate the profit or loss for the accounting period and to determine the amount payable to shareholders as dividends. Saario's expenditure-revenue theory is a dynamic accounting theory that places emphasis on the profit and loss account: the balance sheet has been of secondary importance in Finnish accounting. The theory is based on the realization principle for the recording of business transactions in the form of expenditures, revenues and monetary transactions. There was a large degree of flexibility in the measurement of annual income. Valuation adjustments and provisions were allowed, and were commonly used for the purpose of income smoothing in order to achieve the target annual result (profit or loss) as far as the company's income taxation and distribution of dividends were concerned. Tax-accounting rules have had a considerable effect on financial accounting in Finland (Näsi and Virtanen, 2003).

The reforms of the accounting legislation in 1992 and 1997 resulted in major changes in Finnish accounting, and harmonized Finnish regulations with EU directives. The inclusion of the true-and-fair-view concept in the rules represented a significant change in the spirit of Finnish financial accounting. Even though the legislation has been harmonized in line with EU directives, however, the expenditure-revenue theory still has an influence on Finnish thinking. The current Accounting Act sets out good accounting practice in Finland, along with other official regulations, including instructions and statements issued by the Finnish Accounting Board, IAS/IFRS, and recommendations by auditors and other

accounting professionals. IAS are applied to some extent in the legislation and in its interpretation, the major differences concerning fair valuation under IAS and historical cost in Finland, the revaluation of fixed assets and the treatment of intangible assets (Näsi and Virtanen, 2003).

3.3.3 Norway

Norway's accounting rules were originally set up to protect creditors, and reflected the government's need to calculate taxable income. The informational role of accounting was also established in the regulations, but the concept of prudence was dominant in the measurement rules. Since then the accounting regime has undergone an enormous change. The new accounting law of 1998 emphasizes the information function of financial statements. Taxation and accounting were closely connected to each other until the tax reform of 1992 and the 1998 legislation. The general focus on the information function and the preference for the matching convention over the prudence principle in the new legislation indicates the shift towards the Anglo-Saxon perspective on accounting. As Alexander and Schwencke (2003) argue, the emphasis on the matching convention has made Norwegian accounting "even more Anglo-Saxon" than accounting in the Anglo-Saxon countries in general. Specific rules go towards earnings conservatism in ensuring that only earned revenue is recognized, for example, and on the other hand, the prudence concept requires unrealized losses to be recognized.

The preparatory work for the new accounting act highlighted the information content of the profit and loss account rather than that of the balance sheet in a departure from the continental accounting tradition and the conservative measurement of elements in the balance sheet. This may lead to conflict with IASB standards that adopt a balance-sheet approach over the profit and loss statement. In spite of this national interpretation of the profit-and-loss-oriented Conceptual Framework, the Accounting Act of 1998 assumes that good accounting practices should be developed in accordance with recognized practice and in line with IASC standards and US GAAP. The new Act also eliminated many differences between US GAAP and Norwegian good accounting practice, even if the standards of the NASB (Norwegian Accounting Standards Board) are close to IASB standards: the

impairment standard violates IAS solution (IAS 36), for example, and is generally based on US GAAP (Alexander and Schwencke, 2003; Johnsen and Eilifsen, 2003).

Alexander and Schwencke (2003) assess the accounting change in Norway after the enactment of the Accounting Act of 1998. They also comment on the emphasis on the Anglo-Saxon perspective to the extent that the resulting balance sheets are less conservative than the ones prepared in accordance with IAS. General regulation of the prudence principle as required under the Fourth Directive is not included in Norwegian Accounting Law. In addition to emphasizing the matching principle over the prudence principle, Norway aims at specific national regulation rather than harmonization with respect to European law and the international conceptual frameworks.

3.3.4 Sweden

The government has a strong influence on Swedish accounting through the regulation of financial accounting and taxation. From a historical perspective Sweden has been considered part of the Continental European tradition in its financial reporting, although in recent decades there has been a trend towards the Anglo-Saxon tradition. Because of this mix in approaches, Swedish accounting is difficult to classify. The main principles set out in the Annual Accounting Act for annual financial statements are ¹⁾ clarity, ²⁾ generally accepted accounting practice, and ³⁾ a true and fair view. Clarity means that the statement should be drawn up in a transparent way and the different parts should be easy to read together. Generally accepted accounting practice is a legal standard based on the Act, and on accounting practice and recommendations, and is interpreted as the obligation to follow the accounting legislation and its principles. The concept of a true and fair view is new in the Swedish legislation. It means that the balance sheet, and the profit and loss accounts and the accompanying notes together must give a true and fair view of the company's market situation and its performance (Fagerström and Lundh, 2006).

Regulation formerly encouraged the production of conservative balance sheets, but the situation has changed because of the growing need of Swedish companies to seek finance in international capital markets. There was a very ambitious convergence program aimed at

issuing Swedish accounting standards by the year 2000, in line with the IAS as far as possible. International accounting principles have gradually been adopted into the standards set by the Swedish Financial Accounting Standards Council (RR, *Redovisningsrådet*). Only in a few exceptional cases do the standards deviate from the IAS. For example, Swedish law imposes restrictions based on EU directives that prevent the application of all the IAS measurement attributes, such as the use of fair values. Another, although rare exception concerns cases in which there is significant reason to deviate because of inconsistencies, for example (Heurlin and Peterssohn, 2003).

Although accounting regulation in the Nordic countries originally differed fundamentally from IAS principles, in recent years each country has taken steps towards compliance, as described above. In view of the trend in the legislation in each of the countries towards the Anglo-Saxon reporting tradition, it is expected that firms will exhibit conditional conservatism even before adopting IFRS. Moreover, given the recent changes in national accounting legislation, it is assumed that earnings conservatism has increased as the accounting rules have moved away from the German tradition: continental accounting is conducive to unconditional conservatism whereas Anglo-Saxon practices favor conditional conservatism.

Doupnik and Salter (1995) classify Sweden and Finland as one cluster, and Denmark and Norway as belonging to the European cluster. Leuz *et al.* (2003) studied investor protection and earnings quality, and present evidence that Norway now belongs to the Anglo-American group, separated from the other Nordic countries. In the light of these findings, it is to be expected that Norway will show more earnings conservatism than the other Nordic countries, even if there is a trend in each one to adopt Anglo-American practices.

3.4 The role of foreign investments in developed markets

Meek and Thomas (2004) highlight the growing influence of international factors on accounting practice. They argue that growth on international equity and bond markets, the increasing number of cross-listings, the influence of the IASB and the FDIs of multinational enterprises have increased demand among investors for comparable and

transparent accounting information across national boundaries. Multinational companies control much of the world's economy, and foreign direct investments currently represent approximately 30 percent of the world's total capital flow.

As Leuz, *et al.* (2009) state, domestic sources of finance are limited in many countries – even in developed markets - and it is important to understand the factors affecting the decision-making of foreign investors. They point out that information asymmetries between foreign and local investors are particularly pronounced with respect to the evaluation of a firm's governance structure. Outside investors are less likely to know about political connections, banking relations, family social status, and connections among the business elite, for example. Stringent disclosure requirements decrease the cost to foreign investors of information disadvantage and problematic governance structures.

The Nordic countries comprise a suitable case for analysis for several reasons. Nordic equity markets have varied considerably in importance over the years, and have transformed in structure from closed markets to open international investment environments. During the first half of the 20th century policymakers imposed various forms of regulation on the financial markets in order to create cheap domestic financing and boost economic recovery. Politicians' attitudes towards foreign ownership and equity have also changed. Most restrictions on cross-border equity activities had been relaxed by 1999, and this boosted the interest of foreign investors in Nordic companies and the numbers of foreign listings on the equity markets. The entry of foreign investors enhanced the process of bringing the national markets into the global equity market, and the transition from state regulation to global integration is now complete. However, there are still cross-border information gaps in the Nordic markets. Large corporations that have invested in breaking away from traditional highly regulated and segmented equity markets have succeeded in closing the information gap in the individual countries, although the bulk of companies listed on Nordic stock exchanges still suffer from cross-border information asymmetries. Foreign companies' direct investment and foreign investors' portfolio investments are 'pull' mechanisms in the global integration of equity markets (Oxelheim, 2001). High-quality financial information is a prerequisite in terms of closing cross-border information gaps.

On the other hand, Nordic authorities have influenced the development of equity market integration through their tax policies and by favoring debt financing. The primary source of corporate finance used to be bank loans. Banks had inside access to information, and both the information content of accounting numbers and the quality of financial reporting were relatively low. During the late 1980s and early 1990s the policymakers gradually abolished the incentives that favored loans rather than equity (Oxelheim, 2001). As a consequence, the need for timely and high-quality accounting information increased throughout the time period investigated. The need for such information is obvious in all these markets in order to reduce information asymmetry, which increases when investors do not have close ties to firms.

Kalev *et al.* (2008) divide the existing literature on information asymmetry between foreign and local investors into two contrasting streams. On the one hand it is argued that local investors face fewer investment barriers and have easier access to information than foreign investors, and that foreign investors are more sophisticated, and are better able to analyze market conditions and make informed investment decisions. Ahearne *et al.* (2004), on the other hand, focus on information costs and home bias, arguing that of more significance than direct barriers to international investment are asymmetries that stem from the poor quality and low credibility of financial information. Daude and Fratzscher (2008) consider the existence of a pecking order of cross-border investment. Their findings confirm the view that foreign direct investments are more sensitive to information friction than foreign portfolio investments, and that the magnitude of the pecking-order effect is great. FDIs differ from portfolio investments in two senses: they are more stable, and the investors' aim is to influence the running of the business and the management of the firm (Pike and Neale, 2003).

Jacobson and Aaker (1993) suggest that the relationship between investors and firms is closer, and investors are better informed, in Japan than in the USA. Consequently, the need for high-quality financial information to reduce information asymmetry between managers and investors is lower in the Japanese business environment. Moreover, Cheung *et al.* (1999) provide evidence that reported earnings are less value-relevant in Japan than in the USA, and conservative accounting practices are more evident in the return-earnings

association. Jiang and Kim (2004) argue that the level of information asymmetry strongly affects the investment decisions of foreign investors in Japan, where cross-corporate ownership and the sharing of value-relevant information exclusively within the network characterize the institutional environment. Foreign investors cannot obtain private (exclusively shared) information about a firm's performance on the Japanese market, and consequently invest in information-rich firms with low information asymmetry.

Financial markets in the Nordic countries have resembled Japanese stakeholder corporatism. Firms tended to obtain capital in the form of bank loans and bank-related owners, and financial information was conveyed through close relations between creditors and company management. Financial statements primarily served tax purposes. However, less corporate finance now comes from better-informed insider ownership whereas more comes from less well-informed outside owners, and the role of capital markets has changed. Firms have improved their financial reporting in order to attract investors and, given that all the Nordic countries are small capital markets, to compete for foreign capital. Restrictions on foreign ownership have been abolished and foreign investments have grown dramatically since the deregulation of the financial markets.

Reiter (2003) describes the globalization of Swedish corporate ownership. Expansion and internationalization have reflected the long-term shift from a bank-oriented to a market-oriented economic system. Moreover, a more Anglo-Saxon economic and financial culture has replaced traditional stakeholder patterns and the close ties that characterized the Japanese institutional environment. The financial system in Finland has traditionally been bank-centered and dominated by relationship-based debt finance. Hyytinen *et al.* (2003) demonstrate the shift towards stock-market dominance, and Fagerström and Lund (2006) report similar capital market developments in Denmark and Norway – movement away from bank loans towards equity markets and the encouragement of both domestic and foreign investors. Based on World Bank's Financial Development and Structure database, Bushman and Piotroski (2006) classify Norway and Denmark as market-oriented financial systems, whereas Finland and Sweden are considered bank-oriented economies.

LaFond and Watts (2008) showed in a recent study that information asymmetry generated conservatism in financial statements. Their results indicate that high-quality financial information alleviates information asymmetry between firm insiders and outside equity investors. They also found that changes in information asymmetry led to changes in conservatism. It is assumed that the changing trend in Nordic capital markets from better-informed investors with close corporate ties and access to inside information towards less well-informed investors dependent on external financial information will increase the demand for high-quality financial information. The information asymmetry between the better-informed local investors and the less well-informed foreign investors increases along with the increase in foreign investments. FDIs in particular have high ownership implications and are more sensitive to information imperfections than other forms of foreign investments. Conservatism is expected to alleviate the information asymmetry between better-informed and less well-informed investors.

3.5 Summary

There have been significant changes in financial reporting during the last few decades both in the transitional economies of Europe and in the Nordic countries. The reporting system has traditionally served the interests of state administration in the transitional economies, but nowadays it is more a question of attracting investors. Similarly, in the Nordic countries the purpose of financial reporting is moving away from creditor protection towards meeting the needs of investors and other users of the information.

There has been a corresponding change in the users of financial information because of the new sources of company finance in both of these environments. Firms in the transitional economies have traditionally relied on state finance, but now they have to attract other sources of capital, especially from foreign investors. Bank financing has been the norm in the Nordic countries, and investors have had access to inside information. Nowadays firms need to disclose public information to outside investors, especially foreign investors. Globalization and financial market integration have increased the demand for high-quality information.

4 DATA AND METHODS

4.1 *The transitional economies of Europe*

The sample of listed non-financial companies in the transitional economies of Europe derives from the Amadeus database. It excludes financial firms (SIC 6000 – 6999). Countries with fewer than 100 firm-year observations are also excluded, which include three transitional economies: Estonia, Hungary and Slovenia. The data thus consist of firms domiciled in Bulgaria, Croatia, the Czech Republic, Latvia, Lithuania, Moldova, Romania, Russia, Serbia, the Slovak Republic, and Ukraine. The research period covers 2000-2006. Table 2 illustrates the sample selection. Observations with one or more missing variables were truncated, and the two extreme observation percentiles of each accounting variable were deleted to eliminate the effect of possible outliers. The total number of observations was thus 13,736 firm-years.

Table 2. Sample selection in firm-years, 2000-2006

	Number of firm-years
Number of non-financial firm-year observations from database	22,324
Less firm-years	
With insufficient financial data in the database	(7,863)
In countries with less than 100 observations	(185)
With extreme outliers	(540)
Number of firm-year observations in the final sample	13,736

The market independent measure developed by Ball and Shivakumar (2005), which is based on changes in income, was used to measure conservatism. Table 3 reports the summary statistics – the means, medians, minimums, maximums and standard deviations – for the sample of 13,736 firm-year observations by country. The variable ΔNI , change in income, is presented for each country separately.

The means and medians of the variable ΔNI differ most in Latvia, Poland, and Serbia. The percentage change in negative earnings ranges between 41 and 51.7, being the lowest in Russia and the highest in Slovakia. There were significant political and economic changes,

such as market liberalization and strong economic growth, in these countries during the research period.

Table 3. Descriptive statistics of the data on the transitional economies in Europe

ΔNI	N	Mean	Median	Min	Max	Std.dev.
Bulgaria	1072	0.013	0.003	-0.335	0.623	0.098
Croatia	1398	0.008	0.004	-0.302	0.600	0.067
Czech Rep.	121	0.005	0.003	-0.291	0.652	0.079
Latvia	148	0.022	0.004	-0.214	0.692	0.112
Lithuania	212	0.008	0.004	-0.282	0.344	0.075
Moldova	1383	0.009	0.001	-0.333	0.714	0.088
Poland	877	0.027	0.015	-0.331	0.672	0.116
Romania	326	0.001	0.000	-0.283	0.375	0.083
Russia	2745	0.015	0.006	-0.342	0.683	0.100
Serbia	3631	0.022	0.002	-0.337	0.730	0.155
Slovak Rep.	511	0.001	0.000	-0.310	0.570	0.078
Ukraine	1312	0.001	0.002	-0.331	0.555	0.092

Notes:

The table gives the descriptive statistics for the sample used in Model (1), which is based on changes in income.

$$\text{Model (1)} \quad \Delta NI_t = \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D * \Delta NI_{t-1} + \epsilon_t$$

where ΔNI_t is the change in income (NI) from fiscal year t-1 to t scaled by total assets (TA) at the beginning of the period, D is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0. The sample consists of observations derived from Amadeus 2000-2006. Firstly, all observations with missing values for one or more variables are eliminated. Secondly, two extreme percentiles of observations of each variable are eliminated.

The market independent approach developed by Ball and Shivakumar (2005) is applied in order to measure conditional conservatism in the emerging markets of Central and Eastern Europe. The measure is based on changes in income: it measures timely gain and loss incorporation as the tendency for increases and decreases in accounting income to reverse. The following model is estimated to identify transitory gain and loss components in accounting income:

$$\Delta NI_t = \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D \times \Delta NI_{t-1} + \varepsilon_t, \quad (1)$$

where ΔNI_t is change in income from fiscal year $t-1$ to t (defined $NI_t - NI_{t-1}$) scaled by total assets at the beginning of the period, D is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0, and ε is an error term. Untimely recognition of economic gains implies that gains are recognized to be persistent positive components of accounting income that tend not to reverse. Conversely, timely recognition of economic losses implies recognition as transitory income decreases. More timely recognition of economic losses than of gains implies that α_3 is negative.

Ball and Shivakumar (2005) consider timeliness of loss recognition a favorable attribute of financial reporting in that it increases the usefulness of financial statements, particularly in corporate governance and debt agreements. There is less demand for timely gain recognition than for timely loss recognition. Accordingly, the focus of this study is on timely loss recognition rather than the timeliness of gain recognition.

The following interactions are included in Model (1) in order to assess the effect of legal origin on timely loss recognition.

$$\begin{aligned} \Delta NI_t = & \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D \times \Delta NI_{t-1} + \alpha_4 FRA \\ & + \alpha_5 D \times FRA + \alpha_6 \Delta NI_{t-1} \times FRA + \alpha_7 D \times \Delta NI_{t-1} \times FRA \\ & + \alpha_8 GER + \alpha_9 D \times GER + \alpha_{10} \Delta NI_{t-1} \times GER + \alpha_{11} D \times \Delta NI_{t-1} \times GER + \varepsilon_t, \end{aligned} \quad (2)$$

where FRA is a dummy variable taking the value 1 if a country is of French legal origin, otherwise 0. GER is a dummy variable taking the value 1 if a country is of German legal origin. The reference group is of Russian legal origin. All the other values are as above.

The classification of the transitional economies by legal origin is based on the work of Harper and McNulty (2008). Complementing the four legal families broadly used in the literature following the publication of the paper authored by La Porta *et al.* (1998) they add a fifth family, that of Russian legal origin. Several transitional economies in Eastern Europe share a common history under Russian domination, and faced political instability and

eventually dramatic regime changes in order to eliminate the Russian impact. However, they note the difficulty of determining the legal origin and point to the various ways in which these countries could be classified. Reynolds and Flores (in *Foreign Law: Current Sources of Codes and Basic Legislation in Jurisdictions of the World*, 2003, Littleton, Colorado: Rothman) state that the Russian legal system is characterized by conflicts, contradictions, undefined or poorly defined principles and concepts, and major gaps, and predict that it will eventually develop along the lines of the civil law tradition (Harper and McNulty, 2008).

The following extensions are included in Model (1) in order to investigate the extent to which the stage of the transition process affects earnings quality.

$$\begin{aligned} \Delta NI_t = & \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D \times \Delta NI_{t-1} + \alpha_4 IND_L + \alpha_5 D \times IND_L \\ & + \alpha_6 \Delta NI_{t-1} \times IND_L + \alpha_7 D \times \Delta NI_{t-1} \times IND_L + \alpha_8 IND_H \\ & + \alpha_9 D \times IND_H + \alpha_{10} \Delta NI_{t-1} \times IND_H + \alpha_{11} D \times \Delta NI_{t-1} \times IND_H + \varepsilon_t \end{aligned} \quad (3)$$

where *IND* is one of the transition indicators provided by EBRD. Transition is measured on three different aspects of institutions: firstly, banking reform and interest-rate liberalization (*BANK*), secondly securities markets and non-bank financial institutions (*SEC*), and finally, governance and enterprise restructuring (*GOV*). EBRD measures progress in transition on a scale ranging from 1 to 4. These transition indicators are rescaled into dummy variables in accordance with the following principle. Progress in the transition from a planned economy to a market economy is measured on three levels: low progress, medium progress, and high progress. Values 1 and 1+ indicate low progress (*IND_L*) in the transition process. *IND_L* is a dummy variable taking the value 1 if the transition indicator of a country in which a firm is domiciled is low progress in that particular year, otherwise 0. Values between 2 and 3- indicate medium progress in the transition process, whereas values equal to or greater than 3 indicate high performance (*IND_H*). Medium progress characterizes the reference group. *IND_H* is a dummy variable taking the value 1 if progress in transition is high in that year in a country in which the firm is domiciled, otherwise 0. Measurement of three aspects of transition (*BANK*, *SEC* and *GOV*) is based on the same principles from low to

high progress, hence as *BANK_L*, *BANK_M*, *BANK_H*, and so on. All the other variables are defined as above.

Country-level data on the transition process is publicly available from the European Bank for Reconstruction and Development (EBRD). There are several indices describing the stage of transition annually in each country, which have been used to track reform developments in all of them since the beginning of the process. Progress is measured against the standards of industrialized market economies, taking account of the fact that there is neither a “pure” market economy nor a unique end-point for transition. The measurement scale for the indicators ranges from 1 to 4+, where 1 represents little or no change from a rigid centrally planned economy and 4+ represents the standards of an industrialized market economy (European Bank for Reconstruction and Development, 2007). The indicators of interest in this study are 1) banking reform and interest-rate liberalization, 2) securities markets and non-bank financial institutions, and 3) governance and enterprise restructuring.

Finally, the following extension to Model (1) investigates the effect of European Union membership on timely loss recognition.

$$\begin{aligned} \Delta NI_t = & \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D \times \Delta NI_{t-1} + \alpha_4 EU_t \\ & + \alpha_5 D \times EU_t + \alpha_6 \Delta NI_{t-1} \times EU_t + \alpha_7 D \times \Delta NI_{t-1} \times EU_t + \varepsilon_t, \end{aligned} \quad (4)$$

where, *EU* is a dummy variable taking the value 1 if a country is a Member State of the European Union, otherwise 0. Alternatively, *EU* is defined as a dummy variable taking the value 1 after a country has become a EU member, and the value 0 before its EU accession. All other variables are defined as above.

EU Directives do not contain a separate framework of principles, but there are principles for valuation in the Fourth Directive: Article 31 requires compliance with the prudence principle of valuation, in addition to the other principles. According to van Hulle (1996), the prudence principle is the most important one, even if no hierarchy exists in the final version of the directive.

Table 4 reports the correlations between variables describing the phase of transition in different institutions: banking reform and interest-rate liberalization (*BANK*), securities markets and non-bank financial institutions (*SEC*), and governance and enterprise restructuring (*GOV*) as well as EU membership (*EU*). The three variables describe clearly different aspects of transition given that the correlation between them is relatively low, the highest being between banking and governance, at 0.502.

Table 4. Correlation matrix for the variables describing progress in transition and EU membership

Variables	BANK	SEC	GOV	EU
BANK	1.000			
SEC	0.086	1.000		
GOV	0.502	0.357	1.000	
EU	0.641	0.132	0.451	1.000

Notes:

The table shows the correlations between the variables banking reform and interest-rate liberalization (*BANK*), securities markets and non-bank financial institutions (*SEC*), and governance and enterprise restructuring (*GOV*) and EU membership (*EU*).

The following modifications were incorporated into Model (1) in order to examine the effect of the different aspects of economic freedom on conservatism.

$$\begin{aligned} \Delta NI_t = & \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D \times \Delta NI_{t-1} + \alpha_4 FREE \\ & + \alpha_5 D \times FREE + \alpha_6 \Delta NI_{t-1} \times FREE + \alpha_7 D \times \Delta NI_{t-1} \times FREE + \varepsilon_t \end{aligned} \quad (5)$$

where *FREE* is an indicator variable taking the value 1 if a country's index of that particular economic freedom is greater than or equal to the median country-level realization, otherwise 0. In the estimation of different specific economic freedoms *INV* indicates investment freedom, *CORR* indicates freedom from correlation, and *FISC* indicates fiscal freedom. All other variables are defined as above.

The index of economic freedom is based on *The Wall Street Journal's* and The Heritage Foundation's ranking of 161 countries across 10 types of freedom. Overall economic freedom comprises the following specific aspects: business freedom, trade freedom, monetary freedom, freedom from government, fiscal freedom, property rights, investment freedom, financial freedom, freedom from corruption, and labor freedom. Each of these is graded on a scale ranging from zero to 100, where 100 represents maximum freedom.

This study focuses on three specific types of freedom: investment freedom, freedom from corruption, and fiscal freedom, which are the most influential in terms of the usefulness of financial reporting to investors. Investment freedom refers to the free flow of capital, especially foreign capital: capital typically flows to where it is most needed and where the returns are greatest. Restrictions on foreign investment limit the inflow of capital, thus determining each country's policies on foreign investment in order to determine its overall investment climate. Questions examined include whether there is a foreign-investment code that prescribes the country's investment laws and procedures; whether the government encourages foreign investment through the fair and equitable treatment of investors; whether there are restrictions on access to foreign exchange; whether foreign firms are treated the same as domestic firms under the law; whether the government imposes restrictions on payments, transfers, and capital transactions; and whether specific industries are closed to foreign investment.

Freedom from corruption assesses the perception of governmental, legal, judicial, and administrative corruption in the business environment. Corruption is defined as dishonesty or decay. This factor is based on Transparency International's Corruption Perceptions Index (CPI), which measures the level of corruption in 152 countries. The CPI comprises a 10-point scale in which a score of 10 indicates very little corruption and a score of 1 indicates a very corrupt government. The freedom score was obtained by converting the CPI data to a scale ranging from 0 to 100 and multiplying the score by 10. The level of corruption is low when the score on freedom from corruption is high.

Fiscal freedom measures the tax burden. A government may impose fiscal burdens on economic activity by generating revenue for itself primarily through taxation, but also from

debt that ultimately must be paid off through taxation. Fiscal freedom includes the top marginal tax rates on individual and corporate income, as well as a measure of total tax revenue as a portion of gross domestic product (GDP). In this measure lower taxation translates into a higher level of fiscal freedom.

Finally, the following modifications are included in Model (1) in order to assess the effect of FDIs on conditional conservatism:

$$\begin{aligned} \Delta NI_t = & \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D \times \Delta NI_{t-1} + \alpha_4 FDI \\ & + \alpha_5 D \times FDI + \alpha_6 \Delta NI_{t-1} \times FDI + \alpha_7 D \times \Delta NI_{t-1} \times FDI + \varepsilon, \end{aligned} \quad (6)$$

where FDI is a dummy variable taking the value 1 if a country's foreign direct investments are greater than or equal to median country-level foreign direct investments, otherwise 0. Alternatively, growth in FDIs is measured relative to the level during the previous year. ΔFDI is a dummy variable taking the value 1 if a country's FDIs have increased by more than 20 percent from the previous year in that particular country, otherwise 0. All other variables are defined as above. The annual FDI information for each country derives from the Global Market Information Database (GMID).

The FDI variable was constructed from the database as follows. Foreign direct investments consist of the sum of FDI inflows and FDIs in stock in the database. FDI inflows in the reported economy comprise capital provided (either directly or through other related enterprises) by a foreign direct investor to an enterprise resident in the economy (FDI enterprise). FDI inward stock consists of the value of the share of capital and reserves (including retained profits) to the parent enterprise, plus the net indebtedness of its affiliates. The numbers of mergers and acquisitions are excluded because they differ in nature as investments: they may not induce similar incentives to provide high-quality accounting information as the investment environment is expected to generate in other FDI contexts.

Table 5. Correlation matrix for the variables describing economic freedom and FDIs

Variables	INV	CORR	FISC	FDI	Δ FDI	N
INV	1.000					84
CORR	0.782	1.000				84
FISC	-0.492	-0.576	1.000			84
FDI	0.529	0.327	-0.266	1.000		84
Δ FDI	-0.208	-0.325	0.383	-0.178	1.000	84

Notes:

The table shows the correlations between investment freedom (INV), freedom from corruption (CORR) and fiscal freedom (FISC), foreign direct investments (FDI), and change in foreign direct investments from the previous year (Δ FDI).

Table 5 comprises the correlation matrix for the variables used in the empirical tests, defined as follows: INV indicates investment freedom, CORR indicates freedom from corruption, FISC indicates fiscal freedom, FDI stands for foreign direct investments, and Δ FDI signifies change in FDIs from the previous year. The country-level observations are measured using an observation for each year during the sample period. Correlation among the variables varies from -0.576 to 0.782, being highest between investment freedom and freedom from corruption. However, these variables measure two different aspects of institutional quality. The correlation between fiscal freedom and the other indicator variables is negative, as is that between the level of and growth in FDI.

4.2 The Nordic countries

The sample consists of listed firms in the Nordic countries, covering the period 1995-2006. The data for Denmark, Finland, Norway and Sweden were drawn from the Worldscope Database. Financial firms (SIC 6000 – 6999) were excluded, as were observations in which any of the earnings variables (NI_t , NI_{t-1}) or total assets were missing. Furthermore, and in line with earlier studies, the two extreme percentiles were excluded. Table 6 shows the sampling process. The final sample comprised 5,068 firm-year observations.

Table 6. The Nordic sample in firm-years, 1995-2006

	Number of firm-years
Number of non-financial firm-year observations from the database	7,524
Less firm-years	
With insufficient financial data	(2,358)
With extreme outliers	(98)
The number of firm-year observations in the final sample	5,068

Table 7 presents the descriptive statistics for the sample of Nordic countries by country in Panel A, and by market-to-book ratio category in Panel B. The difference between the means and the medians is greater in Norway and Sweden, but not very obvious in Denmark and Finland, and are the greatest in the category with the highest market-to-book ratio.

Table 7. Descriptive statistics of the data on listed companies in the Nordic countries

Panel A. Descriptive statistics for each country							
Δ NI	Country	N	Mean	Median	Std. Dev.	Min	Max
	Denmark	1003	0.010	0.007	0.105	-0.458	0.882
	Finland	1084	0.009	0.009	0.074	-0.313	0.247
	Norway	973	0.030	0.013	0.166	-0.816	0.977
	Sweden	2008	0.029	0.010	0.171	-0.596	1.252
Panel B. Descriptive statistics for each market-to-book category							
Δ NI	Category	N	Mean	Median	Std. Dev.	Min	Max
	MTB low	1576	0.007	0.002	0.122	-0.581	1.252
	MTB medium	1575	0.015	0.000	0.224	-1.215	0.912
	MTB high	1575	0.041	0.007	0.125	-0.650	1.069

Notes:

Panel A presents the descriptive statistics on changes in accounting earnings deflated by total assets at the beginning of the period (Δ NI) for each country, and Panel B presents Δ NI for the different categories of market-to-book values. The firm-year observations are drawn from Worldscope and cover the period 1995-2006.

Ball and Shivakumar's (2005) market-independent approach was adopted in order to measure earnings conservatism in the Nordic countries and allow comparability of the results to those for the transitional economies of Europe. The principal measure is based on changes in income, measuring timely gain and loss incorporation as the tendency for increases and decreases in accounting income to reverse. The same model (1) was used to

identify the transitory gain and loss components in accounting income in the Nordic countries as in the transitional economies:

$$\Delta NI_t = \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D \times \Delta NI_{t-1} + \varepsilon_t, \quad (1)$$

where ΔNI_t is change in income from fiscal year $t-1$ to t (defined $NI_t - NI_{t-1}$) scaled by total assets at the beginning of the period, D is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0, and ε is an error term. Untimely recognition of economic gains implies that they are considered persistent positive components of accounting income that tend not to reverse. Conversely, timely recognition of economic losses implies that they are recognized as transitory decreases in income. More timely recognition of economic losses than of gains implies that α_3 is negative. According to Ball and Shivakumar (2005), there is less demand for timely gain recognition than for timely loss recognition. The focus of this study is therefore on the latter.

The following extensions are included in Model (1) in order to test the effect of IAS/IFRS adoption on accounting conservatism.

$$\begin{aligned} \Delta NI_t = & \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D \times \Delta NI_{t-1} + \alpha_4 IAS \\ & + \alpha_5 D \times IAS + \alpha_6 \Delta NI_{t-1} \times IAS + \alpha_7 D \times \Delta NI_{t-1} \times IAS + \varepsilon_t, \end{aligned} \quad (7)$$

where, IAS is a dummy variable taking the value 1 if the financial reporting is under IAS/IFRS, otherwise 0. This variable derives from the Worldscope database. Firms that follow a mixture of local and international standards were excluded from the analysis, as were firms that do not disclose information on the accounting standards they follow. All the other variables are defined as above.

The following modifications are introduced into Model (1) in order to find out if there is a difference in the degree of conservatism between bank-oriented and market-oriented financial systems in the Nordic countries:

$$\begin{aligned}\Delta NI_t = & \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D \times \Delta NI_{t-1} + \alpha_4 BBASED \\ & + \alpha_5 D \times BBASED + \alpha_6 \Delta NI_{t-1} \times BBASED + \alpha_7 D \times \Delta NI_{t-1} \times BBASED + \varepsilon_t,\end{aligned}\quad (8)$$

where *BBASED* is a dummy variable taking the value 1 if the country has bank-oriented financial systems, otherwise 0. This variable is based on information taken from Bushman and Piotroski (2006). All the other variables are defined as above.

Next, Model (1) is modified by the interaction of the market-to-book-ratio quantiles in order to measure its relationship with conditional conservatism. The following result is obtained:

$$\begin{aligned}\Delta NI_t = & \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D \times \Delta NI_{t-1} + \alpha_4 MBlow \\ & + \alpha_5 D \times MBlow + \alpha_6 \Delta NI_{t-1} \times MBlow + \alpha_7 D \times \Delta NI_{t-1} \times MBlow \\ & + \alpha_8 MBhigh + \alpha_9 \times MBhigh + \alpha_{10} \Delta NI_{t-1} \times MBhigh \\ & + \alpha_{11} D \Delta NI_{t-1} \times \Delta NI_{t-1} \times MBhigh + \varepsilon_t,\end{aligned}\quad (9)$$

where *MBhigh* equals 1 if the firm belongs to the highest quantile of the market-to-book ratio, otherwise 0, and *MBlow* takes the value 1 if the firm belongs to the lowest quantile, otherwise 0. Firms belonging to a quantile of medium value comprise the reference group. All the other variables are defined as above. If the relationship between MTB and conditional conservatism is negative, a higher level of conservatism would be expected in the low-MTB group than in the reference group (medium-MTB), and thus α_7 would be significantly negative. Similarly, a lower level of conditional conservatism would be expected in the high-MTB firms than in the reference group, and thus α_{11} would be positive.

Finally, Model (1) is made to interact with the variable ΔFDI , which identifies the year-on-year growth in foreign direct investments in a country in order to detect their effect. The following model measures the effect of FDIs on conditional conservatism:

$$\begin{aligned}\Delta NI_t = & \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D \times \Delta NI_{t-1} + \alpha_4 \Delta FDI \\ & + \alpha_5 D \times \Delta FDI + \alpha_6 \Delta NI_{t-1} \times \Delta FDI + \alpha_7 D \times \Delta NI_{t-1} \times \Delta FDI + \varepsilon_t,\end{aligned}\quad (10)$$

where ΔFDI is a dummy variable taking the value 1 if FDIs were growing in a country in that particular year, otherwise 0. All the other variables are defined as above.

The FDI variable was constructed from the database as follows. Foreign direct investments consist of the sum of FDI inflows and FDIs in stock in the database. FDI inflows in the reported economy comprise capital provided (either directly or through other related enterprises) by a foreign direct investor to an enterprise resident in the economy (FDI enterprise), whereas inward stock consists of the value of the share of their capital and reserves (including retained profits) to the parent enterprise, plus the net indebtedness of affiliates. The numbers of mergers and acquisitions are excluded because of their different nature as investments: they may not induce similar incentives to provide high-quality accounting information as investment in other FDI forms is expected to generate.

Finally, the sample is split into three sub-samples with respect to market-to-book ratio, and Model (10) is estimated separately for every quantile (low, medium and high) in order to identify the effect of FDI on its relationship with conditional conservatism. In the interests of robustness, the sample is also split into three categories according to sales growth and R&D intensity.

5 EMPIRICAL RESULTS

5.1 The reliability of earnings figures and conditional conservatism in the transitional economies: empirical results

Earlier studies document the strong presence of conservatism in several countries and accounting regimes. If the conservatism coefficient α_3 is negative and statistically significant, the implication is that negative changes in earnings tend to reverse more often than positive changes. In other words, negative changes are more temporary in nature and positive changes tend to be more permanent.

The results from the country-specific estimations of regression (1) are presented in Table 8. There are differences in timely loss recognition between these transitional economies: the coefficient α_3 implying differential timeliness in recognition of gains and losses is significantly negative in several countries, varying from -0.445 for Russia to 0.931 for Poland. The implication is that conservatism exists in Bulgaria, Croatia, Moldova, Poland, Romania, Russia and Slovakia at the conventional significance level, and in the Czech Republic at a 10-percent level.

The conservatism coefficient is not significant in Latvia, Lithuania and Ukraine, implying no asymmetric timeliness between positive and negative changes in earnings in these countries. The results for Serbia are surprising: the coefficient (0.168) is significantly positive, implying very aggressive rather than conservative accounting practices. The recognition of gain is timelier than of loss, which implies a very low quality of accounting information. It is noteworthy that Serbia is at a very early stage in the transition process measured on various indicators, and as yet there are neither the institutions nor the market demand for high-quality accounting information.

Table 8. Conditional conservatism in the transitional economies of Central and Eastern Europe

Model (1)	COEFFICIENTS		VARIABLES				R-squared	Adj. R-squared
	Constant	D	ΔNI_{t-1}	$D \times \Delta NI_{t-1}$	Year fixed effects	Observations		
Bulgaria	-0.005 (0.538)	-0.011 (0.147)	-0.004 (0.948)	-0.633*** (0.000)	Yes	1072	0.095	0.088
Croatia	0.011* (0.040)	-0.009 (0.065)	-0.099 (0.271)	-0.567*** (0.000)	Yes	1398	0.120	0.114
Czech Republic	0.000 (0.996)	-0.034 (0.068)	-0.388*** (0.000)	-1.096 (0.088)	Yes	121	0.412	0.365
Latvia	0.031 (0.273)	-0.016 (0.494)	-0.066 (0.762)	-0.217 (0.482)	Yes	148	0.019	-0.045
Lithuania	0.006 (0.809)	-0.018 (0.239)	-0.014 (0.950)	-0.404 (0.158)	Yes	212	0.069	0.028
Moldova	0.010 (0.058)	-0.006 (0.276)	-0.133 (0.084)	-0.553*** (0.000)	Yes	1383	0.123	0.120
Poland	-0.026 (0.131)	-0.035*** (0.000)	0.006 (0.927)	-0.931*** (0.000)	Yes	877	0.182	0.174
Romania	0.035** (0.002)	-0.017 (0.133)	-0.042 (0.709)	-0.476* (0.016)	Yes	326	0.133	0.111
Russia	0.018** (0.003)	0.001 (0.882)	0.038 (0.402)	-0.445*** (0.000)	Yes	2745	0.059	0.056
Serbia	0.122*** (0.000)	0.004 (0.396)	-0.363*** (0.000)	0.168*** (0.006)	Yes	3631	0.540	0.539
Slovakia	-0.008 (0.421)	-0.008 (0.309)	-0.061 (0.617)	-0.521* (0.013)	Yes	511	0.096	0.080
Ukraine	0.002 (0.786)	0.004 (0.594)	-0.119 (0.095)	-0.178 (0.151)	Yes	1312	0.086	0.080

Robust p-values in parentheses
 *** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated model is as follows:

$$\text{Model (1)} \quad \Delta NI_t = \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D * \Delta NI_{t-1} + \epsilon_t$$

where ΔNI_t is change in income from fiscal year t-1 to t scaled by total assets at the beginning of the period, D is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0.

Table 9. The effect of legal origin on conditional conservatism in the transitional economies

VARIABLES	Model (2)
Constant	-0.004 (0.200)
D	-0.005 (0.105)
ΔNI_{t-1}	-0.001 (0.981)
$Dx\Delta NI_{t-1}$	-0.515*** (0.000)
FRAorigin	-0.003 (0.290)
$DxFRAorigin$	-0.006 (0.229)
$\Delta NI_{t-1} \times FRAorigin$	-0.041 (0.431)
$Dx\Delta NI_{t-1} \times FRAorigin$	-0.069 (0.483)
GERorigin	0.011 (0.260)
$DxGERorigin$	-0.013 (0.325)
$\Delta NI_{t-1} \times GERorigin$	-0.034 (0.825)
$Dx\Delta NI_{t-1} \times GERorigin$	0.184 (0.376)
Year fixed effects	Yes
Observations	10105
R-squared	0.071
Adj. R-squared	0.070

Robust p-values in parentheses
 *** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated model is as follows:

$$\text{Model (2)} \quad \Delta NI_t = \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D * \Delta NI_{t-1} + \alpha_4 FRA + \alpha_5 D * FRA + \alpha_6 \Delta NI_{t-1} * FRA + \alpha_7 D * \Delta NI_{t-1} * FRA + \alpha_8 GER + \alpha_9 D * GER + \alpha_{10} \Delta NI_{t-1} * GER + \alpha_{11} D * \Delta NI_{t-1} * GER + \varepsilon_t$$

where ΔNI_t is change in income from fiscal year t-1 to t scaled by total assets at the beginning of the period, D is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0. FRA is a dummy variable taking the value 1 if the country is of French legal origin, otherwise 0. GER is a dummy variable taking the value 1 if the country is of German legal origin. The reference group is Russian legal origin. Serbia is excluded because of missing information on legal origin. The calculations are based on White (1980) heteroscedasticity consistent standard errors and t-values.

The results of the Model (2) estimates are reported in Table 9. It could be assumed from the literature on accounting conservatism that there would be differences in the degree of

conservatism depending on the legal origin. However, legal origin does not appear to affect the quality of financial reporting in these transitional economies. The coefficients showing incremental conservatism in systems of French or German relative to Russian legal origin are insignificant, indicating that they do not differ in terms of conservatism. Thus, there are factors other than legal origin that affect accounting quality in transitional economies, namely the role of other institutions. The following analysis concentrates on the transition phase and how it affects accounting quality.

Progress in the transition process is measured on three different indicators:

- 1) Securities markets and non-bank financial institutions: High development in this area means at least substantial issuance of securities by private enterprises; the establishment of independent share registries, secure clearance and settlement procedures, and some protection of minority shareholders; and the emergence of non-bank financial institutions and associated regulatory frameworks.
- 2) Banking reform and interest-rate liberalization: High-level progress in this area requires substantial progress in the establishment of bank solvency and of a framework for prudential supervision and regulation; full interest-rate liberalization with little preferential access to cheap refinancing; and significant lending to private enterprises and the significant presence of private banks.
- 3) Governance and enterprise restructuring: Significant and sustained actions to harden budget constraints and effectively promote corporate governance (for example, privatization combined with strict credit and subsidy policies and/or the enforcement of bankruptcy legislation) are minimum requirements for a high-level transition process.

Countries achieving maximum scores in these three areas should show standards and performance that are typical of advanced industrial economies (European Bank for Reconstruction and Development, 2007).

Table 10. The effect of the transition phase on conditional conservatism

VARIABLES	Model (3)		
	Banking reform and interest-rate liberalization	Securities markets and non-bank financial institutions	Governance and enterprise restructuring
Constant	0.092*** (0.000)	0.009 (0.051)	0.013** (0.003)
D	0.008* (0.042)	0.003 (0.321)	0.006* (0.044)
ΔNI_{t-1}	-0.051 (0.234)	-0.063 (0.066)	-0.017 (0.578)
$Dx\Delta NI_{t-1}$	-0.174** (0.002)	-0.299*** (0.000)	-0.267*** (0.000)
BANK_L	0.019*** (0.001)		
$DxBANK_L$	-0.010 (0.152)		
$\Delta NI_{t-1}xBANK_L$	-0.225*** (0.000)		
$Dx\Delta NI_{t-1}xBANK_L$	-0.034 (0.721)		
BANK_H	-0.077*** (0.000)		
$DxBANK_H$	-0.021*** (0.000)		
$\Delta NI_{t-1}xBANK_H$	0.008 (0.885)		
$Dx\Delta NI_{t-1}xBANK_H$	-0.413*** (0.000)		
SEC_L		0.021*** (0.000)	
$DxSEC_L$		-0.001 (0.856)	
$\Delta NI_{t-1}xSEC_L$		-0.189*** (0.000)	
$Dx\Delta NI_{t-1}xSEC_L$		0.430*** (0.000)	
SEC_H		-0.105*** (0.000)	
$DxSEC_H$		-0.022** (0.001)	
$\Delta NI_{t-1}xSEC_H$		0.049 (0.462)	
$Dx\Delta NI_{t-1}xSEC_H$		-0.389*** (0.002)	
GOV_L			0.036*** (0.000)
$DxGOV_L$			-0.009 (0.152)
$\Delta NI_{t-1}xGOV_L$			-0.505*** (0.000)

Table 10 continued

VARIABLES	Model (3)		
	Banking reform and interest-rate liberalization	Securities markets and non-bank financial institutions	Governance and enterprise restructuring
Dx Δ NI _{t-1} xGOV_L			0.304** (0.002)
GOV_H			-0.022*** (0.000)
DxGOV_H			-0.024*** (0.000)
Δ NI _{t-1} xGOV_H			-0.031 (0.624)
Dx Δ NI _{t-1} xGOV_H			-0.349** (0.003)
Country fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	13736	13736	13736
R-squared	0.108	0.120	0.108
Adj. R-squared	0.106	0.118	0.106

Robust p-values in parentheses
 *** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated model is as follows:

$$\text{Model (3)} \quad \Delta \text{NI}_t = \alpha_0 + \alpha_1 D + \alpha_2 \Delta \text{NI}_{t-1} + \alpha_3 D * \Delta \text{NI}_{t-1} + \alpha_4 \text{IND_L} + \alpha_5 D * \text{IND_L} + \alpha_6 \Delta \text{NI}_{t-1} * \text{IND_L} + \alpha_7 D * \Delta \text{NI}_{t-1} * \text{IND_L} + \alpha_8 \text{IND_H} + \alpha_9 D * \text{IND_H} + \alpha_{10} \Delta \text{NI}_{t-1} * \text{IND_H} + \alpha_{11} D * \Delta \text{NI}_{t-1} * \text{IND_H} + \epsilon_t$$

where ΔNI_t is change in income from fiscal year t-1 to t scaled by total assets at the beginning of the period, $D\Delta \text{NI}_{t-1}$ is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0. *IND* is one of the EBRD transition indicators. Transition is measured in accordance with three different institutional aspects: banking reform and interest-rate liberalization (*BANK*), securities markets and non-bank financial institutions (*SEC*), and governance and enterprise restructuring (*GOV*). *IND_L* is a dummy variable taking the value 1 if the transition indicator of the country in which a firm is domiciled is making medium progress in that particular year, otherwise 0. *IND_H* is a dummy variable taking the value 1 if progress is high that year in the country in which a firm is domiciled, otherwise 0. Measurement of three aspects (*BANK*, *SEC* and *GOV*) is based on the same principles of low to high progress in transition, hence as *BANK_L*, *BANK_M*, *BANK_H*, etc. Medium progress (*IND_M*) is the reference group. The calculations are based on White's (1980) heteroscedasticity consistent standard errors and t-values.

It is assumed that countries showing high progress in the transition process also show higher-quality earnings than those performing less well. The results of the Model (3) estimates support this hypothesis, and are reported in Table 10. The second column of the table gives the results according to banking reform and interest-rate liberalization, the third

column gives the results for Securities markets and non-bank financial institutions, and the last column for governance and enterprise restructuring.

Conditional conservatism is assumed to increase step by step along with the phase of transition, and thus to be lower in countries making low progress than in those making medium progress. Therefore the coefficient on the variable $DxANI_{t,j}IND_L$, which indicates incremental conservatism in the environment of low-progress transition, is assumed to be significantly positive, suggesting a lower level of conditional conservatism relative to the reference group. Conversely, the coefficient $DxANI_{t,j}IND_H$, which indicates incremental conservatism in the environment that is closest to a market economy, is assumed to be significantly negative. This would imply that earnings are more conservative in an environment of high progress in transition relative to the reference-group medium progress.

The coefficient on $DxANI_{t,j}IND_H$ is significantly negative for all of the transition indicators, implying incremental conditional conservatism when progress is high relative to medium. The coefficients on $DxANI_{t,j}BANK_H$ (-0.413), and on $DxANI_{t,j}SEC_H$ (-0.389) and $DxANI_{t,j}GOV_H$ (-0.349), show higher accounting quality in economies that are close to the market model. The coefficient on $DxANI_{t,j}IND_H$ surveys the difference in the level of conservatism between low and medium progress in transition.

The coefficients on $DxANI_{t,j}SEC_L$ (0.430) and $DxANI_{t,j}GOV_L$ (0.304) are significantly positive and suggest that there is less conditional conservatism in the case of low progress related to securities markets, and in governance relative to the reference group. Hence, accounting quality improves as securities markets and governance develop, diverging in these respects from a typical planned economy. Interestingly, the results regarding the phase of transition from low to medium progress do not imply increased conditional conservatism when the indicator relating banking reform and interest-rate liberalization is applied. The coefficient on $DxANI_{t,j}BANK_L$ (-0.034) is not statistically significant, which suggests that there is no difference in the degree of conservatism between low and medium progress in the banking sector.

Table 11. The effect of European Union membership on conditional conservatism

VARIABLES	Model (4)	
	The whole sample EU vs. Non-EU countries	Only EU members Before vs. after membership
Constant	0.022*** (0.000)	-0.003 (0.797)
D	0.000 (0.942)	-0.013 (0.064)
ΔNI_{t-1}	-0.118*** (0.000)	0.063 (0.447)
$D \times \Delta NI_{t-1}$	-0.215*** (0.000)	-0.723*** (0.000)
EU	0.001 (0.927)	0.022* (0.050)
$EU \times D$	-0.030** (0.002)	-0.020 (0.070)
$EU \times \Delta NI_{t-1}$	0.016 (0.848)	-0.106 (0.339)
$EU \times D \times \Delta NI_{t-1}$	-0.482* (0.016)	-0.094 (0.685)
Country fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Observations	13736	1869
R-squared	0.093	0.126
Adj. R-squared	0.091	0.118

Robust p-values in parentheses
 *** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated model is as follows:

$$\text{Model (4)} \quad \Delta NI_t = \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D * \Delta NI_{t-1} + \alpha_4 EU + \alpha_5 D * EU + \alpha_6 \Delta NI_{t-1} * EU + \alpha_7 D * \Delta NI_{t-1} * EU + \epsilon_t$$

where ΔNI_t is change in income from fiscal year t-1 to t scaled by total assets at the beginning of the period, D is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0. EU is a dummy variable taking the value 1 if a country is an EU member in that particular year, otherwise 0. The coefficients and p-values of the intercepts and dummy variables are not tabulated. The calculations are based on White (1980) heteroscedasticity consistent standard errors and t-values.

These results are not consistent with the evidence presented in Ball *et al.* (2008) indicating that conservatism in developed markets is shaped by debt rather than equity. The results presented in Table 10 suggest that equity markets dominate as drivers of conservatism during the whole transition process in emerging economies. The development of the banking

system leads to increases in accounting quality only when improvements reach a high level, but not in the transition from the low to the medium phase, whereas the development of security markets increases the quality of accounting information right from the early stages.

Finally, the effect of European Union membership on conditional conservatism is examined. It is assumed that firms in countries that have joined the EU are more likely to recognize economic losses on a timely basis than firms in countries that are not EU Member States due to the conditions that EU applicants must fulfill. Table 11 shows the results of the Model (4) estimates. The numbers in the second column covering the whole sample are consistent with the hypothesis and show that coefficient α_7 is negatively significant (-0.482), indicating incremental timeliness in loss recognition in EU member states compared to non-members.

The numbers in the third column of Table 11 covering the sub-sample of EU Member States show no increase in timeliness of loss recognition within a country after accession relative to the time before EU membership. The coefficient α_7 is not statistically significant when the sample consists only of firms in EU countries. These results are consistent with those reported by Joos and Lang (1994): there is no increase in the quality of financial information following EU accession. What is different in the transition economies, however, is that the effect of EU membership is felt before accession. The conditions need to be fulfilled and improvements made by the time of accession, not afterwards.

In sum, the results presented in this section show that different institutional settings affect accounting conservatism in transitional economies. The effect of legal origin is not as pronounced as documented in studies conducted in developed countries, but other institutions affect the level. The findings indicate that accounting quality improve as the countries progress in the transition from a planned towards a market economy, as well as when they join the European Union.

5.2 The effects of the investment environment on conditional conservatism in the transitional economies of Europe: empirical results

This section concentrates on the effects of the investment environment, and especially on the effects of FDIs on conditional conservatism. Table 12 reports the results of running Model (5) for three types of economic freedom: investment freedom, freedom from corruption, and fiscal freedom. It is assumed that firms in countries with higher investment freedom report higher-quality earnings: incentives for providing high-quality information increase when the environment supports foreign investments. It is also assumed that freedom from corruption will increase the quality of accounting information given that corruption impairs the usefulness of formal financial information. Conversely, financial reporting is assumed to be more conservative in conditions of low fiscal freedom because higher conservatism allows firms to reduce taxable income. Taxation creates incentives to minimize income.

Given the special interest in this study on the level of conservatism in environments with higher and lower levels of economic freedom, the analysis focuses on coefficient α_7 , which measures incremental conservatism in the case of high relative to low economic freedom. The results of the investment freedom are given in the first column of Table 13. The coefficient α_7 on $D*ANI_{t-1}*INV$, which measures incremental conservatism in conditions of high investment freedom relative to environments in which the flow of foreign capital is limited, is significantly negative (-0.550), indicating that firms show more conservative reporting in countries with high investment freedom than in those with low investment freedom. A high-quality investment environment creates incentives to engage in high-quality financial reporting to foreign investors in order to attract foreign capital.

The results of the second aspect of economic freedom, freedom from corruption, are presented in the third column of Table 12. As with the results regarding the investment environment, the coefficient α_7 on $D*ANI_{t-1}*CORR$, which measures incremental conservatism in environments in which freedom from corruption is high (i.e. the level of corruption is low) is significantly negative (-0.612), implying that firms in less corrupt environments report higher-quality earnings.

Table 12. The effect of institutional quality on conditional conservatism

VARIABLES	Model (5)		
	Investment freedom	Freedom from corruption	Fiscal freedom
Constant	0.073*** (0.000)	0.070*** (0.000)	0.066*** (0.000)
D	0.002 (0.553)	0.003 (0.302)	-0.013*** (0.000)
ΔNI_{t-1}	-0.220*** (0.000)	-0.186*** (0.000)	-0.028 (0.504)
$Dx\Delta NI_{t-1}$	-0.006 (0.906)	-0.057 (0.221)	-0.601*** (0.000)
INV	-0.010* (0.044)		
$DxINV$	-0.010* (0.034)		
$\Delta NI_{t-1}xINV$	0.215*** (0.000)		
$Dx\Delta NI_{t-1}xINV$	-0.550*** (0.000)		
CORR		0.006 (0.359)	
$DxCORR$		-0.016*** (0.001)	
$\Delta NI_{t-1}xCORR$		0.196*** (0.000)	
$Dx\Delta NI_{t-1}xCORR$		-0.612*** (0.000)	
FISC			-0.000 (0.918)
$DxFISC$			0.015** (0.001)
$\Delta NI_{t-1}xFISC$			-0.114* (0.022)
$Dx\Delta NI_{t-1}xFISC$			0.469*** (0.000)
Country fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	13736	13736	13736
R-squared	0.098	0.099	0.096
Adj. R-squared	0.097	0.098	0.094

Robust p-values in parentheses
 *** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated model is as follows:

$$\text{Model (5)} \quad \Delta NI_t = \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D * \Delta NI_{t-1} + \alpha_4 \text{FREE} + \alpha_5 D * \text{FREE} + \alpha_6 \Delta NI_{t-1} * \text{FREE} + \alpha_7 D * \Delta NI_{t-1} * \text{FREE} + \varepsilon_t$$

where ΔNI_t is change in income from fiscal year t-1 to t scaled by total assets at the beginning of the period, D is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0. FREE is a dummy variable taking the value 1 if a country's index of that particular economic freedom is high, otherwise

0. Estimates for the different specific freedoms are tabulated in different columns. INV indicates investment freedom, CORR indicates freedom from correlation, and FISC indicates fiscal freedom. The calculations are based on White (1980) heteroscedasticity consistent standard errors and t-values. Transparency International ranks more than 150 countries annually by their perceived levels of corruption, ranging from 10 (highly clean) to 0 (highly corrupted). Finland, Iceland and New Zealand share the top score of 9.6.

Conversely, the numbers in the last column of Table 12 show that increased fiscal freedom decreases conditional conservatism. The coefficient α_7 on $D*ANI_{t-1}*FISC$, which measures incremental conservatism in environments in which fiscal freedom is high, is significantly positive (0.469), implying that firms facing a lower tax burden report higher-quality earnings.

Secondly, this section examines the effect of foreign direct investments on conditional conservatism in the transitional economies. Recent studies (e.g., Ball and Shivakumar, 2005) show that it is not only the institutional environment but also the market demand for accounting quality that determines the level of conservatism. The FDI level is therefore used as a proxy for the demand for high-quality financial reporting in order to assess the demand for conservatism in these emerging markets.

The results of running Equation (6) are presented in Table 13. The numbers in the second column are based on the whole sample. The coefficient α_7 on $D*ANI_{t-1}*FDI$, which measures incremental conservatism in environments in which the FDI level is high, is significantly negative, indicating incremental conditional conservatism under higher levels of FDI. Thus, firms in countries with high FDI levels choose reporting practices that result in more conditional conservatism, and higher-quality financial reporting is used to meet the information needs of foreign investors. These findings are consistent with evidence from developed US markets presented by LaFond and Watts (2008).

To provide further evidence of the effect of FDIs on conditional conservatism, the sample is divided into two sub-samples. In the next step the effect of FDIs is differentiated between different levels of investment freedom. The results presented in the third column of Table 13 provide evidence that the effect of foreign direct investments on accounting quality is especially obvious in an environment where investment freedom is low. In this low quality

institutional environment the need for accounting conservatism to reduce information asymmetry between managers and foreign equity investors is even greater than in a high quality investment environment. The coefficient α_7 on $D*\Delta NI*FDI$, which measures incremental conservatism in the environment of high level of FDIs relative to the environment of low level of FDIs, is significantly negative (-0.500), implying that managers have incentives to increase earnings quality when the level of FDIs is high in the low institutional quality environment. However, the results presented in the last column of Table 13 among firms within the high quality investment environment indicate that high levels of FDIs no longer lead to increased conservatism. The coefficient α_7 on $D*\Delta NI*FDI$ is no longer significant and fails to show incremental conditional conservatism among higher levels of FDIs in the low quality institutional environment. The results are consistent with the contracting explanation of accounting conservatism provided by earlier studies.

Table 13. Levels of foreign direct investments affecting conditional conservatism

VARIABLES	Whole sample	Model (6)	
		Low investment freedom	High investment freedom
Constant	0.069*** (0.000)	-0.026*** (0.000)	0.005 (0.554)
D	0.002 (0.654)	0.005 (0.282)	-0.011 (0.056)
ΔNI_{t-1}	-0.216*** (0.000)	-0.276*** (0.000)	0.003 (0.956)
$Dx\Delta NI_{t-1}$	-0.039 (0.440)	0.088 (0.128)	-0.567*** (0.000)
FDI	0.007 (0.197)	0.024* (0.019)	0.000 (0.966)
$Dx\text{FDI}$	-0.010* (0.041)	-0.013 (0.159)	0.002 (0.736)
$\Delta NI_{t-1}x\text{FDI}$	0.206*** (0.000)	0.235* (0.012)	-0.000 (0.997)
$Dx\Delta NI_{t-1}x\text{FDI}$	-0.492*** (0.000)	-0.500*** (0.000)	-0.010 (0.935)
Country fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	13736	7317	6419
R-squared	0.098	0.144	0.083
Adj. R-squared	0.096	0.142	0.080

Robust p-values in parentheses
*** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated model is as follows:

$$\text{Model (6)} \quad \Delta\text{NI}_t = \alpha_0 + \alpha_1 D_1 + \alpha_2 \Delta\text{NI}_{t-1} + \alpha_3 D * \Delta\text{NI}_{t-1} \\ + \alpha_4 \text{FDI} + \alpha_5 D * \text{FDI} + \alpha_6 \Delta\text{NI}_{t-1} * \text{FDI} + \alpha_7 D * \Delta\text{NI}_{t-1} * \text{FDI} + \varepsilon,$$

where ΔNI_t is the change in income from fiscal year $t-1$ to t scaled by total assets at the beginning of the period, D is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0. FDI is a dummy variable taking the value 1 if a country's FDIs are greater than the median in these countries, otherwise 0. The calculations are based on White (1980) heteroscedasticity consistent standard errors and t -values.

Alternatively, FDI could be defined as the change in FDI from the previous year. Hence, the following analysis focuses on the effect of FDI growth on accounting quality. The sample is divided into two sub-groups based on the year-to-year change in FDIs, high and low growth environments. The results of this analysis are reported in Table 14. The second column covers the whole sample. The coefficient α_7 on $D * \Delta\text{NI} * \Delta\text{FDI}$, which measures incremental conservatism when FDI growth is rapid, is significantly positive (0.314), implying that there is less conservatism when FDI growth is higher relative to when it is low.

The highest growth in FDIs is in countries with the lowest absolute level. Given the rate of economic development, it is natural that FDIs will increase at a decreasing rate: in more mature economies even a large monetary increase is a small increase when change is the yardstick. Initially, a slight improvement in institutions leads to a greater increase in FDIs, but later on when the institutions are more highly developed, improvement in the investment environment increases FDIs at a slower rate. By definition, therefore, the quality of accounting information is lower in countries with the highest increase in incoming FDIs over the previous year. The need for high-quality accounting information to reduce information asymmetry between better-informed investors and less well-informed foreign investors is lower when the market demand for high-quality accounting information is lower because the absolute number of foreign investors is low, even though the growth in FDIs is high.

The numbers in the third and fourth columns of Table 14 also show that there is a difference in financial-reporting quality in this respect between low and high investment environments. When investment freedom is low there is no difference between the different growth categories, and conversely, when it is high, meaning that foreign capital can flow freely into

the country, the quality of financial reporting is lower among firms located in countries in which FDI growth is highest. The conservatism coefficient α_7 on $D*\Delta NI*\Delta FDI$, which measures incremental conservatism in environments in which FDI growth is high, is significantly positive (0.283). This implies that firms in environments of high FDI growth report less conservative earnings.

Table 14. The effect of FDI growth on conditional conservatism

VARIABLES	Whole sample	Model (6)	
		Low investment freedom	High investment freedom
Constant	0.055*** (0.000)	-0.060*** (0.000)	-0.001 (0.907)
D	-0.010** (0.009)	0.006 (0.436)	-0.019*** (0.000)
NI _{t-1}	-0.134** (0.001)	-0.282*** (0.000)	-0.024 (0.612)
DxNI _{t-1}	-0.495*** (0.000)	-0.073 (0.633)	-0.752*** (0.000)
ΔFDI	0.019*** (0.000)	0.052*** (0.000)	0.003 (0.486)
Dx ΔFDI	0.011* (0.027)	-0.006 (0.504)	0.016** (0.005)
NI _{t-1} x ΔFDI	0.024 (0.629)	0.085 (0.345)	0.041 (0.494)
DxNI _{t-1} x ΔFDI	0.314*** (0.001)	0.042 (0.796)	0.283* (0.019)
Country fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	13736	7317	6419
R-squared	0.098	0.154	0.088
Adj. R-squared	0.096	0.152	0.084

Robust p-values in parentheses
*** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated model is as follows:

$$\text{Model (6)} \quad \Delta NI_t = \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D * \Delta NI_{t-1} + \alpha_4 \Delta FDI + \alpha_5 D * \Delta FDI + \alpha_6 \Delta NI_{t-1} * \Delta FDI + \alpha_7 D * \Delta NI_{t-1} * \Delta FDI + \varepsilon_t$$

where ΔNI_t is change in income from fiscal year t-1 to t scaled by total assets at the beginning of the period, D is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0. ΔFDI is a dummy variable taking the value 1 if a country's FDIs grow by over 20 percent from the previous year, otherwise 0. The calculations are based on White (1980) heteroscedasticity consistent standard errors and t-values.

The flow of foreign capital is limited in environments of low investment freedom. The increase in FDIs creates no incentive to improve the quality of accounting information because the regulation still limits the absolute amounts of foreign capital. Moreover, the incentives to reduce information asymmetry between better-informed and less well-informed investors are low and do not generate conservatism in financial reporting. However, when investment freedom is high, meaning that there is a free flow of foreign capital into the country, there are differences in the quality of accounting information depending on the level of FDI growth. In such an environment the absolute level of FDIs is higher, therefore the incentives to reduce information asymmetry between better-informed and less well-informed investors are greater. Now, growth in FDIs affects the quality of accounting information. However, the relationship is reversed, indicating that financial-reporting quality is lower in environments in which FDIs are increasing most. When they increase at a decreasing rate, the absolute level is already higher, thus even great amounts of new FDIs do little to increase the overall growth. Hence, the quality of accounting information is higher in countries in which the level of FDIs is higher but growth is lower.

However, a caveat is needed regarding causality in these results. Even though there is an association between conditional conservatism and foreign direct investments, there is no evidence of the direction of causality. Although intuition based on the development of the financial reporting environment in these transitional economies gives reason to assume that FDI leads to improvements in financial reporting, further evidence is needed to determine whether higher FDI levels also increase the level of conservatism, or vice versa.

5.3 The impact of a changing regulatory environment on conditional conservatism in the Nordic countries: empirical results

This section examines how changes in accounting regulation affect accounting conservatism in the Nordic countries. Table 15 reports the results of the Model (1) estimates testing the existence of conditional conservatism in each country. The results are presented separately for all firms and for the sample comprising firms that report according to local accounting standards. The numbers in the second, fourth, sixth and eighth columns cover the whole

sample and give the results for Denmark, Finland, Norway and Sweden, respectively. There is evidence of conditional conservatism in each country, and the slope coefficient α_3 from regression (1) is significantly negative for all countries, ranging from -0.291 for Finland to -0.636 for Norway. These results are consistent with those reported by Bushman and Piotroski (2006).

The numbers in the third, fifth, seventh and ninth columns of the table refer to the sample of firms that follow national accounting regulations and give the results for Denmark, Finland, Norway and Sweden, respectively. The Model (1) estimates support the results derived from the whole sample with the exception of the α_3 coefficient measuring the degree of conditional conservatism in Denmark and Finland: although it is negative, it is not statistically significant. In the case of Sweden it indicates conservative accounting numbers, and is the highest among Norwegian firms at -0.829. This result is consistent with the recent changes in financial reporting regulations in Norway, as discussed in Chapter 3.3.3. Earlier studies refer to this change in accounting legislation as very dramatic, which may explain why conservatism is most obviously present in Norway.

The results of this study are consistent with those of earlier studies indicating increased levels of conservatism. Further, it complements the results reported by Raonic *et al.* (2004) with reference to the Nordic countries suggesting that conditional conservatism only exists in Denmark at the conventional significance level: this study gives evidence of its existence in Finland, Sweden and Norway.

Table 15. Conditional conservatism in the Nordic countries

VARIABLES	Model (1)							
	Denmark Whole sample	Denmark Local standards	Finland Whole sample	Finland Local standards	Norway Whole sample	Norway Local standards	Sweden Whole sample	Sweden Local standards
Constant	0.025* (0.025)	0.011 (0.251)	0.006 (0.482)	-0.018* (0.017)	-0.006 (0.655)	0.004 (0.222)	0.008 (0.407)	0.110 (0.084)
D	-0.030*** (0.000)	-0.014* (0.044)	-0.010 (0.066)	-0.013 (0.079)	-0.008 (0.453)	-0.015 (0.230)	-0.013 (0.129)	-0.018 (0.082)
ΔNI_{t-1}	-0.151* (0.032)	-0.131 (0.137)	-0.088 (0.314)	-0.135 (0.304)	0.040 (0.510)	0.063 (0.436)	0.040 (0.463)	0.066 (0.347)
$Dx\Delta NI_{t-1}$	-0.435** (0.001)	-0.130 (0.383)	-0.291* (0.016)	-0.160 (0.310)	-0.636*** (0.000)	-0.829*** (0.000)	-0.482*** (0.000)	-0.636*** (0.000)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1003	724	1084	760	973	658	2008	1383
R-squared	0.099	0.044	0.105	0.115	0.174	0.228	0.080	0.104
Adj. R-squared	0.086	0.025	0.093	0.099	0.162	0.211	0.073	0.095

Robust p-values in parentheses

*** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated models are as follows:

$$\text{Model (1)} \quad \Delta NI_t = \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D * \Delta NI_{t-1} + \varepsilon$$

where ΔNI_t is change in income from fiscal year t-1 to t scaled by total assets at the beginning of the period, D is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0.

Table 16 reports the results of the Model (1) estimates testing for the existence of conditional conservatism in the Nordic countries on average. The second column gives the results for the whole sample, the third column covers the sample of firms that follow local standards, and the final column covers a reduced sample of firms that follow either International Accounting Standards or US GAAP, which are considered to be the highest-quality sets of standards in the world and were therefore used in the analysis. Firms that follow a mixture of local and international standards were excluded from the analysis, as were firms that do not disclose which accounting standards they apply. These results are consistent with existing research in showing that, on average, earnings are conservative in the Nordic countries.

Table 16. Average levels of conditional conservatism in the Nordic countries

VARIABLES	Whole sample	Model (1)	
		Firms that follow local standards	Firms that follow IAS or US GAAP
Constant	0.001 (0.935)	0.056 (0.086)	0.003 (0.942)
D	-0.014** (0.002)	-0.018*** (0.001)	-0.010 (0.334)
ΔNI_{t-1}	0.017 (0.642)	0.043 (0.365)	-0.065 (0.170)
$D \times \Delta NI_{t-1}$	-0.518*** (0.000)	-0.639*** (0.000)	-0.338* (0.024)
Country fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	5068	3525	1025
R-squared	0.098	0.119	0.091
Adj. R-squared	0.095	0.115	0.076

Robust p-values in parentheses
 *** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated model is as follows:

$$\text{Model (1): } \Delta NI_t = \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D * \Delta NI_{t-1} + \epsilon_t$$

where ΔNI is change in income from fiscal year t-1 to t scaled by total assets at the beginning of the period, D is a dummy variable taking the value 1 if the last year's change ΔNI_{t-1} is negative, otherwise 0. The coefficients of the intercept and dummy variables are not tabulated. The calculations are based on White (1980) heteroscedasticity consistent standard errors and t-values.

The main purpose of this section is to find out whether conditional conservatism increased following changes in national accounting legislation. There were various changes during the research period from 1995 to 2006. The Swedish Accounting Act was amended in 1999 and came into force at the beginning of the year 2000. In Norway the Accounting Act was amended one year earlier and came into force at the beginning of 1999. There were two changes in Denmark, amendments to the Bookkeeping Act of 1998 and the Financial Statements Act of 2001, which came into force at the beginning of 2002. Finally, the Finnish Accounting Act was amended first in 1997 and again in 2004.

All these changes are expected to bring national legislation more in line with international accounting standards, and highlight the information needs of outside investors. Hence, they are expected to affect the quality of financial reporting, namely accounting conservatism. Recent studies document an increase in earnings quality after the adoption of IAS/IFRS. However, the focus in this study is on the quality of earnings after national legislation has begun to move towards international standards, but before their adoption. The results of running Model (1) for each year for the Nordic countries on average are presented in Table 17. The coefficient indicating conservatism is significantly negative for 1998 and 2002-2004, being -1.147 at the highest. It thus seems that conservatism increased after the changes in national legislation, but not after the compulsory adoption of IAS/IFRS among listed companies in 2005. The effect of IAS/IFRS adoption on the degree of conservatism is examined separately, and the results are documented in Table 18.

Figure 7 shows the changes in the degree of conservatism over time in the Nordic countries. There was a clear increase during the sample period, the coefficient being at its smallest in the early years and at its highest after 2001. These results indicate an increase in earnings quality even before the compulsory adoption of IAS/IFRS among all listed companies in the European Union in their consolidated financial statements from 2005 onwards. The Council of the European Union announced this decision in 2002, which is the very year in which the degree of conservatism was at its greatest in the Nordic countries.

Table 17. Conditional conservatism by year in the Nordic countries

Model (1) COEFFICIENTS	Constant	D	ΔNI_{t-1}	$D \times \Delta NI_{t-1}$	VARIABLES Country fixed effects	Observations	R-squared	Adj. R- squared
Year 1995	-0.006 (0.700)	0.005 (0.776)	0.324 (0.415)	-0.594 (0.232)	Yes	226	0.088	0.063
Year 1996	0.003 (0.717)	0.014 (0.224)	-0.107 (0.591)	0.407 (0.241)	Yes	238	0.071	0.047
Year 1997	0.006 (0.573)	-0.010 (0.298)	-0.254 (0.359)	0.114 (0.705)	Yes	241	0.069	0.045
Year 1998	0.002 (0.795)	-0.016 (0.140)	-0.186** (0.003)	-0.323*** (0.000)	Yes	336	0.245	0.233
Year 1999	0.003 (0.840)	-0.028 (0.080)	-0.281 (0.262)	-0.112 (0.724)	Yes	396	0.087	0.073
Year 2000	0.006 (0.612)	0.011 (0.441)	-0.106 (0.198)	-0.109 (0.554)	Yes	427	0.042	0.029
Year 2001	0.002 (0.866)	-0.031 (0.069)	-0.228* (0.017)	-0.124 (0.476)	Yes	484	0.092	0.080
Year 2002	-0.002 (0.916)	-0.048** (0.003)	0.191 (0.340)	-1.147*** (0.000)	Yes	531	0.180	0.170
Year 2003	0.008 (0.570)	-0.025 (0.073)	0.133 (0.096)	-1.083*** (0.000)	Yes	552	0.201	0.192
Year 2004	0.002 (0.891)	-0.024 (0.063)	0.164* (0.032)	-0.935*** (0.000)	Yes	571	0.104	0.094
Year 2005	0.016 (0.242)	-0.003 (0.877)	-0.081 (0.247)	-0.211 (0.422)	Yes	543	0.035	0.025
Year 2006	0.019 (0.102)	-0.007 (0.616)	-0.042 (0.675)	-0.312 (0.065)	Yes	523	0.070	0.059

Robust p-values in parentheses

*** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated model is as follows:

$$\text{Model (1)} \quad \Delta NI_t = \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D * \Delta NI_{t-1} + \epsilon_t$$

where ΔNI_t is change in income from fiscal year t-1 to t scaled by total assets at the beginning of the period, D is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0.

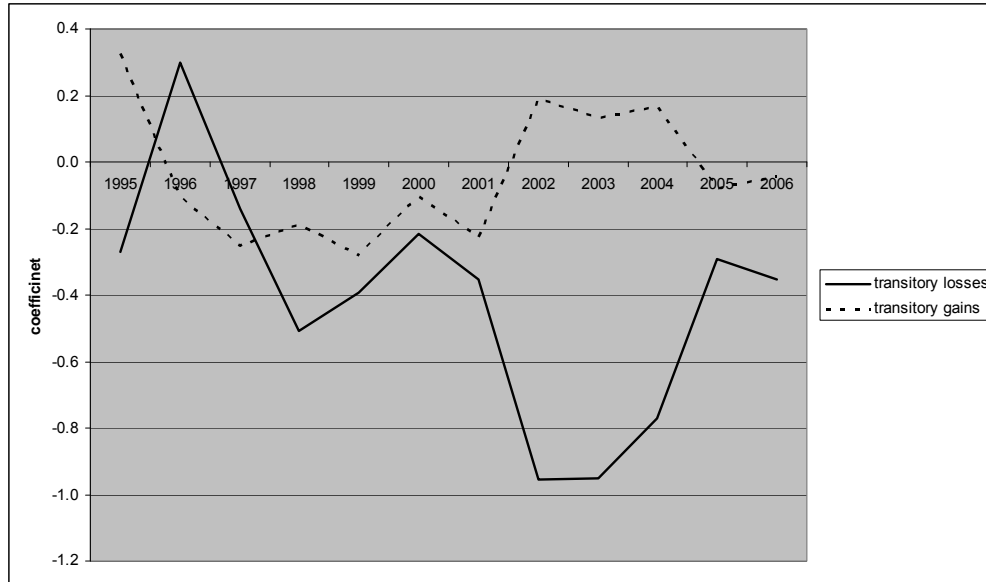


Figure 7. Conditional conservatism in the Nordic countries on an annual basis

Surprisingly, the degree of conservatism seemed to decrease towards the end of the sample period. During the last two sample years all listed companies in the European Union area were required to adopt the IAS/IFRS in their consolidated financial statements. The above results suggest that accounting quality increased following amendments to national accounting legislation rather than as a result of the adoption of International Accounting Standards.

Table 18 reports the results of the Model (7) estimates concerning the effect of IAS/IFRS adoption on accounting conservatism. The coefficient α_7 indicating incremental conservatism after IAS/IFRS adoption is not statistically significant for Denmark, Finland or Sweden, or the Nordic countries on average, thereby indicating no post-adoption increase in conditional conservatism in those three countries.

However, the coefficient is significantly positive for Norway (0.651), indicating decreasing rather than increasing post-adoption conservatism. These results are not consistent with the average numbers documenting an increase in earnings quality after

adoption, but they are consistent with studies describing a change in attitudes towards conservatism after the 1999 legislative reform in Norway.

Table 18. The increase in conservatism following the adoption of IAS/IFRS in the Nordic countries

VARIABLES	Nordic countries	Denmark	Model (7) Finland	Norway	Sweden
Constant	-0.016 (0.444)	0.024 (0.413)	-0.012 (0.347)	-0.030 (0.645)	-0.056 (0.231)
D	-0.019*** (0.000)	-0.015* (0.035)	-0.012 (0.083)	-0.015 (0.224)	-0.018 (0.084)
ΔNI_{t-1}	0.052 (0.285)	-0.137 (0.122)	-0.132 (0.317)	0.063 (0.437)	0.073 (0.306)
$D \times \Delta NI_{t-1}$	-0.656*** (0.000)	-0.126 (0.390)	-0.167 (0.290)	-0.827*** (0.000)	-0.646*** (0.000)
IAS	0.027 (0.188)	-0.002 (0.941)	0.017 (0.195)	0.044 (0.503)	0.067 (0.140)
$D \times IAS$	0.011 (0.367)	-0.010 (0.704)	-0.009 (0.532)	0.005 (0.802)	0.007 (0.737)
$\Delta NI_{t-1} \times IAS$	-0.087 (0.223)	0.048 (0.767)	0.024 (0.897)	-0.129 (0.263)	-0.094 (0.367)
$D \times \Delta NI_{t-1} \times IAS$	0.320 (0.069)	-0.247 (0.630)	-0.381 (0.234)	0.651** (0.008)	0.180 (0.495)
Year fixed effects	Yes	Yes	Yes	Yes	Yes
Country fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	4511	891	984	849	1787
R-squared	0.106	0.037	0.110	0.208	0.097
Adj. R-squared	0.103	0.017	0.094	0.191	0.088

Robust p-values in parentheses
 *** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated model is as follows:

$$\text{Model (7)} \quad \Delta NI_t = \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D * \Delta NI_{t-1} + \alpha_4 IAS + \alpha_5 D * IAS + \alpha_6 \Delta NI_{t-1} * IAS + \alpha_7 D * \Delta NI_{t-1} * IAS + \varepsilon_t$$

where ΔNI_t is change in income from fiscal year t-1 to t scaled by total assets at the beginning of the period, D is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0. IAS is a dummy variable taking the value 1 if the financial reporting is under IAS/IFRS, otherwise 0. The calculations are based on White (1980) heteroscedasticity consistent standard errors and t-values.

Although La Porta *et al.* (1998) found that Nordic accounting standards were of high quality, and this study provides no evidence of increased conditional conservatism after IAS/IFRS adoption, this test should be replicated at a later point in time to ascertain whether the switch from national to IAS/IFRS standard reporting improved the quality of

earnings. The adoption requirement is relatively recent, and the number of firms doing so voluntarily is small in the sample used in this study.

The early years following the adoption of new accounting standards are especially challenging, and it may take a while before the quality of financial reporting increases. However, what is of more significance in this study is the evidence that conditional conservatism did indeed increase prior to the adoption of IFRS. This indicates that the quality of financial reporting improved following changes in national legislation rather than after switching to IFRS reporting.

Table 19. The effects of market- versus bank-oriented financing

VARIABLES	Model (8) Nordic countries
Constant	0.001 (0.932)
D	-0.018** (0.007)
ΔNI_{t-1}	-0.012 (0.802)
$D \times \Delta NI_{t-1}$	-0.584*** (0.000)
BBASED	0.000 (.)
$D \times \text{BBASED}$	0.008 (0.399)
$\Delta NI_{t-1} \times \text{BBASED}$	0.050 (0.472)
$D \times \Delta NI_{t-1} \times \text{BBASED}$	0.122 (0.373)
Year fixed effects	Yes
Country fixed effects	Yes
Observations	5068
R-squared	0.100
Adj. R-squared	0.097

Robust p-values in parentheses
*** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated model is as follows:

$$\text{Model (8)} \quad \Delta NI_t = \alpha_0 + \alpha_1 D + \alpha_2 \Delta NI_{t-1} + \alpha_3 D * \Delta NI_{t-1} + \alpha_4 \text{BBASED} + \alpha_5 D * \text{BBASED} + \alpha_6 \Delta NI_{t-1} * \text{BBASED} + \alpha_7 D * \Delta NI_{t-1} * \text{BBASED} + \varepsilon_t$$

where ΔNI_t is change in income from fiscal year t-1 to t scaled by total assets at the beginning of the period,

D is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0. BBASED is a dummy variable taking the value 1 if a country's financial system is bank-oriented, otherwise 0. The calculations are based on White (1980) heteroscedasticity consistent standard errors and t-values.

Finally, this section investigates the differences between the Nordic countries with respect to market- and bank-oriented finance. The results are reported in Table 19. The coefficient for the variable $Dx\Delta NI_{t-1}x BBASED$ is not statistically significant, suggesting that there are no differences in the degree of conservatism between the two systems. These findings are based on a sample in which only two countries represented each system orientation, and are not in accordance with earlier research evidence.

The results presented in this section suggest that there is no difference in accounting quality between bank- and market-oriented financial systems in the Nordic countries. The next section focuses on foreign direct investments, and whether they affect accounting conservatism in the Nordic context.

5.4 The effect of FDIs on the interaction between conditional conservatism and market-to-book ratio: empirical results

In light of the existing literature it could be assumed that unconditional conservatism pre-empts conditional conservatism, and thus that conditional conservatism is lowest in firms with a high market-to-book ratio (high unconditional conservatism) and highest among those with a low market-to-book ratio (low unconditional conservatism). However, the market-to-book ratio also captures elements other than conservative financial reporting. Table 20 reports the results of the Model (9) estimates, which suggest no differences in the degree of conditional conservatism among different levels of market-to-book ratios: conservatism coefficient α_7 of low market-to-book ratio firms is not significantly different from the coefficient α_3 of the reference group (firms with a medium market-to-book ratio). Nor is the conservatism coefficient α_{11} of high market-to-book ratio firms significantly different from that of the reference group. These results are not consistent with the literature documenting a negative relation between conditional and unconditional conservatism.

As discussed earlier in this study, it is expected that increase in foreign direct investment increases information asymmetry between managers and outside investors, especially foreign investors. Therefore firms need to offer high quality financial information to reduce the information asymmetry accompanied with inside information and that leads to higher conditional conservatism.

Table 20. The relationship between conditional conservatism and the market-to-book ratio

VARIABLES	Model (9)
Constant	0.001 (0.867)
D	-0.015** (0.006)
ΔNI_{t-1}	-0.097 (0.056)
$Dx\Delta NI_{t-1}$	-0.426*** (0.000)
MBlow	-0.010 (0.074)
$DxMBlow$	-0.001 (0.916)
$\Delta NI_{t-1}xMBlow$	0.078 (0.425)
$Dx\Delta NI_{t-1}xMBlow$	-0.118 (0.432)
MBhigh	0.010 (0.097)
$DxMBhigh$	0.009 (0.473)
$\Delta NI_{t-1}xMBhigh$	0.189* (0.012)
$Dx\Delta NI_{t-1}xMBhigh$	-0.089 (0.549)
Country fixed effects	Yes
Year fixed effects	Yes
Observations	5068
R-squared	0.109
Adj. R-squared	0.104

Robust p-values in parentheses
 *** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated model is as follows:

$$\text{Model (9): } \Delta NI_t = \alpha_0 + \alpha_1 D\Delta NI_{t-1} + \alpha_2 \Delta NI_{t-1} + \alpha_3 D\Delta NI_{t-1} * \Delta NI_{t-1} + \alpha_4 MBlow + \alpha_5 D\Delta NI_{t-1} * MBlow + \alpha_6 \Delta NI_{t-1} * MBlow + \alpha_7 D\Delta NI_{t-1} * \Delta NI_{t-1} * MBlow + \alpha_8 MBhigh + \alpha_9 D\Delta NI_{t-1} * MBhigh + \alpha_{10} \Delta NI_{t-1} * MBhigh + \alpha_{11} D\Delta NI_{t-1} * \Delta NI_{t-1} * MBhigh + \epsilon_t$$

where ΔNI is change in income from fiscal year $t-1$ to t scaled by total assets at the beginning of the period, $D\Delta NI_{t-1}$ is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0. MB_{high} equals 1 if a firm belongs to the highest market-to-book-ratio quantile, otherwise 0. MB_{low} takes the value 1 if a firm belongs to the lowest market-to-book-ratio quantile, otherwise 0. Firms belonging to the medium value quantile comprise the reference group. The coefficients of the intercept and dummy variables are not tabulated. The calculations are based on White (1980) heteroscedasticity consistent standard errors and t-values.

Table 21 reports the results of the Model (10) estimates, and Figure 8 illustrates them graphically. Coefficient α_7 , which measures incremental conservatism in years of growing FDIs compared to years in which they decline, is negative and significant (-0.337), indicating higher levels of conditional conservatism in the former case. Foreign investors demand higher-quality financial reporting to alleviate the information asymmetry problem: increasing information asymmetry reduces conditional conservatism. The implication is that conditional conservatism is useful in mitigating information asymmetry between managers and foreign investors. Figure 8 illustrates this difference in conservatism coefficients between times of increasing and decreasing FDI levels.

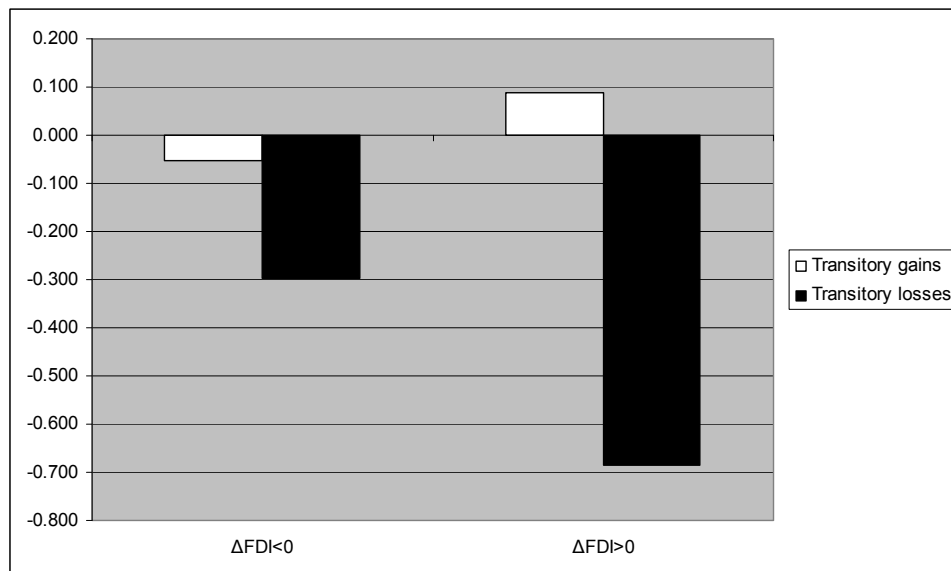


Figure 8. Transitory gains and losses incorporated into income during times of decreasing and increasing foreign investments in the Nordic countries

Table 21. The effect of foreign direct investments on conditional conservatism

VARIABLES	Model (10)
Constant	0.002 (0.787)
D	-0.013 (0.145)
ΔNI_{t-1}	-0.068 (0.169)
$Dx\Delta NI_{t-1}$	-0.307** (0.010)
ΔFDI	-0.002 (0.719)
$Dx\Delta FDI$	-0.004 (0.697)
$\Delta FDIx\Delta NI_{t-1}$	0.126 (0.066)
$Dx\Delta FDIx\Delta NI_{t-1}$	-0.337* (0.022)
Country fixed effects	Yes
Year fixed effects	Yes
Observations	5068
R-squared	0.103
Adj. R-squared	0.099

Robust p-values in parentheses
 *** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated model is as follows:

$$\text{Model (10) : } \Delta NI_t = \alpha_0 + \alpha_1 D\Delta NI_t + \alpha_2 \Delta NI_{t-1} + \alpha_3 D\Delta NI_{t-1} * \Delta NI_{t-1} + \alpha_4 \Delta FDI + \alpha_5 D\Delta NI_{t-1} * \Delta FDI + \alpha_6 \Delta NI_{t-1} * \Delta FDI + \alpha_7 D\Delta NI_{t-1} * \Delta NI_{t-1} * \Delta FDI + \varepsilon_t$$

where ΔNI is change in income from fiscal year t-1 to t scaled by total assets at the beginning of the period, $D\Delta NI_{t-1}$ is a dummy variable taking the value 1 if the last year's change ΔNI_{t-1} is negative, otherwise 0. ΔFDI equals 1 if FDIs are increasing in that country during that particular year, otherwise 0. The coefficients of the intercept and dummy variables are not tabulated. The calculations are based on White (1980) heteroscedasticity consistent standard errors and t-values.

Table 22 reports the results of the Model (10) estimate among three sub-samples based on market-to-book values. The second column represents low market-to-book-value firms and the third column represents medium market-to-book-value firms. In neither case does an increase in FDIs increase conditional conservatism. The conservatism coefficient α_7 during times of increasing FDIs is not statistically significant, and is different from coefficient α_3 when FDIs are on the decrease in both the low market-to-book-ratio and

the medium market-to-book-ratio firms. Information asymmetry between managers and foreign investors is not dominant in these lower categories.

Table 22. The relationship between FDIs and conditional conservatism in different MTB categories

VARIABLES	Model (10)		
	MB low	MB medium	MB high
Constant	0.003 (0.857)	0.047*** (0.000)	0.021 (0.218)
D	-0.013 (0.246)	-0.027* (0.021)	0.003 (0.881)
ΔNI_{t-1}	-0.140 (0.211)	-0.197** (0.009)	0.017 (0.823)
$Dx\Delta NI_{t-1}$	-0.444* (0.018)	-0.366** (0.006)	-0.136 (0.437)
ΔFDI	0.002 (0.859)	-0.027* (0.012)	0.006 (0.688)
$Dx\Delta FDI$	0.000 (0.990)	0.016 (0.240)	-0.021 (0.375)
$\Delta FDIx\Delta NI_{t-1}$	0.217 (0.191)	0.096 (0.335)	0.098 (0.351)
$Dx\Delta FDIx\Delta NI_{t-1}$	-0.205 (0.410)	-0.088 (0.606)	-0.590* (0.013)
Country fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	1576	1575	1575
R-squared	0.131	0.144	0.114
Adj. R-squared	0.119	0.132	0.102

Robust p-values in parentheses
 *** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated model is as follows:

$$\text{Model (10): } \Delta NI_t = \alpha_0 + \alpha_1 D\Delta NI_{t-1} + \alpha_2 \Delta NI_{t-1} + \alpha_3 D\Delta NI_{t-1} * \Delta NI_{t-1} + \alpha_4 \Delta FDI + \alpha_5 D\Delta NI_{t-1} * \Delta FDI + \alpha_6 \Delta NI_{t-1} * \Delta FDI + \alpha_7 D\Delta NI_{t-1} * \Delta NI_{t-1} * \Delta FDI + \epsilon_t$$

where ΔNI is change in income from fiscal year t-1 to t scaled by total assets at the beginning of the period, $D\Delta NI_{t-1}$ is a dummy variable taking the value 1 if the prior-year change ΔNI_{t-1} is negative, otherwise 0. ΔFDI equals 1 if foreign direct investments are increasing in that country during that particular year, otherwise 0. The observations are divided into three sub-samples based on the market-to-book value of the firm. The calculations are based on White (1980) heteroscedasticity consistent standard errors and t-values.

Most market-to-book ratios are above one. High market values relative to book values may indicate the use of conservative accounting methods. If MTB is understood as an unconditional conservatism measure, the previously documented negative association

with conditional conservatism implies that the latter is necessary in low-MTB firms. Therefore, increasing FDI increases conditional conservatism among *low*-MTB-value firms.

However, there are two reasons why market values deviate from book values: either the book value is estimated to be too low (conservative reporting practices), or a higher market value relative to book value indicates growth options. Hence, the MTB ratio is a noisy measure of conservative reporting practices because it also captures investors' growth expectations and therefore risk. These elements create information asymmetry between less well-informed and better-informed investors. Furthermore, information asymmetry generates conditional conservatism in financial reporting. It is therefore reasonable to expect that the demand for conditional conservatism is highest in high-risk firms in order to mitigate information asymmetry, especially in firms with a high market-to-book value. If bias results more from the economic environment, i.e. investors' growth options, information asymmetry is greatest in high-MTB-ratio firms, and therefore the need for conditional conservatism to alleviate it in times of increasing FDIs is greatest among *high*-MTB-value firms.

Other variables are used in order to enhance the robustness of the growth-options component of the market-to-book ratio. It is assumed, for example, that sales growth and R&D intensity measure the risk associated with growth opportunities and cause information asymmetry between firm insiders and investors, and are therefore expected to behave like the market-to-book ratio if it reflects investors' growth options.

However, when the market-to-book value is high, meaning that the balance-sheet value of the firm deviates a lot from its market value, it seems that conditional conservatism increases during years of increasing FDI. The conservatism coefficient of the variable $Dx\Delta FDIx\Delta NI_{t-1}$ is negative (-0.590) and significant, indicating that increased conservatism reduces information asymmetry between managers and foreign investors in these extremely risky firms. These results are presented in the last column of Table 22.

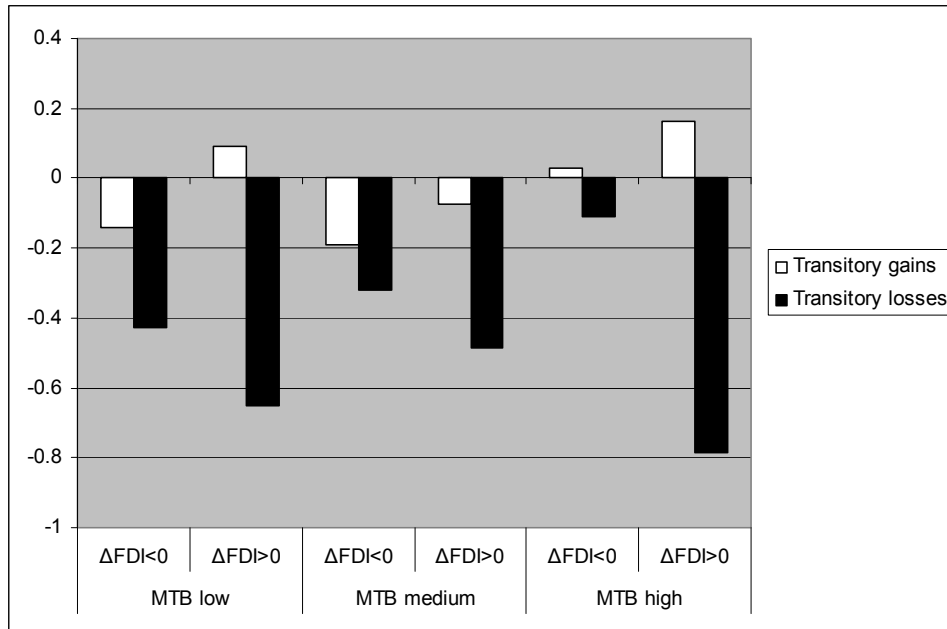


Figure 9. Transitory gains and losses incorporated into income: during times of decreasing and increasing foreign investment for firms in low, medium, and high market-to-book-value categories

Figure 9 shows how FDIs affect the relation between conditional conservatism and the market-to-book ratio: the higher the spread between the market value and the balance-sheet value of the firm, the higher is the uncertainty regarding its true value, and the higher the risk for investors, particularly foreign investors. This effect is particularly visible in analyses of the relationship between conditional conservatism in an environment of increasing international investments ($\Delta FDI > 0$). Information asymmetry between different types of investors increases with the level of international investment because of the higher proportion of international in relation to national investors.

These results imply that the market-to-book ratio is not an adequate measure of unconditional conservatism as it also measures investors' growth expectations and therefore the risk that is associated with the investment.¹ A further implication is that the relationship between conditional conservatism and the market-to-book ratio is strongly affected by the investment environment, in other words by the presence of international investors. A high market-to-book ratio causes information asymmetry between managers and outside investors, and high-quality accounting information is required to reduce this problem.

An alternative measure, sales growth, was used to test the robustness of the results attributable to the growth-options component of the market-to-book ratio and the effect of growth opportunities. Table 23 presents the results of the Model (10) estimates in three different portfolios of firms. The sample firms are divided into sub-samples based on sales growth, and the results obtained are consistent with those presented in Table 22. The numbers in the second column of Table 23 show no evidence of increasing conservatism among firms with a low sales-growth ratio when FDIs increase.

As the numbers in the third and fourth columns of Table 23 show, when FDIs increase the conservatism coefficient for firms with medium (-1.179) and high (-0.370) sales growth is significantly negative, thereby associating increasing conservatism with increasing FDIs. These results indicate that information asymmetry is especially high in these firm categories, and therefore the need for high-quality information is greater in the presence of increasing FDIs in order to reduce information asymmetry among less well-informed investors.

¹ To validate the results explaining that market-to-book ratio also measures risk, we replicate the results by estimating Model (3) by the three different portfolios of operating leverage. Operating leverage is regarded as a risk measure and the results (not tabulated) are consistent with the results concerning MTB. Increasing foreign direct investments increase conditional conservatism only among the firms that have the highest operating leverage, but not among the firms with low or medium operating leverage. The similarity of the results indicates that both operating leverage and MTB measure risk and conditional conservatism are used to reduce the information asymmetry that is associated with risk in this investment environment.

Table 23. The relationship between FDIs and conditional conservatism in different sales-growth categories

VARIABLES	Model (10)		
	Sales growth low	Sales growth medium	Sales growth high
Constant	-0.028 (0.254)	0.022** (0.009)	0.044** (0.007)
D	-0.011 (0.482)	0.013 (0.147)	-0.016 (0.234)
ΔNI_{t-1}	-0.131 (0.064)	-0.122 (0.243)	0.055 (0.559)
$Dx\Delta NI_{t-1}$	-0.495** (0.003)	0.296 (0.112)	-0.192 (0.201)
ΔFDI	0.005 (0.678)	-0.005 (0.453)	-0.007 (0.560)
$Dx\Delta FDI$	-0.010 (0.582)	-0.039** (0.002)	0.010 (0.558)
$\Delta FDIx\Delta NI_{t-1}$	0.111 (0.306)	0.086 (0.516)	0.076 (0.518)
$Dx\Delta FDIx\Delta NI_{t-1}$	-0.146 (0.481)	-1.179*** (0.000)	-0.370 (0.058)
Country fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	1667	1666	1666
R-squared	0.141	0.203	0.101
Adj. R-squared	0.130	0.192	0.090

Robust p-values in parentheses
 *** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated model is as follows:

$$\text{Model (10): } \Delta NI_t = \alpha_0 + \alpha_1 D\Delta NI_{t-1} + \alpha_2 \Delta NI_{t-1} + \alpha_3 D\Delta NI_{t-1} * \Delta NI_{t-1} + \alpha_4 \Delta FDI + \alpha_5 D\Delta NI_{t-1} * \Delta FDI + \alpha_6 \Delta NI_{t-1} * \Delta FDI + \alpha_7 D\Delta NI_{t-1} * \Delta NI_{t-1} * \Delta FDI + \epsilon_t$$

where ΔNI is change in income from fiscal year t-1 to t scaled by total assets at the beginning of the period, $D\Delta NI_{t-1}$ is a dummy variable taking the value 1 if the last year's change ΔNI_{t-1} is negative, otherwise 0. ΔFDI equals 1 if FDIs are increasing in that country during that particular year otherwise 0. The observations are divided into three sub-samples based on the market-to-book value of the firm. The calculations are based on White (1980) heteroscedasticity consistent standard errors and t-values.

Finally, in order to further enhance the robustness of the results, Model (10) is estimated among three different sub-samples categorized by R&D intensity, which as discussed in Chapter 2 is used as a further measure of growth opportunities and information asymmetry. This substantially reduced the sample size to 1,692 observations. Table 24 gives the results. The numbers in the second and third columns show no increase in the

degree of conservatism corresponding with increasing FDIs in either the low-R&D-intensity or the medium-R&D-intensity categories. The last column reports the results for high-R&D-intensity firms. The conservatism coefficient is negative (-0.613) and significant at the 10 percent level, implying the need for these firms to report high-quality earnings to compensate the risk associated with R&D and information asymmetry between better-informed and less well-informed investors. These findings are consistent with the results concerning conditional conservatism in different market-to-book-value categories presented in Table 22.

Table 24. The relationship between FDIs and conditional conservatism in different categories of R&D intensity

VARIABLES	Model (10)		
	R&D low	R&D medium	R&D high
Constant	-0.004 (0.799)	-0.047* (0.025)	0.033 (0.337)
D	-0.009 (0.538)	0.007 (0.577)	-0.044 (0.183)
ΔNI_{t-1}	-0.111 (0.438)	0.102 (0.627)	-0.239 (0.122)
$Dx\Delta NI_{t-1}$	-0.548* (0.039)	-0.679* (0.030)	0.099 (0.686)
ΔFDI	-0.010 (0.587)	0.007 (0.529)	0.005 (0.861)
$Dx\Delta FDI$	0.024 (0.218)	-0.037* (0.026)	-0.026 (0.514)
$\Delta FDIx\Delta NI_{t-1}$	0.555 (0.131)	-0.066 (0.784)	0.143 (0.456)
$Dx\Delta FDIx\Delta NI_{t-1}$	-0.264 (0.571)	-0.304 (0.431)	-0.613 (0.053)
Country fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
Observations	564	564	564
R-squared	0.166	0.187	0.128
Adj. R-squared	0.134	0.156	0.094

Robust p-values in parentheses
 *** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated model is as follows:

$$\text{Model (10): } \Delta NI_t = \alpha_0 + \alpha_1 D\Delta NI_{t-1} + \alpha_2 \Delta NI_{t-1} + \alpha_3 D\Delta NI_{t-1} * \Delta NI_{t-1} + \alpha_4 \Delta FDI + \alpha_5 D\Delta NI_{t-1} * \Delta FDI + \alpha_6 \Delta NI_{t-1} * \Delta FDI + \alpha_7 D\Delta NI_{t-1} * \Delta NI_{t-1} * \Delta FDI + \epsilon_t$$

where ΔNI is change in income from fiscal year $t-1$ to t scaled by total assets at the beginning of the period, $D\Delta NI_{t-1}$ is a dummy variable taking the value 1 if the last year's change ΔNI_{t-1} is negative, otherwise 0. ΔFDI equals 1 if FDIs are increasing in that country during that particular year, otherwise 0. The observations are divided into three sub-samples based on the market-to-book value of the firm. The calculations are based on White (1980) heteroscedasticity consistent standard errors and t-values.

Overall, the results reported in Tables 21-24 are consistent with the view that foreign investors demand high-quality information in order to alleviate information asymmetry between local and international investors. This information asymmetry arises especially if the market-to-book ratio of a firm is high, indicating uncertainty associated with growth opportunities. It thus seems that risk-prone firms in particular need to produce high-quality financial information in order to reduce information asymmetry between better-informed and less well-informed investors, and to attract their share of the FDIs coming into the country.

The findings are also consistent with the notion that high earnings quality reduces information asymmetry between managers and outside investors, especially foreign investors. High-quality information is needed in particular when a firm's growth options are high and therefore increase information asymmetry. These results, together with those presented in Table 20, strengthen concerns that the market-to-book ratio is an inadequate measure of unconditional conservatism. The two elements that constitute the difference between the firm's market and its book value - conservative accounting practices and growth options - interact differently with conditional conservatism and therefore its association with the market-to-book ratio needs to be interpreted with caution.

However, a caveat is needed with regard to causality here, as with the results presented in Chapter 5.2. Even though there is an association between conditional conservatism and FDI, there is no evidence of the direction of causality. Although, given the development of the financial reporting environment in the Nordic countries, it is reasonable to assume that FDI leads to an improvement in financial reporting, further evidence is needed to validate the results suggesting that increased FDIs also increase the level of conservatism, or vice versa.

5.5 Robustness check

The parameters of the timely loss recognition coefficient ($\alpha_{2it} + \alpha_{3it}$) and the incremental timely loss recognition coefficient (α_{3it}) are estimated separately for each country i and for each year t by means of regression (1). Each estimated coefficient of earnings properties is regressed on the country's institutional characteristics following Model (11):

$$\begin{aligned} EARNINGS_PROPERTY_{it} = & \alpha_0 + \alpha_1 INSTITUTION + \alpha_7 FRAorigin \\ & + \alpha_8 GERorigin + \alpha_8 SOLVENCY + \varepsilon_i \end{aligned} \quad (11)$$

The results of the Model (11) estimate for timely and incremental loss recognition are presented in Table 25 and Table 26, respectively. The regression incorporates institutional characteristics and controls for the dummy variables legal origin (Russian origin is the base) and solvency. The main result is confirmation of the hypothesis that each institutional characteristic is associated with the level of timely and incremental loss recognition. Economic freedom has three different specifications: investment freedom, freedom from correlation, and fiscal freedom. Transition is measured in three different aspects of institutions: banking reform and interest rate liberalization, securities markets and non-bank financial institutions and governance and enterprise restructuring. The coefficient for each institutional characteristic is negative, except for fiscal freedom. These results are consistent with those concerning the effect of these institutional characteristics on conditional conservatism presented in Chapter 5.

Table 25. Timely loss recognition ($\alpha_{2it} + \alpha_{3it}$)

VARIABLES	Model (11)					
Constant	-0.309*** (0.000)	0.050* (0.026)	-1.475*** (0.000)	-0.067** (0.006)	-0.185*** (0.000)	-0.017 (0.504)
INV	-0.006*** (0.000)					
CORR		-0.021*** (0.000)				
FISC			0.011*** (0.000)			
BANK				-0.188*** (0.000)		
SEC					-0.137*** (0.000)	
GOV						-0.217*** (0.000)
FRAorigin	Included	Included	Included	Included	Included	Included
GERorigin	Included	Included	Included	Included	Included	Included
Solvency	Included	Included	Included	Included	Included	Included
Observations	10052	10052	10052	10052	10052	10052
R-squared	0.057	0.117	0.062	0.081	0.065	0.088
Adj. R-squared	0.056	0.116	0.061	0.081	0.065	0.088

p-values in parentheses

*** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated Model is as follows:

Model (11): $\text{Timely loss recognition}_{it} = \alpha_0 + \alpha_1 \text{INSTITUTION} + \alpha_2 \text{FR4origin} + \alpha_3 \text{GERorigin} + \alpha_4 \text{SOLVENCY} + \varepsilon_{it}$

where the institution is either economic freedom or a transition indicator. Economic freedom has three different specifications: INV indicates investment freedom, CORR indicates freedom from correlation, and FISC indicates fiscal freedom. Transition is measured on three different aspects of institutions: banking reform and interest-rate liberalization (BANK), securities markets and non-bank financial institutions (SEC), and governance and enterprise restructuring (GOV). FRAorigin denotes French legal origin, and GERorigin German legal origin.

Table 26. Incremental loss recognition slope (α_{3it})

VARIABLES	Model (11)			
Constant	-0.395*** (0.000)	-1.685*** (0.000)	-0.108*** (0.000)	0.076* (0.013)
INV	-0.004*** (0.000)			
CORR	-0.034*** (0.000)			
FISC		0.013*** (0.000)		
BANK			-0.143*** (0.000)	
SEC				-0.175*** (0.000)
GOV				-0.264*** (0.000)
FRAorigin	Included	Included	Included	Included
GERorigin	Included	Included	Included	Included
Solvency	Included	Included	Included	Included
Observations	10052	10052	10052	10052
R-squared	0.023	0.038	0.033	0.065
Adj. R-squared	0.022	0.038	0.033	0.065

p-values in parentheses

*** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated Model is as follows:

Model (11): Incremental loss recognition slope_{it} = a_{0i} + a_1 INSTITUTION + a_2 FRAorigin + a_3 GERorigin + a_4 SOLVENCY + ε_{it}

where the institution is either economic freedom or a transition indicator. Economic freedom has three different specifications: INV indicates investment freedom, CORR indicates freedom from correlation and FISC indicates fiscal freedom. Transition is measured on three different aspects of institutions: banking reform and interest-rate liberalization (BANK), securities markets and non-bank financial institutions (SEC) and governance and enterprise restructuring (GOV). FRAorigin denotes French legal origin, and GERorigin German legal origin.

In order to further enhance their robustness the empirical results presented above were tested on a random sample of 200 listed non-financial companies in the highly developed markets of the USA, derived from the Worldscope database. Financial firms (SIC 6000 – 6999) were excluded and the research covered the period 1995-2006. Observations with one or more missing variables were truncated, and the two extreme percentiles of observations for each accounting variable were deleted in order to eliminate the effect of possible outliers. The total number of observations was 2,304 firm-years. Information on FDIs was obtained from the UNCTADstat database provided by the United Nations Conference on Trade and Development. Foreign direct investments consist of the sum of FDI inflows and FDIs in stock in the database.

Table 27. The relationship between FDIs and conditional conservatism in the USA

VARIABLES	Model (10)
Constant	-0.014* (0.044)
D	-0.008 (0.333)
ΔNI_{t-1}	-0.014 (0.924)
$Dx\Delta NI_{t-1}$	-0.394* (0.042)
ΔFDI	0.014 (0.146)
$Dx\Delta FDI$	-0.002 (0.834)
$\Delta FDIx\Delta NI_{t-1}$	-0.034 (0.823)
$Dx\Delta FDIx\Delta NI_{t-1}$	-0.035 (0.878)
Year fixed effects	Yes
Observations	2304
R-squared	0.069
Adj. R-squared	0.062

Robust p-values in parentheses
 *** p<0.001, ** p<0.01, * p<0.05

Notes:

The estimated model is as follows:

$$\text{Model (10): } \Delta NI_t = \alpha_0 + \alpha_1 D\Delta NI_{t-1} + \alpha_2 \Delta NI_{t-1} + \alpha_3 D\Delta NI_{t-1} * \Delta NI_{t-1} + \alpha_4 \Delta FDI + \alpha_5 D\Delta NI_{t-1} * \Delta FDI + \alpha_6 \Delta NI_{t-1} * \Delta FDI + \alpha_7 D\Delta NI_{t-1} * \Delta NI_{t-1} * \Delta FDI + \epsilon_t$$

where ΔNI is the change in income from fiscal year $t-1$ to t scaled by total assets at the beginning of the period, $D\Delta NI_{t-1}$ is a dummy variable taking the value 1 if the last year's change ΔNI_{t-1} is negative, otherwise 0. ΔFDI equals 1 if FDIs are increasing in that country during that particular year, otherwise 0. The calculations are based on White (1980) heteroscedasticity consistent standard errors and t-values.

Ball *et al.* (2000) argue that conditional conservatism is higher in a common-law environment than in code-law legal families, and that US markets, among other code-law countries, represent the 'shareholder' governance model in which high-quality financial information is provided through publicly disclosed financial statements.

Table 27 reports the results of running Model (10) on a random sample of firms operating in the US, which is considered to be among the most developed capital markets in the world. The markets are the most advanced and the financial statements, prepared in accordance with US GAAP, are considered to be of the highest possible quality. Therefore, in this environment increasing FDIs are not expected to increase the level of conservatism. The results proved to be consistent with this hypothesis. The coefficient of α_3 (-0.394) is significantly negative, suggesting that firms report conservative earnings during times of decreasing FDIs, but the coefficient of α_7 is not statistically significant and does not indicate incremental conservatism in times of increasing FDIs.

These results are consistent with the results presented in the preceding chapters. The Nordic countries and the transitional economies of Europe form a unique research environment in which change in the purpose of financial statements as well as in the users of financial information has generated the demand for high quality. In these research environments financial statements exhibit increased conditional conservatism in order to provide high-quality publicly disclosed information and alleviate problems of information asymmetry.

5.6 Summary

The literature on accounting refers to various institutions that cause international differences in the degree of conservatism. The Nordic countries and the transitional economies of Europe form an interesting environment in which to study the effect of

different institutions on accounting conservatism in that there has been a significant change in the purpose of financial statements as well as in the users of financial information. Moreover, the two environments are totally different in that the transitional economies are emerging markets whereas the Nordic countries are stable and sophisticated.

Transitional economies have moved from command towards market economies, and this change has affected the purpose of financial information. The informational role of financial statements is emphasized when firms need to attract investor rather than state financing. The empirical analysis suggests that conditional conservatism increases when institutions that are characteristic of a market economy are established.

The change in the Nordic countries regarding the purpose of financial statements was of a different kind. Accounting regulation was previously aimed at protecting creditors. Now with the adoption of IFRS and convergence with national legislation the purpose is primarily to serve the information needs of current and potential investors. The empirical results suggest that this change has increased the need for conservative financial reporting.

Earlier studies focusing on the contracting purposes of conditional conservatism found that it was useful in mitigating problems of informational asymmetry. The results of this study suggest that market demand increases conditional conservatism, and that an increase in FDIs is associated with a higher degree of conservatism. This association is evident in the transitional economies in which FDIs constitute a significant source of finance, but it also applies in the Nordic countries where markets are more developed and the relative share of FDIs is lower.

Finally, the empirical analysis indicates that conditional conservatism eliminates the information asymmetry that is associated with growth options and risk. The market-to-book ratio is a widely used proxy for unconditional or overall conservatism. However, it also reflects growth options and risk and thus as a measure of conservatism has to be interpreted with caution.

6 CONCLUSION

The investigation of conditional conservatism in the Nordic countries and the transitional economies of Central and Eastern Europe reported in this dissertation extends the research on financial accounting focusing on international differences in the degree and determinants of conservatism. Earnings quality is measured by accounting conservatism, one single, but important attribute of accounting quality. Conservatism is understood as asymmetric timeliness in the recognition of gains and losses. The study examined how change in the role of accounting information and in its users affects accounting conservatism. The two different financial-reporting environments in question provide different perspectives on how institutional settings affect accounting quality.

The theoretical background of the study lies in the informational and contracting roles of financial reporting. Accounting theory argues that information in the financial statement is useful for decision-making and contracting purposes. There are international differences in the usefulness and quality of the information due to various institutional characteristics, and differences in financial reporting depending on the level of conservatism. Conditional conservatism alleviates information-asymmetry problems. Users of financial information benefit from conservative accounting practices because they prevent managers from engaging in opportunistic behavior and allow other, alternative information sources to flourish.

The four main hypotheses put forward and empirically tested are based on the theoretical analysis: firstly, the changed purpose of financial reporting increases conservatism in the transitional economies; secondly, foreign direct investments increase the demand for accounting conservatism in the transitional economies; thirdly, the changed purpose of financial reporting also increases conservatism in the more sophisticated Nordic markets, for example; fourthly, an increase in foreign direct investment also increases the demand for accounting conservatism in the Nordic countries even though FDIs are relatively less important in developed than in emerging markets.

The empirical results of the study support the hypotheses, providing evidence that accounting conservatism increased in both research environments after the institutional changes. With regard to hypotheses 1 and 3, the findings suggest that in the transitional economies and in the more sophisticated Nordic markets the quality of financial information measured as accounting conservatism increases when the financial statements place more emphasis on the information needs of investors in their decision-making.

Furthermore, with regard to information asymmetry between managers and outside investors, the results support hypothesis 2, indicating that increased FDI creates a demand for high-quality information and thereby increases the degree of accounting conservatism in transitional economies. Similarly with regard to hypothesis 4, the effect of FDIs on accounting quality is also evident in developed markets: higher levels of FDI also increase accounting conservatism in the Nordic markets even though FDIs are relatively less important in developed than in emerging markets. The conclusions based on the various empirical results are reviewed below.

6.1 The new, informational role of accounting numbers in transitional economies

This section focuses specifically on the effect of the transition process on earnings quality proxied by conditional conservatism. The study contributes to the existing literature on cross-country differences in conditional conservatism by focusing on transitional economies and identifying the legal and political aspects of transition that affect earnings quality. Accounting legislation and reporting are rapidly changing in these emerging market economies. The reliability of financial information cannot be assumed in uncertain legal and economic conditions. In the age of command economies financial reporting was simple and was addressed mainly to the state. Now firms need to improve their reporting quality in order to attract non-governmental sources of finance. In order to satisfy the information needs of foreign investors they should prepare their financial statements in accordance with International Accounting Standards.

This empirical evidence on conditional conservatism reported in this study rests on the analysis of data from 12 transitional economies in Europe covering the period from 2000 to 2006. The results show that losses are recognized in a timely manner in several of the countries concerned, although there is no evidence of conservatism in Latvia, Lithuania or Ukraine, and financial reporting in Serbia seems to be very aggressive and of poor quality. There are no apparent differences in the degree of conservatism between different legal traditions. The most significant aspect in this part of the investigation concerns the effect of the phase of the transition process on conditional conservatism. It seems that firms in countries that have progressed well show significantly more timely loss recognition than when the transition indicator indicates slow progress. This result is robust to several different aspects of the transition process: securities markets and non-bank financial institutions, banking reform and interest-rate liberalization, and governance and enterprise restructuring.

Furthermore, earnings quality is compared between new members of the European Union and the transitional economies that remain outside. The results indicate that losses are recognized in a significantly more timely fashion in countries that have joined the EU, although there is no increase in earnings quality in EU Member States as measured before and after EU accession.

6.2 The role of FDIs in affecting the demand for high-quality financial information in emerging markets

This section focuses on the effect of the investment environment on accounting quality and the demand for high-quality accounting information in emerging markets. Accounting quality is understood as the usefulness of the information in the financial statement to investors and other users of financial reporting, and is measured through a single but important attribute, namely conservatism. Data on a sample of listed firms covering the period 2000-2006 was analyzed in order to find out how institutions in the investment environment and market demand affect accounting conservatism in the transitional economies of Europe.

The findings suggest that investment freedom (especially the free flow of foreign capital) and freedom from corruption increase the quality of accounting information, and that a high-quality institutional environment is conducive to high-quality accounting. However, increased fiscal freedom is detrimental to accounting quality. In reporting environments in which the tax rate is high the incentives to reduce taxable income are greater than the incentives to produce high-quality financial information for investors.

In terms of the effect of FDI on accounting quality, it seems that managers adjust the quality of the information to the demand for reporting quality. Accounting conservatism is a useful means of minimizing information asymmetry between managers and outside investors, especially foreign investors. Overall, the results indicate that as the level of information asymmetry increases in emerging markets, the level of conditional conservatism increases. Both institutional and market demands for high-quality information affect the quality of financial reporting produced by firms in transition economies.

6.3 The effect of changes in accounting regulations on earnings quality in the Nordic countries

This section summarizes the findings concerning conditional conservatism in Scandinavia during the period from 1995 to 2006. Finland, Sweden, Norway and Denmark form a unique code-law family that shares certain economic, cultural, historical and legal characteristics. However, these countries have recently strayed from their common, German origins and have developed their own respective accounting regulations with a view to complying with International Accounting Standards. The purpose of this part of the study was to examine the extent to which changes in accounting regulations affect the quality of earnings measured in terms of conditional conservatism. The aim was to find out whether conditional conservatism existed in the Nordic countries, whether it increased following changes in the national accounting legislation, and finally whether there were differences in the degree of conservatism between firms reporting in accordance with local versus IAS/IFRS standards.

The results from a sample comprising all available firms indicate the existence of conditional conservatism in each country, and also suggest that the degree of conservatism increased during most of the period of investigation, except for the last few years. The increased level of conservatism followed the legal reforms in domestic accounting rather than the adoption of IAS/IFRS. These results imply that changing the regulatory environment increased the degree of conditional conservatism in code-law countries when the trend was from the German tradition towards Anglo-Saxon practices, i.e. from ensuring creditor protection towards emphasizing the information needs of investors. Despite similarities in the reporting environments, there were differences in the quality of earnings. Surprisingly, the analysis highlighted more conditional conservatism in Norwegian firms following local accounting standards than in those following IAS/IFRS. These results confirm the dramatic change in attitude towards conservatism following the legislative reform in Norway, which seems more prone to conditional conservatism than the other Nordic countries. Finally, there was no evidence of Nordic differences in financial reporting with regard to conditional conservatism between bank-oriented and market-oriented financial systems.

6.4 The effect of FDIs on the demand for high-quality financial information in developed markets

The emphasis in this section is on the effect of foreign direct investment on accounting quality in developed markets, specifically with regard to conditional conservatism and the market-to-book ratio, and how FDIs affect their interaction. The investigation concerns the Nordic countries, in which the demand for high-quality accounting information has been increasing following the change in focus from inside investors with access to inside information toward outside investors who rely on publicly disclosed data. This part of the study enhances understanding of the market demand for accounting quality, and also provides new insights into the relation between conditional conservatism and the market-to-book ratio.

It seems that information asymmetry related to increasing FDIs generates conservatism in financial reporting because less well-informed foreign investors demand high-quality

accounting information in order to remove the asymmetry. The implication is that conservatism is useful in mitigating information asymmetry between managers and outside (foreign) investors. The relationship between conditional conservatism and the market-to-book ratio, which embodies not only conservative accounting practices but also investors' growth expectations, is strongly affected by the investment environment. Information asymmetry between managers and foreign investors is greater when the market-to-book ratio is high.

Conditional conservatism was also found to increase in line with increasing FDI only when the market-to-book ratio was high. These results indicate that risk-prone firms in particular need to produce high-quality financial information to reduce the information asymmetry associated with FDIs. It also seems that the market-to-book ratio is an inadequate measure of accounting conservatism in that it also measures investors' growth expectations, and hence is a measure of risk and information asymmetry. These findings also hold for other measures of information asymmetry, namely sales growth and R&D intensity. The implication is that conditional conservatism increases in line with increasing FDIs only when information asymmetry is high, and consequently that high-quality accounting information reduces information asymmetry and thereby risk.

These findings are helpful to anyone who uses the information in financial statements to assess the reliability and quality of earnings in emerging markets. The implications also extend to financial analysis, and decision-making related to both contracting and investment in developed markets. In addition, they may be of use to policymakers engaged in assessing the quality of regulation in different institutional environments.

6.5 Limitations

This section reviews the limitations of the study, which concentrates on accounting conservatism. Several different measures of conservatism are used in the accounting literature, but there is no consensus among researchers on the application or even the feasibility of these models. This dissertation employs only one of the measures referred to in the recent literature, and the results are limited to one form of conservatism,

conditional conservatism. There is also ongoing debate as to whether accounting conservatism is useful for investors and other users of financial information. The view adopted in this dissertation is that conservatism, understood as a property of earnings quality, does enhance decision-making. It is acknowledged that this is only one of the useful properties of earnings, and that the results are limited in this respect, too.

The market demand for conservatism is approximated by the level of or change in foreign direct investments. Part of the information incorporated into this variable is lost with the construction of the dummy variable. The results would be more valuable if FDIs were measured as continuous or cumulative variables, and would also be more generalizable if the market demand for conservatism were approximated by the level of or change in foreign portfolio investments. Moreover, the ratio between foreign direct investments and foreign portfolio investment might offer further insight into the market demand for high-quality financial information.

6.6 Further research

The results of this dissertation relate to one attribute of accounting quality, conservatism. Further research could examine other attributes such as value relevance, timeliness, persistence, earnings management and income smoothing in the same research environments. This could provide more valuable information for investors and other users of financial information, including regulators.

Future research could also focus on the effects of different corporate governance structures on accounting quality. This study concentrated on foreign direct investments, which involve control, but foreign portfolio investments also contribute considerably to corporate financing, particularly in developed markets.

There is also a need for more research on emerging markets, and the analysis could be extended to cover transitional economies outside Europe. These economies will face significant changes in their institutional settings and this will also affect the role and the quality of accounting information: the adoption and enforcement of IFRS has been

especially problematic. Further information on the effect of enforcement and the rule of law on accounting quality could give valuable insights into institutions that affect financial-reporting quality in transitional economies.

Auditors play a major role in ensuring the reliability of accounting information. It would therefore be useful to analyze the interrelationship between accounting quality and audit quality. The growing importance of International Standards of Auditing (ISAs) and the actions taken in the European Union concerning their obligatory adoption make this aspect relevant to emerging and developed markets in the European Union.

Despite the numerous studies demonstrating the usefulness of accounting conservatism, IASB and FASB claim that conservatism should be eliminated from financial reporting and that financial information should be free from bias. Further research is needed to investigate whether the adoption of IFRS is sufficient to remove accounting conservatism in financial statements, or whether other institutional factors will continue to influence the use of conservative accounting practices and the degree of conservatism once accounting regulation has been harmonized to cover all companies worldwide.

Finally, further studies could concentrate not only on the determinants, but also on the consequences of high-quality financial information. It would be interesting to find out how improved earnings quality affects capital allocation, investment behavior, and the cost of equity and debt capital, particularly in emerging markets.

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