

Erasmus University Rotterdam
Faculty Erasmus School of Economics
Master Thesis Accounting, Auditing & Control



The Quality of Accounting Information: A Case of the Netherlands

Master Thesis

Author: S.H. Badloe

Student number: 279600

Date: November 2011

EUR supervisor: Dr. C.D. Knoops

EUR co-reader: Prof. Dr. M.A. van Hoepen

KPMG supervisor: I. Duport

The Quality of Accounting Information: A Case of the Netherlands

Abstract

By Shenaz Badloe

This thesis explores accounting quality in the Netherlands by examining the legal and political system of the Netherlands, financial reporting incentives of Dutch public firms and accounting standards followed by Dutch public firms before 2005 and from 2005. First, the legal and political system research proves that from 2005, the Netherlands has a more stakeholder-oriented corporate governance model and as a consequence, better investor protection. Second, the study on the financial reporting incentives of Dutch firms shows that there is more need for public disclosure from 2005. Third, the accounting standards study is divided into a literature study and an empirical study. The literature study proves that after adopting International Financial Reporting Standards (IFRS), Dutch financial statements provide more disclosures and therefore more useful information for stakeholders. Also, the use of more fair value accounting from 2005, presents more timely information for decision-making. At last, the empirical study on accounting standards confirms that better investor protection, more disclosure requirements and applying IFRS from 2005 result in less conservatism. The most interesting discovery of this thesis is that less conservatism in the Netherlands is negatively related to earnings management, i.e. earnings management practices increase to compensate for the decrease in conservatism. Meaning, managers tend to find techniques to get around more legislation and/or stricter accounting standards.

ACKNOWLEDGMENTS

This thesis is the result of my study on accounting quality in the Netherlands. With this thesis I will conclude the master's program Accounting, Auditing & Control at the faculty Erasmus School of Economics. Before presenting my research, I would like to express my gratitude to certain people.

First, I like to take this opportunity to thank my thesis supervisor at the Erasmus University Rotterdam, Dr. C.D. Knoop for his guidance, critical comments, clear explanations and good advice. Second, I wish to thank KPMG Rotterdam for the facilities they offered while I was writing my thesis. I want to thank especially my coach, Ilona Dupont, at KPMG for her advice and guidance. All of these people and their professional knowledge made significant contributions to this study.

I would also like to thank my parents, my boyfriend Giovanni, my family and friends for their encouragement, support and motivation during my studies. Throughout the years, they have encouraged me and aided me in pursuing my master's degree.

Thank you!

Rotterdam, November 2011

Shenaz Badloe

TABLE OF CONTENTS

CHAPTER 1	INTRODUCTION.....	6
1.1	CHAPTER INTRODUCTION.....	6
1.2	THESIS BACKGROUND AND RELEVANCE.....	6
1.3	THESIS AIM, METHODOLOGY AND STRUCTURE.....	9
1.4	CHAPTER SUMMARY.....	11
CHAPTER 2	LITERATURE STUDY.....	12
2.1	CHAPTER INTRODUCTION.....	12
2.2	ACCOUNTING QUALITY.....	12
2.3	THE FIRST DETERMINANT: LEGAL AND POLITICAL SYSTEM.....	14
	2.3.1 <i>Legal and Political System of the Netherlands.....</i>	15
2.4	THE SECOND DETERMINANT: FINANCIAL REPORTING INCENTIVES.....	22
	2.4.1 <i>Financial Reporting Incentives in the Netherlands.....</i>	23
2.5	THE THIRD DETERMINANT: ACCOUNTING STANDARDS.....	25
	2.5.1 <i>Dutch GAAP Versus IFRS.....</i>	26
2.6	CONCLUDING THE LITERATURE STUDY.....	27
2.7	VALUE RELEVANCE.....	29
	2.7.1 <i>Conservatism.....</i>	30
	2.7.2 <i>Earnings management.....</i>	31
	2.7.3 <i>Conservatism and earnings management employed in value relevance studies.....</i>	34
2.8	CHAPTER SUMMARY.....	37
CHAPTER 3	HYPOTHESIS FORMULATION AND RESEARCH DESIGN.....	39
3.1	CHAPTER INTRODUCTION.....	39
3.2	HYPOTHESIS FORMULATION.....	39
3.3	METHODOLOGY.....	40
3.4	SAMPLE.....	42
3.5	CHAPTER SUMMARY.....	44
CHAPTER 4	EMPIRICAL TESTS, RESULTS AND INTERPRETATIONS.....	45
4.1	CHAPTER INTRODUCTION.....	45
4.2	CONSERVATISM.....	45
4.3	EARNINGS MANAGEMENT.....	51
4.4	CHAPTER SUMMARY.....	55

CHAPTER 5	CONCLUSION	57
5.1	SUMMARY OF THE FINDINGS	57
5.2	ANSWERING THE PROBLEM STATEMENT	58
5.3	LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FUTURE RESEARCH.....	59
REFERENCES.....		61
APPENDIX 1:	EXTENSIVE LITERATURE SUMMARY ON VALUE RELEVANCE.....	66
APPENDIX 2:	COMPANIES REPRESENTING THE SAMPLE	68
APPENDIX 3:	COMPANIES AND DATA FOR THE EMPIRICAL TESTS.....	69
APPENDIX 4:	OUTPUT EARNINGS CONSERVATISM REGRESSION	69
APPENDIX 5:	OUTPUT EARNINGS MANAGEMENT REGRESSION FOR THE ESTIMATION PERIOD	75

CHAPTER 1 INTRODUCTION

1.1 CHAPTER INTRODUCTION

As the title of the thesis suggests, the objective of this study is to investigate the quality of accounting information in the Netherlands. In plain English, the quality of accounting information (also referred to as ‘accounting quality’) can be described as the usefulness of financial statement information to outside parties that have an interest in the firm. The more useful the provided information is for decision-making by stakeholders, the better the quality of the financial statements. This chapter elaborates on the reasons for investigating accounting quality in general and also in the Netherlands. Furthermore, the determinants of accounting quality are presented in this chapter in order to provide an idea about the content of this thesis and the structure of the thesis is portrayed.

1.2 THESIS BACKGROUND AND RELEVANCE

It is not uncommon to use an opening storyline that directly strikes the attention of the reader. That is why I begin my thesis with the numerous accounting scandals that emerged in the 1990’s such as the scandals of Xerox (2000), Enron (2001), Royal Ahold and Parmalat (2003). In order to prevent fraudulent acts in the future, there was a sudden need for reforming accounting standards. The reformation is also known as the shift from rules-based accounting to principle-based accounting.¹ Also, new laws and regulations were implemented by the government; just think about the famous internal control framework of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and the Dutch Corporate Governance Code. All these measures were taken to make financial statement information more fair and reliable for decision-making. So, the question is now: “Did standard-setters and politicians do enough to prevent future accounting disasters?”

Nowadays we are all coping with the effects of the credit crisis. This credit crisis started out as a financial crisis that originated in the summer of 2007 when the housing market in the United States of America (USA, hereafter US) started to collapse due to rapid devaluation of obligations in which the mortgages of the houses were bundled. The devaluation of the mortgages was due to the fact that banks provided loans to customers who were not

¹ Rules-based accounting is a list of detailed rules that must be followed when preparing the financial statements. Principle-based accounting is when professional judgment is exercised when preparing the financial statements according to the reporting guidelines.

creditworthy of the loans. The result was an enormous write off on obligations, the fall of large financial institutions (e.g. Lehman Brothers in the US), the bail out of many banks by governments (e.g. Fortis Bank in the Netherlands) and a decline in stock returns in markets around the world.

The financial crisis also led to a debate on fair value accounting. Fair value accounting is a way to measure assets and liabilities that appear on a company's balance sheet. Financial Accounting Standards (SFAS) 157² defines fair value as "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date."³ Laux and Leuz (2009) mention that fair value is procyclical, i.e. it intensifies swings in the financial system and that it may even cause a downward spiral in financial markets. As a consequence, the market value (fair value) of balance sheet and income statement figures decline below the book values resulting in unjust valuation of balance sheet and income statements figures in times of economic distress.

All these past and present scandals and collapses of large firms have left legislators, standard-setters, accounting practitioners and users of financial statement information wondering about the fairness and usefulness of accounting information as it is presented in the financial statements. Do we need another reformation of accounting standards? Or maybe more legislation? What can we do to make accounting information more reliable in order to better meet the needs of its users? In order to answer these questions, we first have to establish the quality of accounting information at the moment. Only if we know and understand what we have now, we can work on making it better. That is the motivation behind this study: establish the quality of accounting information at the moment to create a fundamental basis for further and future research.

The problem with measuring the quality of accounting information is that it is not only imbedded in accounting standards, but it is also dependent on the institutional framework of countries and the reporting incentives of firms. Consequently, many researchers examined the relation between accounting quality and institutional frameworks simultaneously with accounting standards (Ball et al., 2000; Leuz et al., 2003; Bushman and Piotroski, 2006; Soderstrom and Sun, 2007). The weakness in prior studies however, is that researchers examine many countries together in order to collect sufficient data for their study. In the process they cluster the findings of the institutional setting of different countries (e.g. in code law countries in which accounting standards are set by the government and common law

² See: <http://www.fasb.org/pdf/fas157.pdf>

³ There are also Level 2 and Level 3 valuation methods for fair value in case of unavailable market prices.

systems in which standard-setting is a market process) to clearly identify the relation between institutional factors, accounting standards and accounting quality. In this process small, but important details of some countries are ignored.

A good example to illustrate the clustering problem is the case of the Netherlands. When examining the institutional setting of the Netherlands, researchers often stumble upon how to classify the institutional setting of the Netherlands. Confusion often starts with the legal origin of the Netherlands, which is French, then sustains with the origin of the Dutch accounting standards, which is British, and continues with the level of investor protection in the Netherlands, which is believed to be weak. Thus, the Netherlands has been categorized as a code law country (La Porta et al., 1997, 1998), but also as a common law country (Ball et al., 2000). And since the Netherlands is neither a code law nor a common law country, researchers often find unexplainable or what they call 'interesting' results for the Netherlands. The results for the Netherlands are often considered insignificant in the main findings of prior studies because the Netherlands often represents a very small part of the whole investigated sample and as a consequence the results for the Netherlands are ignored in prior studies.

The unique setting of the Dutch legal system is a request for a thorough investigation of the institutional framework of solitarily the Netherlands in order to avoid clustering. The characteristics of the legal system of the Netherlands can then state something about accounting quality in the Netherlands. However, accounting quality is not only dependent on the institutional setting, but also on the quality of the accounting standards that are followed, and therefore the quality of accounting standards in the Netherlands also requires careful investigation in order to bestow an opinion on accounting quality in the Netherlands. Measuring accounting quality in the Netherlands is particularly beneficial for regulators, standard-setters, accounting practitioners and users of financial statement information since accounting quality reveals the relevance, reliability and the usefulness of financial statement information provided by Dutch firms. By examining accounting quality in the Netherlands, we can indentify strengths and weaknesses in our financial statements. Future research can than focus on how to make accounting information in the Netherlands more useful for its users.

1.3 THESIS AIM, METHODOLOGY AND STRUCTURE

The research question of this thesis can be formulated as follows:

“What is the influence of adopting IFRS on financial statement information provided by Dutch public firms?”

The objective of this study is to examine accounting quality in the Netherlands. Accounting quality is examined by studying the legal and political system of the Netherlands, financial reporting incentives of Dutch public firms and accounting standards in the Netherlands. To examine the legal and political system of the Netherlands and the financial reporting incentives of Dutch firms, a literature study on the institutional framework of the Netherlands is conducted. For investigating accounting standards in the Netherlands, a literature study as well as an empirical study is necessary to examine the effects of accounting standards on reporting quality in the Netherlands.

The institutional setting (legal and political system and financial reporting incentives) is expected to have a positive influence on accounting quality if: (1) accounting standards are developed by a private body that operates independently from the government, (2) there is strong investor protection, (3) tax accounting operates independently from financial accounting, (4) there is good corporate governance and (5) there is a market-oriented capital structure, a big securities market and a stakeholder-oriented ownership structure in order to pose the need for public disclosure. Therefore, for determining the institutional setting in the Netherlands an extensive literature study on the Dutch situation is required.

Whereas examining the institutional setting of the Netherlands can be attained by a literature study, testing accounting standards in the Netherlands is another matter. Accounting standards can positively impact accounting quality if these standards are of high quality. High quality accounting standards ought to provide useful financial statement information to stakeholders to facilitate in their decision-making. Accounting standards are useful for decision-making if they provide full and fair information regarding a firm’s economic performance.

Whether financial statements provide full information can be investigated by the disclosure requirements implemented in the accounting standards. More disclosure requirements under IFRS are supposed to positively impact accounting quality (Daske and Gebhardt, 2006). However, Paredes (2003) finds that people can become overloaded with information and make worse decisions with more information due to more disclosures. In this study it is

assumed that mandatory adoption of IFRS results in more relevant and useful disclosure requirements to facilitate in stakeholder's decision-making and therefore there is no information overload. To test the disclosure requirements in the Dutch financial statements, a literature study is conducted.

Whether financial statements provide fair information, can be tested by examining management's discretion in preparing financial statements. Prior studies (e.g. Lang et al., 2006; Barth et al., 2007; Christensen et al., 2008) investigate the level of management's discretion by testing the level of conservatism and earnings management in financial statement information. These two constructs are especially relevant because they rely on managerial discretion and are therefore likely to be influenced by the incentives of those preparing the financial statements.

Earnings management is a strategy by management to manipulate a company's earnings. However, not all forms of earnings management are manipulative; earnings management can also be considered informative when it informs stakeholders about the underlying economic performance of a company. This is also the case for conservatism; conservatism tends to understate the economic performance of companies. Explanations for the existence of conservatism posit that it benefits the users of financial reports, as it increases firm value by constraining management's opportunistic payments to themselves or other parties. The increase in value is then shared among all parties to the firm, increasing their welfare (Watts, 2003). In this study the focus is on the manipulative and not the informative role of earnings management. Also, for conservatism, this study implies that conservatism is used by management to avoid litigation and contracting costs. Therefore, when the level of conservatism and earnings management in financial statement information is low, accounting quality improves.

However, testing the quality of accounting standards in the Netherlands poses two problems: (1) Dutch public firms use International Financial Reporting Standards (IFRSs, hereafter IFRS) to prepare the consolidated financial statements and Dutch private firms have the option to choose whether to report according to IFRS or Dutch accounting standards (Dutch GAAP) and (2) IFRS is only applied in financial statements starting after January 1, 2005. The solution for the first problem is to only investigate Dutch public firms because from 2005 these firms report under IFRS. In this way the speculation of the reporting standards used by private firms is eliminated. The solution for the second problem is to incorporate a time line in the study by dividing the study into two periods: a pre-IFRS period (before 2005) in which Dutch public firms report under Dutch GAAP and an IFRS period (from 2005) in which those

firms report under IFRS. The advantage of implementing a time line in the study is that the quality of both standards, IFRS and Dutch GAAP, can be compared with each other. With this comparison regulators and standard-setters can affirm whether IFRS is a qualitative higher standard than Dutch GAAP and if the adoption of IFRS contributes to high accounting quality in the Netherlands.

The remainder of the thesis is structured as follows: chapter two is an extensive literature study on the determinants of accounting quality in the Netherlands. Chapter three presents a research design on how the quality of the accounting standards can be measured through conservatism and earnings management. In chapter four, the empirical conservatism and earnings management tests are conducted and the results of the tests are presented and analyzed. The study ends with chapter five in which the conclusion of the research is formulated, the strengths and weaknesses of the study are revealed and recommendations for future research is provided.

1.4 CHAPTER SUMMARY

Testing the quality of accounting information is important for the reason that financial markets rely on published financial statement information for their efficient and effective functioning. The objective of this thesis is to study accounting quality in the Netherlands by examining the legal and political system of the Netherlands, the financial reporting incentives of Dutch firms and the quality of the accounting standards. The legal and political system and the financial reporting incentives are investigated through a literature study. For determining the quality of the accounting standards, a literature study is conducted on the disclosure requirements embedded in the accounting standards and an empirical study is performed in which conservatism and earnings management are considered proxies for testing the quality of the accounting standards.

2.1 CHAPTER INTRODUCTION

This chapter contributes to the study by explaining what accounting quality is and how to measure accounting quality. The quality of accounting information (section 2.2) depends on the usefulness of this information to outside parties such as shareholders and investors. Accounting information is useful to outside parties when this information assists in the decision-making process of these parties. Accounting information can be obtained from financial reports. Thus, examining the quality of the financial reports is the key to explain accounting quality. Therefore, factors that have an influence on preparing the financial reports must be taken into consideration for determining the quality of the provided information in the financial reports.

According to Soderstrom and Sun (2007), the legal and political system of a country (section 2.3), financial reporting incentives of firms (section 2.4) and accounting standards followed (section 2.5) influence accounting quality. Accounting standards, also referred to in the literature as General Accepted Accounting Principles (GAAP) are standards and procedures that companies use to prepare financial statements in a commonly accepted way. GAAP are needed so that financial reports will fairly and consistently describe the economic performance of companies in order for financial statements to provide relevant information to outside parties. The quality of GAAP (accounting standards) is consequently measured by value relevance (section 2.7). Each of these topics is thoroughly explained in this chapter where the focus lies on the quality of accounting information in the Netherlands before and after the introduction of the International Financial Reporting Standards.

2.2 ACCOUNTING QUALITY

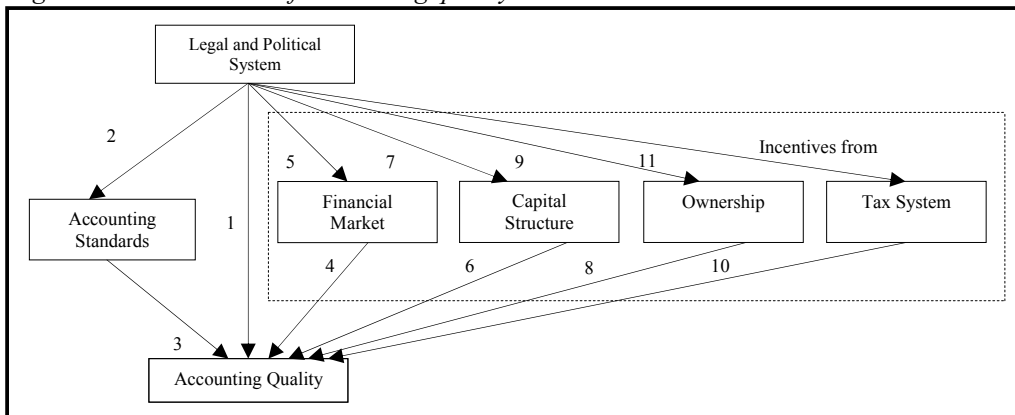
Siegel (1982) cited: “Quality appears to be an important attribute of accounting information. However, accounting quality is neither a readily measurable nor a generally agreed upon characteristic of a firm.” Ten years later, Imhoff (1992) recognized the importance of Siegel’s citation and added that accounting quality as a term is used to suggest that all accounting signals may not be equally free of noise due to bias or measurement error or both. From this definition it can be derived that accounting quality descends from accounting signals, which can be traced back from financial reports. It is worth noting that in this study accounting

quality is described through the quality of financial reports, and thus by financial reporting quality.

Hoogendoorn and Mertens (2001) consent that financial reporting is about communication. Especially, communication of financial and non-financial information to the stakeholders that have a financial interest in a company, is important. In this study, the focus is on communication of external financial reporting to the stakeholders of a company. The quality of financial reporting information is related to the stakeholders that this information is essentially meant for. Stakeholders should be able to use the information in financial reports for their decision-making. Hoogendoorn and Mertens (2001, p. 2) mention: “The better the usefulness of the financial information for decision-making, the higher the quality of the financial information.” With this statement, a link is laid to the importance of high accounting quality. High accounting quality provides useful information, which enables stakeholders to make better decisions in order to improve the efficiency of the capital markets. Besides this argument, Frankel and Li (2004) mention that accounting theory argues that financial reporting also reduces information asymmetry by disclosing relevant and timely information.

Soderstrom and Sun (2007) depict a schematic framework (see Figure 1) describing the determinants of accounting quality. Figure 1 shows that legal and political systems, incentives of financial reporting and accounting standards all affect accounting quality. Although accounting standards are likely to affect financial reporting, it is only one of the determinants of overall accounting quality (Ball et al., 2000). Because the legal and political system and financial reporting incentives will continue to differ across countries, it is possible that accounting quality differs across countries. Therefore, when studying accounting quality, the various determinants of accounting quality call for careful country-specific explanation.

Figure 1: Determinants of accounting quality



Source: Soderstrom and Sun (2007)

2.3 THE FIRST DETERMINANT: LEGAL AND POLITICAL SYSTEM

Following Soderstrom and Sun (2007), legal and political systems influence accounting quality in several ways. First, they affect accounting quality indirectly through accounting standards (arrow 2 in Figure 1). Accounting standard-setting is a political process, in which users of accounting information such as tax authorities, banks, shareholders, managers and labor unions have a significant influence on standard-setting. Second, legal and political systems affect accounting quality directly through enforcement of accounting standards and litigation against managers and auditors (arrow 1 in Figure 1). The enforcement role of legal systems is especially important when considering accounting quality following the adoption of IFRS. The International Accounting Standards Board (IASB) issues IFRS, but does not have enforcement power. Enforcement power resides in the security exchanges and courts where firms are listed (Schipper, 2005). In addition, IFRS is principle-based, which means that auditors and accountants need to follow general principles and exercise professional judgment.

There are several criteria to categorize countries according to their legal and political setting. Djankov et al. (2007) and La Porta et al. (1998) classify legal origins in English, French, German, Scandinavian and Socialist systems. Hung (2001) makes the distinction between British-American (Anglo-Saxon) and Continental European models. And Ball et al. (2000) divide legal systems of the world in code and common law systems. Due to the unique structure of the Dutch legal and political system (which is explained in section 2.3.1), the legal system of the Netherlands is categorized by the criteria of Ball et al. (2000) in which legal systems are divided into code and common law systems. Ball et al. (2000) argue that perhaps the most fundamental institutional variable causing accounting income to differ internationally is the extent of political influence on both standard setting and enforcement. They argue that the main proxy to determine whether a country's legal system is classified as either code law (a governmental process) or common law (a market process) is by investigating whether accounting practices are determined primarily in the public sector or in the private sector, respectively.

As defined by Ball et al. (2000), "In code law countries, the comparatively political influence on accounting occurs at national and firm levels. Governments establish and enforce national accounting standards, typically with representation from major political groups such as labor unions, banks and business associations. At the firm level, politicization typically leads to a stakeholder governance model, whose main objective is payout determination, i.e., to

determine the maximum amount of earnings that can be used for payments to stakeholders such as shareholders and executives, without jeopardizing the firms' financial stability. Compared to common-law countries, the demand for accounting income under code law is influenced more by the payout preferences of agents for labor, capital and government, and less by the demand for public disclosure. Conversely, because agents for these groups are represented in corporate governance, insider communication solves the information asymmetry between managers and stakeholders. Code law enforcement is a governmental function, involving administrative bodies undertaking criminal prosecution for code violation."

Ball et al. (2000) define common law systems as: "Under the shareholder governance model that is typical of common law countries, shareholders alone elect members of the governing board, payouts are less closely linked to current-period accounting income, and public disclosure is a more likely solution for the information asymmetry problem. In comparison with the more political process in code law countries, the desirable properties of accounting income in common law countries are determined primarily in the disclosure market. Common law arises from individual action in the private sector. While it might be efficient for private-sector bodies to codify generally accepted accounting rules and make them binding on their members, such standards arise in an accounting market, not in government. Common law enforcement is a private matter, involving civil litigation." Following previous studies such as Ali and Hwang (2000) and Ball et al. (2000), the shareholder-oriented reporting systems is defined as a system whose main objective is to provide a timely and reliable accounting performance measure to shareholders.

2.3.1 LEGAL AND POLITICAL SYSTEM OF THE NETHERLANDS

According to David and Brierly (1985), the Netherlands became a civil legal law country when occupied by the French in 1795. Civil law is a legal system inspired by Roman law, in which laws are written into a collection, codified, and not determined by judges. However, in an accounting setting, the term civil or code law refers to standard setting and enforcement that occurs under a governmental process (Ball et al., 2000). Regardless of the legal origin of the Netherlands, there is no univocal opinion of researchers whether the Netherlands is a code or common law country. La Porta et al. (1997, 1998) categorize the Netherlands as a code law country based on low investor protection in the Netherlands, whereas Ball et al. (2000) considers the Netherlands a common law country based on the need for public disclosure in the Netherlands. Since prior research on the legal system of the Netherlands is not univocal,

the characteristics of the Dutch legal system will be compared to the characteristics of code and common law systems as presented by Ball et al. (2000).

Accounting standards in the Netherlands

Zeff et al. (1992) mention that the earliest indigenous law in the Netherlands was approved in 1837. According to this law a merchant should draft an inventory listing and balance sheet (in Dutch: voorraadstaat en balans), but publishing was not required. The Netherlands Institute of Accountants was established in 1895 and this institute borrowed and, where applicable, used United Kingdom (UK) accounting principles as the basis for Dutch accounting in its formative years⁴ (to be noted: American accounting standards are the basis for the British accounting standards). According to Zeff et al. (1992), in 1928 the first company law was published requiring large companies and listed companies to publish a balance sheet and an income statement.

According to Klaassen et al. (2008), the first public law on external financial reporting in the Netherlands is the Law on Annual Reporting for Companies, which was established in 1971 by the Verdam Committee. According to this law, conflicts between companies could be taken to a branch of the Court of Justice at Amsterdam, known as the Enterprise Chamber. In this year also the Tripartite Accounting Standards Committee was founded, consisting of the Dutch Institute of Accountants (NIVRA), the Joint Employers' Organizations, and the Trade Union Federation. In 1981, this Committee became the Dutch Council for Annual Reporting (in Dutch: Raad voor de Jaarverslaggeving, also known as the RJ). The Council is an executive body, which is responsible for autonomous statutory drafting and publishing of the Guidelines for Annual Reporting (in Dutch: Richtlijnen voor de Jaarverslaggeving, also known as Dutch GAAP).

Cuijpers et al. (2005) mention that the accounting rules of the RJ are not legally binding and the RJ's Conceptual Framework is a literal translation of the IASB's Conceptual Framework. The RJ is not considered an element of the Dutch legal system but there are representatives (observers) of the Ministry of Finance and the Authority Financial Markets (in Dutch: Autoriteit Financiële Markten, also known as AFM) in the RJ. Furthermore, the RJ also represents users, preparers and auditors of financial statements. According to Roberts (2005) the guidelines of the RJ are used as recommendations and are not statutory requirements. However, these recommendations are considered essential references for auditors when auditing financial statements and for courts in coming to a verdict.

⁴ See: <http://adt.curtin.edu.au/theses/available/adt-WCU20061129.142400/unrestricted/09Appendices.pdf>

Title 9 of Book 2 of the Civil Code (in Dutch: Titel 9 van Boek 2 van het Burgerlijk Wetboek) is the most important Dutch law for annual reporting that is implemented by the government. The Civil Code concerns statutory law, which provides guidelines for the annual report, auditing and the publication of the annual report at the Chamber of Commerce. In Title 9 of Book 2 of the Civil Code, the Fourth and Seventh European Commission (EC) directives are incorporated. The Fourth EC directive pertaining to annual reports of companies stipulates requirements for the format, disclosure, and audit of the annual report. Furthermore, the Seventh EC directive stipulates requirements for the consolidated annual report. Listed Dutch companies are also subject to oversight by the AFM, which provides general rules on interim reporting and the publication of financial reporting. Also, The Dutch Central Bank is assigned for oversight on financial institutions (banks and insurance companies).

Title 9 of book 2 of the Civil Code refers to Dutch GAAP for preparing the annual reports of public and private companies in the Netherlands. Since Title 9 of Book 2 of the Civil Code contains statutory law and the government has observers in the RJ, the Netherlands is often perceived as a code law country. However, Dutch financial accounting and tax accounting rules are distinct and the influence of the government on Dutch accounting regulation is limited (Cuijpers et al., 2005). This situation is only applicable until the year 2005 when most Dutch companies employed Dutch GAAP in their annual reports. In 2002, the European Commission Regulation No. 1606/2002 required listed companies in the Netherlands to use International Financial Reporting Standards (IFRS) as adopted by the European Union (EU) in their consolidated accounts from 2005.

The road to IFRS

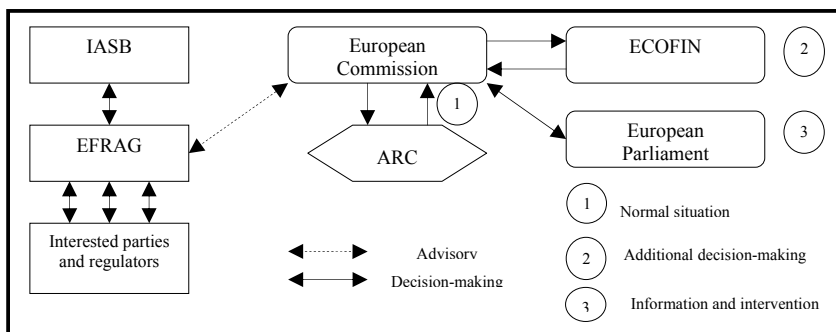
Soderstrom and Sun (2007, p. 6) mention in their study “Europe is the origin of many legal systems, such as English, German, French and Scandinavian, and thus, prior to harmonization, there were extremely diverse, country-specific accounting systems. Recognizing this, members of the European Union (EU) were the first countries to move towards harmonization of accounting standards.” In the late 70s and 80s, the EU issued several directives to harmonize financial reporting practices in the EU to reduce diversity and facilitate cross-listings. This resulted in a unified format of financial statements that facilitates cross-border research and investments.

Van Helleman (2005) states that the EU directives on annual reporting were initially meant for harmonizing national standards within Europe, but this goal appeared to be a very challenging process. Another possibility for the EU was to adopt American reporting standards (US GAAP), but this was not practical since the European Commission could not

accept that mandatory accounting standards in Europe are developed and issued by a body outside the EU. Therefore, instead of developing EU guidelines, the EU chose another approach, which was adopting a set of new standards that were hardly used by firms. These standards were required to result in a higher degree of transparency and comparability of financial reporting in the EU and the EC could influence the content of these standards. Accounting harmonization progressed in 1995 when the EC opted to use the International Accounting Standards (IAS), which were developed and issued by a private body entitled the International Accounting Standards Committee (IASC), for all stock funds in the EU. Applying IAS in Europe was an attempt to create one integrated European capital market (European Commission, 1999). Van der Tas (2006) states that the reason for adopting IAS was to improve efficiency on the European stock-exchange in order to attract capital less costly and more efficiently from the perspectives of both the firms and the investors.

Soderstrom and Sun (2007) mention that more firms started to use IAS voluntarily in the late 90s as stock exchanges in Europe became more favorable disposed towards IAS. In 2000 the IASC, the cooperation of participants, was restructured into the International Accounting Standards Board (IASB), a private body with a fulltime board and extensive support. The IASB incorporated the standards of the IASC (IAS), Standing Interpretations Committee (SIC, also a body of the IASC), International Financial Reporting Interpretations Committee (IFRIC, a body of the IASB) and established some new standards into the overall standards of IFRSs. On June 6, 2002, the EU issued an official statement to require all listed companies in the EU to use IFRS in their consolidated accounts for fiscal years starting on January 1, 2005. Van Helleman (2005) states that with selecting IFRS, the EU remains in the position to control the direction in which these standards are developing. As a result of the endorsement mechanism, issued IFRSs have to pass through the EC for approval before listed European companies can apply these standards in their consolidated financial statements.

Figure 2: Approval of IFRS in the EU



Source: Van Helleman (2005)

The European Parliament notifies how the approval of the standards is regulated. Knoops (2007) mentions that discussion and evaluation of the standards is a political process in which different parties that have an interest in the development of the standards are involved. These parties participate via the European Financial Reporting Advisory Group (EFRAG) and the Accounting Regulatory Committee (ARC) as shown in Figure 2. Other involved parties are the IASB and the Council of Ministers (ECOFIN). This structure makes it possible for the EC to intervene and participate proactively in the development of IFRS. For Dutch public companies that are required to report under IFRS from 2005, the Netherlands can be recognized as a common law country since applied IFRS by Dutch public firms are issued by the IASB, which is a private body that does not have statutory power to enforce IFRS.

Corporate governance

Corporate governance is the set of mechanisms in place to ensure that the assets of the firm are used efficiently, guaranteeing the suppliers of finance a return on their investment and thus preventing the inappropriate distribution of these assets to managers or other parties at the expense of the rest of the stakeholders (Shleifer and Vishny, 1998). Accordingly, adequate governance results in better monitoring of management. In the Netherlands, institutions such as pension funds, own small stakes in Dutch firms. But, management or large shareholders hold large parts, or even the majority, of outstanding shares (Cuijpers et al., 2005). Therefore, the Netherlands is known for its shareholder-controlled firms with both a supervisory and management board (two-tier board structure). The supervisory board is independent from the company and consists entirely of 'outsiders' and the management board consists of the management team of the company. The two-tier board structure makes it possible to separate decision-control from decision-management functions.

De Jong et al. (2005) mention: "In the shareholder-oriented structure, shareholders elect members of the management board and approve the annual reports. Supervisors are elected by co-optation, not by shareholders. Dividend policy is set by management with the consent of the supervisory board and is formally approved by shareholders. Shareholders also vote on issues as mergers and acquisitions." From this point of view it can be concluded that the shareholders are the key drivers of Dutch firms. However, the Dutch corporate governance model can also be perceived as stakeholder-oriented. First, in the citation it is mentioned that shareholders do not elect the supervisors. Second, the Dutch governance model is known for its anti-takeover mechanism, which limits the voting power of controlling shareholders in important decisions. Third, the supervisors are required by Dutch law to act in the interest of all the stakeholders. Fourth and last, the supervisors can make amendments in the financial statements, and thus the supervisors have the final authority to determine the amount of profit

and consequently the amount of dividend payout. These are all signals that Dutch firms tend to be more stakeholder-oriented.

In 1997, the Peters Committee presented a report containing 40 recommendations concerning corporate governance in the Netherlands. The report mainly focuses on the relationship between the board of management, the supervisors and the shareholders. It pleads for a strengthening of the position of shareholders and urges them to participate more actively in the affairs of the company. The report is an example of a code of best practice in the sense that it is not legally binding; it merely makes recommendations. The report of the Peters Committee is also known as the ‘Dutch Corporate Governance Code’. The Code includes the following important recommendations to strengthen the position of shareholders: (1) capital and control should be in line, (2) the board of management and the supervisory board should have the confidence of the general meeting of shareholders and (3) investors who represent 1% of the issued capital should be able to place items on the agenda. The Dutch Corporate Governance Code, effective from 2004, can be considered a move towards a more shareholder-oriented corporate governance model in the Netherlands.

Investor protection

The main reason why the Netherlands is often classified as a code law country is due to the lack of regulation in the field of investor protection. The World Bank (2009)⁵ defines investor protection as: “Companies grow by raising capital, either through a bank loan or by attracting equity investors. Selling shares allow companies to expand without the need to provide collateral and repay bank loans. However, investors worry about their money and look for laws that protect them. Good protections for minority shareholders are associated with larger and more active stock markets. Thus, both governments and businesses have an interest in reform strengthening investor protections.”

In 1995, the European Commission Regulation No. 93/22/EEG Investment Services Directive (ISD) was implemented. The purpose of ISD was to protect investors in Europe. ISD regulation in the Netherlands was assigned to the AFM in 1999. Before the introduction of the AFM, investor protection in the Netherlands was proven to be weak by La Porta et al. (1998). Also, the World Bank report of 2009 perceives accounting regulation in the Netherlands as being weak, because the Dutch Enterprise Chamber is the only mechanism that passively enforces Dutch GAAP and Dutch GAAP are not officially backed by law or endorsed by the stock exchange.

⁵ <http://www.doingbusiness.org/Documents/CountryProfiles/NLD.pdf>

The study of La Porta et al. (1998) mainly compares the Netherlands to countries with shareholder-oriented models, where naturally the interests of the stockholders are the most important and thus strongly protected. La Porta et al. (1998) develop a measure of creditor protection in 49 countries. The measure is composed of four items: (1) no automatic stay on assets, thereby preventing secured creditors from getting possession of loan collateral, (2) secured creditors are paid first, (3) restrictions exist for going into reorganization and (4) management does not stay on in reorganization. The Netherlands scores 2 out of 4 on this measure of creditor protection because secured creditors are paid first, and restrictions exist for going into reorganization. A score of 2 implies debt-holders in The Netherlands have a strong position, but internationally, they do not have many rights.

In the Netherlands, the Dutch Corporate Governance Code also protects the interests of the stakeholders. According to Timmerman and Doorman (2002), shareholder protection in the Netherlands was necessary to attract financing from foreign and Dutch investors and to lower the cost of capital for Dutch companies. The former Minister of Finance, sir Wouter Bos, said in an 2008 interview⁶ regarding corporate governance in the Netherlands: “That the Dutch shareholders are protected under the stakeholder-model does not necessarily mean that they are weaker protected then under a shareholder-model. In the shareholder model, a shareholder can prosecute the governors of a company when there is a conflict of interests. In the Netherlands, the governors of a company can be held liable in the event of a conflict of interests.” Thus, with the introduction of the Dutch Corporate Governance Code in 2004, it can be remarked that investor protection in the Netherlands is heading to a stronger level.

Concluding it can be stated that it is not right to classify the Netherlands as either a code or common law country. It is also not relevant for researchers to categorize the Netherlands as either code or common law. The characteristics of the Dutch legal system and the influence this has on accounting quality in the Netherlands are more relevant for the research. Therefore, the Netherlands will not be categorized as either code or common law, but rather be positioned in the middle of a code and common law system. Moreover, in the remaining of the thesis the Dutch legal system will be referred to as a unique legal system where influences of both code and common law systems are present. As mentioned earlier, the legal and political system of a country influences the quality of the financial reports by influencing the standard-setting process (the Dutch ‘Polder model’), enforcing accounting standards (IFRS) and litigation against governors of companies (‘Dutch Corporate Governance Code’).

⁶http://www.minfin.nl/Actueel/Kamerstukken/2008/01/Kamervragen_over_beleggersbescherming_in_Nederland

2.4 THE SECOND DETERMINANT: FINANCIAL REPORTING INCENTIVES

Legal and political systems also affect accounting quality indirectly through the incentives associated with financial reporting. Financial reporting incentives stem from both the supply of (cost of disclosure) and demand (benefit of meeting contracting parties) for information. Ball (2001, p.131) argues “all parties contracting or contemplating contracting with the firm demand information about the firm’s ability to meet its contractual obligations. Therefore, firms agree to incur the costs of supplying information and in return they receive better terms of trade from factor owners and customers.”

The first financial reporting incentive that likely affects accounting quality is the development of financial markets (arrow 4 in Figure 1). Soderstrom and Sun (2007, p. 30-31) mention “the demand for information results from market participants’ needs to reduce information asymmetry. Adverse selection happens when market participants cannot differentiate between good and bad firms. Without such differentiation, market participants would ‘price protect’ themselves by increasing costs of financing to firms, and thus only bad firms would be willing to finance at these high costs.” Francis et al. (2005) state that firms in need of external financing voluntarily disclose more information than a country’s minimum requirement and have lower costs of capital. Thus, the demand for information from market participants provides incentives for firm managers to improve the quality of financial reporting. Through the financial markets, legal and political systems indirectly affect accounting quality (arrow 5 in Figure 1). Strong investor protection and lower levels of government expropriation guarantee investors who are willing to provide financing. Because the demand for accounting information is dependent on the nature of financial markets, and the legal and political systems will impact the markets, characteristics of the legal and political system will impact the quality of earnings.

Firms with different financing needs have different incentives for financial reporting (arrow 6 in Figure 1). Ali and Hwang (2000) make a distinction between bank-based economies and market-based economies. In market-based economies, investors invest directly through a stock market and they rely directly on a company’s financial reports and expend resources to acquire information. In bank-based economies, investors decide to lend money through a bank and delegate the role of monitoring of firms to the bank. However, Sun (2006) finds that the usefulness of financial reporting in improving capital investments decisions is decreasing with the level of debt financing. As a result of low reporting incentives, accounting quality would decrease in firms dependent on bank financing. Through the capital market, legal and

political systems can indirectly influence accounting quality (arrow 7 in Figure 1). In bank-based economies, earnings quality is lower because information is privately communicated instead of through financial reporting.

The ownership structure of a firm also influences accounting quality (arrow 8 in Figure 1). For firms with concentrated ownership where controlling stakeholders are active in management (mostly private companies), the need for financial reporting reduces. Political and legal systems can also influence accounting quality indirectly through the ownership structure of a firm (arrow 9 in Figure 1). La Porta et al. (2008) mention that countries with stronger investor protection have a lower concentration of ownership, because ownership concentration is a substitute for legal protection, since shareholders need more control over managers and small investors have less protection. Thus, the legal and political system of a country affects the ownership structure, which in turn affects earnings quality.

The last important aspect of the legal system is the tax system and the tax system can influence earnings quality in several ways (arrow 10 in Figure 1). First, when there is a close linkage between accounting standards and tax laws, the quality of accounting standards reduces due to the fact that accounting standards serve political purposes such as tax collection for the government. Second, tax rates can increase the incentives to reduce taxable income. Third, tax authorities have statutory power to verify a firm's profits. Finally, legal and political systems affect accounting quality through tax systems (arrow 11 in Figure 1), because tax rates are determined via a political process in which the Ministry of Finance is appointed.

2.4.1 FINANCIAL REPORTING INCENTIVES IN THE NETHERLANDS

As mentioned by Soderstrom and Sun (2007), the legal and political system of a country indirectly influences accounting quality through financial reporting incentives of firms. The financial reporting incentives that matter in this context are (1) the financial market, (2) the capital structure, (3) ownership structure and (4) the tax system. In this section these financial reporting incentives are explained thoroughly for the Dutch situation.

Financial market development

Zeff et al. (1992) identified the Dutch financial market as a relatively small securities market, but a strong equity market. Still, the Dutch financial market was not perceived to be a capital-market-based financial system due to inactive corporate control. However, this was only the

situation before the Dutch Corporate Governance Code was implemented in the Netherlands, and thus this situation is particularly for the period before the year 2005. Therefore, it can be stated that the small securities market in the Netherlands before 2005, led towards smaller reliance on formal means of communication. According to Demircuc-Kunt and Levine (1996), the stock market in the Netherlands can be considered a developed stock market. The Dutch stock market has few non-bank financial corporations, but the Netherlands together with the UK and the US, has the most insurance and pension companies. Following the stakeholder-oriented model of Dutch firms with various participants such as shareholders, laborers and unions (Dutch Polder model) it can be stated that information asymmetry is probably solved by public disclosure.

Capital structure

Zeff et al. (1992) mention the great reliance on bank lending in the Netherlands. Thus, before 2005 the capital structure in the Netherlands can be considered a bank-oriented financial systems in which banks do their own assessment of a company's creditworthiness and therefore they do not depend on the information provided in annual reports. Demircuc-Kunt and Maksimovic (2002) categorize the capital structure of the Netherlands as a market-based financial system in which investors invest directly through a stock market and they rely directly on a company's financial reports and expend resources to acquire information. The market-based capital structure of the Netherlands poses the need for full and transparent financial information in order to address the need of investors in better decision-making. According to Ali and Hwang (2000), the usefulness of financial statement information is higher in market-oriented financial systems than in bank-oriented financial systems.

Ownership structure

According to Cuijpers et al. (2005), the corporate structure of Dutch (public) firms is based on a two-tier board structure, formally separating the decision-management and decision-control functions. This structure categorizes the Netherlands in the Continental European model. Another characteristic of the ownership structure in the Netherlands is that in many firms, management or shareholders hold large parts, or even the majority, of outstanding shares. Nevertheless, according to De Jong (2002), institutional ownership is also common in the Netherlands. This gives rise to a great within-country variation in ownership structures. Following Ali and Hwang (2000) the Continental European characteristics of Dutch firms can decrease the usefulness of accounting information since the shareholders mostly use this information. However, foreigners and pension funds also own stakes in Dutch firms and therefore public disclosure is required in the Netherlands, which positively influences the usefulness of financial statement information.

Tax system

Tax laws are virtually irrelevant for annual reporting in the Netherlands, a feature that is comparable to US and UK practice. Many other EC countries, including France, Germany and Belgium, have closer ties between the annual reporting regulation and tax reporting, since in these countries the annual report is used to levy corporation taxes. In the Netherlands, a private body known as the Dutch Accounting Standards Board (RJ), is involved in the standard-setting process. According to Ali and Hwang (2000), the usefulness of accounting information is higher for countries where private-sector bodies are involved in the standard-setting process, because government standard-setters establish financial accounting rules whose primary purpose is to satisfy regulatory needs.

Before 2005, it can be stated that the small securities market, the bank-oriented capital structure and shareholder-oriented governance model in the Netherlands indicate that there was not much need for public information. But, from 2005 accounting information provided by Dutch public firms can be considered useful for decision-making due to the need for public disclosure, the market-oriented capital structure, private and institutional shareholders and the separation of tax from accounting regulation. This view is strengthened by the legal and political system in the Netherlands where the accounting standards followed by public firms are established by a private body and where all stakeholders are fairly protected. Thus, there are indications that the Dutch government and listed firms in the Netherlands have taken action to ensure that financial reports provide the necessary quality for decision-making. Soderstrom and Sun (2007) mention that legal and political systems, financial reporting incentives and accounting standards in a country determine accounting quality. The next section focuses on the usefulness of accounting information that is imbedded in the accounting standards.

2.5 THE THIRD DETERMINANT: ACCOUNTING STANDARDS

In section 2.3 it is thoroughly described how Dutch firms reported under Dutch GAAP before 2005. Dutch GAAP represents accounting rules that are not considered statutory laws, but the Dutch Civil Code does refer to Dutch GAAP in its statutory law. From this position it can be concluded that accounting standards in the Netherlands are binding for its members under a governmental process. When analyzing the accounting rules of Dutch GAAP a little further, it can be noted that Dutch GAAP was mainly a translation of the former IAS as they were formulated by the IASC. Since IAS were generated under a market process, it can be perceived that while Dutch GAAP are binding for its members, Dutch GAAP is generated

under a market process. This confusing situation is also a reason why researchers had different opinions about the establishment and enforcement of accounting standards in the Netherlands before the introduction of the high-quality IFRS accounting standards in 2005.

IFRS are considered high quality standards, because the IASB focuses on the qualitative characteristics that these standards must represent in order to make financial statements useful for decision-making. Relevance and faithful representation are the fundamental qualitative characteristics of useful financial information. Relevant financial information is capable of making a difference in the decisions made by users. Materiality is an entity-specific aspect of relevance based on the nature or magnitude (or both) of the items to which the information relates in the context of an individual entity's financial report. To be useful, financial information must not only be relevant, it must also represent faithfully the phenomena it purports to represent. This fundamental characteristic seeks to maximize the underlying characteristics of completeness, neutrality and freedom from error. Information must be both relevant and faithfully represented if it is to be useful. Comparability, verifiability, timeliness and understandability are qualitative characteristics that enhance the usefulness of information that is relevant and faithfully represented.⁷

2.5.1 DUTCH GAAP VERSUS IFRS

In order to obtain an understanding about the impact of IFRS on consolidated financial statements of Dutch listed companies, it is necessary to study the differences between IFRS and Dutch GAAP since Dutch listed companies have been reporting under both accounting standards. Several studies have been conducted to determine the differences between Dutch GAAP and IFRS. Street (2002) conducted a study where local GAAP of 62 different countries were analyzed by looking at 80 accounting standards. Street (2002) found that out of the 80 standards, eleven standards resulted in differences between IFRS and Dutch GAAP, of which two standards were not mandatory for Dutch GAAP. This indicates a higher level of disclosure for IFRS in regard to Dutch GAAP.

Ding et al. (2007) also conducted research on the differences between IFRS and the local GAAP of 30 different countries. Their results indicate that there are 25 differences between IFRS and Dutch GAAP. Ten of these differences were due to the fact that these standards were absent in Dutch GAAP. This study also indicates that IFRS requires a higher level of

⁷ <http://www.iasplus.com/standard/framework.htm>

disclosure than Dutch GAAP. Research performed by Ernst & Young (2006) pointed out 357 differences between Dutch GAAP and IFRS. On the matter of disclosures, IFRS was in 52 standards stricter than Dutch GAAP. On the other hand, Dutch GAAP is in 31 standards stricter on disclosures than IFRS. Overall, it can be concluded that IFRS is stricter than Dutch GAAP on the matter of disclosures and thus a higher level of disclosure is required under IFRS. These studies clearly indicate that there are difference between Dutch GAAP (applied in single financial statements of listed Dutch companies and financial statements of private companies) and IFRS (applied in consolidated financial statements of listed Dutch companies).

The major change in the Framework of the IASB is the move towards relevant and reliable financial statement information. This move is challenged by the historic cost accounting valuation⁸, which provides more reliable but less relevant information. Historical cost accounting provides the original monetary value of an item. Therefore, the Framework moved towards another valuation method, named fair value accounting. Fair value accounting provides more timely and relevant but less reliable information, because most of the time quoted market prices are unavailable and difficulties occur when making estimates of fair value that can lead to volatility and subjectivity in profits. The use of more fair value in IFRS is also one of the significant differences between IFRS and Dutch GAAP.

2.6 CONCLUDING THE LITERATURE STUDY

From the legal and political study and the financial reporting incentives study the conclusion can be drawn that before 2005 Dutch firms reported mostly under Dutch GAAP. Dutch GAAP is passively enforced through Title 9 of Book 2 of the Civil Code. Also, the stakeholders were protected under a shareholder-oriented model and therefore investors were weakly protected. However, from 2005, this situation changed in a positive way. Dutch public firms are now required to report under IFRS, which are established by a private body and actively enforced by the EU. Furthermore, with the introduction of the Dutch Corporate Governance Code, the governance structure in the Netherlands became more stakeholder-oriented which leads to more protections for the investors. At last, the introduction of the AFM also improves investor protection in the Netherlands.

Before 2005 the financial reporting incentives of Dutch firms were heading in a direction in which there was almost no need for public disclosure. The Netherlands had a small securities

⁸ Historical cost accounting requires all financial statement items to be based on original cost.

market, a more bank-oriented capital structure and a more shareholder-oriented ownership structure in which there was more need for communication within the firm. After 2005, the Netherlands is known for its developed stock market with a market-oriented capital structure in which stakeholders are protected under the Dutch Corporate Governance Code. At last, from the accounting standards study, it can be noted that due to the introduction of IFRS in 2005, Dutch public firms are required to disclose more information in their financial statement. Thus, from analyzing the determinants of accounting quality it can be stated that from 2005 accounting information ought to be more useful due to the mandatory adoption of IFRS. Especially the need for public disclosure, more disclosure requirements due to IFRS and the stakeholder-oriented governance model should assist in the usefulness of the provided accounting information for outside users. Figure 3 sums up the literature study on the determinants of accounting quality.

Figure 3: Determinants of accounting quality for Dutch public firms

	Before 2005	After 2005
1) Legal and political system of the Netherlands	Accounting standards: Dutch GAAP (passive enforcement)	Accounting standards: IFRS (active enforcement by the EU), but no statutory power
	Governance model: shareholder-oriented	Governance model: stakeholder-oriented (Dutch Corporate Governance Code)
	Investor protection: low	Investor protection: medium
2) Financial reporting incentives of Dutch firms	Financial market: small securities market with more private communication	Financial market development: Dutch Polder model poses the need for public information
	Capital structure: bank-oriented financing where banks acquire their own information	Capital structure: market-oriented financing poses the need for public disclosure
	Ownership structure: private ownership is common and the shareholders are protected under the shareholder model	Ownership structure: private and institutional ownership financing poses the need for public disclosure
	Tax system: tax accounting is independent from financial accounting indicating low government involvement in accounting standards-setting	Tax system: tax accounting is independent from financial accounting indicating low government involvement in accounting standards-setting
3) Accounting standards	Disclosure requirements under Dutch GAAP are not as many as under IFRS	There are more disclosure requirements under IFRS
	More use of historic cost accounting and as a consequence, less timely information	The shift towards using more fair value accounting and therefore more timely and useful information

With Figure 3, the literature study part of this thesis is concluded. The next section focuses on how accounting standards can influence accounting quality. The focus is hereby on the fairness of accounting standards. Accounting standards ought to provide fair information in

the financial statements in order to assist in the decision-making process of the stakeholders. Accounting information is also considered useful when managers cannot exercise discretion while preparing the financial statements. In this case, financial statements provide value relevant information to stakeholders. Therefore, the next section focuses on value relevance.

2.7 VALUE RELEVANCE

One approach that can assist in determining the usefulness of accounting information in the Netherlands is by studying the quality of the accounting standards that are used to prepare the consolidated financial statements of Dutch firms. By adopting this approach, the importance is on the value relevance of the provided accounting information. Accounting information is considered useful when this information is value relevant to stakeholders. The obstacle in employing this approach is how to measure the value relevance of accounting standards. One general thought is that accounting information is useful and thus value relevant to stakeholders when (1) the accounting values presented in the financial statements correspond with the fair values presented by share prices and returns and when (2) managers cannot exercise discretion in accounting figures. Accordingly, the level of conservatism and the level of earnings management should affirm the value relevance of accounting information.

Francis and Schipper (1999) define four possible explanations of value relevance, which are: (1) financial statement information leads stock prices by capturing intrinsic share values towards which stock prices drift, (2) financial statement information is value relevant if it contains the variables used in a valuation model or assists in preceding those variables, (3) value relevance as indicated by a statistical measure whether investors actually use the information of setting prices and (4) a statistical association between accounting information and market values or returns. Another researcher, Hung (2001), defines value relevance as the ability of an accounting measure to capture or summarize information that affects firm value. Two proxies for value relevance are frequently adopted in prior studies (e.g. Lang et al., 2006; Barth et al., 2007; Christensen et al., 2008), namely, conservatism (tests fairness) and earnings management (tests the level of management discretion exercised). Christensen et al. (2008) state that conservatism and accruals particularly rely on management's discretion and are therefore likely to be influenced by the incentives of those preparing the financial statements. In order to use conservatism and earnings management as proxies for value relevance, these topics are discussed in more detail in this section.

2.7.1 CONSERVATISM

Conservatism is often referred to as “anticipate no profit, but anticipate all losses.” Basu (1997) formulates a more refining definition of accounting conservatism, which is “the tendency to require a higher degree of verification for recognizing good news than bad news in financial statements... This asymmetry in recognition leads to systematic differences between bad news and good news periods in the timeliness and persistence of earnings.” Basically, this means that there are more stringent recognition requirements for profits than for losses.

There are two types of conservatism: (1) balance sheet conservatism by Feltham and Ohlson (1995), where there is an understatement of net asset value and (2) earnings conservatism by Basu (1997), where there is asymmetric timeliness of earnings. Balance sheet conservatism is also known as ex ante or unconditional conservatism that leads to a higher market-to-book ratio (when the market-to-book ratio is greater than one, there is an indication of balance sheet conservatism). Earnings conservatism is also referred to as ex post or conditional conservatism where negative and positive annual stock returns are used as proxies for good and bad news.

Watts (2003) explains four incentives for conservatism: (1) contracting in order to address the agency problem, (2) shareholder litigation to avoid legal costs, (3) taxation to reduce taxable income, and (4) accounting regulation to prevent overvaluation of income due to accounting standards. Basu (1997) argues that abandonment is also an incentive for conservatism. In this case shareholders would prefer to liquidate the firm rather than bear predictable losses. Conservatism is an understatement of both net assets and accounting earnings, while market valuation does not differentiate in timeliness of recognition of negative versus positive news. As a result the market value is greater than the book value. Because of the disruption in accounting data, the value relevance of reported accounting information declines.

Researchers discovered different formulas to measure conservatism. The most commonly used measures are: (1) the market-to-book (MTB) ratio of Feltham and Ohlson (1995), (2) the asymmetric timeliness measure of Basu (1997) and (3) the negative-accruals measure of Givoly and Hayn (2000). The MTB model assumes that a conservative accounting system tends to depress the net book values of a firm relative to the firm’s true economic value. Therefore a higher MTB ratio indicates a higher degree of conservatism. The strengths of the MTB model are that it uses firm-specific measurements and it is a widely acknowledged

model. However, this model does not control for economic rents in firms. The Basu model focuses on the implication that earnings will reflect bad news more quickly than good news. A cross-sectional regression is used to measure the degree of conservatism. Basu's model is also the most popular model in conservatism literature and one reason for its popularity is that the Basu model covers most of the incentives for conservatism. However, some limitations to the model are that the model of Basu does not perform well in a time-series approach, the model is not suitable for private companies, and there is no firm-specific measure of conservatism. The last measure explained in this study, is that of Givoly and Hayn (2000) who use negative accruals as a measure for conservatism. The rationale behind their theory is that when firms report bad news more quickly than good news, the level of accumulated accruals become more and more negative. Total accruals are the sum of operating and non-operating accruals in their measure. The strength of Givoly and Hayn's (2000) model is that accruals are a firm-specific measure of conservatism. However, critics argue that the measurement requires a base year, which is difficult to standardize for firms and the measurement does not compensate for depreciations. These three models are presented in Figure 4 and further explained in chapter 4.

Figure 4: The three common conservatism models

Feltham and Ohlson (1995)	Basu (1997)	Givoly and Hayn (2000)
$MTB = \frac{\sum MV}{\sum BV}$ <p>Where:</p> <p>MV = market value represented by market capitalization BV = book value represented by shareholders equity</p>	$NI_t = \alpha_0 + \alpha_1 DR_{it} + \beta_0 R_{it} + \beta_1 R_{it}^* DR_{it} + \varepsilon_{it}$ <p>Where:</p> <p>NI_t = accounting income (before extraordinary items) R_{it} = return of firm i over 12 months (P_t-P_{t-1})/P_{t-1} DR_{it} = 1 if R_{it} < 0 and 0 if otherwise</p>	<p>Measurement operating and non-operating accruals:</p> <p>Total accruals (before depreciation) = (net income + depreciation) – cash flow from operations</p> <p>Operating accruals = Δ accounts receivable + Δ inventories + Δ prepaid expenses – Δ accounts payable – Δ taxes payable</p> <p>Non-operating accruals = total accruals – operating accruals</p>

2.7.2 EARNINGS MANAGEMENT

Earnings management is often referred to as the information asymmetry problem between managers and stakeholders, which is powered by imperfect markets where the stakeholders do not have all the correct information on a timely basis. A recent definition of earnings

management is formulated by Stolowy and Breton (2004) who define, what they call, accounts manipulation as “the use of management’s discretion to make accounting choices or to design transactions so as to affect the possibilities of wealth transfer between the company and society (political costs), funds providers (cost of capital) or managers (compensation plans).” Meaning, management can make accounting decisions that can affect financial statement information positively or negatively. But also, management can act in their self-interest and increase their own wealth (agency theory). However, Palepu et al. (2007) mention that not all accounting choices are motivated by earnings management, some accounting choices are made to inform outsiders of the changing business (the signaling or informativeness role of earnings management).

According to Hoogendoorn (2004) there are five forms of earnings management: (1) loss maximization also known as ‘big bath accounting’, (2) loss minimization, (3) profit maximization for reputation purposes, (4) profit minimization for political cost purposes, and (5) income smoothing. Income smoothing combines the first four forms of earnings management together. In profitable years the profit will be minimized and profit will be ‘reserved’ and during the years with losses this reserve will be used to boost the profitability to arrive at a stable level of profit (growth). Management’s choice for smoothing income is to create a stable risk profile for the firm in order to reduce fluctuations in share price of the company, which positively influences the reputation of the firm. Manipulation of earnings figures misleads stakeholders about the true economic performance of a company. Thus, earnings management has a negative effect on decision-making and consequently decreases the usefulness of financial statement information for outsiders. As a result, the value relevance of accounting information reduces.

Earnings management cannot be detected simply by observing financial reports since managers can use different methods to manipulate earnings (e.g. through accounting choices, presentation of financial figures, disclosures etc.). But, earnings management can be detected with the use of accrual models. Ronen and Yaari (2008, p. 371) explain that accruals are the result of the discrepancy (time lag) between the timing of cash flows and the timing of the accounting recognition of a transaction. Accruals are thus the difference between net profit (earnings) and cash flow from the operational result in a certain period.

According to Ronen and Yaari (2008), there are two types of accruals: (1) non-discretionary accruals (NDA) “accruals that arise from transactions made in the current period that are normal for the firm given its performance level and business strategy, industry conventions, macro-economic events, and other economic factors” and (2) discretionary accruals (DA)

“accruals that arise from transactions made or accounting treatments chosen in order to manage earnings.” Accordingly, discretionary accruals are an indicator of earnings management. However, from financial statement information only the amount of total accruals can be obtained. Thus, the amount of non-discretionary accruals must be deducted from the total accruals in order to obtain the level of discretionary accruals.

Non-discretionary accruals can be estimated with the use of an accrual model. There are several accrual models to detect the level of non-discretionary accruals, three of which are the Jones model (1991), the popular modified-Jones model by Dechow et al. (1995) and the recent performance-matching model of Kothari et al. (2005). These models can be used in a time-series and/or in a cross-sectional approach. Time-series models use company-specific variables from the same company to study the effects of certain events over a long period. The cross-sectional model uses the average of the industry of the company for the same period to study certain events across e.g. industries.

According to Jones (1991), earnings management can be measured with a two-period model: the estimation period and the event period. For the estimation period, discretionary accruals are supposed to be zero. This assumption implies that earnings management is not present in the estimation period. To compensate for differences in company size all variables are scaled by lagged total assets (control for heteroskedasticity). In the event period, the difference between the total accruals and the non-discretionary accruals is expected to be the amount of the discretionary accruals. A disadvantage of the Jones model is the presence of the type-I error, because some normal accruals were incorrectly identified as discretionary accruals. The consequence is an incorrect conclusion that earnings management is applied. Jones herself declares another limitation of her model, namely that all revenues are supposed to be non-discretionary.

Dechow et al. (1995) provide a solution for the type-I error in their modified-Jones model by adding accounts receivable to the Jones model. Companies can engage in earnings management by posting revenues (in this period) that belong to the next period. Kothari et al. (2005) noticed that the heteroskedasticity problem was still not solved by the modified-Jones model of Dechow et al. (1995) and they decided to add an intercept (α_0) to reduce this heteroskedasticity and an extra control variable (return on assets) into the regression. They conclude that this also reduces type-I errors and that the ROA variable reduces the level of normal (non-discretionary) accruals that are erroneously identified as discretionary accruals.

Another important aspect of the model of Kothari et al. (2005) is performance matching. Kothari et al. (2005) use performance matching of ROA and industry to calculate the level of discretionary accruals. They use two similar samples: in the first sample, ROA is matched per industry and in the second sample the actual ROA is matched with the ROA of the industry mean of the first sample. The first sample is also referred to as the control sample. The control group is matched with the second sample group to identify significant differences among the variables under analysis. However, Shih (2009) finds that the ROA-adjusted model of Kothari et al. (2005) has a high frequency of type-II errors and thus underestimates the use of earnings management. These three accrual models are presented in Figure 5 and further explained in chapter 4.

Figure 5: The three common accrual models

The Jones model (1991)	The modified-Jones model (1995)	The performance-matching model (2005)
$\frac{TA_{it}}{A_{i,t-1}} = \alpha_1 \frac{1}{A_{i,t-1}} + \beta_{1i} \frac{\Delta REV_{it}}{A_{i,t-1}} + \beta_{2i} \frac{PPE_{it}}{A_{i,t-1}} + \varepsilon_{it}$ <p>Where: TA = total accruals A = total assets REV = revenues PPE = gross property, plant and equipment ε = error term i = index for firm, i=1,2,...,N t = index for period (year) in the estimation period, t=1,2,...,T</p>	$\frac{TA_{it}}{A_{i,t-1}} = \alpha_1 \frac{1}{A_{i,t-1}} + \beta_{1i} \frac{\Delta REV_{it} - \Delta AR_{it}}{A_{i,t-1}} + \beta_{2i} \frac{PPE_{it}}{A_{i,t-1}} + \varepsilon_{it}$ <p>Where: AR = accounts receivable</p>	$\frac{\hat{TA}_{i,t}}{A_{i,t-1}} = \alpha_0 + \alpha_i \frac{1}{A_{i,t-1}} + \beta_{1i} \frac{\Delta REV_{it} - \Delta AR_{it}}{A_{i,t-1}} + \beta_{2i} \frac{PPE_{it}}{A_{i,t-1}} + \delta_1 ROA_{i,t-1}$ <p>Where: ROA = return on assets δ = regression coefficient in the estimation period</p>

2.7.3 CONSERVATISM AND EARNINGS MANAGEMENT EMPLOYED IN VALUE RELEVANCE STUDIES

Ali and Hwang (2000) take into account institutional factors that can affect the value relevance of financial accounting data in a country. They specify value relevance in terms of earnings and book value of equity. The country-specific variables that are employed in their study are: (1) the type of financial system of a country: bank-oriented or market-oriented, (2) whether the government or a private body establishes accounting standards, (3) whether the country is classified as a British-American or a Continental model and (4) whether the tax system is independent from accounting standards. They find that the value relevance of financial reports is lower for countries where the financial system is bank oriented, where

private-sector bodies are not involved in the standard-setting process, where accounting practices follow the Continental model, where tax rules have a greater influence on financial accounting measurements and where spending on auditing services is relatively low.

Ball et al. (2000) also focus on institutional factors because they claim that accounting quality is not only dependent on accounting standards, but also on the incentives to follow the accounting standards. They study international differences within Australia, Canada, UK, USA, France, Germany and Japan and classify the legal systems of these countries as either code or common law. Ball et al. (2000) show that common law countries with shareholder-orientation have stronger incentives for conservatism; on the other hand code law countries with stakeholder-oriented systems engage less in conservative accounting. Their sample consists of more than 40.000 firm-year observations during 1985-1995. They found that in code law countries there is less conservatism than in common-law countries. Within the common law countries UK expressed the least conservatism due to lower political involvement in accounting, lower litigation costs and less issuance of public debt.

Leuz et al. (2003) try to examine whether there is a relation between the legal system of 31 different countries and the level of earnings management. Their analysis is based on the notion that insiders, i.e., managers and controlling shareholders, have incentives to acquire private control benefits. However, the ability of insiders to divert resources for their own benefit is limited by legal systems that protect the rights of outside investors. As outsiders can only take disciplinary actions against insiders if outsiders detect the private benefits, insiders have an incentive to manipulate accounting reports in order to conceal their diversion activities. The regression results show that earnings management is negatively associated with the quality of minority shareholder rights and legal enforcement.

Considering Ali and Hwang (2000) and Ball et al. (2000), the main objective of Bushman and Piotroski (2006) is to gain deeper understanding of the nature of financial reporting incentives created by an economy's institutional structure with respect to accounting conservatism (asymmetric recognition of economic gains and losses into reported earnings). Summarizing, they find that (1) firms in countries with high quality judicial systems reflect bad news in reported earnings faster than firms in countries with low quality judicial systems, (2) strong public enforcement aspects of securities law slows recognition of good news in earnings relative to firms in countries with weak public enforcement aspects, (3) firms in countries with political economies characterized by high risk of expropriation of assets by the state and high state ownership of enterprises both speed the recognition of good news and slow the recognition of bad news in earnings, (4) in common law countries, firms facing high state

involvement in the economy tend to speed the recognition of good news and slow the recognition of bad news relative to firms in countries with less state involvement and (5) mixed and inconclusive results with respect to the influence of financial architecture and tax regimes. Specifically, they find that speed of good news recognition is slower and the incremental speed of bad news recognition is faster in countries with both high quality judicial regimes and high relative usage of private bonds, and in countries with both high quality judicial regimes and more diffuse ownership structures.

In order to bring the above cited literature in a smaller context, Hung and Subramanyam (2007) investigate the financial statement implications of adopting IAS for firms in Germany only, a country with a stakeholder-oriented and tax-driven accounting system. They document four main findings: (1) total assets and book value of equity, as well as variation in book value and net income, are significantly higher under IAS than under HGB (German GAAP), (2) book value (net income) plays a more (less) important valuation role under IAS than under HGB, although there is no evidence suggesting that IAS has improved the relative value relevance of book value and net income, (3) the IAS adjustments to book value are value relevant, while the adjustments to net income are value irrelevant and (4) there is weak evidence that the timeliness and asymmetric timeliness (conditional conservatism) of IAS income may be higher than that of HGB income. Furthermore, their research suggests that there is little evidence suggesting that moving from HGB to IAS increases the value relevance of book value and net income or significantly improves the timeliness with which economic events are incorporated into accounting income. Also, the results suggest that accounting standards per se do not have a major impact on the value relevance and timeliness of financial statement information.

Also Paananen and Lin (2009) investigate whether there is a change in accounting quality in Germany under the IAS period (2000–2002), voluntary IFRS period (2003–2004) and mandatory IFRS period (2005–2006). Following prior research, they operationalize accounting quality with earnings smoothing, timely loss recognition, and value relevance metrics. The findings of their study implicate a decrease in accounting quality over the last years. They find that earnings and book value of equity are becoming less value relevant during the mandatory IFRS period compared to both the IAS and the voluntary IFRS periods. Their results indicate that accounting quality improved between the IAS era and the voluntary IFRS period but worsened in the mandatory IFRS period. The finding of their study is that the last revisions of IAS and the addition of new IFRS have caused a decrease in the quality of financial reporting in Germany.

All the noted value relevance studies, except for the studies of Hung and Subramanyam (2007) and Paananen and Lin (2009) since these studies focus on the German situation, are summarized in Figure 6. This figure shows the results of previous conservatism, earnings management and value relevance studies that were also linked to the institutional settings of countries. The outcome of these studies is helpful when speculating whether value relevance will increase or decrease in the Netherlands after adopting IFRS in 2005. An extensive literature summary on the value relevance studies examined in this section, can be obtained from the first appendix. In the next chapter the expectations for this research are formulated and the design in how the research can be attained will be presented.

Figure 6: The findings of prior research on conservatism, earnings management and value relevance

Features of the Dutch institutional environment and accounting standards from 2005	Conservatism	Earnings management	Value relevance
Establishment of accounting standards by the IASB	Ball et al. (2000): Decreases	High quality standards: Decreases	Ali and Whang (2000): Increases
Stakeholder-oriented governance model	Ball et al. (2000): Decreases	Leuz et al. (2003): Decreases	Value relevance should increase
Better investor protection	Bushman and Piotroski (2006): Decreases	Leuz et al. (2003): Decreases	Ali and Whang (2000): Increases
Need for public disclosure	Ball et al. (2000): Increases	Leuz et al. (2003): Decreases	Ali and Whang (2000): Increases
Tax accounting is independent from financial accounting	Ball et al. (2000): Decreases	Accounting income is not equal to taxable income: Decreases	Ali and Whang (2000): Increases

2.8 CHAPTER SUMMARY

Soderstrom and Sun (2007) mention that accounting quality, can be measured by determining the legal and political system of a country, the financial reporting incentives of firms and accounting standards. From the literature study on the legal and political system of the Netherlands and the financial reporting incentives of Dutch public companies it can be stated that from 2005 accounting quality should be improved due to the need for more public disclosure and the move towards a more stakeholder-oriented governance model. The last measure to determine accounting quality that is employed in this chapter is the quality of the accounting standards. Prior studies reveal that after adopting IFRS, consolidated financial statements of Dutch listed companies provide more disclosures. These are all indications that accounting quality should be improved after adopting IFRS in 2005.

The value relevance studies indicate that after 2005, there should be a decrease in conservatism and earnings management in the Netherlands, which leads to an increase in the value relevance of financial statement information. However, the question is whether this actually is the case for the Netherlands. In order to test whether the value relevance of financial statement information really increased after adopting IFRS in 2005, it is necessary to examine the proxies for value relevance, which are: (1) conservatism and (2) earnings management. These proxies are empirically tested in chapter 4.

CHAPTER 3 HYPOTHESIS FORMULATION AND RESEARCH DESIGN

3.1 CHAPTER INTRODUCTION

The preceding chapter explains that legal enforcement of accounting standards, corporate governance, investor protection, the need for public disclosure and the disclosure requirements play an important role in determining accounting quality. The only aspect of accounting quality in the literature study that could not be theoretically tested is value relevance. But from previous research on value relevance it can be noted that the direction into which the Netherlands is heading by adopting IFRS, should positively influence accounting quality. The good news is that value relevance can be tested empirically through two proxies of value relevance, namely conservatism and earnings management. This chapter contributes to the study by building a research design on how the value relevance study for the Netherlands can be attained. The hypotheses formulation, methodology and sample for investigating value relevance in the Netherlands are revealed in this chapter.

3.2 HYPOTHESIS FORMULATION

The legal and political study and the financial reporting incentives study for the Netherlands provide evidence that accounting standards in the Netherlands can be considered of high-quality. From the accounting standards study it can be concluded that since IFRS requires more disclosures than Dutch GAAP (more useful information) and exercises more fair value measurements (more timely information), IFRS is a higher quality standard than Dutch GAAP and therefore Dutch firms provide more useful financial statement information after adopting IFRS in 2005. From previous value relevance studies it can be determined that legal enforcement of accounting standards, a stakeholder-oriented corporate governance model, good investor protection, the need for public disclosure and the superior disclosure requirements of IFRS are all contributing to high-quality accounting standards. However, to be certain that this is also the case for the Netherlands, value relevance of Dutch financial statement information must be empirically tested.

To determine the value relevance of accounting information for decision-making purposes, most studies employ earnings analyses of financial statement information. Afterwards, the accounting values (as presented by financial statements) and the market values (presented by share prices and stock returns) are compared to each other for measuring the value relevance of the provided accounting information. The closer the association between the accounting

values and fair values, the more value relevant accounting information is to investors and consequently the higher the accounting quality of financial statement information. This study employs two measures of value relevance that were frequently used in prior studies (e.g. Lang et al., 2006; Barth et al., 2007; Christensen et al., 2008), namely, conservatism and earnings management.

Conservatism is an understatement of both net assets and accounting earnings, while market valuation does not differentiate in timeliness of recognition of negative versus positive news. As a result the market value is greater than the accounting value. Because of the disruption in accounting data, the value relevance of reported accounting information declines. Since IFRS is predicted to be of high quality, I expect that there is less conservatism after adopting IFRS in 2005. The conservatism hypothesis employed in this study is:

H₁: After adopting IFRS in 2005, the level of conservatism for Dutch firms decreases.

Manipulation of earnings figures misleads stakeholders about the true economic performance of a company. Thus, earnings management has a negative effect on decision-making and consequently decreases the usefulness of financial statement information for outsiders. As a result, the value relevance of accounting information reduces. In order to address accounting quality in the Netherlands, an earnings management study is employed for consolidated financial statements of Dutch public firms. I expect that the level of earnings management is higher in the Dutch GAAP-period (2001 to 2004) in comparison with the IFRS-period (2006 to 2009) since IFRS is referred to as a high quality accounting standard. If this is true, the value relevance of accounting information in the Netherlands increases after adopting IFRS. Therefore, the earnings management hypothesis utilized in this study is:

H₂: After adopting IFRS in 2005, the level of earnings management for Dutch listed firms decreases.

3.3 METHODOLOGY

Conservatism

There is no universally agreed upon definition of conservatism. What we know is that conservatism means that losses are reported in a more timely fashion than gains. However, researchers have come up with different formulas to measure conservatism. The most commonly used measures are: (1) the market-to-book (MTB) ratio model of Feltham and Ohlson (1995), (2) the asymmetric timeliness measure of Basu (1997) and (3) the negative-accruals measure of Givoly and Hayn (2000). For measuring accounting conservatism in this

study, the market-to-book ratio model of Feltham and Ohlson (1995) is employed to measure balance sheet conservatism for the reason that this model uses firm-specific measurements that clearly indicate whether there is a sign of an understatement of net asset value. The market-to-book ratio is calculated based on aggregated amounts of market and book values (balance sheet items), where the market value is the sum of market capitalization of all companies in the sample and book value is the sum of shareholder's equity of all companies in the sample. A market-to-book ratio greater than one indicates accounting conservatism. The market-to-book ratio model is formulated as:

$$MTB = \frac{\sum MV}{\sum BV}$$

Also, for measuring earnings conservatism, the Basu (1997) model is used to capture the timeliness of gains and losses. The Basu's model focuses on the implication that earnings will reflect bad news more quickly than good news. A cross-sectional regression is used to measure the degree of conservatism. Basu's model is also the most popular model in conservatism literature and one reason for its popularity is that the Basu model covers most of the incentives for conservatism as explained in section 2.7.1. Basu measures the relation between net income (NI) and stock returns (R) to observe the current performance and the future performance of a company. In Basu's model net income (cash flows + accruals) reflect the impact of the current performance and the impact of future bad news (e.g. bad debts and stock obsolescence). The stock returns capture current performance, but also future good and bad news. The Basu (1997) regression is explained in section 4.2 and is constructed as follows:

$$NI_t = \alpha_0 + \alpha_1 DR_{it} + \beta_0 R_{it} + \beta_1 R_{it}^* DR_{it} + \varepsilon_{it}$$

Earnings management

Earnings management cannot be detected simply by observing financial reports since managers can use different methods to manipulate earnings, but earnings management can be detected with the use of accrual models. There are several accrual models to detect the level non-discretionary accrual, three of which are the Jones model (1991), the popular modified-Jones model by Dechow et al. (1995) and the recent performance-matching model of Kothari et al. (2005).

Although the model of Kothari et al. (2005) is one of the recent models to detect non-discretionary accruals, a slightly different modified-Jones model of Dechow et al. (1995) will be used in this study. The Jones (1991) model will not be employed in this study because the

model poses several type-I errors and also Jones herself mentioned the lack of accounting for accounts receivable in her study. The deficiency of the Jones (1991) model is resolved by the modified-Jones model of Dechow et al. (1995) by accounting for accounts receivable in their model. The model of Kothari et al. (2005) adds an intercept and lagged return on assets to the modified-Jones model of Dechow et al. (1995). The use of the intercept is a good addition to the model since it further reduces the type-I errors. However, Shih (2009) finds that adjusting for lagged return on assets results in a high frequency of type-II errors and underestimates the use of earnings management. Also, Kothari et al. (2005) employ ‘matched pairs’ of Return on Assets (ROA) in their study; meaning that the ROA of a company is compared with the ROA-mean of the industry in which the company is categorized. However, in the sample of this study, not all industries are represented by more than one company and thus ‘matched pairs’ cannot be utilized in this study. Therefore, the cross-sectional modified-Jones model of Dechow et al. (1995) with the addition of the intercept from the model of Kothari et al. (2005) is employed in this study.

According to Jones (1991), earnings management can be measured with a two-period model: the estimation period and the event period. For the estimation period, discretionary accruals are supposed to be zero. This assumption implies that earnings management is not present in the estimation period. To compensate for differences in company size all variables are scaled by lagged total assets (control for heteroskedasticity). The model for the estimation period is:

$$\frac{NDA_{it}}{Ai_{t-1}} = \frac{TA_{it}}{Ai_{t-1}} = \alpha_0 + \alpha_i \frac{1}{Ai_{t-1}} + \beta_{1i} \frac{\Delta REV_{it} - \Delta AR_{it}}{Ai_{t-1}} + \beta_{2i} \frac{PPE_{it}}{Ai_{t-1}}$$

In the event period, the estimated coefficients from the estimation period are filled in the regression of the event period. The difference between the total accruals and the non-discretionary accruals is expected to be the amount of the discretionary accruals, which is indicated by the error term. The model for the event period is:

$$\frac{TA_{it}}{Ai_{t-1}} = \hat{\alpha}_0 + \hat{\alpha}_i \frac{1}{Ai_{t-1}} + \hat{\beta}_{1i} \frac{\Delta REV_{it} - \Delta AR_{it}}{Ai_{t-1}} + \hat{\beta}_{2i} \frac{PPE_{it}}{Ai_{t-1}} + \varepsilon_{it}$$

3.4 SAMPLE

The empirical research is based on consolidated financial statement information of Dutch public firms that mandatory had to adopt IFRS in 2005. The Thomson One Banker and WorldScope databases are used to collect all the necessary data for the market-to-book ratio model of Feltham and Ohlson (1995), the earnings conservatism model of Basu (1997) and

the modified-Jones model of Dechow et al. (1995). The Thomson One Banker database finds a total of 90 Dutch public firms active on the Amsterdam stock exchange. Because financial institutions have specific accounting requirements and it is difficult to compare utility companies due to the high diversity within this particular line of business, these companies are excluded from the sample. To be able to only examine if IFRS provides more value relevant financial statement information than Dutch GAAP, companies that used different accounting standards are also eliminated from the sample.

A total of 63 Dutch listed firms are examined in this study (see Figure 7 and Appendix 2). The total of the tested sample and the data used are presented in Appendix 3. The companies are not divided into industries, because the empirical studies on earnings management and conservatism are not carried out by industry. Also, the empirical tests are cross-sectional, meaning that there is no constants sample. All the data of the 63 firms over eight years present 504 firm-year observations.

Figure 7: Companies representing the sample

The sample:	
Aalberts Industries NV	Koninklijke DSM
Accell Group NV	Koninklijke Porceleynne Fles
Akzo Nobel NV	Koninklijke Ten Cate NV
Alanheri NV	Koninklijke Vopak NV
Amsterdam Commodities NV	Koninklijke Wessanen NV
And International Publishers	Macintosh Retail Group NV
Arcadis NV	Mediq NV
Ballast Nedam NV	Nederlands Apparaatfabriek NV
Batenburg Beheer NV	Nedsense Enterprises NV
Beter Bed Holding NV	Neways Electric International
Brunel International NV	Nutreco NV
Crown Van Gelder NV	Oranjewoud NV
CSM NV	Ordina NV
Ctac NM NV	Qurius NV
Docdata NV	Randstad Holding NV
DPA Group NV	Reed Elsevier NV
Draka Holding NV	Rood Testhouse NV
Exact Holding NV	Roto Smeets Group NV
Gamma Holding NV	Royal Boskalis Westminster NV
Grontmij NV	Simac Techniek NV
Heijmans NV	Sligro Food Group NV
Heineken NV	Spyker Cars NV
HES-Beheer NV	Telegraaf Media Groep
Hitt NM NV	Stern Groep NV
Hydratec Industries NV	TKH Group NV
ICT Automatisering NV	TNT NV
Imtech NV	Unilever NV
Innoconcepts NM NV	Unit 4 Agresso NV
Kendrion NV	USG People NV
Koninklijke Ahold NV	Vivenda Media Groep NV
Koninklijke BAM Groep NV	Wolters Kluwer NV
Koninklijke Brill NV	

3.5 CHAPTER SUMMARY

This chapter elaborates on the models, the sample and the data that are used to test the value relevance of Dutch accounting information. If earnings management decreases after adopting IFRS in 2005 and conservatism also decreases after 2005, then this is an indication that the value relevance of financial statement information provided by Dutch listed companies is increased after adopting IFRS in 2005, indicating that IFRS is of higher quality than Dutch GAAP. With this empirical study, one of the three determinants of accounting quality is tested. The findings of the literature study, where the other two determinants (legal and political system and financial reporting incentives) were studied, proved that just by examining the Dutch institutional system no conclusion can be drawn for accounting quality in the Netherlands due to the unique setting of the Dutch system. Therefore, accounting standards are the main indication of whether accounting quality increases/decreases after adopting IFRS. The next chapter will empirically test the models presented in this chapter in order to test the value relevance of accounting information in the Netherlands.

CHAPTER 4 EMPIRICAL TESTS, RESULTS AND INTERPRETATIONS

4.1 CHAPTER INTRODUCTION

As mentioned in the previous chapters, this study investigates accounting quality in the Netherlands by investigating the legal and political system in the Netherlands, the financial reporting incentives of Dutch firms and the accounting standards that are used to prepare the consolidated financial statements of Dutch stock listed firms. From the literature study conducted on the legal and political system of the Netherlands and the financial reporting incentives of Dutch firms, it can be noted that the value relevance of financial statement information should increase. In this chapter accounting quality is tested by examining the value relevance of the accounting standards that are used to prepare the consolidated financial statements of Dutch listed firms. The proxies used to test value relevance are earnings management and conservatism, since these proxies are often subject to management's discretion. The more management can manage these proxies, the less value relevant the financial statement information becomes for outsiders. Therefore this chapter builds forward on empirically testing the value relevance of Dutch financial statement information, which is conducted with the statistical program Statistical Package for the Social Sciences (SPSS).

4.2 CONSERVATISM

Balance sheet conservatism

Unconditional conservatism or balance sheet conservatism is tested by Feltham and Ohlson's (1995) market-to-book ratio model. The market value is represented by market capitalization and the book value is represented by shareholders equity. When the market-to-book ratio is greater than zero, there is an indication of balance sheet conservatism due to asymmetry in net asset values. The market-to-book ratio model is originally a cross-sectional analysis that contains 504 firm-year observations in this study. Cross-sectional analysis uses widely dispersed data that relates to only one period. Therefore it is not important that there is a constant sample. In order to observe the trend of the MTB ratio from 2001-2009, the data is pooled per year. After computing descriptive statistics on the market values and the book values from 2001-2009, the SPSS output shows that market values and book values are positively skewed (see Figure 8). This is an indication of asymmetry in market values and book values. For a normal distribution in which there is no asymmetry, the skewness is one. The market-to-book ratio is calculated by dividing the market value by the book value for each entity per year.

Figure 8: The MTB ratios per year

Descriptive Statistics							
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
MTB2001	62	,48464	11,35783	2,7984221	2,30295185	1,741	,304
MTB2002	62	,42995	13,06118	2,0854741	2,15395996	3,233	,304
MTB2003	62	0,465	21,03126	2,4551762	3,23982621	3,797	,304
MTB2004	63	0,617	11,78692	2,4938616	1,98724463	2,692	,302
MTB2005	63	,65312	8,67058	2,8869589	1,70032650	1,817	,302
MTB2006	63	,63315	9,78203	3,0452766	1,68171111	1,698	,302
MTB2007	63	,61323	8,50385	2,6889534	1,44256552	1,534	,302
MTB2008	63	,22079	11,83189	1,5367788	1,56975969	4,899	,302
MTB2009	57	0,224	12,90669	2,1493466	1,92751213	3,628	,316
Valid N (listwise)	57						

The SPSS program presents descriptive statistics on the calculated MTB ratios for each year in a scheme. The output is a result of a cross-sectional analysis that is pooled in a time-series model to show the cross-sectional results per year. The measurement ‘skewness’ clearly shows that there is asymmetry in market and book values for Dutch listed firms from 2001-2009, because the skewness is always greater than one for each year in the sample. In order to observe the trend in MTB ratio’s per year, the mean (Figure 8, the grey highlighted area) of each year is put into a graph, with the following result:

Figure 9: Means of the market-to-book ratio per year

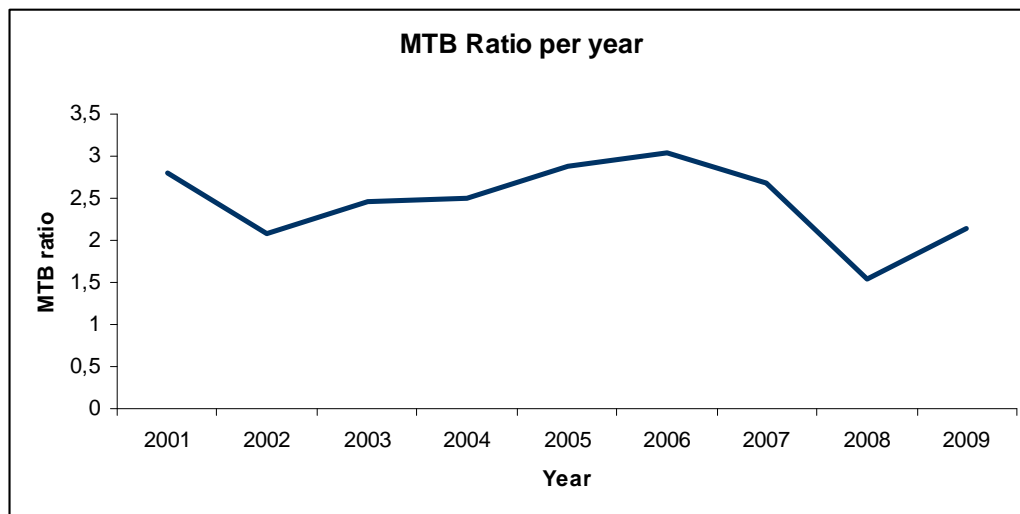


Figure 9 shows how the average MTB ratio moves per year from 2001-2009. A general conclusion that can be drawn from the figure is that the average MTB ratio for Dutch public firms is greater than one for the whole investigated period, indicating that on average market values of net assets are higher than their book values. As the figure indicates, the MTB ratio is the highest in 2005 and 2006. One reason for the high MTB ratio in the two first adoption years of IFRS can be the shift towards more use of fair value accounting due to IFRS. In the introduction of this study, it is mentioned that IFRS was perceived to be procyclical, i.e. IFRS shows higher market values for balance sheet items in comparison with their book values.

An interesting shift in the MTB ratio starts in 2007. From 2007, the MTB ratio declines significantly and in 2008 the MTB ratio was the lowest in nine years. However, this reduction of asymmetry in market and book values cannot be dedicated to IFRS. As mentioned in the introduction of this study, the financial crisis started in 2007 and reached its peak in 2008. As a consequence of the financial crises, market prices declined resulting in a decline in the market values of the net assets of firms. The rising MTB ratio from 2008 could be the result of a recovery in the financial market after the credit crisis.

The final remark on balance sheet conservatism is that for the period 2001-2009 the average MTB ratio is about 2,46. When mitigating IFRS adoption effects (years 2005 and 2006) and financial crisis effects (years 2007 and 2008), the average MTB ratio from 2001-2004 is 2,45 and the market-to-book ratio in 2009 is about 2,14. From this point of view, it can be noted that in general, the market-to-book ratio declined in the last year. The decrease in the MTB ratio can be the result of adopting the high-quality IFRS standards. IFRS requires more relevant information and as a consequence balance sheet figures are adjusted for their current value which is principally the market value. Thus, a decline in the MTB ratio in 2009 can be the result of higher book value valuation methods under IFRS, i.e. more fair value valuation.

Earnings conservatism

Conditional conservatism or earnings conservatism is measured by the regression model of Basu (1997). The Basu model is originally a cross-sectional analysis that contains 504 firm-year observations in this study. Cross-sectional analysis uses widely dispersed data that relates to only one period. Therefore it is not important that there is a constant sample. In the model NI represents the net income of a firm, which shows the relation between current firm performance and future good performance and R represents the stock return of a firm in a specific fiscal year indicating current firm performance and future good and bad performance. DR is a dummy variable with the value one indicating that R anticipates future bad news ($R < 0$) and with the value 0 indicating that R is not anticipating future bad news ($R > 0$). In

Basu's model β_i indicates the level of earnings conservatism. The Basu's earnings conservatism model is formulated in the following multiple cross-sectional regression:

$$NI_t = \alpha_0 + \alpha_1 DR_{it} + \beta_0 R_{it} + \beta_1 R_{it}^* DR_{it} + \varepsilon_{it}$$

In the Basu study the stock returns are measured from -9 months to +3 months in relation to the fiscal year-end in order to account for the time lag in stock returns. However, other studies such as Beaver et al. (1980) suggest that incorporating a time lag gives similar results as not incorporating a time lag (measuring a whole year). Also Ball et al. (2000) measure returns over the whole fiscal year. Therefore, in this study the returns are measured over the fiscal year. In SPSS, descriptive statistics are calculated for the regression of Basu (1997). The output shows that accounting earnings (NI) are mostly negatively skewed and stock returns (R) are mostly positively skewed (Figure 10). This is an indication of asymmetry in accounting earnings and stock returns for the period 2001-2009, meaning that the values of stock returns are higher than the values of earnings.

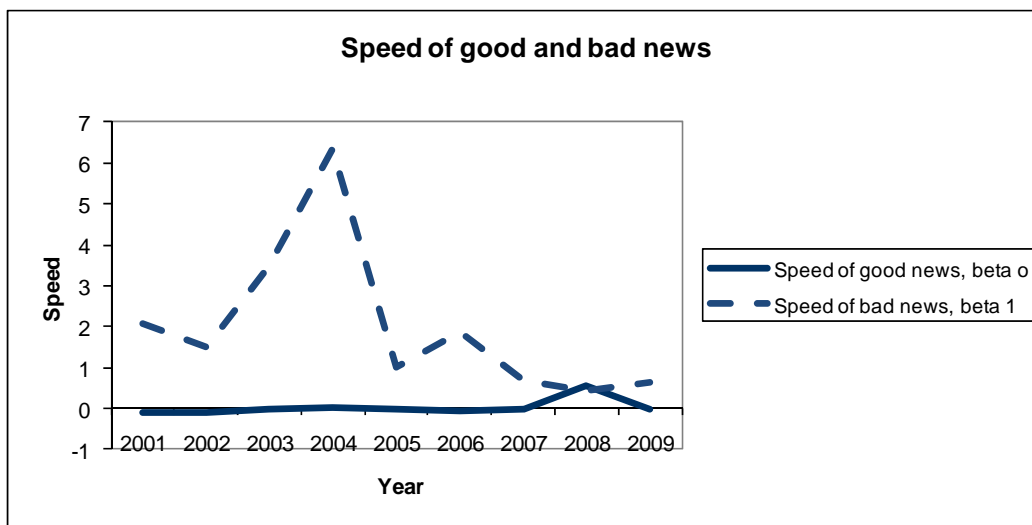
Figure 10: The relation between net income (NI) and stock returns (R) from Basu's model

Descriptive Statistics							
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
NI2001	62	-4,58268	,20716	-,0371283	,61142613	-7,000	,304
NI2002	62	-3,73640	,24320	-,0762256	,63961492	-4,715	,304
NI2003	62	-2,08017	,97010	,0094953	,33799012	-4,148	,304
NI2004	63	-2,53583	,22896	,0020016	,33972476	-7,020	,302
NI2005	63	-,38214	1,50183	,0709724	,19586938	6,264	,302
NI2006	63	-,66001	,13427	,0427070	,10220355	-5,842	,302
NI2007	63	-,88352	,42338	,0573550	,14138811	-4,593	,302
NI2008	63	-2,63079	,26096	-,0525190	,42530785	-4,041	,302
NI2009	58	-2,21816	,13857	-,0916634	,37843095	-3,773	,314
R2001	62	-,94299	,51739	-,1119682	,28351859	-,430	,304
R2002	62	-,75143	2,64338	-,2316764	,45639406	4,122	,304
R2003	62	-,45455	2,86504	,4079319	,58292008	1,883	,304
R2004	62	-,39790	1,58707	,3213255	,39139272	1,143	,304
R2005	63	-,22779	1,88859	,4613776	,46873254	1,413	,302
R2006	63	-,40795	2,06978	,3606385	,39243374	1,555	,302
R2007	63	-,65883	1,23312	,0208045	,29064544	1,174	,302
R2008	62	-,88501	,57740	-,4509430	,24126484	1,303	,304
R2009	59	-,42039	1,79143	,5040754	,52104106	,696	,311
Valid N (listwise)	54						

The results of the cross-sectional analyses are found in Appendix 4. β_0 measures the response of earnings to returns when returns are positive (good news) and $(\beta_0+\beta_1)$ measures the response when returns are negative. Conservatism implies $\beta_0+\beta_1>\beta_0$, that is, $\beta_1>0$. Basu (1997) calls β_1 the asymmetric timeliness coefficient and finds it is significantly different from zero in a cross-sectional regression. For each year, the coefficients are regressed separately in order to observe a trend from 2001-2009. The results are presented in Figure 11.

The graph illustrates the direction of β_0 and β_1 from 2001-2009. β_0 is retrieved from Appendix 4; the value of β_0 is equal to the value of RDR in the output (The yellow highlighted observations in Appendix 4). β_1 is also retrieved from Appendix 4; the value of β_1 is equal to the value of R in the output (the grey highlighted observations in Appendix 4). If $\beta_1>0$, then β_0 represents the speed of good news relative to the speed of bad news. β_1 indicates the speed of bad news relative to the speed of good news. Basu (1997) predicted that if $\beta_1>0$ there is an indication of asymmetric timeliness of earnings. The graph shows that the speed of good news was only faster than the speed of bad news in 2004 and 2008. In the remaining periods, the speed of good news was negative. This is an indication that in general, Dutch firms report bad news faster than good news. That bad news is recognized faster than good news, is also predicted by Basu (1997), who mentions that $\beta_1>0$. The speed of bad news (β_0) clearly illustrates that β_1 is always greater than zero, indicating that Dutch firms report bad news faster than good news.

Figure 11: Earnings conservatism indicated by β_1 (R) and β_0 (RDR)



In the year 2004 β_0 was greater than zero, indicating that good news was reported in a timely fashion. However in 2004, β_1 , the speed of bad news, was the highest in nine years. Thus, that

β_0 was greater than zero in 2004, is negligible. More precisely, in the pre-IFRS period there are more signs of earnings conservatism than in the IFRS-period. A possible explanation for this phenomenon could be the shareholder-oriented corporate governance model in the pre-IFRS period. In the shareholder-oriented model the focus lies especially on mitigating agency problems and requiring timely information. As Garcia Lara et. al (2009) mention, requiring timely information is equal to recognizing bad news in a timely manner to alert the shareholders of a company. Thus, shareholder-oriented models are associated with a higher degree of conservatism. From 2005, the Netherlands shifted to a more stakeholder-oriented corporate governance model in which the interests of all the stakeholders are taken into account. In this setting it is important to report good news in a timely fashion.

The only year in which good news is reported significantly faster than bad news, is the year 2008. As mentioned in the balance sheet conservatism analysis, the financial crisis reached its peak in 2008 and as a result, market values of earnings components declined below their book values. The earnings conservatism study shows that in this year, good news was reported in a more timely manner than bad news. Easton and Pae (2004) studied the link between earnings conservatism and balance sheet conservatism and their research found that earnings conservatism is negatively associated with balance sheet conservatism. However, in the Netherlands, while balance sheet conservatism declined in 2008 (due to a decline in market values), earnings conservatism was also lower in 2008. What this situation is implicating is that earnings conservatism was lower in 2008, indicating that good and bad news were reported with the same speed, and as a result, book values of net assets were not understated. This is another explanation for the lower MTB ratio in 2008. Not only did market values of balance sheet items decline, but also book values were not understated resulting in a decline of the MTB ratio.

Answer to the first hypothesis

The first hypothesis predicted that the level of conservatism would decline after adopting IFRS in 2005. From 2001-2009 it can be noted that balance sheet conservatism was always present in Dutch companies, more specifically, from 2001-2009 market values of net assets have always been greater than the book values of those net assets. Figure 9 demonstrates that directly after adopting IFRS in 2005, an increase in balance sheet conservatism can be noted. An explanation for this trend is the adoption of the more fair value-oriented IFRS standards from 2005. Figure 9 also illustrates a decreasing trend in balance sheet conservatism in 2007 and 2008, but this decline cannot be dedicated to IFRS since the financial crisis reached its peak in 2007-2008. Resembling Laux and Leuz (2009), fair value accounting results in a decrease of market values causing the MTB ratio to decline. At last, in the year 2009, a

relatively lower MTB ratio is detected. The use of fair value valuation under IFRS results in more relevant and timely financial statement information which leads to book values reaching close to their market values.

From the earnings conservatism test, it can be concluded that, in general, Dutch firms report bad news in a more timely fashion than good news. Also, the earnings sheet conservatism test of Basu shows that after 2005, earnings conservatism declined significantly. An explanation for this trend is the shift towards a more stakeholder-oriented model with higher investor protection in the Netherlands which poses the need for accurate information. Another conclusion that can be drawn from the earnings conservatism test is that earnings conservatism is the lowest in the year 2008. Also, the balance sheet conservatism test show a decline in the MTB ratio in the year 2008. It can be stated that the financial crisis led to lower fair values of balance sheet items resulting in a decline in profits. In order to boost profits, managers started to report good news in a more timely fashion to compensate the declining profits. As a result, good and bad news were both reported in a timely manner leading towards less earnings conservatism. The outcome of the conservatism study signifies that the first hypothesis holds.

4.3 EARNINGS MANAGEMENT

Earnings management is tested by the accrual model of Dechow et al. (1995) with adding the intercept from the model of Kothari et al. (2005). In this model two periods are distinguished: an estimation period in which no earnings management is expected and an event period in which earnings management is expected. In order to test the estimation period, the following multiple regression is employed:

$$\frac{NDA_{it}}{A_{i,t-1}} = \frac{TA_{it}}{A_{i,t-1}} = \alpha_0 + \alpha_i \frac{1}{A_{i,t-1}} + \beta_{1i} \frac{\Delta REV_{it} - \Delta AR_{it}}{A_{i,t-1}} + \beta_{2i} \frac{PPE_{it}}{A_{i,t-1}}$$

The regression formulates that non-discretionary accruals are equal to the total accruals in the estimation period, leaving no room for discretionary accruals. The non-discretionary accruals are tested with an intercept and all the variables are scaled by lagged total assets in order to avoid heteroskedasticity. Furthermore, the variables sales and property, plant and equipment determine the non-discretionary accruals. After obtaining all the needed data from the databases, the data is sorted by year. For each year a cross-sectional regression is computed per year in order to estimate the coefficients (α_0 , α_i , β_{1i} , β_{2i}) for each period in the estimation phase. The output obtained from SPSS is presented in Appendix 5.

The purpose for estimating the coefficients in the estimation period is to fill in these coefficients in the event period for which the multiple regression is:

$$\frac{TA_{it}}{A_{it-1}} = \hat{\alpha}_0 + \hat{\alpha}_i \frac{1}{A_{it-1}} + \hat{\beta}_{1i} \frac{\Delta REV_{it} - \Delta AR_{it}}{A_{it-1}} + \hat{\beta}_{2i} \frac{PPE_{it}}{A_{it-1}} + \varepsilon_{it}$$

In the event period, all the coefficients and variables are filled in the regression and are subtracted from the total accruals, leaving only the error term as an only variable indicating the level of absolute discretionary accruals. For each firm from 2001 to 2009, the absolute discretionary accruals are calculated. Discretionary accruals of zero indicate that earnings are not manipulated. Discretionary accrual of minus zero or plus zero, indicate that earnings are managed downwards or upwards. For this study it is not important whether earnings are managed downwards or upwards, only the existence of earnings management in the pre-IFRS and post-IFRS period is important. Figure 12 is the SPSS output for descriptive statistics presenting the discretionary accruals per year.

Figure 12: Discretionary accruals per year

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
DA2001	56	-,38588	,63233	,0001216	,13031022
DA2002	61	-,28635	,26385	-,0004714	,10103122
DA2003	62	-,23005	,23698	,0004734	,07408920
DA2004	62	-,90667	,50439	-,0145429	,15755367
DA2005	62	-,76065	18,93589	-,0003456	2,46953190
DA2006	62	-1,40711	,33206	,0040618	,21933401
DA2007	62	-,23266	,31755	-,0025004	,08001056
DA2008	62	-,27419	,20485	-,0025694	,09075907
DA2009	50	-,27220	,11032	-,0060324	,07822386
Valid N (listwise)	45				

The descriptive statistics show the means of the discretionary accruals are never 0. This is an indication that earnings management was present in the period 2001-2009 for Dutch public firms. To observe the level of earnings management in the pre-IFRS and post-IFRS period, the means of the discretionary accruals per year are put into Figure 13.

Figure 13 shows that from 2001-2003 there is hardly any indication of earnings management for Dutch public firms. But, in 2004 earnings have been relatively managed downwards. As Hoogendoorn (2004) states, the reasons for managing earnings downwards are to maximize losses or to minimize profits to avoid political costs. One argument for managing earnings

downwards in 2004 can be that firms were anxious about the switch from Dutch GAAP to IFRS in 2005 due the extensive use of fair value accounting under IFRS. Dutch firms were probably afraid that due to the fair value measurement the value of assets would increase and as a result the profits would increase under IFRS and ultimately firms would have to pay for the high profits. Therefore, firms could have managed earnings downwards in 2004 to control for the expected high profits in 2005 under IFRS.

Figure 13: The movement of discretionary accruals (the means, Figure 12) from 2001-2009

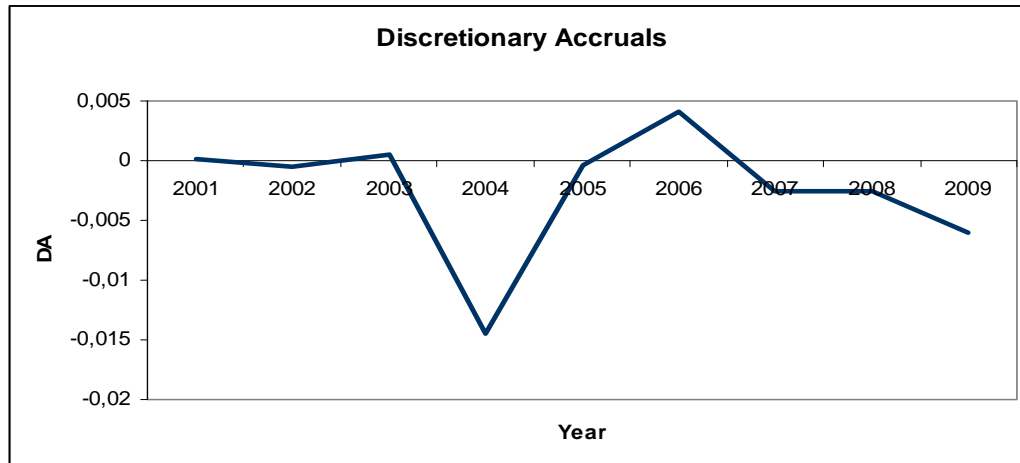


Figure 13 also illustrates that in the year 2005, there is hardly any evidence of earnings management in the Netherlands. This result is contrary to the results of Capkun et al. (2008) who find evidence for a high level of earnings management in 2005 for European firms. Their argument for the high level of earnings management in 2005 is that firms manage earnings upwards in 2005 and they blame the higher earnings on the switch from local GAAP to IFRS. As a result researchers often exclude the year 2005 from their sample in order to avoid biased results. An argument for almost no earnings management in 2005 can be that managers were suspicious of the new accounting standards IFRS. They were afraid that IFRS would be of such high standards that earnings management would be detected easily. To safeguard their position, they exercised less discretion while preparing the 2005 financial statements. Also, in the year 2005, Dutch public firms were required to publish their financial statement conforming IFRS, however for the reasons of comparison, these firms were also required to publish a financial statement under Dutch GAAP. Reporting under both IFRS and Dutch GAAP could also be an incentive for not managing earnings in the year 2005.

In the year 2006, the graph illustrates an increase in earnings management. This finding suggests that Dutch public firms managed earnings upwards in 2006 to compensate for the

lower profits that were reported in the year 2004. This is an indication that managers were signaling stakeholders that the firm is in good health, even after the transition to fair value accounting under IFRS.

For explaining the earnings management practices after 2006, the conservatism study is employed. Earnings conservatism is reporting good news in a less timely way than reporting bad news. As a consequence, profits are understated. Balance sheet conservatism is about book values of earnings items not matching their market values. A reason for the difference in book and market values is earnings conservatism. When profits are understated due to slow recognition of good news, balance sheet income items are also understated. This results in a lower book value of balance sheet items. So, when conservatism tends to press profits, managers try to mitigate this effect by boosting up profits.

The conservatism study shows that in the IFRS period there was significantly less earnings conservatism and balance sheet conservatism compared to the pre-IFRS period. Meaning, profits were not drastically understated after adopting IFRS. The earnings management study indicates that managers have been mostly managing earnings downwards in the IFRS-period. A reason for managing earnings downwards in the IFRS period could be to mitigate the effect of less conservatism in this period. Due to less conservatism, profits were not understated as much as in the pre-IFRS period. The consequence could be higher profits. In order to show a steady growth of the firm, managers could have incentives to manage earnings downwards to mitigate the higher level of profits.

Answer to the second hypothesis

The second hypothesis predicts that after adopting IFRS in 2005, managers would have less incentives to manage earnings. This prediction was based on the facts that from 2005 accounting standards in the Netherlands were enforced by the IASB, corporate governance in the Netherlands was taken to a higher level which led to better investor protection, the need for public disclosure increased and the adoption of the high-quality IFRS standards was definite. However, the empirical test implies otherwise. The earnings management test clearly shows that there is more earnings management in the IFRS period.

The level of earnings management in the Netherlands is thus not dependent on the institutional setting of the Netherlands. The level of earnings management in the Netherlands depends on conservatism! Conservatism declined after 2005 resulting in less understatement of earnings items and thus higher profits. Therefore, earnings had to be managed downwards to suppress profits in order to show a stable growth of the firm. It can be concluded that in the

Netherlands balance sheet conservatism and earnings conservatism share a positive relation while conservatism (earnings and balance sheet) and earnings management are negatively related. At last, the second hypothesis does not hold.

Value relevance

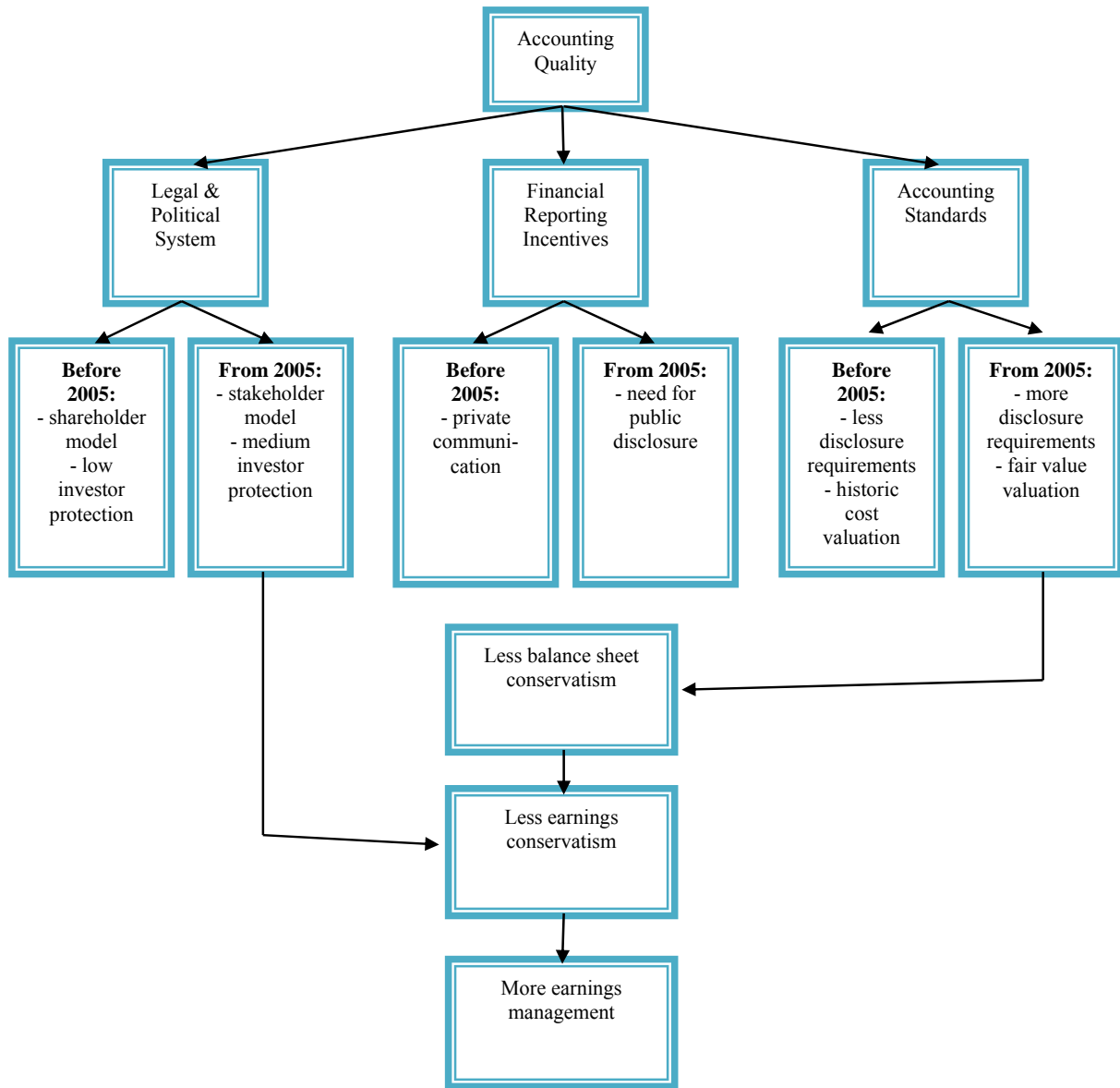
From the literature study on the institutional setting of the Netherlands it was concluded that due to improvements in the legal and political system of the Netherlands, the need for public disclosure and the adoption of IFRS from 2005, accounting quality in the Netherlands ought to improve. To verify if this was indeed the case, a value relevance study was employed in order to test whether financial statement information was relevant for decision-making. The proxies for value relevance were conservatism and earnings management. It was concluded from previous value relevance research that value relevance increases if conservatism and earnings management decreases.

However, this was not the case for the Netherlands. While conservatism decreases in the Netherlands, earnings management increases. The reasons for the decrease in conservatism were more timely gain recognition under IFRS and a shift to the stakeholder governance model with more investor protection. It appears that strictness of accounting standards and better investor protection are compensated with more discretion in earnings figures. IFRS may have succeeded in preventing conservatism, but it still fails to stop earnings management. Less conservatism positively affects value relevance, but earnings management practices have a negative impact on value relevance. Thus, the empirical tests remain inconclusive on the value relevance of financial statement information in the Netherlands.

4.4 CHAPTER SUMMARY

This chapter empirically tests the influence of accounting standards on financial reporting quality in the Netherlands. Accounting standards are contributing to accounting quality if accounting standards require more value relevant information in financial statements. Value relevant information is referred to as fair information and information is considered fair when management provides truthful information on the economic performance of a company. Accounting literature identifies two methods by which management can exercise discretion when preparing the financial statements: conservatism and earnings management. In the Netherlands, it can be concluded that after adopting IFRS in 2005, Dutch financial statements are considered less conservative, but more manipulated by management. The reasons behind these findings are sketched in Figure 14, which is an schematic summary of the accounting quality research executed in this study.

Figure 14: Summary of the empirical study



CHAPTER 5 CONCLUSION

5.1 SUMMARY OF THE FINDINGS

In this thesis the emphasis is on studying accounting quality in the Netherlands by measuring the legal and political system in the Netherlands, the financial reporting incentives of Dutch public firms and accounting standards followed in the pre-IFRS period (2001-2004) and the IFRS period (2005-2009). From the literature study on the legal and political system of the Netherlands and the financial reporting incentives of Dutch public companies it can be stated that from 2005 accounting quality should improve due to the need for more public disclosure and the move towards a more stakeholder-oriented governance model which poses the need for better investor protection. Also, prior studies reveal that after adopting IFRS, consolidated financial statements of Dutch listed companies provide more disclosures. These are all indications that accounting quality should improve after adopting IFRS in 2005.

This study also performs research on the value relevance of the information that is required under the accounting standards. The literature study on value relevance indicates that after 2005, there should be a decrease in conservatism and earnings management in the Netherlands, which ultimately must lead to an increase in the value relevance of financial statement information. In order to test whether the value relevance of financial statement information really increased after adopting IFRS in 2005, it is necessary to examine the proxies for value relevance, which are: (1) conservatism and (2) earnings management. The value relevance empirical study is carried out with the assistance of the Thomson One Banker and WorldScope databases. These databases acquired data on e.g. income, sales, EPS (see Appendix 3) for the 63 Dutch listed firms that represent the sample of the empirical study. The sample is not divided into industries in order to avoid only-one-firm-industries.

The first hypothesis predicts that the level of conservatism declines after adopting IFRS in 2005. From 2001-2009 it can be noted that balance sheet conservatism was always present in Dutch companies. However, the main finding suggests that the use of fair value valuation under IFRS results in more relevant and timely financial statement information which leads to book values reaching close to their market values and thus, less balance sheet conservatism. From the earnings conservatism test, it can be concluded that, in general, Dutch firms report bad news in a more timely fashion than good news. But, after 2005, earnings conservatism declines significantly due to the shift towards a more stakeholder-oriented model with higher investor protection in the Netherlands which poses the need for accurate information. As a

result, good and bad news were both reported in a timely manner leading towards less earnings conservatism. The outcome of the conservatism study signifies that the first hypothesis holds.

The second hypothesis predicts that after adopting IFRS in 2005, managers would have less incentives to manage earnings. This prediction was based on the facts that from 2005 accounting standards in the Netherlands were enforced by the IASB, corporate governance in the Netherlands was taken to a higher level which led to better investor protection, the need for public disclosure increased and the adoption of the high-quality IFRS standards was definite. However, the empirical test implies otherwise. The earnings management test clearly shows that there is more earnings management in the IFRS period. A possible explanation for this finding is that conservatism declined after 2005 resulting in less understatement of earnings items and thus higher profits. Therefore, earnings had to be managed downwards to suppress profits in order to show a stable growth of the firm.

It can be concluded that in the Netherlands balance sheet conservatism and earnings conservatism share a positive relation while conservatism (earnings and balance sheet) and earnings management are negatively related. At last, the second hypothesis does not hold. It appears that strictness of accounting standards and better investor protection are compensated with more discretion in earnings figures. IFRS may have succeeded in preventing conservatism, but it still fails to stop earnings management. Less conservatism positively affects value relevance, but earnings management practices have a negative impact on value relevance. Thus, the empirical tests remain inconclusive on the value relevance of financial statement information in the Netherlands.

5.2 ANSWERING THE PROBLEM STATEMENT

The research question of this thesis is: *“What is the influence of adopting IFRS on financial statement information provided by Dutch public firms?”* The answer to the question can be formulated by combining the findings of the literature studies and the empirical study:

- ❖ Legal and political system of the Netherlands: From 2005, the Netherlands knows a more stakeholder-oriented corporate governance model with a relatively higher level of investor protection → Positively influencing accounting quality.
- ❖ Financial reporting incentives of Dutch firms: From 2005, there is more need for public disclosure → Positively influencing accounting quality.
- ❖ Accounting standards:

- Literature study on IFRS: From 2005, Dutch public firms report under IFRS. Prior studies indicate that IFRS requires more disclosures than Dutch GAAP and therefore it can be stated that IFRS is of higher quality than Dutch GAAP. Also, IFRS requires more fair value valuation of balance sheet items and therefore IFRS provides more timely and relevant information → Positively influencing accounting quality.
- Literature study on value relevance: A stakeholder-oriented corporate governance with better investor protection, more need for public disclosure, more disclosure requirements and more fair value measurements should result in higher value relevance of financial statement information.
- Empirical study on value relevance: From 2005, Dutch public firms exercise less in conservatism practices due to the higher quality IFRS standards. However, high quality standards result in more earnings management. As a consequence, the value relevance study remains inconclusive.

The quality of accounting information (accounting quality) depends on all the above mentioned determinants. It can be concluded that all the determinants, except for earnings management, positively influence accounting quality in the Netherlands. Therefore, I conclude that the positive impact on accounting quality is greater than the negative impact on accounting quality (more earnings management) and thus, overall accounting quality increased in the Netherlands after adopting IFRS in 2005.

5.3 LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FUTURE RESEARCH

Every study has its limitations, since an author cannot investigate all the elements that relate to the subject of examination. The first limitation of this study is the timeline. In order to make this study attainable, I had to assume that in the years prior to 2005, the Netherlands knew a more shareholder-oriented model and stakeholders required less need for public information in regard to the period from 2005. This is of course not entirely true; corporate governance in the Netherlands started developing from 1997 and before 2005 the stakeholders in Dutch public firms were already in the need for more public disclosure.

The second limitation of this study leaning on the results of prior research that IFRS requires more disclosures than Dutch GAAP. An ideal situation would be to investigate the differences between Dutch GAAP and IFRS and focus on the quality of the disclosures. If a standard

requires more disclosures, it does not necessarily mean that it is a higher quality standard. The disclosure requirements should be in-line with the needs of the stakeholders. Only then disclosures contribute to the quality of the accounting standards.

Despite the limitations of this study, this research contributes to existing literature by determining accounting quality in the Netherlands in an extensive approach. By employing the legal and political system of the Netherlands, financial reporting incentives of Dutch firms and accounting standards into the accounting quality study, this research covers most of the elements that can have an impact on accounting quality.

The results of this study indicate that accounting quality in the Netherlands improved after adopting IFRS in 2005. It can be noted that switching to IFRS was a good move of the European Union. However, legislators, standard-setters, accounting practitioners and users of financial statement information should be aware of the fact that stricter accounting standards do not eliminate earnings management practices. Instead, managers always tend to find a technique to compensate for stricter accounting standards. So, “when one door closes, another door opens.”

A good solution to expose earnings management, is the shift towards principle-based accounting. With this move, managers should not only prepare financial statements in accordance with laws and regulations for financial reporting, but managers are also held accountable for their discretion. Professionals such as auditors and standard-setters can brainstorm on management’s choices in preparing the financial statements. However, Beest (2009) finds that the rules-based and principles-based treatments lead to comparable levels of earnings management. These results suggest that changing the discretion in accounting standards may affect the nature of earnings management, but is unlikely to prevent earnings management applications. Therefore, future researchers should build upon this study and try to explore methods that limit management’s ability in exercising discretion in financial statements.

REFERENCES

- Ali, A., & Hwang, L. (2000). Country-specific factors related to financial reporting and the value relevance of accounting data. *Journal of Accounting Research*, 38 (1), 1-21.
- Ball, R. (2001). Infrastructure requirements for an economically efficient system of public financial reporting and disclosure. *Brookings-Wharton Papers on Financial Services*, 127-169.
- Ball, R., Kothari, S., & Robin, A. (2000). The Effect of International Institutional Factors On Properties of Accounting Earnings. *Journal of Accounting and Economics*, 29 (1), 1-51.
- Barth, M., Landsman, W., & Lang, M. (2007, September). International Accounting Standards and Accounting Quality. *Stanford Research Paper Series*, Available at: <http://ssrn.com/abstract=1029382>.
- Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings. *Journal of Accounting and Economics*, 24, 3-37.
- Beest, F. (2009). Rules-Based and Principles-Based Accounting Standards and Earnings Management. *Nijmegen Center for Economics (NiCE) Working Paper 09-114*. Available at: <http://www.ru.nl/nice/workingpapers>
- Beaver, W., & Lambert, R. (1980). The information content of security prices. *Journal of Accounting and Economics*, 2, 3-28.
- Bushman, R., & Piotroski, J. (2006). Financial reporting incentives for conservative accounting: The influence of legal and political institutions. *Journal of Accounting and Economics*, 42, 107-148.
- Capkun, V., Cazavan-Jeny, A., Jeanjean, T., & Weiss, L. (2008, April). Earnings Management and Value Relevance during the Mandatory Transition from Local GAAP's to IFRS in Europe. *Working paper, HEC, ESSEC and Georgetown University*.
- Christensen, H., Lee, E., & Walker, M. (2008, March). Incentives or standards: What determines accounting quality changes around IFRS adoption? *Financial Accounting and Reporting Section (FARS) Paper*, Available at: <http://ssrn.com/abstract=1013054>.
- Cuijpers, R., Moers, F., & Peek, E. (2005, May). Firm-level reporting incentives and accounting properties: Stakeholder- versus shareholder-oriented governance structures. *Working Paper Maastricht University*, Available at: <http://www.personeel.unimaas.nl/r.cuijpers/papers/CG.pdf>.
- Daske, H. & Gebhardt, G. (2006). International Financial Reporting Standards and Experts' Perceptions of Disclosure Quality. *Abacus*, 42 (3-4), 461-498.

- David, R., & Brierly, J. (1985). Major legal systems in the world today: an introduction to the comparative study of law. *Stevens Publishing*, 3rd edition.
- De Jong, A. (2002). The Disciplining Role of Leverage in Dutch Firms. *European Finance Review*, 6, 31-62.
- De Jong, A., De Jong, D., Mertens, G., & Wasley, C. (2005). The role of self-regulation in corporate governance: evidence and implications from The Netherlands. *Journal of Corporate Finance*, 11 (3), 473-503.
- Dechow, P., Sloan, R., & Sweeny, A. (1995). Detecting Earnings Management. *The Accounting Review*, 70 (2), 193-225.
- Demirguc-Kunt, A., & Levine, R. (1996). Stock Market Development and Financial Intermediaries: Stylized Facts. *The World Bank Economic Review*, 10 (2), 291-321.
- Demirguc-Kunt, A., & Maksimovic, V. (2002). Funding growth in bank-based and market-based financial systems: evidence from firm-level data. *Journal of Financial Economics*, 65, 337-363.
- Ding, Y., Hope, O., Jeanjean, T., & Stolowy, H. (2007). Differences between domestic accounting standards and IAS: Measurement, determinants and implications. *Journal of Accounting and Public Policy*, 26, 1-38.
- Djankov, S., McLiesh, C., & Shleifer, A. (2007). Private credit in 129 countries. *Journal of Financial Economics*, 84, 299-329.
- Easton, P., & Pae, J. (2004). Accounting Conservatism and the Relation Between Returns and Accounting Data. *Review of Accounting Studies*, 9 (4), 495-521.
- Ernst & Young. *Vergelijking IFRS met Nederlandse wet- en regelgeving*. Available at: <http://www.ey.nl/download/publicatie/IFRS.pdf>
- European Commission. (1999). *Communication on Financial Services: Implementing the Framework for Financial Market: Action Plan*.
- Feltham, G., & Ohlson, J. (1995). Valuation and Clean Surplus Accounting for Operating and Financial Activities. *Accounting Research*, 11 (2), 689-731.
- Francis, J., & Schipper, K. (1999). Have Financial Statements Lost Their Relevance? *Journal of Accounting Research*, 37 (2), 319-352.
- Francis, J., Khurana, I., & Pereira, R. (2005). Disclosure incentives and effect on cost of capital around the world. *The Accounting Review*, 80 (4), 1125-1162.

- Frankel, R., & Li, X. (2004). Characteristics of a firm's information environment and the information asymmetry between insiders and outsiders. *Journal of Accounting and Economics*, 37 (2), 229-259.
- Garcia Lara, J., Garcia Osma, B., & Penalva, F. (2009). Accounting conservatism and corporate governance. *Review of Accounting Studies* (14), 161–201.
- Givoly, D., & Hayn, C. (2000). The changing time-series properties of earnings, cash flows and accruals: Has financial reporting become more conservative? *Journal of Accounting and Economics*, 29, 287-320.
- Hoogendoorn, M. (2004). Beleidsaspecten inzake de jaarrekening . *Externe Verslaggeving in Theorie en Praktijk*, Available at: <http://dare.uva.nl/record/94404>.
- Hoogendoorn, M., & Mertens, G. (2001). *Kwaliteit van externe financiële verslaggeving in Nederland*. Kluwer/Limperg Instituut.
- Hung, M. (2001). Accounting standards and value relevance of financial statements: An international analyses. *Journal of Accounting and Economics*, 30, 401-420.
- Hung, M., & Subramanyam, K. (2007). Financial statement effects of adopting international accounting standards: the case of Germany. *Review of Accounting Studies*, 12, 623-657.
- Imhoff, E. (1992). The relation between perceived accounting quality and economic characteristics of the firm. *Journal of Accounting and Public Policy*, 11 (2), 97-118.
- Jones, J. (1991). Earnings Management During Import Relief Investigations. *Journal of Accounting Research*, 29 (2), 193-228.
- Klaassen, J., Hoogendoorn, M., & Vergoossen, R. (2008). *Externe verslaggeving* (Vol. 7). Noordhoff Uitgevers.
- Knoops, C. D. (2007). Waar zijn de gebruikers? Een conceptual framework gebaseerd op 'decision usefulness'? *Maandblad voor Accountancy en Bedrijfseconomie*, 4, 118-120.
- Kothari, S., Leone, A., & Wasley, C. (2005). Performance matched discretionary accrual measures. *Performance matched discretionary accrual measures*, 39, 163-197.
- Lang, M., Smith Raedy, L., & Wilson, W. (2006). Earnings management and cross listing: Are reconciled earnings comparable to US earnings? *Journal of Accounting and Economics*, 42, 255–283
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1998). Law and Finance. *Journal of Political Economy*, 106 (6), 1113-1155.

- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2008). The Economic Consequences of Legal Origins. *Journal of Economic Literature*, 26 (2), 285-332.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1997). Legal Determinants of External Finance. *The Journal of Finance*, LII (3), 1131-1150.
- Larcker, D., Richardson, S., Tuna, I. (2007). Corporate governance, accounting outcomes, and organizational performance. *The Accounting Review*, 82 (4), 963–1008.
- Laux, C., & Leuz, C. (2009). The crisis of fair-value accounting: Making sense of the recent debate. *Accounting, Organizations and Society*, 34 (6-7), 826-834.
- Leuz, C., Nanda, D., & Wysocki, P. (2003). Earnings management and investor protection: an international comparison. *Journal of Financial Economics*, 69, 505-527.
- Paananen, M., & Lin, H. (2009). The Development of Accounting Quality of IAS and IFRS over Time: The Case of Germany. *Journal of International Accounting Research*, 8 (1), 31-55.
- Palepu, K., Healy, P., Bernard, V., & Peek, E. (2007). *Business analysis and valuation. IFRS Edition*. South-Western Cengage Learning.
- Paredes, T.A. (2003). Blinded by the Light: Information Overload and its Consequences for Securities Regulation. *Working Paper Washington University Law Quarterly*, Available at: <http://ssrn.com/abstract=413180>
- Roberts, A. (1995). The very Idea of Classification in International Accounting. *Accounting, Organizations and Society*, 20 (7/8), 639-664.
- Ronen, J., & Yaari, V. (2008). *Earnings Management, Emerging Insights in Theory, Practice, and Research*. Springer Science+Business Media, LLC.
- Schipper, K. (2005). The Introduction of International Accounting Standards in Europe: Implications for International Convergence. *European Accounting Review*, 14 (1), 101-126.
- Shih, M. (2009). Throw the Baby out with the Bath Water: Problems with Performance Matched Discretionary Accrual Measures. *Working Paper National University of Singapore*.
- Shleifer, A. & Vishny, R. (1998). *The Grabbing Hand: Government Pathologies and their Cures*. Cambridge, MA: Harvard University Press.
- Siegel, J. (1982). The “Quality of Earnings” Concept – A Survey. *Financial Analysts Journal*.
- Soderstrom, N. & Sun, K. (2007). IFRS Adoption and Accounting Quality: A Review. *European Accounting Review*, 16 (4), 675-702.

- Stolowy, H., & Breton, G. (2004). Accounts Manipulation: A Literature Review and Proposed Conceptual Framework. *The Review of Accounting and Finance*, 3 (1), 5-66.
- Street, D. (2002). GAAP 2001—Benchmarking national accounting standards against IAS: summary of results. *Journal of International Accounting, Auditing & Taxation*, 11, 77-90.
- Sun, K. (2006). Financial reporting quality, capital allocation efficiency, and financing structure: an international study. *Working Paper University of Hawaii at Manoa*, Available at: <http://ssrn.com/abstract=816384>.
- Timmerman, L., & Doorman, A. (2002). Rights of minority shareholders in the Netherlands. *A report written for the XVth World Congress of the International Academy of Comparative Law*.
- Van der Tas, L. G. (2006). Invoering van IFRS in de EU: achtergronden, kansen en bedreigingen. *Maandblad voor Accountancy en Bedrijfseconomie*, 11, 532-542.
- Van Helleman, J. (2005). Goedkeuring van IFRS voor toepassing in Europa. *Maandblad voor Accountancy en Bedrijfseconomie*, 7/8, 326-333.
- Watts, R. (2003). Conservatism in accounting. *Accounting Horizons*, 17 (3), 207-221.
- Zeff, S., Van der Wel, F., & Camfferman, K. (1992). *Company financial reporting: a historical and comparative study of the Dutch regulatory process*. New York: North-Holland.

APPENDIX 1: EXTENSIVE LITERATURE SUMMARY ON VALUE RELEVANCE

Author	Objective	Sample	Methodology	Results
Francis and Schipper (1999)	Addresses the concern whether financial statements have lost their relevance to investors	US listed firms from 1952 to 1994	Portfolio returns test, OLS regression, earnings regression, balance sheet regression, book value and earnings regression	A decline in the relevance of earnings information, and an increase in the relevance of balance sheet and book value information
Hung (2001)	Investigate the relation between accrual accounting and value relevance of accounting measures in countries with different levels of shareholder protection	21 countries from 1991 to 1997	Portfolio returns test	The use of accrual accounting negatively affects the value relevance of financial statements in countries with weak shareholder protection
Ali and Hwang (2000)	Explore the relation between value relevance and country-specific factors	16 countries from 1986 to 1995	Pooled time-series and cross-section regression	The value relevance of financial reports is lower for countries where the financial systems that are bank oriented; where private-sector bodies are not involved in the standard-setting process; where accounting practices follow the Continental model; where tax rules have a greater influence on financial accounting measurements; and where spending on auditing services is relatively low
Ball et al. (2000)	Examine the association between country-level institutions and conservative accounting practices	Accounting income, cash flow and dividends over 1985-1995 from Global Vantage Industrial/Commercial (IC) files	A model of incorporation of economic income and accounting income	Accounting income in common law countries is significant more timely than in code-law countries, except concerning Japan
Leuz et al. (2003)	Examination of earnings management in international context	31 countries from 1990 to 1999	Four different country-level measures of earnings management	Earnings management decreases in countries with strong investor protection, because strong protection limits insiders' ability to acquire private control benefits, which reduces their incentives to mask firm performance

Bushman and Piotroski (2006)	Explore how reported accounting numbers are shaped by the institutional structure of the country in which firms are domiciled	38 countries from 1992 to 2001	Earnings conservatism : association of accounting earnings and share returns	<ul style="list-style-type: none"> - Earnings conservatism is positively related to quality of the legal system - Earnings conservatism is almost not affected by securities laws - Earnings conservatism is negatively related to risk of expropriation by the state / state ownership - Mixed and inconclusive results on effect of financial architecture and tax regime on earnings conservatism
Hung and Subramanyam (2007)	Investigate the financial statement implications of adopting IAS for firms in Germany	80 German firms from 1998 to 2002	Two-stage regression	<ul style="list-style-type: none"> - Total assets and book value of equity, as well as variability of book value and income, are significantly higher under IAS than under German GAAP - In addition, book value and income are no more value relevant under IAS than under HGB, and HGB (IAS) income is highly persistent (transitory) - Weak evidence that IAS income exhibits greater conditional conservatism than HGB income.
Paananen and Lin (2009)	Investigate whether there is a change in accounting quality during the IAS-period, the voluntary IFRS-period and the mandatory IFRS-period	107 German firms from 2000 to 2006	Regression analyses	Accounting quality improved between the IAS era and the voluntary IFRS adoption period, but worsened in the IFRS mandatory period

APPENDIX 2: COMPANIES REPRESENTING THE SAMPLE

Entity	Industry	IFRS Adoption Year	Fiscal Year End Date
Aalberts Industries NV	2000	2005	31-dec
Accell Group NV	3000	2005	31-dec
Akzo Nobel NV	1000	2005	31-dec
Alanheri NV	3000	2005	31-dec
Amsterdam Commodities NV	3000	2005	31-dec
And International Publishers	5000	2005	31-dec
Arcadis NV	2000	2005	31-dec
Ballast Nedam NV	2000	2005	31-dec
Batenburg Beheer NV	2000	2005	31-dec
Beter Bed Holding NV	5000	2005	31-dec
Brunel International NV	2000	2005	31-dec
Crown Van Gelder NV	1000	2005	31-dec
CSM NV	3000	2005	30-sep
Ctac NM NV	9000	2005	31-dec
Docdata NV	3000	2005	31-dec
DPA Group NV	2000	2005	31-dec
Draka Holding NV	2000	2005	31-dec
Exact Holding NV	9000	2005	31-dec
Gamma Holding NV	2000	2005	31-dec
Grontmij NV	2000	2005	31-dec
Heijmans NV	2000	2005	31-dec
Heineken NV	3000	2005	31-dec
HES-Beheer NV	2000	2005	31-dec
Hitt NM NV	2000	2005	31-dec
Hydratec Industries NV	2000	2005	31-dec
ICT Automatisering NV	9000	2005	31-dec
Imtech NV	2000	2005	31-dec
Innoconcepts NM NV	2000	2005	31-dec
Kendrion NV	2000	2005	31-dec
Koninklijke Ahold NV	5000	2005	31-dec
Koninklijke BAM Groep NV	2000	2005	31-dec
Koninklijke Brill NV	5000	2005	31-dec
Koninklijke DSM	1000	2005	31-dec
Koninklijke Porceleyn Fles	3000	2005	31-dec
Koninklijke Ten Cate NV	2000	2005	31-dec
Koninklijke Vopak NV	2000	2005	31-dec
Koninklijke Wessanen NV	3000	2005	31-dec
Macintosh Retail Group NV	5000	2005	31-dec
Mediq NV	5000	2005	31-dec
Nederlands Apparaatfabriek NV	2000	2005	31-dec
Nedsense Enterprises NV	9000	2005	31-dec
Neways Electric Internationa	2000	2005	31-dec
Nutreco NV	3000	2005	31-dec
Oranjewoud NV	9000	2005	31-dec
Ordina NV	9000	2005	31-dec
Qurius NV	9000	2005	31-dec
Randstad Holding NV	2000	2005	31-dec
Reed Elsevier NV	5000	2005	31-dec
Rood Testhouse NV	9000	2005	31-dec
Roto Smeets Group NV	2000	2005	31-dec
Royal Boskalis Westminster NV	2000	2005	31-dec
Simac Techniek NV	9000	2005	31-dec
Sligro Food Group NV	5000	2005	30-dec
Spyker Cars NV	3000	2005	31-dec
Stern Groep NV	5000	2005	31-dec
Telegraaf Media Groep	5000	2005	31-dec
TKH Group NV	2000	2005	31-dec
TNT NV	2000	2005	31-dec
Unilever NV	3000	2005	31-dec
Unit 4 Agresso NV	9000	2005	31-dec
USG People NV	2000	2005	31-dec
Vivenda Media Groep NV	9000	2005	31-dec
Wolters Kluwer NV	5000	2005	31-jan

APPENDIX 3: COMPANIES AND DATA FOR THE EMPIRICAL TESTS

Total of Dutch listed companies

Total Dutch Listed Firms	90
Financials and Utilities	11
Data Not Available For All Periods	4
Reporting Under NON-NL GAAP and NON-IFRS Standards	6
Uncommon Fiscal Year End Date	4
Industries representing only 1 Firm	2
Total Dutch Listed Firms Included in the Sample	63

Data collected for the empirical tests

TF.ICBIndustry	Industry classification of a firm
TF.FiscalYearEndDate	Represents the month, day and year the company closes its books at the end of its financial year
WS.AcctgStandardsFollowed	Accounting Standard
TF.IncomeBefExtraltmsAndPfdDiv (EBXI)	Represents income before extraordinary items and preferred and common dividends, but after operating and non-operating income and expense, reserves, income taxes, minority interest and equity in earnings
TF.NetCashFlowOperatingCFStmt (CFO)	Represent the net cash receipts and disbursements resulting from the operations of the company. It is the sum of Funds from Operations, Funds From/Used for Other Operating Activities and Extraordinary Items
TF.TotalAssets (A)	Represent the sum of cash & equivalents, receivables, securities inventory, custody securities, total investments, net loans, net property, plant and equipment, investments in unconsolidated subsidiaries and other assets
TF.Sales (REV)	Represent gross sales and other operating revenue less discounts, returns and allowances
TF.TotalReceivables (AR)	Represent the amounts due to the company resulting from the sale of goods and services on credit to customers (after applicable reserves). These assets should reasonably be expected to be collected within a year or within the normal operating cycle of a business
TF.TotalPropPlantEquipGross (PPE)	Represents tangible assets with an expected useful life of over one year which are expected to be used to produce goods for sale or for distribution of services
TF.ReturnOnAssets (ROA)	Represent the accumulated after tax earnings of the company which have not been distributed as dividends to shareholders or allocated to a reserve account
WS.YrEndMarketCap	Market Price-Year End * Common Shares Outstanding
TF.TotalCommonEquity	Represents all interest bearing and capitalized lease obligations. It is the sum of long and short term debt
WS.EPS	Earnings per Share
WS.PriceClose	Share price at the end of the fiscal year

APPENDIX 4: OUTPUT EARNINGS CONSERVATISM REGRESSION

Earnings conservatism coefficients: 2001

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,575 ^a	,331	,297	,512798314422343

a. Predictors: (Constant), RDR2001, DR2001, R2001

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,117	,166		,709	,481
	R2001	-,108	,782	-,050	-,138	,891
	DR2001	,308	,213	,245	1,444	,154
	RDR2001	2,096	,874	,737	2,399	,020

a. Dependent Variable: NI2001

Earnings conservatism coefficients: 2002

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,457 ^a	,209	,168	,58337564368837

a. Predictors: (Constant), RDR2002, DR2002, R2002

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,122	,195		,625	,535
	R2002	-,077	,242	-,055	-,317	,752
	DR2002	,269	,250	,162	1,076	,286
	RDR2002	1,491	,448	,562	3,330	,002

a. Dependent Variable: NI2002

Earnings conservatism coefficients: 2003

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,557 ^a	,311	,275	,28778397400166

a. Predictors: (Constant), RDR2003, R2003, DR2003

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,051	,057		,889	,378
	R2003	-,004	,073	-,007	-,054	,957
	DR2003	,432	,171	,509	2,529	,014
	RDR2003	3,470	,754	,905	4,602	,000

a. Dependent Variable: NI2003

Earnings conservatism coefficients: 2004

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,877 ^a	,770	,758	,167989597516148

a. Predictors: (Constant), RDR2004, R2004, DR2004

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,033	,034		,946	,348
	R2004	,037	,063	,043	,590	,558
	DR2004	,395	,080	,429	4,946	,000
	RDR2004	6,363	,490	1,077	12,979	,000

a. Dependent Variable: NI2004

Earnings conservatism coefficients: 2005

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,272 ^a	,074	,027	,193237184344404

a. Predictors: (Constant), RDR2005, R2005, DR2005

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,093	,040		2,328	,023
	R2005	-,010	,057	-,024	-,177	,860
	DR2005	-,077	,113	-,124	-,682	,498
	RDR2005	1,014	1,001	,178	1,012	,315

a. Dependent Variable: NI2005

Earnings conservatism coefficients: 2006

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,820 ^a	,673	,656	,059905150265628

a. Predictors: (Constant), RDR2006, R2006, DR2006

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,074	,012		6,163	,000
	R2006	-,046	,022	-,176	-2,133	,037
	DR2006	,129	,039	,374	3,292	,002
	RDR2006	1,876	,191	1,095	9,845	,000

a. Dependent Variable: NI2006

Earnings conservatism coefficients: 2007

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,478 ^a	,229	,189	,127299954889975

a. Predictors: (Constant), RDR2007, DR2007, R2007

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,081	,028		2,913	,005
	R2007	-,031	,088	-,063	-,352	,726
	DR2007	,085	,049	,301	1,734	,088
	RDR2007	,673	,183	,678	3,674	,001

a. Dependent Variable: NI2007

Earnings conservatism coefficients: 2008

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,429 ^a	,184	,142	,396203274525515

a. Predictors: (Constant), RDR2008, DR2008, R2008

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,248	,293		-,845	,402
	R2008	,566	,876	,319	,645	,521
	DR2008	,687	,328	,348	2,098	,040
	RDR2008	,434	,921	,211	,471	,639

a. Dependent Variable: NI2008

Earnings conservatism coefficients: 2009

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,468 ^a	,219	,173	,220014819044923

a. Predictors: (Constant), RDR2009, R2009, DR2009

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,024	,055		,435	,666
	R2009	-,033	,069	-,073	-,482	,632
	DR2009	-,220	,114	-,340	-1,929	,059
	RDR2009	,645	,496	,213	1,301	,199

a. Dependent Variable: NI2009

APPENDIX 5: OUTPUT EARNINGS MANAGEMENT REGRESSION FOR THE ESTIMATION PERIOD

Earnings management coefficients, estimation period: 2001

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,048	,034		-1,414	,163
	(1/At-1)2001	,060	,549	,015	,109	,913
	(REV-AR/At-1)2001	,001	,044	,004	,026	,979
	(PPE/At-1)2001	-,012	,036	-,046	-,332	,741

a. Dependent Variable: (TA/At-1)2001

Earnings management coefficients, estimation period: 2002

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,092	,023		-4,045	,000
	(1/At-1)2002	-,039	,277	-,018	-,141	,888
	(REV-AR/At-1)2002	-,002	,027	-,009	-,065	,949
	(PPE/At-1)2002	,032	,026	,157	1,198	,236

a. Dependent Variable: (TA/At-1)2002

Earnings management coefficients, estimation period: 2003

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,065	,016		-4,002	,000
	(1/At-1)2003	,195	,257	,105	,759	,451
	(REV-AR/At-1)2003	,023	,030	,106	,760	,451
	(PPE/At-1)2003	-,007	,018	-,050	-,381	,705

a. Dependent Variable: (TA/At-1)2003

Earnings management coefficients, estimation period: 2004

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-,067	,025		-2,732	,008
(1/At-1)2004	,079	,275	,038	,288	,774
(REV-AR/At-1)2004	,023	,059	,052	,396	,693
(PPE/At-1)2004	,023	,027	,115	,876	,385

a. Dependent Variable: (TA/At-1)2004

Earnings management coefficients, estimation period: 2005

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	,703	,512		1,372	,175
(1/At-1)2005	-2,090	3,721	-,108	-,562	,577
(REV-AR/At-1)2005	-,348	,827	-,081	-,421	,675
(PPE/At-1)2005	-,491	,538	-,120	-,914	,365

a. Dependent Variable: (TA/At-1)2005

Earnings management coefficients, estimation period: 2006

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-,055	,044		-1,238	,221
(1/At-1)2006	,072	,733	,013	,099	,922
(REV-AR/At-1)2006	,004	,035	,015	,116	,908
(PPE/At-1)2006	,003	,047	,010	,074	,941

a. Dependent Variable: (TA/At-1)2006

Earnings management coefficients, estimation period: 2007

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-,007	,016		-,421	,676
(1/At-1)2007	-,179	,302	-,080	-,594	,555
(REV-AR/At-1)2007	,004	,037	,013	,095	,925
(PPE/At-1)2007	-,007	,018	-,050	-,379	,706

a. Dependent Variable: (TA/At-1)2007

Earnings management coefficients, estimation period: 2008

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-,086	,017		-4,891	,000
(1/At-1)2008	,120	,292	,055	,410	,683
(REV-AR/At-1)2008	-,007	,025	-,037	-,272	,786
(PPE/At-1)2008	,011	,021	,068	,511	,611

a. Dependent Variable: (TA/At-1)2008

Earnings management coefficients, estimation period: 2009

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-,109	,015		-7,123	,000
(1/At-1)2009	,163	,494	,050	,330	,743
(REV-AR/At-1)2009	-,008	,072	-,017	-,112	,911
(PPE/At-1)2009	,020	,019	,158	1,028	,309

a. Dependent Variable: (TA/At-1)2009