Chapter 1

Introduction

1.1 Introduction

This thesis investigates the mechanisms that shape financial statement information, taking two approaches. The first approach focuses on investors, the second concentrates on managers.

The first approach assumes that financial statements are for investors. This view on the role of financial statements is the view adopted by the mainstream of financial accounting research. It is also the view supported by financial reporting standard setting bodies and advanced by textbooks. The idea that investors are the main audience for financial statements is widely accepted. In fact, this idea is so widespread that it creates a form of laziness in the minds of those advocating this view: few people question it. A subsequent other accepted idea is that investors depend on financial statement information, and that financial reporting should be regulated in order to protect investors against the capricious reporting behavior of managers. On the other hand, the fact that investors do not base their decisions predominantly on published financial statements information cannot be ignored. Also, capital markets are the most obvious institutions for dealing and hedging all forms of financial risks. Proponents of the view that investors depend on specific firms’ financial statement information neglect this function of capital markets. This is especially so when they express the idea that investors deserve protection against the opportunistic behavior of managers. These casual observations give reason to adopt an alternative viewpoint on the mechanism that shapes financial statement information.

This alternative viewpoint investigates the party that reports financial information: the managers. This view assumes that managers have an interest in determining the outcomes of the financial reporting process, more in line with observations of managers’ behavior. For example, not seldomly managers leave
firms after the announcement of disappointing earnings numbers. And, not surprisingly, good earnings performance advances a manager’s career.

This thesis shows that the first approach, the one that concentrates on investors’ interests in financial reporting, suffers from methodological and theoretical problems. The alternative approach, with a focus on managers’ interests, has a better theoretical foundation and is less affected by methodological problems. This approach shows that managers’ individual preferences concerning their own wealth have an effect on the way they conduct financial reporting. This result shows that in addition to accounting standards, managers’ individual preferences concerning the outcome of the reporting process is a factor that determines reporting practice. Further, the results of this thesis suggest that the enforcement of financial reporting regulation affects reported earnings in such a way that the reported earnings number has less bearing on the firm’s market value. Contrary to what regulators assume, the results of this thesis suggest that financial reporting regulation, and its enforcement in particular do not always have a positive effect on the information reflected in reported earnings numbers. Therefore, accounting standards setters should take into account the effect of standards on the wealth of managers.

The research presented in this thesis is market based accounting research. The availability of data on Dutch listed firms makes it possible to “confront” information from financial reports with information from markets. Such a “confrontation” enables an analysis of financial reporting phenomena, and advances our understanding of financial reporting. The quality of the analysis depends on the methods used. For that reason, this thesis devotes considerable space to theories and methods used in financial accounting research.

Market based research has its limitations. It investigates financial reports from listed firms, which makes it difficult to generalize the results to the case of non-listed firms. Further, market based research investigates an aggregate of firms. Due to aggregation, a great deal of information on individual firms disappears. Also, the quality of market based research depends on the quality of the data. The number of data sources increases over time, but few deliver data perfectly suitable to research purposes. Many data providers do not maintain long histories, for example. This limits researchers to investigate only recent developments. Also, data providers have the propensity to stop maintaining data on firms that become de-listed from stock markets. If one does not correct for this survivorship bias, then conclusions on only surviving firms are generalized to all firms. Another problem is that some data providers make corrections in reported data, or fill in missing numbers. This also results in a loss of valuable information. But even if the data match the required specifications, another problem remains. Financial reporting research generally assumes that numbers reported in financial reports are what they stand for. It assumes equal accounting treatment of
transactions, which is not always the case. Different firms interpret accounting standards differently, which makes the interpretation of reported numbers ambiguous. And, as noted in the previous paragraph, correcting data results in a loss of valuable information.

Despite these problems, market based accounting research dominates financial reporting research. Researchers have learned to accept that some of the problems that accompany the data are beyond their control. The remaining problems are the researcher’s challenge.

Before this thesis starts with reviewing existing theories, and before it begins presenting research, it first describes the context of financial accounting research. Section 1.2 presents a brief review of current and past developments in accounting research. Because financial reporting research has close connections with the setting of financial reporting standards, section 1.3 discusses a selection of current issues in financial reporting regulation. After a context description, section 1.4 presents the objective and outline of this thesis.

### 1.2 Contemporary accounting research

#### 1.2.1 Introduction

This section presents a brief sketch of financial reporting research from the last four decades. Section 1.2.2 discusses the normative approach in financial reporting research. This approach dominated the pre-seventies, and devoted much attention to finding the best approach to financial reporting. Financial reporting alternatives were evaluated against the concept of true income, a concept that required the reported income to relate to a firm’s “true” value. The controversy caused by the true income approach gave way to two alternative approaches in financial accounting research: a pragmatic approach that still focused on the relevance of accounting information for decision making but de-emphasized the income number, and an approach that changed accounting research rather drastically – market based accounting research.

Section 1.2.3 is a brief review of empirical – or market based – research. Market based research confronted researchers with the efficient market hypothesis. This hypothesis posed problems to financial reporting research because its message of substance over form seemed to trivialize accounting principles. A reaction to the idea that financial statements were assumed trivial came from positive accounting theory (PAT). Section 1.2.4 shows that PAT advanced financial reporting research during the eighties by integrating concepts derived from
micro economic theory, such as the principal-agent theory\textsuperscript{1}.

At the end of the eighties, PAT lost its dominance in financial accounting research to research that returned the focus to the relevance of accounting numbers for decision making. This approach focused on the relevance of financial accounting information for mainly investors. It has much in common with fundamental investment analysis, a mode of investment analysis dominating the pre-seventies. Current mainstream financial accounting research adopts this view.

While Chapter 2 extensively reviews research that focuses on firm fundamentals, section 1.2.5 presents a taste of it and is followed by a brief review on research that more or less revisits PAT. This research investigates factors that affect the way earnings are reported.

### 1.2.2 Normative financial accounting research

Until the end of the sixties, financial accounting research had committed much effort to finding the best method of financial reporting. It was assumed that the purpose of financial reporting was to inform investors and creditors about the stewardship role of management. In the absence of observable market values for many assets and liabilities, marked-to-market accounting was not thought to be a feasible reporting alternative. Further, cash flow accounting was considered unsuitable for the stewardship role, because cash flows were thought to be uninformative regarding effort. These considerations made accrual accounting a good accounting alternative. However, basic concepts of accrual accounting like those of matching, realization\textsuperscript{2}, and of prudence\textsuperscript{3} led to the development of a myriad alternative accounting methods. Without some benchmark, it was impossible to evaluate all these methods.

The economic income concept provided a theoretical benchmark for evaluating accounting methods. It assumed that accounting methods should lead to an

\textsuperscript{1}It should be noted that before the introduction of PAT, an avenue of economic based accounting research already existed (see, for example, Gonedes and Dopuch, 1974). This avenue of research is generally denoted with the term \textit{analytical accounting research}. The difference with PAT is that the objective of \textit{analytical accounting research} is not per se to develop empirically testable models. Also, Watts and Zimmerman denoted marked based accounting research as positive research. This text however characterizes PAT as a substream of market based accounting research.

\textsuperscript{2}Paton and Littleton (1940) formalized the concept of matching. It states that revenues and expenses should be recorded in a way that efforts and accomplishments are properly aligned. The concept of realization states that revenues should be recognized in financial statements only when the prices to be received for the products or services become reasonably certain.

\textsuperscript{3}The concept of prudence states that foreseeable losses are recognized in the financial statements immediately, and that the recognition of profits should be postponed until the period the profit is realized.
accounting income number reflecting the net present value of future cash flows, after adjustments for deposits and withdrawals. Economic income, therefore, incorporates the future effects of decisions made by management into the current measure of income. Formulated this way, economic income could be used for stewardship evaluation, but problems related to the uncertainty of future cash flows impaired the concept’s value for evaluating stewardship. This was already noticed by Canning (1929), whose ideal was Irving Fisher’s income approach. To overcome problems inherent to Fisher’s forward-looking income approach, Canning proposed a series of surrogate measures that would bring accounting closer to the economic income (Whittington, 1986). Note that it was then already clear that accounting income would never perfectly match economic income.

Other problems related to the quest for financial reporting based on economic were the lack of user interest, and the lack of attention to other sources of information relevant to investors and creditors. “These difficulties have led various academics, from Beaver and Demski (1979) to Solomons (1991), to despair of economic income as either a model for, or an estimate available from, accounting profit.” (Rees 1995).

One response to the problems inherent in the economic income concept was a more pragmatic approach that assumed that different users of financial statements had different information needs, and therefore required more than one income number. This pragmatic approach de-emphasized the importance of one sole income number. It focused on other accounting information as well. An example of research contributing to this view on accounting information is Edwards and Bell (1961), who adopt a “different incomes for different purposes approach” (Whittington, 1986). One of these income concepts provides a profit measure that consists of current cost operating profit and holding gains or losses. This is a form of “comprehensive income”. It reflects a broader concept of total income, because it presents not only the profit from current operations, but also the changes in the firm’s market value.

The ideas of Edwards and Bell (1961) are interesting for another reason: one of their approaches presents a framework that establishes a link between profits, dividends, and firms’ market values. With Edwards and Bell, accounting research embarked upon fundamental investment analysis, at that time a popular mode of investment analysis, which uses accounting information to select undervalued stocks.

A second response to the controversial economic income approach introduced a new view on financial reporting that ventured the idea that market prices could reveal something about the relevance of accounting numbers. The results of this approach were rather devastating for those who were convinced that there exists an accounting income number that reflects true income perfectly.
1.2.3 Market based accounting research

In 1968, Ball and Brown introduced market based accounting research with the objective to constitute “an appropriate test of usefulness” (Ball and Brown, 1968). One motivation for the pair’s research was to counter assertions that historical cost was an inadequate basis for financial reporting. At that time, accounting standard setters (probably inspired by discussions about the economic income concept) proposed current cost accounting as an alternative to historical cost accounting. Current cost accounting would bring book values more in line with (economic) market values. Their Chicago School roots influenced Ball and Brown to test the usefulness of accounting information empirically, so that their results could be used to evaluate the assertion that historical cost accounting was inadequate\textsuperscript{4}.

The basic idea behind the paper is simple. “Because net income is a number of particular interest to investors, the outcome we use as a predictive criterion is the investment decision as it is reflected in security prices” (Ball and Brown, 1968). This idea refers to the efficient market hypothesis. Results of Ball and Brown are in conformity with the efficient market hypothesis and put into perspective the idea that accounting information adds much to what is already known by the market. Ball and Brown show “that 85-90 percent is incorporated into the share price before disclosure.” The remaining information is captured timely after the announcement.

Beaver (1968) investigated share trading volume effects of earnings announcements. Beaver demonstrates that earnings numbers have information content. Beaver’s research method measures trade volumes of stocks around the time of earnings announcements. The results show that surrounding an earnings announcement, trading volume is particularly high. Beaver (1968) is an example of research that supports the idea of relevance of financial statement information.

It should be noted that Beaver, in demonstrating the information content of earnings, probably overstates the usefulness of financial statement information. To illustrate, note that there is one subtle but important difference between the methodology used by Beaver and that of Ball and Brown. The latter study uses a return based index – in this case, the abnormal performance index – for measuring the usefulness of earnings. Returns are the accepted standard for measuring information (See, for example, Campbell et al., 1997). Volumes of trade are probably related to new information, but there is no theoretical benchmark that makes it possible to interpret them in a meaningful way. Demski

\textsuperscript{4}Boland and Gordon (1992) note that Chicago School economics place a high value on the usefulness of theories to policymakers: “Usefulness is the keystone of the positivism promoted by Chicago School economics ... Providing positive theories that can be used as instruments by policymakers is an obvious goal for Chicago School economics.”
and Feltham (1994) formalize this notion, by showing that trade volume is not necessarily related to the moment of release of information. A comparison of the results of Ball and Brown – who show that prices already reflect much of the earnings announcement information – with the results of Beaver – who shows that trade volumes react strongly to earnings announcements – shows that trade volumes probably overstate the economic effects of an earnings announcement. Beaver’s results, therefore, seem to overstate the usefulness of accounting earnings numbers. The titles and introductory sections of both articles also support the idea that there is a subtle difference in interpretation of the usefulness of earnings numbers. The title of Ball and Brown is “An Empirical Evaluation of Accounting Income Numbers”, a display of an unbiased attitude with respect to the issue of the usefulness of accounting information. Their introductory section shows the same sort of candidness. On the other hand, Beaver’s “The Information Content of Annual Earnings Announcements” assumes that earnings announcements have information content before the results are presented. In his introductory section, Beaver expresses his concerns about the usefulness of accounting information with respect to the accounting profession. Having noted this subtle difference, it must be said that both articles were the first to empirically demonstrate the relation between earnings and stock prices.

Many researchers have extended the work of Ball and Brown and Beaver. Examples are Foster (1977) using quarterly accounting data, and Patell and Wolfson (1984), who investigated the intraday speed of adjustment of stock prices to earnings announcements. Evidence from these studies confirms the idea of efficient capital markets.

One phenomenon not in conformity with the efficient market hypothesis is the post-announcement drift, which suggests that investors trade on public earnings information for quite a while after the announcement. Foster et al. (1984) document a post-announcement drift, but they also show that its existence depends on the proxies chosen for the measurement of unexpected earnings. Ball (1992) comments likewise, emphasizing that one should be aware of limitations inherent in the research design before accepting the existence of an “anomaly”. However, Bernard and Thomas (1990) document a post-announcement drift, and this result is difficult to relate to an erroneous research design. Moreover, their implied investment strategy is feasible, which seems to suggest that the efficient market hypothesis is not entirely descriptive.

Note that financial accounting research benefits somewhat from the suggested inefficiency of capital markets. The suggestion that investors can trade on published earnings numbers supports the view that financial reports are mainly useful.

5Market efficiency generally refers to the semi-strong form of efficiency defined by Roberts (1967) and Fama (1970).
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to investors. It is often suggested that the efficient market hypothesis makes the use of accounting standards for financial reporting irrelevant. This notion challenged research, especially around the beginning of the seventies. As a result, new ways of thinking about financial statements emerged. First, there was a relatively defensive view that emphasized the relevance of financial statements. The second view incorporated the efficient market hypothesis and made use of other developments in financial economic theory.

Concerning the defensive approach, note the following: after Ball and Brown (1968), an avenue of research emerged that “undermined the a priori approach in which logic alone was used to demonstrate the superiority of one accounting approach over the other” (Dopuch, 1996). In just a few years, the ideas about the relevance of financial reporting changed dramatically. Brown (1987) refers to Beaver (1973) and notes that “the state of the art circa Beaver presumed that cosmetic accounting changes had no cash flow consequences and that footnote disclosure was a perfect substitute for including information in the body of the financial reports.”

To prevent an erosion of the perceived relevance of financial statements, Beaver devised a new approach in financial reporting research (Beaver, 1989). What he calls an accounting revolution is the introduction of the informational needs of different users, along with the notion of a complex financial reporting environment. The introduction of user needs in financial accounting research might have diverted some researchers’ attention from economic theories and toward other research fields, such as psychology. Examples of such research are Abdelkhalik and Keller (1979), Lee and Tweedie (1975, 1976), and Feenstra (1985) who use qualitative research methods and concentrate on how people interpret financial statements.

The other view on financial accounting information that emerged after Ball and Brown (1968) accepted market efficiency, and advanced research in financial accounting by internalizing concepts from financial economic theory. This view is the subject of the following section.

1.2.4 Positive accounting theory


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6The a priori approach refers to the normative approach.
7Brown (1987) refers to Beaver (1973), an article relating the implication of the efficient market hypothesis to the financial reporting standard setting process.
1.2 Contemporary accounting research

choices. The objective of PAT was to explain and predict accounting method choice and it addresses the choice between FIFO or LIFO as a method for inventory valuation or the choice between accelerated depreciation versus straight-line depreciation.

The introduction of PAT was an innovation in accounting research. It reacted to the normative approach of the pre-seventies because it focused on explaining accounting practice, not prescribing it. It also reacted to the informational approach in financial accounting, because the no-cost frictionless world underlying that approach was not considered descriptive. It led to the uncomfortable implication that footnote disclosure was equivalent to disclosing items in the financial statements. Note that neither the normative or the no-cost informational approach explained or predicted why firms chose particular accounting methods.

To deal with the unease caused by the normative and informational approaches, Watts and Zimmerman introduced information and transaction costs to explain and predict accounting choice. It is important to emphasize that they preferred to adhere to economics to explain accounting choice, giving PAT the potential to advance economic research in financial reporting more so than other approaches, such as the user needs approach.

PAT dominated financial reporting research during the eighties, which allowed financial accounting research to finalize a transition from the normative approach (sometimes called engineering approach) to the positive or informational approach in economics. Many fields of economic research had gone through such a transition during the seventies. In financial economics, Akerlof (1970), for example, is often associated with the start of the transition towards information economics, which introduced elements of game theory in economics. In information economics, agents intelligently interact with other players in order to maximize utility, whereas in the engineering approach, agents were regarded as programmable machines that could achieve an optimal result without interacting intelligently with others.

As mentioned before, PAT introduces contracting costs to explain and predict accounting choice. Accounting numbers are assumed to play a role in contracts. Due to the fact that only efficient firms survive, an “accepted set” of accounting procedures survives with these firms. The accepted set would also arise in the absence of a government that mandates accounting procedures. It might vary across different types of firms, although some overlap in procedures could exist. Further, it limits managers in exercising accounting discretion opportunistically. However, PAT assumes there is still some freedom to select procedures from the accepted set.

The extent to which accounting choice affects the contracting parties’ wealth
depends on the relative magnitudes of contracting costs. To illustrate these magnitudes, and to empirically test their theory, Watts and Zimmerman hypothesize the following regarding:

- **agency costs**: Watts and Zimmerman suggest that accounting numbers in compensation contracts are useful for minimizing agency costs, suggesting the possibility that accounting choice could affect wealth (Watts and Zimmerman, 1990, p. 133). Managers of firms with bonus plans are more likely to choose accounting procedures that shift reporting earnings from future to current periods (Watts and Zimmerman, 1986, p. 208).

- **bankruptcy and agency costs**: The closer a firm is to a particular restrictive accounting-based covenant, the more likely the manager is to use procedures that increase current earnings. Watts and Zimmerman transform this reasoning into the testable debt/equity hypothesis: The larger a firm’s debt/equity ratio, the more likely the firm is to select accounting procedures that shift reported earnings from future periods to the current period (Watts and Zimmerman, 1986, p. 216).

- **political costs**: Watts and Zimmerman assume that large firms are more politically sensitive and have relatively larger wealth transfers imposed on them than do smaller firms (Watts and Zimmerman, 1986 p. 235). Therefore they hypothesize: The larger the firm, the more likely it is to select accounting procedures that defer reported earnings from the current period to future periods.

Many researchers have extended and improved positive accounting research. In their *Ten Years Perspective* paper of 1990, Watts and Zimmerman review and evaluate positive accounting research, asserting that the evidence of research to date is consistent with the three hypotheses. In their view, PAT literature highlighted the importance of contracting costs and provided a framework for predicting accounting choices. They thus remain confident about their theory, but also acknowledge that “while the positive accounting literature has yielded empirical regularities and explanations for these regularities, it is clear there are many research opportunities available beyond those currently exploited ... The major breakthroughs are likely to come from viewing accounting as a choice that is endogenous with the choice of organization, contracting, and financial structures.”

Many criticized PAT, the criticisms addressing many issues. Like Boland and Gordon (1992) do, it is possible to place the criticisms into three groups. First are criticisms about technical issues of positive accounting research. An example is Ball and Foster (1982), who comment on the often used size variable and
note that size might proxy for other omitted variables. However, one can argue whether the comments about technical issues should be regarded as a criticism on positive accounting research alone, because commenting on technical issues is part of the art of empirical research in general.

Second are criticisms about issues of philosophy of science. The criticism often address the positive stance of Watts and Zimmerman. Sterling (1990), for example, notes that by promoting positive research, Watts and Zimmerman are normative. Tinker et al. (1982) argue that positive accounting theories are as value-laden as the normative theories Watts and Zimmerman argue against. On the other hand, one could question the pronounced attention to the word “positive”. Watts and Zimmerman wanted to distinguish their research from the non-empirical accounting research of the pre-seventies, as well as from the empirical accounting research that assumed a no-cost and frictionless world. They had to name their research – with the benefit of hindsight, one could say that Watts and Zimmerman erred in choosing the word “positive”. If instead they had used “empirical”, then they would likely have received less criticism. Watts and Zimmerman probably used the word “positive” to associate their research with “science”, “rationality”, and “objectivity”; and as a result they offended other researchers by suggesting that other research is subjective, has little to do with rationality, or is not scientific. By emphasizing the positive-normative distinction in accounting research, they seem to have overplayed their hand.

The third group of criticisms addresses economics-based research in accounting. These criticisms are more fundamental, and it seems that Watts and Zimmerman have difficulties in dealing with them. In their 1990 article Watts and Zimmerman respond to the articles that critically comment on PAT, with the notable exception of Demski (1988). Demski questions the appropriateness of applying neoclassical economics to the domain of accounting theory. “Market value maximization, present value and wealth are useful constructs from the world of perfect and complete markets” (Demski, 1988). In such a world, it is possible to calculate equilibrium prices that clear markets. But if markets are not perfect and not complete, then supply does not meet demand perfectly, and as a result some agents do not maximize their utility. The contradiction in Watts and Zimmerman’s theory is that they base it on the utility maximizing agent on the one hand (they embrace neoclassical economics), but on the other hand, introduce market failures and information costs. This contradiction seems difficult to resolve, as Watts and Zimmerman (1990) more or less admit by remaining silent on this point.

The criticisms mentioned in the paragraphs above certainly make sense. On the other hand, there are also criticisms that are inappropriate in some ways. Sterling (1990), for example, is often referred to as someone very critical on PAT.
He criticizes PAT for trying to explain accounting practice: “They have proposed a research program with the objective of explaining and predicting words and numerals without mentioning their correspondence... to things and events... they have fallen in love with pictures (financial statements) without recognizing that they need be images of matter (economic goods)”. According to Sterling, accounting research should investigate ways to arrange financial statements so that they correctly reflect some underlying reality, and financial statements should present an objective view of the firm’s financial position. With his claims, Sterling clearly expresses his commitment to the non-empirical research of the pre-seventies. He ignores the important achievement of Watts and Zimmerman having pointed out that the idea of objective financial statements is a fallacy. Leaving the idea of the existence of objective or true financial statements for what it is opens the way to research that investigates accounting method choice. And from managerial accounting research it is known that accounting matters, because it affects managers’ behavior. Thanks to Watts and Zimmerman the connection between financial reporting and managerial behavior is made.

Many other problems with PAT arose from the empirical side of the research. The typical behavior of managers hypothesized by Watts and Zimmerman might only occur in specific circumstances. Empirical research often aggregates information on managers and does not perfectly control for the circumstances in which they operate. This makes it difficult to effectively test hypotheses in a way that the results are generalizable. This is especially true for the three hypotheses advanced by Watts and Zimmerman, and the way they are tested. It all looks quite simplistic: the use of a dummy for the existence of a bonus plan, for example, only tests whether there is a bonus plan. It tests nothing about the characteristics of the bonus plan, which are likely to vary considerably across firms and across managers. On the other hand, if Watts and Zimmerman were to have access to larger data sets, then they could have performed more sophisticated tests.

At the beginning of the nineties, PAT rapidly lost momentum. Developments in finance literature caused a transition in financial reporting research, and a growing number of finance researchers began questioning the CAPM framework. An article that caused much controversy is Fama and French (1992), which tests CAPM empirically. The results demonstrate that the CAPM β does not relate to risk, but that the book to market ratio of equity does instead. Financial reporting researchers anticipated the regained importance of book values for firm valuation purposes, and they began changing the research agenda accordingly. This led to a return to fundamentals.

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9See Sterling (1990) for additional examples of the somewhat simplistic nature of the empirical tests of Watts and Zimmerman.
1.2.5 The return to fundamentals

Since the beginning of the nineties, attention to fundamental values\(^\text{10}\) as explanatory variables for firm value increased. Publications by Fama and French (1992) and Haugen (1995), for example, demonstrate the relevance of the book-to-market ratio for valuation purposes. The regained interest for investors' interests resulted in a stream of textbooks explaining how to create shareholder value (Stern and Stewart, 1995; Copeland et al., 1995). These publications basically use an income concept that resembles that of Edwards and Bell (1961).

More important for financial accounting research were the publications of Ohlson and Feltham, who introduced models that formalized the relation between market values and book values. Prior to Ohlson (working paper dated back to 1989, published in 1995) and Feltham and Ohlson (1995), market based accounting research assumed a link between accounting values and firm value, but there was not a theoretical model to support that assumption; see, for example, Collins and Kothari (1989).

Feltham and Ohlson made a shift in “what we consider the ultimate objective of research on the relation between accounting data and firm value – that is, research bearing on fundamental analysis. It leads us away from an emphasis on explaining stock price behavior and towards a focus on predicting future earnings and future growth in book value” (Bernard, 1995).

Fundamental analysis involves the discovery of value without reference to capital market prices. According to Penman (1992), fundamental analysis was the primary focus of research in investment analysis until 1968. From then on capital market research, clinging to the efficient market hypothesis framework, departed from fundamental analysis. Ohlson (1995) and Feltham and Ohlson (1995) were the first to start investigating fundamental analysis again.

Since Ohlson (1995), accounting information has become relevant again, the informational perspective changing to a measurement perspective. Penman (1992) puts it into words: “From an accountant’s viewpoint the model is particularly pleasing, for we now have a representation of accounting data as fundamentals. Again, we were always a little unsure whether accounting numbers were fundamentals. Are not dividends the fundamentals, we would ask”. The traditional informational approach “left us a bit worried, because all the time we felt that, if you are reporting income, you were making money”.

The Ohlson (1995) model definitely changed research in financial reporting. Much research effort is put into its testing, other research bases its research de-

\(^{10}\)These publications refer to the pre-Miller and Modigliani (1961) era when investors used information from financial statements for their investment decisions. This mode of investment analysis is denoted as fundamental investment analysis.
sign on it. One of the first efforts to test the model against alternative valuation models is the study of Penman and Sougiannis (1996). They conclude that “equity valuation models based on GAAP (accrual) earnings and book values have practical advantages over dividend discounting and discounted cash flow analysis”. Examples of research implementing the Ohlson model are Huijgen (1996) on the valuation of purchased goodwill, and Botosan (1997) on disclosure and cost of capital.

The return to fundamentals embodies more than direct applications and tests, however. The assumption driving fundamentals research is that financial statements should be relevant for investors, and mainstream financial reporting research supports this assumption.

An example of research assuming that financial statements are relevant for investors is that which investigates the value-relevance of particular financial reporting items. The stronger an item correlates with returns, the more value relevant it is supposed to be. Often, when research finds a strong relation between an accounting item and stock returns, it claims that the particular item contains valuable information for investors – the item is considered value relevant.

Another example of a avenue of research that generally assumes that financial statements are important for investors is that which investigates earnings management. The notion of managed earnings is normative. It assumes that unmanaged earnings are “better”. Often “better” is expressed in terms of market values or value relevance. An article illustrating this point is Dechow et al. (1996), which investigates the cost of capital for firms that have been subject to enforcement actions by the SEC; according to the SEC, these firms manipulated earnings numbers. Dechow et al. show that earnings manipulation results in higher costs of capital. The assumption underlying this article is that there exists a benchmark (or objective) income number, and the implication is that firms should report income numbers close to this benchmark.

The next chapter deals in depth with fundamentals research. It should be noted that fundamentals traditionally dominated financial accounting research over the past decades, with the exception of the seventies and eighties. The other decades show research that concentrates on relating book values to economic values. During the pre-seventies, research concentrated on finding a measure of objective or economic income. Today, it focuses on value relevance, and on filtering away managed components from reported earnings, so that reported earnings are more in line with market values.
1.2.6 Positive accounting theory revisited

The fundamentals approach treats the financial reporting information as given. The focus on investors’ interests causes less attention to be paid to underlying mechanism that shapes the properties of the reported financial accounting information.

Recently, a number articles have appeared that reverse the focus. These articles take market values as given, and explore how the accounting system translates them into information reported in the financial statements. Basu (1997), Ball et al. (1999), and Pope and Walker (1999) are empirical examples of papers that investigate the effect of the conservatism principle on reported earnings. An analytical article is Feltham and Ohlson (1996), which investigates how depreciation affects the way how market value is reflected in earnings.

This new approach has the potential to give insight into the factors determining the properties of earnings numbers. This is an interesting development in financial accounting research, because it suggests that developments in accounting research are repeating. After the normative approach, with a focus on true income, a positive approach emerged. Positive accounting theory tried to explain properties of the financial accounting system; it concentrated on opening the black box of financial reporting. After the positive era, research returned to fundamentals, with a strong orientation towards identifying accounting information that reflects firm value. And just recently, some articles have begun investigating factors affecting properties of financial accounting information again. Here, the focus is on explaining factors that determine reported accounting information. The third chapter intends to support this return to positivism.

1.3 Issues in Financial Reporting Regulation

Financial reporting research has always had a strong orientation towards regulatory issues. The reason that Ball and Brown wrote their 1968 paper, for example, was a concern about claims expressed by accounting regulators that historical cost was an inadequate basis for financial reporting. Regulators somehow favored current cost as a basis for financial reporting then. Whittington (1986), Beaver (1986), and Dopuch (1996) also elaborate on the relation between financial reporting research and financial reporting standard setting.

This section comments on recent developments in financial reporting policy making, focusing mainly on the discussion about the relevance or quality of financial statements.

Note that accounting standard setting bodies share many of their values with the fundamentals view on financial statements. Accounting standard setters ad-
here to the idea that financial statements first serve investors’ interests. The International Accounting Standards Committee (IASC), for example believes that financial statements are prepared for the purpose of providing information that is useful in making economic decisions. The first type of economic decision mentioned by the IAS is the decision to sell, hold or buy an equity investment (IAS framework for preparation, Preface); the first user group mentioned by the IASC are the investors (IAS framework for preparation, Users and Their Information needs). Furthermore, the IASC requires that financial statements should provide information on future cash generating ability. The IAS state that (without referring to research) “users are better able to evaluate this ability to generate cash and cash equivalents if they are provided with information that focuses on the financial position, performance and changes in financial position of an enterprise” (IAS framework for preparation, Financial position, Performance and Changes in financial position). This illustrates the orientation of the IASC towards fundamentals.

The reason to address the sharing of values among financial reporting regulators and fundamentals research is that accounting standard setters are inclined to use results from research of the fundamentals approach to expand regulation. But, according to Dopuch (1996), over the last couple of decades accounting standard setters have become skeptical regarding the relevance of research that went against their biases. Researchers should be aware of this and use caution in advancing policy implications of their research.

A particular issue that attracts the attention of reporting regulators is the quality of financial statements. An interesting property generally associated with this issue is the timeliness of financial statement information. Timeliness is related to conservatism (as this thesis shows), and as both properties are the subject of the research presented in this thesis, it is worthwhile to investigate policymakers’ opinions about them.

Many parties such as auditors, accounting regulators, researchers and accounting practitioners refer to timeliness and conservatism when proposing improved accounting standards or discussing contemporaneous shortcomings of financial statements. Some examples illustrate this point:

- Some accounting regulation reformers propose forward-looking accounting standards. They want to reform accounting standards in such a way that auditors have control over what managers disclose about the future performance of their firm. The rationale for prospective accounting is that

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11An example illustrating the position of parties involved in reporting regulation in the Netherlands is Hoogendoorn and Mertens (1996), who elaborate on the Limperg Financial Statements Quality Project and state that investors are the primary user group of financial statements.
current financial statements are uninformative about the future, this is a complaint about a lack of timeliness of financial statements (Elliott, 1994; Hoogendoorn, 1996).

- Some claim that corporations today operate in such a dynamic world that accounting has become inherently untimely (Lev, 1995; Elliot and Jacobson, 1991). The introduction of new accounting standards is expected to solve this problem.

- Others notice that much of a firm’s value does not appear in the balance sheet (Wallman, 1995), or that investors turn to alternative information sources (Rimerman, 1990; Amir and Lev, 1996). Wallman believes that only a dramatic change of the accounting system could solve this problem. Both are complaints about the timeliness of financial statement information.

- The Financial Accounting Standards Board (FASB) also acknowledges the importance of timeliness in its *Statement of Financial Accounting Concepts No. 2 of 1980, Summary of Principal Conclusions*: “Timeliness, that is, having information available to decision makers before it loses its capacity to influence decisions, is an ancillary aspect of relevance. If information is not available when it is needed, or becomes available so long after the reported events that it has no value for future action, it lacks relevance and is of little or no use. Timeliness alone cannot make information relevant, but a lack of timeliness can rob information of relevance it might otherwise have had.”

Typical of the above claims is lack of support by an impressive body of empirical research. However, this is the case for accounting regulation in general. Ball et al. (1999) find it remarkable that the IASC, like other regulating bodies, seems to develop new accounting standards without using theory or evidence on how accounting regulation affects properties of financial statements. In the same way, Buijink (1992) comments on the Dutch financial reporting regulators.

The lack of interest from regulators in how accounting standards affect involved parties contrasts with the rapidly changing regulation occurring worldwide. The IASC has just finished the development of a set of international accounting standards, and several national regulatory bodies (including the Dutch) are changing their accounting standards to bring them in line with the international standards. The lack of empirical research on the effects of financial reporting regulation makes it interesting to investigate properties of financial statements.

Furthermore, it is particularly interesting to investigate properties of Dutch financial statements, because the Dutch enforcement of accounting standards
is not effective. The consequences of the reporting regulation are not severe for Dutch firms, compared to, for example, the United States. Therefore, the research that investigates properties of Dutch financial statement information could provide us a “natural benchmark” that shows how reporting is done in an environment were firms are relatively free to conduct their financial reporting in a way that suits them.

1.4 Objective and Outline

The objective of this thesis is to investigate the forces that shape financial statement information. The research presented takes two viewpoints: an investor’s viewpoint and a manager’s viewpoint. Chapter 2 addresses the investor’s impact on financial statement information, mainly by presenting a review of articles that study financial statement information from an investor’s viewpoint. Much attention is paid to the methods used in financial accounting research to measure the relevance of financial statement information for investors. By investigating this, current accounting research mainly employs a research design that measures the association between stock prices or stock returns and accounting numbers. These studies use association models, which the chapter investigates in depth. It will be shown that association models are vulnerable to specification errors. Furthermore, one of their purposes is to make inferences about the quality of financial statements – it will be shown that association models are not perfectly capable for this purpose. A slight change in the research design often leads to different conclusions and interpretations of the quality of accounting information. Further, the chapter shows that there are more problems (theoretical and empirical) related to the use of association models.

The problems with association models led to the adoption of a different approach for measuring the mechanism shaping properties of financial statement information. Chapter 3 shows that managers are an important party with an interest in the outcome of the financial reporting process. The results show that properties of reported income numbers vary among different “types” of managers: different managers report differently. The research in Chapter 3 originates from the ideas of Positive Accounting Theory that dominated the financial accounting research of the eighties. A decade ago, that avenue of research lost momentum, but the results of Chapter 3 make one wonder why that happened. The approach taken in Chapter 3 is less tormented by theoretical and empirical problems than is the approach presented in Chapter 2. Furthermore, because it is currently underdeveloped, there are many opportunities to improve this path of research.

The two main chapters (2 and 3) are largely self-contained. However, Chapter 2 critically reviews the use of association models in financial accounting research,
and thus can be seen as a chapter that tries to persuade the reader to take alternative approaches; not because they are exciting just because they are alternative, but because the use of association models in mainstream financial accounting research has resulted in a vast amount of research results that are difficult to interpret, and if one wants to interpret the results, extreme care should be exercised. In a sense, Chapter 2 prepares the reader for a different approach, which is then presented in Chapter 3. Both chapters make clear that there is a demand for financial reporting information, that the demand from investors is difficult to measure, and that it is difficult to assess the relevance of financial statements for investors. More important, the chapters make clear that managers also have an interest in the outcomes of the financial reporting process.

Chapter 4 contains a summary of the research, strengths and weaknesses, policy implications, and suggestions for future research.