

EKONOMI OCH SAMHÄLLE

Skrifter utgivna vid Svenska handelshögskolan  
Publications of the Swedish School of Economics  
and Business Administration

Nr 153

JONAS SPOHR

ESSAYS ON EARNINGS MANAGEMENT

Helsingfors 2005

## Essays on Earnings Management

Key words: Earnings management; Initial public offerings; Insider trading; Income smoothing, Information asymmetry; Discretionary accruals

© Swedish School of Economics and Business Administration & Jonas Spohr

Jonas Spohr  
Swedish School of Economics and Business Administration  
Department of Accounting

Distributor:

Library  
Swedish School of Economics and Business Administration  
P.O.Box 479  
00101 Helsinki, Finland

Telephone: +358-9-431 33 376, +358-9-431 33 265  
Fax: +358-9-431 33 425  
E-mail: [publ@hanken.fi](mailto:publ@hanken.fi)  
<http://www.hanken.fi>

ISBN 951-555-897-2 (printed)  
ISBN 951-555-898-0 (PDF)  
ISSN 0424-7256

Edita Prima Ltd, Helsingfors 2005

## **Acknowledgements**

After making a preliminary inquiry concerning Ph.D. studies at the Department of Accounting in the autumn of 1999, Professor Bo-Göran Ekholm phoned me in December to ask when I planned to start my studies. That was the day I gave up my full-time job at Ernst & Young to start studying for the Ph.D. I am thankful for that phone call but most of all, I want to thank my degree supervisor, Bo-Göran, for the trust he has had in me during this project.

I thank my thesis supervisors Professors Tom Berglund and Stefan Sundgren. Without them the thesis wouldn't be what it is today. The same also goes for my pre-examiners, Professors Juha Kinnunen and Marleen Willekens. I am especially grateful to Juha Kinnunen for his very thorough and valuable review report on my thesis proposal.

Throughout the years, I have had many enjoyable and interesting discussions with the people from the Department of Accounting, all of whom deserve special thanks. I would especially like to thank Tom Lindström for keeping my computer running and Professor Anders Tallberg for his support.

Further, I wish to thank Ernst & Young's Partners Folke Tegengren and Marja Tikka as well as Manager Risto Nyberg, who kept offering me auditing work besides my doctoral studies. It gave me a welcomed break from the thesis work and a salary that I needed. The financial support from Foundation of Hanken, KPMG, Suomen Arvopaperimarkkinoiden Edistämissäätiö, Foundation of Valdemar von Frenckell and KHT-yhdistys is also gratefully acknowledged.

To close, I am grateful to my friends for their understanding and their willingness to stand by my side throughout this process. Finally, I want to thank my parents for always being there for me.



## Contents

PART I: THEORETICAL FRAMEWORK AND CONTRIBUTION	1
1. Introduction	3
2. From accruals to the value of the firm	6
2.1. Accruals and earnings	6
2.2. Earnings and valuation	8
3. Earnings management	12
3.1. What is it?	12
3.2. How is it detected?	14
3.2.1. Accounting method choice and timing	14
3.2.2. Discretionary accruals	16
3.3. Where has it been detected?	21
3.3.1. Asset pricing motivations	22
3.3.2. Contractual motivations	27
4. Summaries of the essays	29
4.1. Essay 1: Earnings management and IPOs -Evidence from Finland	29
4.2. Essay 2: Is income-increasing earnings management followed by insider selling binges?	30
4.3. Essay 3: Testing for income smoothing in public and private firms	32
5. Conclusion	33
References	34
PART II: THE ESSAYS	43



## **PART I**

### **THEORETICAL FRAMEWORK AND CONTRIBUTION**





## 1. Introduction

Taking it broadly, accounting is about the measurement and communication of economic information to decision makers (Watts and Zimmerman, 1986). Dependent on the users of the information, accounting is divided into internal and external accounting. External accounting strives to help stakeholders in decisions concerning their relationship with the firm. It should serve as a useful information source for investors, lenders, authorities, customers, suppliers and employees in their respective decisions regarding investments, taxes, whom to do business with or whom to work for.<sup>1</sup>

The responsibility for preparing and publishing external accounting information lies with the firm's managers. Ideally, managers use their inside knowledge of the firm's current state and business circumstances to prepare the information, thus giving a true and fair view of the firm's financial state and performance. To achieve the aimed usefulness for decision making the information needs to be both relevant and reliable. The purpose of existing accounting regulation that guides and restricts managers in their financial reporting is precisely to enhance the relevance and reliability of financial reporting. The core of the regulation constitutes accounting standards of which the most widely used are established and developed by independent organisations, such as the Financial Accounting Standards Board (FASB) in the U.S. and the International Accounting Standards Board (IASB) in the E.U.<sup>2</sup>

Information asymmetry occurs when some parties in business transactions have an information advantage over others (Scott, 2003). Information asymmetry between managers and external information users allow managers to use their discretion in preparing and reporting accounting information for their own advantage. Although opportunism is limited both by the accounting standards and by independent auditors, there is much recent evidence both in academic literature and the popular press suggesting that managers use their discretion over accounting numbers to achieve

---

<sup>1</sup> Internal accounting is used for decision making inside the firm, for example in project and profitability evaluation.

<sup>2</sup> The authority of the accounting standards is enforced directly by law in the E.U. and in the U.S. by the Securities and Exchange Commission (SEC) whose authority to establish financial accounting standards is stated in the Securities and Exchange Act of 1934.

private gains. More specifically, this earnings management is an activity where managers use their discretion to mislead stakeholders about the economic performance of the company or to influence contractual outcomes (Healy and Wahlen, 1999).

Because earnings management has the propensity to deceive, it is likely to be difficult to detect. The early studies on the topic tested the connection between managerial incentives and choices of different accounting methods (e.g. Watts and Zimmerman, 1978 and Hagerman and Zmijewski, 1979). However, changes in accounting methods are relatively easy for outsiders to detect and therefore have limited success in misleading them. Healy's study from 1985, which suggested that managers manage earnings to increase their bonuses, was the first to test for managerial incentives by using accruals.<sup>3</sup> Compared to studying separate accounting choices, accruals have the advantage that they provide a summary measure on both visible and invisible accounting choices that affects earnings. Since Healy's study, and the invention of relatively easy methods to detect accruals management (see Dechow et al., 1995) a considerable amount of earnings management research has been published in accounting and finance journals.

In the majority of this research, it is first hypothesized that earnings management is present in a given situation and then tests are conducted which usually provide support for its presence. As is the focus of this thesis, a great deal of literature on earnings management assumes it is driven by the stock price impact. Earnings management has been found in connection to financial transactions, for example, equity offerings (Teoh et al., 1998a and 1998b) and management buy-outs (Perry and Williams, 1994). Aside from these high magnitude events, asset pricing motivations also puts pressure on earnings on a more frequent basis. Managers may smooth income to make the firm appear a less risky investment than it really is (Trueman and Titman, 1988) or manage earnings to meet analysts' expectations (Kasznik, 1999). In addition to asset pricing motives, earnings management can be driven by contracts written in terms of accounting numbers, such as bonus contracts (Healy, 1985) or debt covenants (Defond and Jiambavlo, 1994), and by the attempt to reduce political costs (Jones, 1991).

---

<sup>3</sup> Accruals are the difference between a period's earnings and cash flows.

Judging from public discussion and the efforts made by regulators to restrict earnings management, the importance of this phenomenon is also recognized outside academia. Considering the steep price declines associated with firms that are shown to have been managing their earnings, it seems clear that the investor should consider the probability of earnings management when making investment decisions. This can be emphasized by quoting Warren Buffet, who notoriously does not give investment advice but nevertheless suggests that investors should “first, beware of companies displaying weak accounting”.<sup>4</sup> Besides being costly for the investor, earnings management harms society as a whole because it distorts the efficient resource allocation. There is a welfare loss if resources are allocated to projects that are made to look good but which in reality are bad.

The aim of this thesis is to increase the understanding of when and where earnings management occurs. It arguably helps investors in assessing the reliability of companies’ financial statements when they consider investment opportunities. Obviously, it would be of great benefit for investors if they could determine directly from the financial statements if earnings have been managed or not. However, because earnings management can take many forms and be invisible it is impossible to provide investors with the knowledge needed to detect it in a specific case. This thesis therefore takes the more accessible route as it aims to identify situations when earnings management is likely to be present. Arguably, the increased understanding of managers’ motivations to use earnings management may also be useful for regulators and auditors when they try to restrict opportunistic behaviour.

The first part of this thesis proceeds as follows. The next section starts by discussing what is gained and lost with accrual accounting and then through the use of the Ohlson (1995) valuation framework goes on to explain how earnings management influences company valuation. Section 3 provides a review on previous relevant research. Summaries of the three essays and their separate contributions are in section 4 while section 5 concludes. Part two of this thesis consists of the complete essays.

---

<sup>4</sup> Berkshire Hathaway’s 2001 annual report in the chairman’s letter to shareholders (p. 21).

## **2. From accruals to the value of the firm**

### 2.1. Accruals and earnings

From the valuation perspective, it would be useful if the value of the firm could be read directly from the balance sheet. This would be the case if assets and liabilities would reflect proper estimates for expected net present values of the firms' all future cash flows. The problem here is that the estimation of fair values for assets without observable market prices would be dependent on managers' competence and discretion and would thus be unreliable. Reliability, on the other hand, is taken to the extreme if only information on the last period's cash flows is reported. When cash flows are examined within a limited time frame, however, they suffer from matching and timing problems and therefore often give the wrong picture of the period's performance. The two extremes of relevance, where net assets on the balance sheet equals the fair value of the company, and reliability, where only occurred cash flows are reported, is compromised through the use of earnings.

By measuring the period performance with earnings, the matching and timing problems inherent in cash flows are decreased through the use of the revenue recognition and matching principles (Dechow, 1994). The revenue recognition principle states that revenues should be recognized when the firm has delivered a product or has produced a substantial portion of it, and the cash receipt is reasonably certain. The matching principle requires that the revenues recognized during one period be matched with the costs associated with them. Over the lifetime of the firm, cash flows and earnings are the same but when accounting principles are applied over finite time periods, cash flows have to be adjusted to produce the earnings number. These adjustments are made with accruals on the balance sheet, and thus, earnings is the sum of a period's change in accruals and its cash flows.

Managers use their superior knowledge of the firm's business circumstances to make the appropriate adjustments to accruals. Although this necessary use of managerial discretion in accruals estimation opens the door to opportunism and errors, there is a

vast body of research showing that earnings is a useful performance measure. This research started with the publication of the Ball and Brown study in 1968 that measured relevance through examining share price reactions to earnings and cash flow changes. They showed that the share prices reacted more to changes in earnings than to changes in cash flows, and concluded that earnings were thus more value relevant than cash flows.

The importance of earnings and the accrual process have also been expressed by regulators. FASB 1978 Statement of Financial Accounting Concepts No. 1, paragraph 44, states that earnings and its components measured by accrual accounting generally provide a better indication of firm performance than cash flows. This view of earnings as a superior performance measure is shared by empirical research (e.g. Dechow, 1994 and Dechow et al., 1998). Generally, this superiority of earnings as the performance measure is the higher the shorter the intervals for which performance is measured, the higher the level of accruals and the more variable the firm's cash flows.

Although earnings is a useful accounting measure, its accruals component seems to produce valuation problems. Sloan (1996) has shown that investors fail to correctly value total accruals because they overestimate their persistence. He showed that abnormal returns could be earned through buying firms with low accruals and selling firms with high accruals, a phenomenon that has become known as the accrual anomaly.<sup>5</sup> Subramanyam (1996), Defond and Park (2001) and Xie (2001) focus on the discretionary component of accruals and show that it is priced by investors. Subramanyam implies that managers use discretionary accruals to smooth income and consequently to signal information concerning the firm's future performance, which leads him to suggest that the observed market pricing is rational. The more recent two of the above-mentioned studies argue the opposite; the market overprices discretionary accruals because investors fail to see through opportunism.

---

<sup>5</sup>The accrual anomaly is demonstrated by Sloan with a trading strategy based on accruals deciles that creates one year abnormal returns of -5.5% for the highest and 4.9% for the lowest accruals deciles. The anomaly has also more recently been shown to hold for quarterly earnings (Collins and Hribar, 2000).

Dechow and Dichev (2002) suggest that the valuation problems in accruals are not due to the intentional use of managerial discretion. They show that firms with high variability in cash flows have higher accrual estimation errors and thus lower earnings persistence, and argue that this is more the result of the difficulty in estimating accruals correctly than intentional accruals management. An alternative view, that has nothing to do with opportunism or errors in estimating accruals, is advocated by papers suggesting that accruals and growth are connected, and that it is growth, not accruals, which investors fail to value (e.g. Chan et al., 2001 and Fairfield et al., 2003).

## 2.2. Earnings and valuation

Analysts and investors may have problems in valuing accruals correctly, yet the importance of accounting earnings in firm valuation have been increasing in recent years (Bernard, 1995). Much of the renewed interest in fundamental analysis was the result of the residual income valuation model presented by Ohlson (1995) and Feltham and Ohlson (1995). This discounted abnormal earnings (AE) model is not a unique valuation technique, because it is based on the same theoretical foundations as the discounted free cash flow (FCF) model and the discounted dividend (DIV) model. Recent research, however, suggests that the AE model is more usable for stockprice prediction than the FCF and DIV models (Dechow et al., 1999 and Francis et al., 2000). The fact that the AE model is based directly on accounting data and contains information dynamics making assessments on future earnings makes it a good tool for demonstrating how earnings management affects firm value.

The AE model is based on the dividend model and firm value is equal to the present value of expected future dividends:

$$V_t = \sum_{\tau=1}^{\infty} \frac{E_t[d_{t+\tau}]}{(1+r)^\tau}, \quad (1)$$

where  $V_t$  is the value of the firm's equity at time  $t$ ,  $d_t$  is net dividends paid at time  $t$ ,  $r$  is the discount rate and  $E_t[ \ ]$  is the expected value operator conditioned on the available information at date  $t$ . The clean surplus accounting relation means that the change in book value for one period is the earnings minus the dividend for the period i.e. all changes in assets/liabilities unrelated to dividends pass through the income statement.<sup>6</sup> This relation leads to dividend policy irrelevancy because the amount paid out as dividends is matched by a drop in the market value (Ohlson 1995). Given the clean surplus relation equation (1) can be written as:

$$V_t = b_t + \sum_{\tau=1}^{\infty} \frac{E_t[x_{t+\tau} - r * b_{t+\tau-1}]}{(1+r)^\tau} - \frac{E_t[b_{t+\infty}]}{(1+r)^\infty}, \quad (2)$$

where  $b_t$  is the book value of equity at time  $t$  and  $x_t$  is earnings for the period  $t-1$  to  $t$ . The final term is assumed to be zero, and abnormal earnings,  $x^a$ , for period  $t$  is defined as:

$$x_t^a = x_t - r * b_{t-1}. \quad (3)$$

AE is "abnormal earnings" because "normal earnings" is the expected return on book value invested in the beginning of the period. Thus, AE can also be expressed as the earnings minus a charge for the use of capital. According to this definition, the period is profitable only if its earnings exceed the firm's cost of capital (Ohlson 1995). This implies that if the firm's earnings only equal the required cost of capital on its book value, then investors would be willing to pay no more than the book value for the company's shares. The firm value is therefore the sum of book value and the present value of expected future abnormal earnings:

$$V_t = b_t + \sum_{\tau=1}^{\infty} \frac{E_t[x_{t+\tau}^a]}{(1+r)^\tau}. \quad (4)$$

---

<sup>6</sup> More exactly, the clean surplus relation is:  $b_t = b_{t-1} + x_t - d_t$ , where  $b_t$  is the book value of equity at time  $t$  and  $x_t$  is earnings for the period  $t-1$  to  $t$ .

Equation (4) is the AE model that shows the value of the firm expressed in accounting numbers and originates from the dividend discount model from equation (1) with the assumption of clean surplus.<sup>7</sup> Ohlson (1995) goes on to model abnormal earnings, which become more important in the AE model the bigger the difference is between the asset value when the assets are in firm specific use and in general use. The book value should reflect the value of assets when these are in general use whereas their firm specific value represents their value in this firm.

Ohlson (1995) assumes abnormal earnings to have positive serial correlation, but over long time periods they should approximate zero. Both assumptions make intuitive sense. Good management and competitive advantages that are present today will hardly vanish totally tomorrow. However, on a competitive market competitors should eventually catch up. Ohlson shows the expected abnormal earnings as follows:

$$x_{t+1}^a = \omega x_t^a + v_t + \varepsilon_{1,t+1} , \quad (5a)$$

$$v_{t+1} = \gamma v_t + \varepsilon_{2,t+1} , \quad (5b)$$

where  $\omega$  and  $\gamma$  are persistence parameters obtaining values between 0 and 1 and  $v_t$  is all value relevant information at time  $t$  other than abnormal earnings. Combining these information dynamics with equation (4) gives the following valuation function:

$$V_t = b_t + \alpha_1 x_t^a + \alpha_2 v_t , \quad (6)$$

where  $\alpha_1 = \omega/(1+r-\omega)$  and  $\alpha_2 = (1+r)/((1+r-\omega)(1+r-\gamma))$ .<sup>8</sup>

Presentations of the AE model state that theoretically, abnormal earnings created by changing accounting methods should not affect valuation (e.g. Bernard, 1995, Tse and

---

<sup>7</sup> The relation in equation (4) is not new, it can be found in the papers of Preinrich from 1938 and Edwards and Bell from 1968 (Bernard, 1995). Surely, the DIV or FCF models also develop relations between value and earnings but do so by starting with the dividend discount formula (1) and then making assumptions on the relation between either earnings and dividends or earnings and cash flows. Equation (4) removes the need for making these assumptions.

<sup>8</sup> As presented in Dechow et al. (1999).



Yaansah, 1999 and Penman, 2001). This statement is based on the fact that if a firm boosts its earnings through changing accounting methods, these higher earnings transform to higher book value, which in turn, leads to lower abnormal returns in future periods. This theoretical viewpoint on accounting method choice makes the assumption that the stakeholder valuing the firm knows the policy that is chosen and can take this into account in predicting future abnormal earnings. This is more likely to be correct if the accounting methods are visible and applied continuously. However, in practice it can be quite difficult to assess how well a given new accounting method affects earnings and this becomes next to impossible if one is not even aware of the change in accounting policy.

Earnings management affects firm value in three different ways in the AE model setting. Firstly, the positive component of managed earnings directly increases book value and firm value by the same amount. Secondly, the managed earnings are likely to affect the estimated future abnormal earnings through Ohlson's (1995) information dynamics. Due to the positive serial correlation between abnormal earnings in equation (5a), higher earnings during this period may lead to revised estimations about future abnormal earnings. Additionally, high earnings in one period may be wrongly regarded as information about  $v$  in equation (6), because the earnings increase can be interpreted as a sign of a desirable state realization. The managed earnings may be regarded for example as a sign that a new product has a good margin or that restructuring measures have been successful, which may lead to higher estimates of future earnings. Generally speaking, successful earnings management affects valuation by creating the impression that the firm's assets are more (or less) valuable in the firm specific use than they actually are.

Finally, earnings management may affect firm value through the cost of capital. The theoretical papers by Ohlson (1995) and Feltham and Ohlson (1995) assume a risk free discount rate, but when analysing firms in real life the choice of the appropriate risk premium crucially affects the obtained valuation.<sup>9</sup> The proper discount rate, being the

---

<sup>9</sup> Empirical research on the AE model has used, for example, a fixed discount rate that is assumed to be the same for all sample firms (e.g. Bernard, 1995) and the industry cost of equity model (e.g. Frankel and Lee, 1998 and Francis et al., 2000).

cost of capital for the firm, is usually positively connected to the volatility of the firm's earnings. Income smoothing may lead to a lower perception of risk, and thus to a lower discount rate in equation (4) and higher market value for the firm.

### **3. Earnings management**

#### 3.1. What is it?

One of the first definitions on earnings management was given by Schipper (1989, 92), who defined it as "...purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain". A popular and more extensive definition has been given by Healy and Wahlen (1999, 368):

"Earnings management occurs when managers use judgement in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers."<sup>10</sup>

The definitions of earnings management agree on the point that managerial intent is a prerequisite for earnings management, but whether this intent should be opportunistic in nature is not totally clear. Several presentations on earnings management also use the term in connection with managerial discretion that has the aim to communicate information to investors that is supposedly not opportunistic (e.g. Dechow and Skinner, 2000 and Scott, 2003). When testing for whether income smoothing is opportunistic or not, Subramanyam (1996) refers to earnings management only in relation to opportunistic behaviour but not when managerial discretion is used to improve earnings persistence and predictability. The view that earnings management is something

---

<sup>10</sup>An alternative definition is offered by former SEC chairman Arthur Levitt (in a speech to the Financial Executives Institute on November 16, 1998) implying it to be "[a] grey area where sound accounting practices are perverted; where managers cut corners; and, where earnings reports reflect the desires of management rather than the underlying financial performance of the company." Another example is given by Fields et al. (2001, 260) when they state that earnings management occurs "when managers exercise their discretion over accounting numbers with or without restrictions. Such discretion can be either firm value maximizing or opportunistic".

opportunistic and harmful that is used to mislead at least some stakeholders is also expressed by the U.S. Securities and Exchange Commission (SEC) and in the earnings management review article by Healy and Wahlen (1999). The intention to mislead someone about financial performance usually requires that earnings management will be difficult to detect.

The search for a proper definition includes the question as to what activities can be regarded as earnings management. Judgement in financial reporting that fits under the earnings management definition includes estimations of, for example, the economic lifetime of long-term assets, losses from bad debts and asset impairments that are dependent on the future and choices between accounting methods. Also judgement that goes beyond strictly accounting decisions is usually considered as earnings management, assuming that these activities are driven by the reporting incentive (e.g. Schipper, 1989 and Healy and Wahlen, 1999). Thus, earnings can be managed through shifting expenditures between periods or realizing an accounting gain by selling an asset that is undervalued on the balance sheet. Whereas the SEC often also includes outright fraud as earnings management, academic literature usually focuses on earnings management activities that fall within Generally Accepted Accounting Principles (GAAP) (Dechow and Skinner, 2000).

Although most of the earnings management research refers directly to for example, net income or income before extraordinary items, the definition of earnings management does not rely on any particular item in the income statement. As Schipper (1989) explicitly states, and which can be understood from the Healy and Wahlen (1999) definition, earnings management need not be directly connected to reported earnings, but has an impact through other accounting numbers. Thus, earnings management can also occur in supplementary disclosures and may target financial ratios instead of earnings.

### 3.2. How is it detected?

Earnings management is difficult to detect from the firms' financial statements because of its propensity to be invisible. For earnings management to be successful it usually needs to go undetected. Early research on earnings management concerned the detection of changes in accounting methods that were usually easily observable to outsiders. Therefore, it is no surprise that in general this research did not find the assumed manipulation to affect stock prices (for an overview of this early research on earnings management, see Watts, 1998). This is in contrast to more recent research focusing on accruals, which has found that earnings management goes unnoticed many times by the market (Healy and Wahlen, 1999).

The challenge for researchers is to detect something that the market apparently often fails to do. The starting point for researchers, however, differs from that of investors because researchers are studying the phenomenon in general, and not its possible presence in a given potential investment object. Using a large set of data it is possible to uncover systematic patterns that may seem random when looking at single cases in isolation.

Usually, the researcher first forms a hypothesis on where earnings management may occur and then tests for it with an appropriate method. In most of the recent earnings management research, these tests are conducted on the component of accruals that is assumed to be the result of managerial discretion, the discretionary (or abnormal) accruals. Before explaining how discretionary accruals are estimated in section 3.2.2., a short presentation on alternative methods to detect earnings management is provided in the next section.

#### *3.2.1. Accounting method choice and timing*

Accounting method choice is interpreted here in a wide sense, including both the choice of a particular accounting method, such as the choice of capitalizing an intangible asset

or not, and the choice of how to apply the method. The application of the method in the case of capitalized intangibles refers to the determination of an appropriate depreciation procedure. Timing also has two dimensions. Firstly, the managers have the discretion to time when an event is shown in accounting, for example, when bad debts or impaired assets are written off. The other dimension is the timing of transactions that affect the reported earnings. In the end of the financial year, R&D projects or advertisement campaigns may be timed so that the expenses affect the earnings of the next period. Another example of this is the appropriate timing of asset disposals and the consequent realization of gains and losses in the income statement.

Accounting choices that have been examined to determine if a firm uses income increasing or decreasing reporting include, among others, inventory valuation and depreciation method choices and the capitalization vs. expense decision concerning intangible assets and interest (for literature reviews, see Watts and Zimmerman, 1986 and Fields et al., 2001). Studies have indicated, for example, that firms capitalizing R&D are more highly leveraged, smaller, less profitable and closer to dividend restrictions than firms that chose to expense them (Daley and Vigeland, 1983 and Aboody and Lev, 1998). This suggests that the firms chose capitalization in order to appear financially stronger and to increase dividend payments. Teoh et al. (1998c) compared the choice of depreciation methods in initial public offering (IPO) firms to non-IPO firm matched pairs. Their analysis showed that the majority of the IPO firms, whose depreciation methods deviated from their matched pairs, applied a depreciation method that was more income increasing than the one used by the matched pair.

Teoh et al. (1998c) also addressed the timing dimension of accounting transactions when they examined write offs of bad debts in IPO firms. They found evidence that IPO firms on average wrote off significantly less bad debts in the year before, and the year of, the IPO than their peers, whereas no difference was noted in the years after the IPO. Studying the timing of when bad debts are recognised in accounting is understandably a popular subject in studies concerning banks. Banks' loan loss provisions and loan charge-offs have been connected to earnings management in several studies (e.g. Collins et al., 1995 and Beatty et al., 2002).

Banks have provided a fertile ground for studies of earnings management that also has consequences beyond accounting. Beatty et al. (2002), for example, suggest that public banks tend to realize more security gains and less security losses to transform small declines in earnings to small reported earnings increases. The realization (selling) of assets depends on the difference between their value in the balance sheet and their market value and thus creates an accounting loss or profit. Firms have, for example, been shown to time sales of long-lived assets (Bartov, 1993 and Herrmann et al., 2003) or use early debt retirement to manage earnings (Hand, 1989).<sup>11</sup>

An arguably more expensive form of the timing propensity is the adjustment of investment decisions to achieve a short-term earnings goal. Dechow and Sloan (1991) show that CEOs spend less on R&D in their final years in office to improve short-term earnings performance. Other studies have reported that R&D expenditures are altered to reach positive and increasing earnings (Baber et al., 1991), avoid earnings decreases (Bushee, 1998) or to smooth earnings (Mande and File, 2000).

Examining only one accounting method or timing choice at a time gives a somewhat limited picture of a firm's accounting choice. To deal with this, several studies examine a portfolio of different accounting choices to establish whether a firm or event is connected to income increasing or decreasing reporting. A possible strategy for doing this is to divide each accounting choice into an income increasing and an income decreasing alternative and then to test these separately on the sample firms (Christie and Zimmerman, 1994). Another alternative is to go through the portfolio of choices for each firm and to come up with a summary measure on how conservative the firm's reporting policy is (Zmijewski and Hagerman, 1981).

### *3.2.2. Discretionary accruals*

Accruals have the desirable trait of giving a summary measure of the firms accounting choice. In earnings management research they are usually divided into two parts,

---

<sup>11</sup> Retiring under par selling debt gives a firm a one-time profit.

discretionary and nondiscretionary accruals, of which the first is the proxy for earnings management. Because discretionary accruals can not be observed directly from financial statements they have to be estimated using some kind of a model. These models form an expectation on the nondiscretionary accruals level and the amount the actual observed accruals deviate from this level is assumed to be the discretionary accruals. Thus, discretionary accruals are defined as discretionary through the model used. Whether this is a good proxy for earnings management depends on the ability of the model to correctly predict how changes in business circumstances affect accruals.

Most of the models estimate a firm's nondiscretionary accruals from the firm's past accruals levels during periods when no systematic earnings management is assumed (Jones, 1991). The alternative is to use a cross-sectional approach where a firm's normal level of accruals in a period is given by a comparable firm's accruals in the same period (Defond and Jiambavlo, 1994). Both in the time-series and cross-sectional approach, the problem is that accruals vary with changes in business circumstances. The more recent models try to control for these changes with parameters that supposedly adjust the expected accruals to the change in circumstances.

Starting with the first and simplest models, Healy (1985) tested his hypotheses on earnings management behaviour by arranging the observations in his sample into groups based on their hypothesized earnings management behaviour. The correctness of the hypotheses was then tested by pair wise comparisons of mean total accruals (scaled by lagged total assets) between groups for which different earnings management behaviour was assumed. This yields the following earnings management model (Young, 1999):

$$DAC_{i,t} = \frac{TA_{i,t}}{A_{i,t-1}}, \quad (7)$$

where  $DAC_{i,t}$  is discretionary accruals for firm  $i$  in period  $t$ ,  $TA_{i,t}$  and  $A_{i,t-1}$  is total accruals and total assets for period  $t$  and  $t-1$  for firm  $i$ . Whereas Healy (1985) compared results of equation (7) between groups of observations to draw conclusions about the level of earnings management in one group, DeAngelo (1986) estimated the firm's

nondiscretionary accruals from the previous period and therefore can be viewed as a time-series version of the Healy model (Dechow et al., 1995). The DeAngelo model is more specifically as follows:

$$DAC_{i,t} = \frac{(TA_{i,t} - TA_{i,t-1})}{A_{i,t-1}}. \quad (8)$$

Friedlan (1994) abandoned the restriction that nondiscretionary accruals are stationary across different business circumstances. By scaling accruals to sales in both the estimation and test period, Friedlan assumed nondiscretionary accruals to be proportional to operating activity as measured by sales (S). The major advantage of this model, which has become known as the modified DeAngelo model, is that it does not put high requirements on data availability. Yet in contrast to other simple models, it lets nondiscretionary accruals to fluctuate between periods due to changes in circumstances. In the modified DeAngelo model, discretionary accruals are produced from the following equation.

$$DAC_{i,t} = \frac{TA_{i,t}}{S_{i,t}} - \frac{TA_{i,t-1}}{S_{i,t-1}}. \quad (9)$$

The most popular accrual estimation model in earnings management research is probably the Jones model (1991), where nondiscretionary accruals are estimated with an OLS regression with change in sales and the level of property, plant and equipment as explanatory variables. Jones estimated the regression parameters using data varying between 14 and 32 years per firm and obtained through these the nondiscretionary accruals in the test period. The model is as follows:

$$\frac{TA_{i,t}}{A_{i,t-1}} = \beta_{0,i} \frac{1}{A_{i,t-1}} + \beta_{1,i} \frac{\Delta REV_{i,t}}{A_{i,t-1}} + \beta_{2,i} \frac{PPE_{i,t}}{A_{i,t-1}} + \varepsilon_{i,t}, \quad (10)$$

where  $\Delta REV_{i,t}$  is change in sales from period t-1 to t for firm i and  $PPE_{i,t}$  is gross property, plant and equipment and  $\varepsilon_{i,t}$  is the error term for firm i in year t. The parameter



estimates from (10) is then combined with data from the test period to generate the discretionary accruals:

$$DAC_{i,t} = \frac{TA_{i,t}}{A_{i,t-1}} - \left[ \hat{\beta}_{0,i} \frac{1}{A_{i,t-1}} + \hat{\beta}_{1,i} \frac{\Delta REV}{A_{i,t-1}} + \hat{\beta}_{2,i} \frac{PPE_{i,t}}{A_{i,t-1}} \right]. \quad (11)$$

Since Jones (1991), where the model was first introduced there have been several modifications. The extensive data requirements are more easily handled by using the Jones model on cross-sectional data (Defond and Jiambavlo, 1994). In this method the Jones model coefficients are obtained by running the regression on firms matched, for example, by year and industry. The original model itself has been expanded on numerous occasions in studies. Dechow et al. (1995) argued that because sales can include earnings management through inflated receivables the first parameter should be corrected with the change in receivables.<sup>12</sup> The depreciation expense included in the calculation of total accruals may be unsuitable for earnings management, which has led researchers to use the Jones model on current accruals by eliminating the parameter of property, plant and equipment (Teoh et al., 1998a). More recently, Kasznik (1999) has included a parameter for change in cash flow and Kothari et al. (2001) have used a version with a parameter of lagged ROA to control for the effect performance has on accruals.

Kang and Sivaramakrishnan (1995) have proposed an instrumental variable model as an alternative to the Jones model. The instrumental variable model explains nondiscretionary accruals by using costs of goods sold and other expenses in addition to the Jones model explanatory variables, and instead of the OLS regression used by Jones (1991) it applies an instrumental variable approach to obtain the parameter estimates. Although this model supposedly yields more powerful and robust tests of earnings management than the Jones model, its popularity has been low which may be a result of its data requirements and complexity.

---

<sup>12</sup> And should thus be  $(\Delta REV_{i,t} - \Delta REC_{i,t})/A_{i,t-1}$ , where  $\Delta REC_{i,t}$  is change in sales receivables between period t and t-1 for firm i.

Previous papers evaluating earnings management models conclude that they are lacking in the power to find earnings management and are also wrongly specified (e.g. Dechow et al., 1995, Guay et al., 1996, Young, 1999, McNichols, 2000 and Peasnell et al., 2000). Dechow et al. (1995) test the time-series version of the Jones model on a sample where they have artificially induced earnings management and report that the model is able to detect earnings management in only less than 30% of the cases when earnings management equals 5% of total assets. Rejection rates of the null of no earnings management close to 100% are obtained only when the induced earnings management exceeds 50% of total assets.

The power to detect earnings management seems to be somewhat higher for the cross-sectional Jones model. Testing the cross-sectional version, Peasnell et al. (2000) state that the rejection frequencies can be as high as 40% of the cases at accrual manipulations of only 2% of total assets. According to Jeter and Shivakumar (1999), the cross-sectional model has greater power to detect earnings management but they point out that this greater power may also be attributable to misspecification. The lack of power to detect earnings management means that discretionary accruals need to be very high relative to earnings in order to be detected. Consider, for example, the study of Teoh et al. (1998b) finding earnings management in a sample of seasoned equity offering firms that have mean (median) net income of only 6.63% (9.00%) of lagged assets in the year when earnings are manipulated (the offering year). Here the lack of power to discover earnings management suggests that a big proportion, if not most, of the earnings reported by seasoned equity offering firms are a result of earnings management, which seems unlikely.

The fact that the discretionary accruals models are incorrectly specified means that discretionary accruals are wrongly estimated. If these errors in estimation are connected to the partitioning variable that predicts the earnings management direction, the conclusions regarding earnings management may be wrong. Research has found the error in a firm's discretionary (or nondiscretionary) accruals estimates to be correlated at least to earnings, cash flows, sales growth and fixed asset structure (e.g. Dechow et al., 1995, Young 1999, McNichols 2000 and Kothari et al., 2001). As long as the

attributes introducing the bias to discretionary accruals exist in both the firms tested for earnings management and the control sample, the obtained evidence of earnings management is not necessarily misleading. But if the test sample differs from its benchmark in regard to the characteristics that systematically produce errors in discretionary accruals estimates, then the results are likely to be biased. For example, firms conducting a share issue may on average be growing faster than firms in a non-issuing benchmark sample. If high growth means high accruals even without management opportunism, then the issuing sample will indicate earnings management even when none is present.

### 3.3. Where has it been detected?

As illustrated in the previous section, a major issue in earnings management studies is how to correctly identify earnings management and the development of models to fulfil this task. The variety of the models used in previous papers has led to a whole branch of research only testing and developing models that test for earnings management. A recent turn in earnings management literature is the increased interest towards investigating how well authorities and auditors react to and put limits on earnings management. The main contributions of the essays in this thesis are related to the questions as to where and when earnings management occurs. Accordingly, this section concentrates on papers testing for the occurrence of earnings management.

The spectrum where earnings management has been found is wide and diversified. Similarly to the literature review of Healy and Wahlen (1999), the studies here are grouped, and based on the incentives driving the earnings management behaviour. Based on occurrence, the two most important factors that seem to be driving earnings management behaviour are capital market related incentives and contracts written in terms of accounting numbers. Whereas the earnings management studies on contracting are generally limited to debt contracts and management compensation contracts, the capital market related studies are more widely diversified. As a third earnings management driving factor, Healy and Wahlen identify the antitrust and government

regulations incentive. Examples of the latter are Jones's (1991) discovery of income decreasing earnings management in industries objected to import relief investigations, and Key's (1997) finding of downward earnings management in firms in the cable television industry at the time of congressional hearings on whether to deregulate the industry. The focus of this presentation, however, is on the asset pricing related motives as these are directly connected to the essays in this thesis.

### *3.3.1. Asset pricing motivations*

Research, where earnings management is used to influence company value, is loosely divided here into three groups. The first group includes studies where the connection between earnings management and major financial transactions is considered (essay 1). Among these are studies examining if earnings management occurs, for example, before equity offerings. In the second group is research investigating if managers use earnings management in an effort to manipulate the stock price to increase their stock based pay or to benefit from insider trading (essay 2). The third group presents evidence suggesting that earnings management continuously occurs to some extent in financial markets (essay 3). Here managers are assumed to manage yearly or quarterly earnings to meet analysts' expectations or to smooth the income stream between periods.

In several different types of financial transactions the value of the firm's shares is of big importance to the firm itself or its owners. These transactions supposedly put special pressure on earnings, which has led researchers to hypothesize that the events are preceded by earnings management. Supporting the hypothesis, earnings management has been connected to IPOs (Friedlan, 1994, Teoh et al., 1998a and Teoh et al., 1998c) and seasoned equity offerings (Rangan, 1998 and Teoh et al., 1998b). Erickson and Wang (1999) and Louis (2004) examine accruals in firms acquiring another firm through a stock for stock merger. They find evidence that the acquiring firms manage earnings upwards before the merger, assumingly to increase their stock price and decrease the amount of shares that are given away in the merger. Erickson and Wang also test if the acquired firms managed earnings to increase their value before the

acquisition, but find no evidence of this. They explain the lack of earnings management in the target firms by stating that these firms were not aware of a merger offer in advance.

In the studies mentioned above, the magnitude of earnings management is relatively high. Using quarterly data, Rangan (1998) and Erickson and Wang (1999) report quarterly median discretionary accruals of around 1% and 2% of assets respectively in the period of the offering or merger announcement, whereas the studies using yearly data report discretionary accruals ranging between 2.5% and 5.5% of assets in the year of the IPO or seasoned equity offering.<sup>13</sup> The high earnings management surrounding the financial transactions generally leads to disappointing earnings performance in the following periods as the abnormal accruals reverse.

In spite of the high earnings management, several studies challenge the efficient market hypothesis. Several of the studies focussing on earnings management in connection to financial transactions suggest that the market apparently fails to see through the managed earnings and/or cannot correctly predict the implications this has on firm value. For example, Teoh et al. (1998a) report that IPOs applying the most conservative reporting practises outperformed the Nasdaq market by 4% over three years whereas firms in the most aggressive quarter underperformed it by about 25%. The incapability of the market to handle earnings management seems to also hold regarding seasoned equity offerings (Rangan, 1998 and Teoh et al., 1998b). In a recent study supporting the view that investors do not see through earnings overstatements in IPOs and seasoned equity offerings, DuCharme et al. (2004), furthermore suggest that high accruals are positively related to lawsuits against the companies. Considering mergers, Louis (2004) provides evidence that the post merger stock underperformance of acquiring firms is at least partly due to the reversal of their managed earnings before the merger. On the whole, this evidence supplements the research mentioned in section 2.1., suggesting that the market misprices abnormal accruals.

---

<sup>13</sup> These figures do not apply to Friedlan's (1994) study on IPOs because Friedlan used the modified DeAngelo model to estimate discretionary accruals which does not give discretionary accruals estimates as a percentage of assets.

In equity offerings, managers may not have any apparent incentive to refrain from maximizing the price of the company stock and obtaining the best deal for the company and its owners.<sup>14</sup> This situation is totally reversed in management buyout transactions where the interests of owners and managers are the opposite. DeAngelo (1986) investigated if managers use their discretion over earnings in an attempt to decrease the purchase price. Using a simple model to test for discretionary accruals, DeAngelo found little evidence supporting her hypothesis of downward earnings management. More recently, however, with the help of more powerful tests, Perry and Williams (1994) and Woody (1997), have both shown that income decreasing earnings management exists before management buyouts.

Management buyouts provide a bridge to the area of earnings management studies where managers manage earnings to receive private capital gains. Theoretically, managers can increase their probability of receiving capital gains by creating favourable buy and sell opportunities of the company's stock for themselves. For stock options, the buy opportunity refers to the period surrounding the grant date, because the strike price of the options is usually connected to the stock price during this period. In the popular press, stock options especially have often been suggested as the reason for earnings management, for example:

“When a company misses a quarter, the stock gets hammered and stock options lose value. Executives have a huge incentive to consistently increase earnings each quarter to make their stock options more valuable. This leads to a strong incentive to manage earnings”

-Consultant James A. Knight  
(Crain's Chicago Business, 2002, issue 25, p. 9)

However, academic research directly connecting options to income increasing earnings management is scarce, most probably because of difficulties in testing for such a connection. The problem here is the options' long exercise periods (years) and therefore the lack of an apparent event when the earnings management should occur. Among the

---

<sup>14</sup>Managers themselves are usually among the owners, for example, Erickson and Wang (1999) report that managers ownership in their sample of 55 acquiring firms range between 0.1% and 83.6% with a mean and a median of 20.0% and 11.1%.

meagre evidence is a recent finding that share repurchases are used to manage earnings per share upwards in companies where the dilution effect of options is high (Bens et al., 2003).

A more accessible route is examining if income decreasing earnings management occurs before stock option grant dates. Only one study could be found that claimed this kind of income decreasing earnings management to exist (Baker et al., 2003). Although not directly addressing earnings management, there are other studies showing that the motive to influence share price is present surrounding the grant dates (Aboody and Kasznik, 2000 and Chauvin and Shenoy, 2001). The share price is reduced by manipulating the timing of information, so that good news is delayed and bad news pushed forward. Aboody and Kasznik (2000) further imply that the information in management forecasts is also manipulated to increase the stock based compensation.

Widening the definition of earnings management to include actions that violate the GAAP, there is evidence that managers use fraud and misstatements to increase the price they receive for their holdings. Beneish (1999) finds that insiders in firms subject to SEC enforcement actions are more likely to sell their shares and exercise stock appreciation rights in the period when earnings are overstated than are managers in control firms. Beneish's paper supports the previous findings of Summers and Sweeney (1998) who studied a sample of companies in which auditors' had discovered fraud, and found insiders' share selling to be connected to the presence of fraud. Both studies contradict the earlier findings of Dechow et al. (1996) who did not find that insiders of firms the SEC had taken enforcement actions against, had engaged in more share selling than insiders in control firms.

Beneish and Vargus's (2002) paper, which is closely related to the second essay of this thesis, moves the discussion back to earnings management within GAAP when they suggest that there is a connection between earnings management and insider trading. Their evidence shows, firstly, that income-increasing accruals<sup>15</sup>, which are connected to insider selling, have low persistence. Secondly, it shows that firms with income-

---

<sup>15</sup> I.e. positive accruals.

increasing accruals accompanied by abnormal insider selling have discretionary accruals that significantly exceed the discretionary accruals in firms for which there is no abnormal selling. Beneish and Vargus see this as evidence that managers use earnings management to increase the price they receive for their shares.

The third group of asset pricing related earnings management studies shows earnings management to be a more frequently occurring phenomenon that is not only connected to certain specific events. These studies show that earnings are managed every quarter or year, for example, to meet analysts' expectations, management forecasts or to decrease the volatility in the earnings stream. There is a lot of both theoretical and empirical research in the last mentioned area particularly.

Among proposed asset pricing related income smoothing motives is the motive to decrease the perceived riskiness of the firm and hence to increase firm value (Trueman and Titman, 1988). Another example is the suggestion that a company will be higher valued if a possible positive earnings surprise is dampened and spread out over consecutive time periods because investors will perceive this as a permanent increase in earnings (Kirschenheiter and Melumad, 2002). The will of managers to increase their job security and avoid interference has been proposed as an alternative reason for income smoothing (Fudenberg and Tirole, 1995). Without directly discriminating between the reasons, there is plenty of empirical evidence showing the existence of income smoothing (e.g. Hand, 1989, Subramanyam, 1996, Defond and Park, 1997 and Riahi-Belkaoui, 2003).

Studies examining earnings distributions are usually regarded as strong evidence of earnings management, because their results are not influenced by errors in discretionary accruals. The best known papers using large samples and finding unusually low frequencies of observations below assumingly important earnings targets are by Burgstahler and Dichev (1997) and Degeorge et al. (1999). The first study uses yearly data to show that earnings are managed to avoid earnings decreases and losses. Burgstahler and Dichev explain their results through managers trying to decrease the costs imposed on the firm in transactions with stakeholders and through prospect



theory.<sup>16</sup> Degeorge et al. use quarterly accounting data to show that firms manage earnings to report positive profits, to avoid reporting a decrease in profits and to meet analyst's forecasts.

There are several other papers reporting evidence that earnings are managed to meet or beat analysts' expectations and management's earnings forecasts (e.g. Bange and DeBondt, 1998, Kasznik, 1999 and Das and Zhang, 2003). Apart from these evident earnings targets, also analysts buy/sell recommendations may affect earnings management behaviour. Abarbanell and Lehavy (2003) suggest that firms obtaining sell (buy) recommendations are more likely to manage earnings downwards (upwards). They explain the downward earnings management in "sell" rated firms through managers in these firms having stronger incentives to take earnings "baths".

### *3.3.2. Contractual motivations*

In addition to the stock price impact, contracts written in terms of accounting numbers give managers a strong motive to manage earnings. There is hardly any other circumstance where both the incentives and the possibilities to manage earnings are as closely connected as in managers' bonus contracts. However, another contract type that has been of interest in research is the debt covenant contract. Debt covenants that are written in terms of accounting numbers may require the borrower to exceed a minimum level of working capital or fixed assets, have certain funds to be able to pay dividends or show a minimum amount of net income (Defond and Jambavlo, 1994).

Healy (1985) shows that the managers' accrual policies are connected to the income-reporting incentives in their bonus contracts. Healy observed that managers tended to manage earnings upwards if unmanaged earnings were between the lower bound that triggered the bonus and the upper bound that gave the maximum bonus. Otherwise managers applied income decreasing earnings management. Healy's results have since

---

<sup>16</sup> Prospect theory postulates that the evaluation of risky projects is affected by reference points where gains and losses are evaluated from a reference point (reference dependence), loss aversion and decreasing marginal value of losses and gains (diminishing sensitivity) (Tversky and Kahneman, 1991).

then been challenged. Gaver et al. (1995) found income smoothing as a stronger motive than the managers' bonus plans and accordingly showed that managers used upward earnings management below the lower bound and income decreasing earnings management above this bound. Holthausen et al. (1995) suggested that managers manage earnings downwards when earnings exceed the upper bound but otherwise found no earnings management. A more recent expansion on these studies is provided by Guidry et al. (1999) as they investigate a large conglomerate's managers' earnings management practices from the bonus maximization point of view. Both using discretionary accruals and by conducting a test on the development of the inventory reserve, they obtain evidence in favour of Healy's results, i.e. earnings are managed upwards if unmanaged earnings are between the lower and upper bound and otherwise earnings are managed downwards.

Moving on to debt covenants, Healy and Palepu (1990) and DeAngelo et al. (1994) find no evidence of income increasing earnings management in firms close to debt covenant violations. Neither study explicitly dealt with debt covenants as such but both made the assumptions that their samples were close to violations based on the firms' weak performance and dividends. Defond and Jiambavlo (1994) and Sweeney (1994) applied a more exact measure of debt covenant violation by only examining firms that actually had reported violations. Both studies concluded that there is evidence of income increasing earnings management surrounding the violations. One possible explanation for the inconsistent results is provided by Peltier-Rivest (1999) and Peltier-Rivest and Swirsky (2000), who suggest that healthy firms have bigger incentives to avoid debt covenant violations than troubled ones. Considering the sampling methods of Healy and Palepu and DeAngelo et al. it is likely that they included firms with weaker performance than the studies that made the connection between covenants and earnings management did.

## **4. Summaries of the essays**

### **4.1. Essay 1: Earnings management and IPOs –Evidence from Finland**

Several studies have documented the presence of earnings management in initial public offering (IPO) firms (for a large sample study, see Teoh et al., 1998a). Research results show variation in the magnitude of firms' earnings management ranging from very aggressive to no earnings management at all. Also in public discussion, some IPO firms are treated with more suspicion than others. The main task of this essay is to examine whether the ownership type of IPO firms is associated with their propensity for earnings management behaviour.

Essay 1 specifically argues that there is a connection between high individual ownership and earnings management, which in turn may lead to weak performance after the IPO. Entrepreneurs are assumed to have stronger incentives to manage earnings than the institutional owners because they have more to gain and less to lose from this activity. Furthermore, it is hypothesized that entrepreneurs' incentives for earnings management should increase the more their ownership is reduced in the IPO.

Empirical tests are conducted on a sample of 56 firms that went public on the Helsinki Stock Exchange between the beginning of 1994 and the end of 2000. Following previous research, evidence of earnings management is sought by observing accruals. Accruals are calculated as the differences in working capital and are used both with and without the depreciation accrual. In addition to the total sample, accruals are examined separately for the 22 entrepreneur firms and the 34 institutionally held firms. The main results are based on discretionary accruals estimated with the modified DeAngelo model and are examined for five periods surrounding the IPO year. The results show only limited evidence of earnings management in the total sample. Separate analysis of the entrepreneur and institutionally owned firms demonstrates that earnings management is limited to the sub-group of the entrepreneur firms. However, earnings management appears not to be connected to how much owners reduce their ownership in the IPO.

Essay 1 contributes to previous literature by suggesting that earnings management propensity in IPOs varies depending on the ownership structure of the IPO firm. The observed difference in earnings management behaviour between entrepreneur and institutionally owned IPO firms should be of value in assessing the reliability of the IPO firms' financial statements. The essay appeared in *The Finnish Journal of Business and Economics* 2/2004.

#### 4.2. Essay 2: Is income-increasing earnings management followed by insider selling binges?

Most of the vast body of research investigating the relationship between earnings management and insider selling agrees that insiders earn abnormal returns on trading in their company's shares. Generally, these abnormal returns are considered to be a result of insiders' superior knowledge about the state of the firm, the industry or the economy. Insiders are the first to know, for example, about a pileup in inventories, a successful product launch or a growing order book. More recently, research has emerged that tries to figure out more exactly what is the information insiders appear to trade on. Seyhun (1992) suggests that insiders have a clearer view on whether the firm value diverges from fundamentals. Insider trading has been connected to specific events, for example, announcements of share repurchases (Lee et al., 1992) and dividend announcements (Karpoff and Lee, 1991). Trading on this type of event specific price sensitive information that affects the stock price when made public clearly represents the illegal type of insider trading that is likely to draw the attention of regulators. A less risky way for insiders is to take advantage of non-public information that will also affect the stock price when made public but the use of which is difficult to prove. An example of this kind of information is knowledge of the quality of the firms' earnings that will most certainly have implications on future reported earnings.

Essay 2 mainly develops the ideas in Beneish and Vargus (2002), based on insiders' information-advantage on earnings quality. Beneish and Vargus show that the one-year-ahead persistence of income-increasing accruals is significantly correlated with insider

trading and that insider selling appears to have a connection to earnings management. Furthermore, they use this knowledge in insider trading to create trading strategies that produce higher one-year-ahead hedge returns than trading strategies based on accruals alone. Beneish and Vargus base their paper on the fact that insider trading in one given year ( $t$ ) provides information about the earnings quality in the financial statements of that year ( $t$ ) which then can then be used to form predictions for the earnings development in the following year ( $t+1$ ). As for insider selling this means that the accrual and earnings levels stay high in the financial statements that are published after the insider selling took place.

In the essay, the proposed link between insider trading and earnings management is investigated more thoroughly. The analysis is based on 752 earnings announcements of 68 firms listed on the Stockholm Stock Exchange. Going through the insider trading records from February 2000 to September 2003 for Swedish public companies, 81 two-month periods where at least three insiders together engaged in substantial selling were selected. The earnings announcements published closest to these “selling binges” were analysed in order to answer the question as to whether accruals were abnormal and if there were signs of earnings management. These critical earnings announcements were compared both to preceding and following quarters and to comparable interim periods in the surrounding years. Discretionary accruals were estimated with the modified DeAngelo model.<sup>17</sup>

The results show that profitability is relatively high until and including the critical period after which it drops significantly, thus the insiders seem to have timed their sells well. The decrease in profitability after the critical period is mostly due to lower accruals whereas cash flows are relatively stable over all analysed periods. In the quarterly analysis, the discretionary accruals increase and are positive in the critical period where after they decrease and show a significantly lower level in the second quarter after the critical quarter. In the interim period analysis discretionary accruals do not show any statistically significant evidence of earnings management although the accruals levels drop significantly after the critical period. On the whole, the evidence

---

<sup>17</sup> That has been used in, for example, Friedlan (1994) and Aharony et al. (2000).

suggests that earnings appear to be managed in the quarter preceding the abnormal insider selling.

Essay 2 contributes to the field by clarifying the connection between high accruals and insider selling. In contrast to Beneish and Vargus (2002) it is found that insiders tend to sell their shares immediately *after* the publication of the earnings announcement with abnormally high accruals and not *before* it. Increasing the timing exactness and using a small sample decreases the likelihood that the findings are due to bias in discretionary accrual estimates.<sup>18</sup> Additionally, the results obtained are the first of their kind that use an accruals measure that is consistent with previous earnings management literature and arguably theoretically more correct than the accruals measures used by Beneish and Vargus.

#### 4.3. Essay 3: Testing for income smoothing in public and private firms

Income smoothing refers to the activity of managing earnings upwards in bad periods and downwards in good periods and is a widely studied phenomenon in the field of accounting. Theoretically, there are many arguments favouring the occurrence of income smoothing. For example, Trueman and Titman (1988) argue that income smoothing lowers lenders' assessments of the probability of bankruptcy and thus reduces the cost of borrowing and enhances equity value. Fudenberg and Tirole (1995) base managers' income smoothing motives on their concerns about keeping their position and avoiding interference. Kirschenheiter and Melumad (2002) argue that the company is higher valued if a possible positive earnings surprise is dampened in order to be spread out over consecutive time periods because investors perceive more steady earnings as more permanent.

On the empirical side, vast evidence of income smoothing has been found (e.g. Kasanen et al., 1996, Defond and Park, 1997 and Bauwhede et al., 2003). A recent contribution

---

<sup>18</sup> Lakonishok and Lee (2001), for example, find that insiders tend to be contrarian investors buying value stocks and being more active in small stocks. These are characteristics that may be connected to both accruals and estimates on discretionary accruals.

to studies on income smoothing has been made by Burgstahler et al. (2004) who suggest that the occurrence or magnitude of income smoothing may be dependent on information asymmetry. Their argument is that the bigger the information asymmetry between managers and owners of a company is, the higher is the quality of the earnings number and thus the less income smoothing is used. In line with this argument Burgstahler et al. present evidence that income smoothing is more prevalent in private firms (low information asymmetry) than public firms (high information asymmetry).

The results of Burgstahler et al. (2004) are somewhat counter intuitive. The bulk of previous research documents income smoothing using samples of public firms. Some authors explicitly argue and show that income smoothing should increase with company size, another proxy for information asymmetry, due to political costs (e.g. Moses, 1987, Herrmann and Inoue, 1996 and Godfrey and Jones, 1999).

Essay 3 contributes to the field by providing more evidence on the contradictory results of Burgstahler et al. (2004) using a different research method and a sample from only one country. In line with Burgstahler et al. the results of the main analysis indicate that income smoothing is more pervasive in private than in public firms. According to the obtained results it can be questioned if public firms engage in income smoothing at all. Further evidence in favour of the hypothesis on the negative connection between information asymmetry and income smoothing is provided with the discovery that bigger firms appear to smooth income less than smaller ones. Although this study comes to the same conclusion as Burgstahler et al. using a different data and research method they are still somewhat puzzling when considering previous income smoothing studies.

## **5. Conclusion**

This thesis belongs to the literature developing theories when and where earnings management occurs. Among the several possible motives driving earnings management behaviour in firms, this thesis focuses on motives that aim to influence the valuation of

the company, usually called asset pricing motives. Earnings management that makes the company look better than it really is may result in disappointment for the single investor and potentially leads to a welfare loss in society when the resource allocation is distorted. A more specific knowledge of the occurrence of earnings management supposedly increases the awareness of the investor and thus leads to better investments and increased welfare.

This thesis contributes to the literature by increasing the knowledge as to where and when earnings management is likely to occur. More specifically, essay 1 adds to existing research connecting earnings management to IPOs and increases the knowledge in arguing that the tendency to manage earnings differs between the IPOs. Evidence is found that entrepreneur owned IPOs are more likely to be earnings managers than the institutionally owned ones. Essay 2 considers the reliability of quarterly earnings reports that precedes insider selling binges. The essay investigates if earnings announcements that are published just before periods when insiders engage in high selling of the firms' shares and options show signs of earnings management. The assumption is that insiders may use overly optimistic reporting to hide a deteriorating performance to receive a higher price for their holdings. The essay contributes by suggesting that earnings management is likely to occur before the insider selling spree. Essay 3 examines the widely studied phenomenon of income smoothing. In line with a recent paper by Burgstahler et al. (2004) it is suggested that income smoothing can be explained with proxies for information asymmetry. The essay contributes to the field by testing for income smoothing with a new research design using discretionary accruals that is arguably less biased than the backed-out method used in previous studies and by showing that smoothing is more pervasive in private and smaller firms.

## **References**

- Abarbanell, J. and R. Lehavy, 2003. Can stock recommendations predict earnings management and analysts' forecast errors? *Journal of Accounting Research*, 41. 1-31.
- Aboody, D. and R. Kasznik, 2000. CEO stock option awards and the timing of corporate disclosure. *Journal of Accounting and Economics*, 29. 73-100.



Aboody, D. and B. Lev, 1998. The value relevance of intangibles: The case of software capitalization. *Journal of Accounting Research*, 36. 161-191.

Aharony, J., C-W. J. Lee and T.J. Wong, 2000. Financial packaging of IPO firms in China. *Journal of Accounting Research*, 38. 103-126.

Baber, W., P. Fairfield and J. Haggard, 1991. The effect of concern about reported income on discretionary spending decisions: The case of research and development. *The Accounting Review*, 66. 818-829.

Baker, T., D. Collins and A. Reitenga, 2003. Stock option compensation and earnings management incentives. *Journal of Accounting, Auditing and Finance*, 18. 557-582.

Ball, R. and P. Brown, 1968. An empirical evaluation of accounting income numbers. *Journal of Accounting Research*, 6. 159-178.

Bange, M. and W. DeBondt, 1998. R&D budgets and corporate earnings targets. *Journal of Corporate Finance*, 4. 153-184.

Bartov, E. 1993. The timing of asset sales and earnings manipulation. *The Accounting Review*, 68. 840-855.

Bauwhede, H.V., M. Willekens and A. Gaeremynk, 2003. Audit firm size, public ownership, and firms' discretionary accruals management. *The International Journal of Accounting*, 38. 1-22.

Beatty, A., B. Ke and K. Petroni, 2002. Earnings management to avoid earnings declines across publicly and privately held banks. *The Accounting Review*, 77. 547-570.

Beneish, M., 1999. Incentives and penalties related to earnings overstatements that violate GAAP. *The Accounting Review*, 74. 425-457.

Beneish, M and M. Vargus, 2002. Insider trading, earnings quality, and accrual mispricing. *The Accounting Review*, 77. 735-791.

Bens, D., V. Nagar, D. Skinner and F. Wong, 2003. Employee stock options, EPS dilution, and stock repurchases. *Journal of Accounting and Economics*, 36. 51-90.

Bernard, V., 1995. The Feltham-Ohlson framework: Implications for empiricists. *Contemporary Accounting Research*, 11. 773-747.

Burgstahler, D. and I. Dichev, 1997. Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics*, 24. 99-126.

Burgstahler, D., L. Hail and C. Leuz, 2004. The importance of reporting incentives: Earnings management in European private and public firms. Working paper, University of Washington, University of Zurich, University of Pennsylvania.

- Bushee, B., 1998. The influence of institutional investors in myopic R&D investment behaviour. *The Accounting Review*, 73. 305-333.
- Chan, K., L. Chan, N. Jegadeesh and J. Lakonishok, 2001. Earnings quality and stock returns The evidence from accruals. Working paper, National Taiwan University (K. Chan), University of Illinois at Urbana-Champaign.
- Chauvin, K. and C. Shenoy, 2001. Stock price decreases prior to executive stock option grants. *Journal of Corporate Finance*, 7. 53-76.
- Christie, A. and J. Zimmerman, 1994. Efficient and opportunistic choices of accounting procedures: Corporate control contests. *The Accounting Review*, 69. 539-566.
- Collins, D. and P. Hribar, 2000. Earnings-based and accrual-based market anomalies: One effect or two? *Journal of Accounting and Economics*, 29. 101-123.
- Collins, J., D. Shackelford and J. M. Wahlen, 1995. Bank differences of the coordination of regulatory capital, earnings and taxes. *Journal of Accounting Research*, 33. 263-292.
- Daley, L. and R. Vigeland, 1983. The effect of debt covenants and political costs on the choice of accounting methods –The case of accounting for R&D costs. *Journal of Accounting and Economics*, 5. 195-211.
- Das, S. and H. Zhang, 2003. Rounding-up in reported EPS, behavioral thresholds, and earnings management. *Journal of Accounting and Economics*, 35. 31-50.
- DeAngelo, L., 1986. Accounting numbers as market valuation substitutes: A study of management buyouts of public stockholders. *The Accounting Review*, 61. 400-420.
- DeAngelo, H., L. DeAngelo and D. Skinner, 1994. Accounting choices of troubled companies. *Journal of Accounting and Economics*, 17. 113-143.
- Dechow, P., 1994. Accounting earnings and cash flows as measures of firm performance: The role of accounting accruals. *Journal of Accounting and Economics*, 18. 3-42.
- Dechow, P. and I. Dichev, 2002. The quality of accruals and earnings: The role of accrual estimation errors. *The Accounting Review*, 77. 35-59.
- Dechow, P., A. Hutton and R. Sloan, 1999. An empirical assessment of the residual income valuation model. *Journal of Accounting and Economics*, 26. 1-34.
- Dechow, P., S.P. Kothari and R. Watts, 1998. The relation between earnings and cash flows. *Journal of Accounting and Economics*, 25. 133-168.

- Dechow, P. and D. Skinner, 2000. Earnings management: Reconciling the views of accounting academics, practitioners, and regulators. *Accounting Horizons*, 14. 235-250.
- Dechow, P. and R. Sloan, 1991. Executive incentives and the horizon problem. *Journal of Accounting and Economics*, 14. 51-89.
- Dechow, P., R. Sloan and A. Sweeney, 1995. Detecting earnings management. *The Accounting Review*, 2. 193-225.
- Dechow, P., R. Sloan and A. Sweeney, 1996. Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research*, 13. 1-36.
- Defond, M. and J. Jiambavlo, 1994. Debt covenant effects and the manipulation of accruals. *Journal of Accounting and Economics*, 17. 145-176.
- Defond, M. and C. Park, 1997. Smoothing income in anticipation of future earnings. *Journal of Accounting and Economics*, 23. 115-139.
- Defond, M. and C. Park, 2001. The reversal of abnormal accruals and the market valuation of earnings surprises. *The Accounting Review*, 76. 375-404.
- DeGeorge, F., J. Patel and R. Zeckhauser, 1999. Earnings management to exceed thresholds. *Journal of Business*, 72. 1-33.
- DuCharme, L., P. Malatesta and P. Sefcik, 2004. Earnings management, stock issues, and shareholder lawsuits. *Journal of Financial Economics*, 71. 27-49.
- Erickson, M. and S. Wang, 1999. Earnings management by acquiring firms in stock for stock mergers. *Journal of Accounting and Economics*, 27. 149-176.
- Fairfield, P., S. Whisenant and T.L. Yohn, 2003. Accrued earnings and growth: Implications for future profitability and market mispricing. *The Accounting Review*, 78. 353-371.
- Feltham, G. and J. Ohlson, 1995. Valuation and clean surplus accounting for operating and financial activities. *Contemporary Accounting Research*, 11. 689-732.
- Fields, T., T. Lys and L. Vincent, 2001. Empirical research on accounting choice. *Journal of Accounting and Economics*, 31. 255-307.
- Francis, J., P. Olsson and D. Oswald, 2000. Comparing the accuracy and explainability of dividend, free cash flow, and abnormal earnings equity value estimates. *Journal of Accounting Research*, 38. 45-70.
- Frankel, R. and C. Lee, 1998. Accounting valuation, market expectation, and cross-sectional stock returns. *Journal of Accounting and Economics*, 25. 283-319.

- Friedlan, J.M., 1994. Accounting choices of issuers of initial public offerings. *Contemporary Accounting Research*, 11. 1-31.
- Fudenberg, D. and J. Tirole, 1995. A theory of income and dividend smoothing based on incumbency rents. *Journal of Political Economy*, 103. 75-93.
- Gaver, J., K. Gaver and J. Austin, 1995. Additional evidence on bonus plans and income management. *Journal of Accounting and Economics*, 19. 2-28.
- Godfrey, J. and K. Jones, 1999. Political cost influences on income smoothing via extraordinary item classification. *Accounting and Finance*, 39. 229-254.
- Guay, W., S.P. Kothari and R. Watts, 1996. A market-based evaluation of discretionary accruals models. *Journal of Accounting Research*, 34. 83-105.
- Guidry, F., A.J. Leone and S. Rock, 1999. Earnings-based bonus plans and earnings management by business-unit managers. *Journal of Accounting and Economics*, 26. 113-142.
- Hagerman, R. and M. Zmijewski, 1979. Some economic determinants of accounting choice. *Journal of Accounting and Economics*, 1. 141-161.
- Hand, J., 1989. Did firms undertake debt-equity swaps for an accounting paper profit or true financial gain? *The Accounting Review*, 64. 587-624.
- Healy, P., 1985. The effect of bonus schemes on accounting decisions. *Journal of Accounting and Economics*, 7. 85-107.
- Healy, P. and K.G. Palepu, 1990. Effectiveness of accounting-based dividend covenants. *Journal of Accounting and Economics*, 12. 97-124.
- Healy, P. and J.M. Wahlen, 1999. A review of the earnings management literature and its implications for standard setting. *Accounting Horizons*, 13. 365-383.
- Herrmann, D. and T. Inoue, 1996. Income smoothing and incentives by operating condition: An empirical test using depreciation changes in Japan. *Journal of International Accounting, Auditing and Taxation*, 5. 161-177.
- Herrmann, D., T. Inoue and W.B. Thomas, 2003. The sale of assets to manage earnings in Japan. *Journal of Accounting Research*, 41. 89-109.
- Holthausen, R., D. Larcker and R. Sloan, 1995. Annual bonus schemes and the manipulation of earnings. *Journal of Accounting and Economics*, 19. 29-74.
- Jeter, D. and L. Shivakumar, 1999. Cross-sectional estimation of discretionary accruals using quarterly and annual data: Effectiveness in detecting event-specific earnings management. *Accounting and Business Research*, 29. 299-319.

- Jones, J., 1991. Earnings management during import relief investigations. *Journal of Accounting Research*, 29. 193-228.
- Kang, S-H. and K. Sivaramakrishnan, 1995. Issues in testing earnings management and an instrumental variable approach. *The Accounting Review*, 33. 353-367.
- Karpoff, J.M. and D. Lee, 1991. Insider trading before new issue announcements. *Financial Management*, 20. 18-26.
- Kasanen, E., J. Kinnunen and J. Niskanen, 1996. Dividend-based earnings management: Empirical evidence from Finland. *Journal of Accounting and Economics*, 22. 283-312.
- Kaszniak, R., 1999. On the association between voluntary disclosure and earnings management. *Journal of Accounting Research*, 37. 57-81.
- Key, K.G., 1997. Political cost incentives for earnings management in the cable television industry. *Journal of Accounting and Economics*, 23. 309-337.
- Kirschenheiter, M. and N. Melumad, 2002. Can “big bath” and earnings smoothing co-exist as equilibrium financial reporting strategies? *Journal of Accounting Research*, 40. 761-796.
- Kothari, S.P., A. Leone and C. Wasley, 2001. Performance matched discretionary accruals. Working paper, Massachusetts Institute of Technology (Kothari), University of Rochester.
- Lakonishok, J. and I. Lee, 2001. Are insider trades informative? *The Review of Financial Studies*, 14. 79-111.
- Lee, D. S., W. H. Mikkelson and M. M. Partch, 1992. Managers’ trading around stock repurchases. *Journal of Finance*, 47. 1947-1961.
- Louis, H., 2004. Earnings management and the market performance of acquiring firms. *Journal of Financial Economics*, 74. 121-148.
- Mande, V. and R. File, 2000. Income smoothing and discretionary R&D expenditures of Japanese firms. *Contemporary Accounting Research*, 17. 263-302.
- McNichols, M., 2000. Research design issues in earnings management studies. *Journal of Accounting and Public Policy*, 19. 313-345.
- Moses, D., 1987. Income smoothing and incentives: Empirical tests using accounting changes. *The Accounting Review*, 62. 358-377.
- Ohlson, J., 1995. Earnings, book values, and dividends in equity valuation. *Contemporary Accounting Research*, 11. 661-687.

- Peasnell, K.V., P.F. Pope and S. Young, 2000. Detecting earnings management using cross-sectional abnormal accruals models. *Accounting and Business Research*, 30. 313-326.
- Peltier-Rivest, D., 1999. The determinants of accounting choices of troubled companies. *Quarterly Journal of Business and Economics*, 38. 28-44.
- Peltier-Rivest, D. and S. Swirsky, 2000. Earnings management in healthy firms. *Journal of Business and Economics*, 39. 21-41.
- Penman, S., 2001. Financial statement analysis and security valuation. McGraw-Hill/Irwin. Boston. MA.
- Perry, S. and T. Williams, 1994. Earnings management preceding management buyout offers. *Journal of Accounting and Economics*, 18. 157-179.
- Rangan, S., 1998. Earnings management and the performance of seasoned equity offerings. *Journal of Accounting and Economics*, 50. 101-122.
- Riahi-Belkaoui, A., 2003. Anticipatory income smoothing and the investment opportunity set: An empirical test of the Fudenberg and Tirole (1995) model. *Review of Accounting and Finance*, 2. 99-117.
- Schipper, K., 1989. Commentary on earnings management. *Accounting Horizons*, 3. 91-102.
- Scott, W., 2003. Financial accounting theory. Pearson Education. Toronto. Ontario.
- Seyhun, N., 1992. Why does aggregate insider trading predict future stock returns? *Quarterly Journal of Economics*, 107. 1303-1331.
- Sloan, R., 1996. Do stock prices fully reflect information in accruals and cash flows about future earnings? *The Accounting Review*, 71. 289-315.
- Subramanyam, K.R., 1996. The pricing of discretionary accruals. *Journal of Accounting and Economics*, 22. 249-281.
- Summers, S. and J. Sweeney, 1998. Fraudulently misstated financial statements and insider trading: An empirical analysis. *The Accounting Review*, 73. 131-146.
- Sweeney, A.P., 1994. Debt-covenant violations and managers' accounting responses. *Journal of Accounting and Economics*, 22. 249-281.
- Teoh, S.H., I. Welch and T.J. Wong, 1998a. Earnings management and the long-run market performance of initial public offerings. *Journal of Finance*, 53. 1935-1974.

- Teoh, S.H., I. Welch and T.J. Wong, 1998b. Earnings management and the underperformance of seasoned equity offerings. *Journal of Financial Economics*, 50. 63-99.
- Teoh, S.H., T.J. Wong and G. Rao, 1998c. Are accruals during initial public offerings opportunistic? *Review of Accounting Studies*, 3. 175-208.
- Trueman, B. and S. Titman, 1988. An explanation for accounting income smoothing. *Journal of Accounting Research*, 26. 127-143.
- Tse, S. and R. Yaansah, 1999. An analysis of historical and future-oriented information in accounting-based security valuation models. *Contemporary Accounting Research*, 16. 347-380.
- Tversky, A. and D. Kahneman, 1991. Loss aversion in riskless choice: A reference-dependent model. *The Quarterly Journal of Economics*, 106. 1039-1061.
- Watts, R., 1998. Does it pay to manipulate EPS? In *The revolution in corporate finance*. Blackwell Publishers. Malden. MA.
- Watts, R. and J. Zimmerman, 1978. Towards a positive theory of the determination of accounting standards. *The Accounting Review*, 53. 112-134.
- Watts, R. and J. Zimmerman, 1986. *Positive accounting theory*. Prentice Hall Englewood Cliffs. NJ.
- Woody, W., 1997. Management buyouts and earnings management. *Journal of Accounting, Auditing and Finance*, 12. 373-389.
- Xie, H., 2001. The mispricing of abnormal accruals. *The Accounting Review*, 76. 357-373.
- Young, S., 1999. Systematic measurement error in the estimation of discretionary accruals: An evaluation of alternative modelling procedures. *Journal of Business, Finance and Accounting*, 26. 833-862.
- Zmijewski, M. and R. Hagerman, 1981. An income strategy approach to the positive theory of accounting standard setting/choice. *Journal of Accounting and Economics*, 3. 129-149.

## **EKONOMI OCH SAMHÄLLE**

Skrifter utgivna vid Svenska handelshögskolan

Publications of the Swedish School of Economics  
and Business Administration

124. KRISTINA HEINONEN: Time and Location as Customer Perceived Value Drivers. Helsingfors 2004.
125. CHRISTINA NORDMAN: Understanding Customer Loyalty and Disloyalty – The Effect of Loyalty-Supporting and -Repressing Factors. Helsingfors 2004.
126. MATTS ROSENBERG: Essays on Stock Option Compensation and the Role of Incentives and Risk. Helsingfors 2004.
127. BENJAMIN MAURY: Essays on the Costs and Benefits of Large Shareholders in Corporate Governance. Helsingfors 2004.
128. HONGZHU LI: Conditional Moments in Asset Pricing. Helsingfors 2004.
129. MIREL LEINO: Value Creation in Professional Service Processes. Propositions for Understanding Financial Value from a Customer Perspective. Helsingfors 2004.
130. MARKO S. MAUKONEN: Three Essays on the Volatility of Finnish Stock Returns. Helsingfors 2004.
131. JAN ANTELL: Essays on the Linkages between Financial Markets, and Risk Asymmetries. Helsingfors 2004.
132. HELENA ÅKERLUND: Fading Customer Relationships. Helsingfors 2004.
133. KIM SKÅTAR: Faktorer som initierar och påverkar prat i långsiktiga relationer. Factors that Initiate and Influence Word of Mouth in Long-Term Relationships. English Summary. Helsingfors 2004.
134. ROBERT WENDELIN: The Nature and Change of Bonds in Industrial Business Relationships. Helsingfors 2004.
135. LI LI: Knowledge Transfer within Western Multinationals' Subsidiary Units in China and Finland. The Impact of Headquarter Control Mechanisms, Subsidiary Location and Social Capital. Helsingfors 2004.
136. MINNA HIILLOS: Personnel Managers and Crisis Situations – Emotion-Handling Strategies. Helsingfors 2004.



137. ÅKE FINNE: Hur den aktiva kunden konstruerar budskap. Ett synsätt inom relationskommunikation. How the Active Consumer Constructs Messages. A Relationship Communication Perspective. English Summary. Helsingfors 2004.
138. MARTIN SEPPÄLÄ: A Model for Creating Strategic Alliances. A Study of Inter-Firm Cooperation in the North European ICT Sector. Helsingfors 2004.
139. HANNELE KAUPPINEN: Colours as Non-Verbal Signs on Packages. Helsingfors 2004.
140. TEEMU KOKKO: Offering Development in the Restaurant Sector - A Comparison between Customer Perceptions and Management Beliefs. Helsingfors 2005.
141. BERNARD BEN SITA: Essays on the Role of Time in Price Discovery. Helsingfors 2005.
142. MARTIN FOUGÈRE: Sensemaking in the Third Space – Essays on French-Finnish Bicultural Experiences in Organizations and Their Narratives. Helsingfors 2005.
143. PERNILLA GRIPENBERG: ICT and the Shaping of Society: Exploring Human – ICT Relationships in Everyday Life. Helsingfors 2005.
144. TUA HALDIN-HERRGÅRD: Hur höra tyst kunskap? Utveckling av en metod för studier av tyst kunnande. Helsingfors 2005.
145. SARI SALOJÄRVI: Increasing Knowledge Focus – a Means for Entrepreneurs to Remain on a Growth Path. Essays on the Role and Nature of Knowledge Management in Finnish SMEs. Helsingfors 2005.
146. MARJUT JYRKINEN: The Organisation of Policy Meets the Commercialisation of Sex. Global Linkages, Policies, Technologies. Helsingfors 2005.
147. HENRI MÄNTTÄRI: Short-Term Price Behavior and the Effect of Foreign Investors in Finnish Equity Markets. Helsingfors 2005.
148. MIA ÖRNDAHL: Stories of Survival. Knowledge Intensive Organisations and the Finnish 1990s Recession. Helsingfors 2005.
149. OLGA KARAKOZOVA: Modelling and Forecasting Property Rents and Returns. Helsingfors 2005.
150. TOMI HUSSI: Essays on Managing Knowledge and Work Related Wellbeing. Helsingfors 2005.
151. PATRIK PAETAU: On the Benefits and Problems of the Object-Oriented Paradigm Including a Finnish Study. Helsingfors 2005.
152. MAQSOOD SANDHU: Managing Project Business Development. An Inter-Organizational and Intra-Organizational Perspective. Helsingfors 2005.