Earnings Management and CEO Turnovers

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There is a general perception in the Swedish press that newly appointed CEOs engage in earnings management in order to boost performance based salaries linked to accounting data. We investigate whether CEOs undertake earnings management in association with CEO turnovers. We present evidence of earnings being managed through the use of accruals management as well as write downs in Swedish corporations. It is found that there are economically significant incentives for managers to manage earnings in order to boost the outcome of accounting based compensation contracts. As a consequence, we suggest that it would be preferable to avoid the use of compensation contracts linked to accounting data.

1. Introduction

Over the past years increasing focus has been directed towards the importance of correct and fair accounting. The interest in how companies pursue their financial reporting has grown in the wake of a multitude of large corporate scandals that has occurred world wide. Recently the focus has been centered on accounting practices in association to CEO turnovers. Criticism has been raised suggesting that performance based incentive programs linked to financial reporting create incentives for CEOs to engage in opportunistic behavior at the expense of shareholders. Swedish press has claimed that newly appointed CEOs manage earnings in order to boost their compensation from accounting based incentive programs (Svenska Dagbladet 2004-01-27). The media also illustrates the perception that, in practice, such earnings management is considered routine at the time of a CEO change. *"Newly appointed CEOs manipulate earnings in order to boost their salaries and to give a good impression of their work. This behavior is common among large Swedish corporations."*(Uppdrag Granskning 2006-03-07).

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These claims are supported by anecdotic evidence rather than thorough academic studies. There are few academic studies examining the occurrence of earnings management in a Swedish context and no academic research studying whether newly appointed CEOs in Swedish corporations engage in earnings management. The paper proceeds as follows. In the next section we discuss various ways earnings can be managed. In Section 3 we discuss various forms of CEO turnovers and in Section 4 a number of hypotheses are formed with respect to earnings management and CEO turnovers. Data are discussed in Section 5 and the results are presented in Section 6. Section 7 concludes.

2. Earnings Management

Earnings management is a concept with many names. It is also referred to as income smoothing, creative accounting, earnings smoothing and cosmetic accounting. The preferred term in Europe is often "creative accounting". In US "earnings management" is the preferred term. This is also the term used in most of the literature on the subject and therefore also the term used in this paper. We use the following definition of earnings management (Merchant and Rockness 1994): *"Any action on the part of management which affects reported income and which provides no true economic advantage to the organization and may in fact, in the long-term, be detrimental."*

There has been extensive research in the area of earnings management, primarily in contexts not specifically related to CEO turnovers (Ball and Watts 1972; Merchant 1990; Jensen 2001). However, several studies have taken a closer look on earnings management at the time of CEO changes (Pourcaui 1993; Murphy & Zimmerman 1993). A number of these studies suggest that managers have incentives to manage earnings in order to diminish the chances that a sharp earnings increase will burden them with difficult performance targets in subsequent periods (Beidelman 1973; Ronen and Sadan 1981).

There are many different ways in which earnings can be managed. For a variable to qualify as an instrument for earnings management it must at least to a partial degree be at the discretion of management (Ronen and Sadan 1981). Even though there are extensive regulations covering the accounting practices of firms there are subjective elements involved. Accounting regulations include a certain amount of flexibility. Accounting rules often permit a choice of policy, for example with respect to asset valuation (one example of this is that IAS permits a choice between valuing non-current assets at either revalued amounts or at depreciated historical costs). Depending on the choice of which accounting practice to use, the reported results may therefore come to differ in a substantial way. In addition, there are

also some areas within accounting that are not fully regulated. A certain level of freedom of choice concerning accounting practices may in fact improve the efficiency of accounting procedures and the quality of the accounting information. However, if someone has incentives to manipulate accounting numbers in an opportunistic manner, this freedom in accounting practice provides opportunities to do so (Healy and Wahlén 1999).

The use of accruals is a natural tool for moving costs between periods (Merchant 1990). Accruals management illustrates several common characteristics of traditional earnings management practiced in many companies. First, the goal of accruals management is management of the income statement, i.e. earnings. Second, accruals management is performed easily through accounting decisions, and does not require the creation of new business transactions. Third, and most important, accruals management is usually done by a single manager or a small group of managers. Nevertheless, the widespread use of accruals also creates an obvious problem for the interpretation of the results of this study since it is hard to distinguish between what is “normal” use of accruals and what is not “normal”. In order to circumvent the problem of what is considered “normal” accruals figures, we focus on total expected accruals and how observed accruals differ relative to expected ones.

Taking on large write downs in the year of the change would be another way for a newly appointed CEO to create a favorable platform for positive earnings development in years to come. However, it could also indicate a failure of previous managers to act (Pourcaui 1993). Moreover, earnings management via write downs is easy to identify in the year that it is undertaken. Consequently, the realization of benefits from opportunistic earnings management through large write downs may be limited (Defond and Jiambalvo 1994). Nevertheless, asset write downs are usually made on an irregular basis and then they make up a large part of abnormal and extraordinary items and may have a significant impact on reported earnings in the years succeeding the write downs. Hence, including write downs as a variable in this study is clearly justified.

Studies have suggested that earnings management comes in two basic forms: smoothing and falsifying (Merchant 1990). Falsifying involves reporting erroneous data while smoothing simply concerns transferring profit or loss from one accounting period to another. This study will not consider the difference between the two, but will merely treat all kinds of manipulative behavior the same. Closely related to traditional earnings management is so called financial engineering. This has to do with the structure of financial transactions of the kind employed by for instance Enron. This practice is more complex and might be requiring formation of legal entities and creation of financing arrangements between the company, its lenders and new outside investors. Financial engineering may require an organizational commitment to earnings management and not only the commitment of a small group. It may

require the commitment of senior management and the company's board of directors as well as management at lower levels of the organization in the decisions to create the needed financial commitments and structures. This kind of manipulation, however, will not be tested for in this paper. In summation, this paper examines traditional earnings management variables and how these variables, accruals and write downs, change in the years surrounding CEO turnovers.

3. CEO Turnovers- Routine versus Non-Routine

We define a CEO turnover as an event when a CEO is leaving the position and a new person is taking this position. The year of the turnover is defined as the first year when the incoming CEO gains control of the financial reporting and puts his signature on the annual report. In some cases both the outgoing and the incoming CEO sign the annual report. In these cases the new CEO has not gained total control yet and the subsequent year will therefore count as the first year when the new CEO is in control. The incentives for CEOs to manage earnings might be affected by the reasons behind the turnover. Reasons for CEO turnovers differ and each turnover is unique. We classify the sample into routine and non-routine turnovers since prior research suggests that incentives for earnings management may differ depending on whether the change is routine or non routine (Pourciau 1993).

Routine turnovers are described as a well planned process in which the appearance of both the outgoing CEO and the incoming CEO are more or less interrelated. In a routine turnover the outgoing CEO and the incoming CEO are more likely to know each other and they are also more likely to share the same goals. As a consequence, incentives to attribute poor performance to predecessors and thus the incentives for opportunistic behavior are likely to be reduced. A typical example of a routine turnover is when the outgoing CEO stays on the board of directors and the incoming CEO is recruited internally. An empirical example of a routine turnover found in the sample is the turnover that took place in Assa Abloy in 2003. In the annual report of 2002 the company announced a necessary and expected CEO change in 2003.

In contrast to routine turnovers, non-routine turnovers are described as relatively unplanned actions where the company has little time to select a suitable successor. In these cases it is less likely that the successor is an insider and also that the departing CEO takes a place in the board of directors (Vancil 1987). A typical example of a non-routine turnover is a situation where the outgoing CEO is fired because of poor performance and the firm recruits the incoming CEO externally under a relatively short period of time. Hence, inspired by prior studies, routine CEO turnovers are defined as a process where the leaving CEO stays in the company, retires, or leaves the position on his own initiative (Vancil 1987). It is also part of the definition that these turnovers are more or less anticipated. In a non-routine turnover, the CEO is more or less forced to leave his position for various reasons, including being

fired because of poor performance and health reasons are also included in the definition.

In some studies it has been found that newly appointed CEOs are more likely to engage in earnings management if the turnover was non-routine (Wells 2002). A possible explanation for this is the greater opportunities to engage in opportunistic behavior in the somewhat more chaotic environment that arise in association with a non-routine turnover. Altogether, this is also why many of the previous studies have chosen to focus only on non-routine turnovers (Pourcian 1993). However, in our study we will not exclude the routine turnovers from the sample. Instead potential differences between routine and non-routine observations will be identified and analyzed.

4. Hypotheses and Methodology

There are obvious are incentives for managers to engage in earnings management. Therefore it can be expected that an incoming CEO would manage financial reports in a way that would attribute poor performance to his or her predecessors. Doing this would also create a platform from where the CEO can start building future earnings and, thus, be in a better position to increase future performance based compensation linked to accounting data. When management engage in this kind of behavior they are said to take a “big bath” or a “cost bath”.

Earnings

Earnings is the first variable to examine regarding earnings management. If CEOs engage in earnings management, i.e. taking a “cost bath” in the year of the change, one would expect to find lower earnings in that year than in the year prior to the change and the year following the change. Thus, earnings should show a V-shaped pattern over the observed time period. Such findings would indicate either lower corporate revenues or higher expenses in the year of the CEO turnover. Therefore, a first step in developing a model for earnings management involves looking at how company earnings change during the period. If earnings are reduced in the year of the CEO turnover due to a reduction in revenues of approximately the same amount this would most likely not indicate reductions in earnings due to large unexpected accruals and or write-downs. However, if revenues stay approximately the same over the period, even though profits decline in the year of the CEO turnover, increased costs might indicate that the CEO is taking a cost bath. In the empirical analysis we deflate earnings by lagged total assets to remove the effects from a potentially increasing asset base as well as to avoid heteroskedasticity and to facilitate inter firm comparisons. A non-parametric sign test is then used in order to test if earnings during the observed period are described by a V-shape or not.

Accruals

Accruals are a widely used tool for moving profit and losses between different accounting periods and it is probably the most frequently used earnings management practice (McNichols 2000). We examine how accruals have changed over the years surrounding the CEO turnover. A way to measure this is by estimating so called unexpected accruals. Unexpected accruals are a proxy for the discretionary component of reported earnings or to which extent earnings management has occurred. If accruals change over time and if negative unexpected accruals are found in the year of the change and positive unexpected accruals are found in the following year this could be evidence of earnings management. Thus, in accordance with previous research, we make the assumption that the examined variables for each firm remain constant between two reporting periods. In accordance with prior literature, unexpected accruals in year t are determined as follows (DeAngelo 1986, 1988; Eddey and Taylor 1999).

$$Unexpected\ accruals_t = Accruals_t - Accruals_{t-1}$$

i.e., this year's unexpected accruals equal this year's booked accruals less last year's booked accruals, where:

$$Accruals_t = Net\ operating\ \ profit\ \ after\ interest\ and\ tax - Cash\ \ flows\ \ from\ \ operations$$

i.e., accruals for a year are defined as that year's net operating profit after interest and tax less that year's cash flow from operations. This definition states that cash flow from operations includes operating interest expenses and that financial interest expenses should be included in the financing and investment operations. It also assumes that interest and tax items, respectively, are extracted from the operations as well as accrued and also that no other items, like irregular items, have been excluded. Accruals are deflated by last year's lagged total assets in order to facilitate inter firm comparisons and to avoid heteroskedasticity (DeAngelo 1988; Jones 1991; Eddey and Taylor 1999; Wells 2002). Furthermore, a simple random walk model is used to describe the relation between earnings management and CEO-turnover. Even though one might expect the same results from both a parametric test and a nonparametric test both tests will be pursued since the t-test is only valid if the population is normally distributed. A flaw of the non-parametric test is the low power that the test might have. A potential difference between routine and non-routine CEO turnovers will also be examined using t-tests and the Mann Whitney U-test. The Mann Whitney U-test is used since the objective of this test is to examine whether the central locations of the two distributions differ or not.

A common feature of all models testing for accruals management is their attempt to isolate and measure management's influence on the financial

reporting. As indicated above, one is to estimate how reported earnings would behave without potential earnings manipulation. The method described above can be classified as a so called aggregate accruals model (McNichols 2000). A majority of the literature covering earnings management has used the aggregated accruals model. This model attempts to identify discretionary accruals based on the relation between total accruals, i.e. aggregated accruals and hypothesized explanatory factors. Most of the aggregated accruals models use total accruals and change in total accruals, respectively, as measures of management's discretion over earnings (Healy 1985; DeAngelo 1986, Eddey and Taylor 1999). Thus, earnings management exist if there is a significant difference between the total booked accruals of one point in time and the observation prior to this.[1]

Write-Downs

Another variable to include are write-downs since these are frequently used for shifting future expenses to current periods (Wells 2002). If large write-downs are more abundant in the year of a CEO turnover this would indeed indicate on earnings management in the form of a big bath. In accordance with the approach used when examining accruals this paper uses unexpected write downs as a measure of potential earnings management. Unexpected write downs in year t are defined as:

$$Unexpected\ \ Write\ Downs_t = Write\ \ Downs_t - \text{Write Downs}_{t-1}$$

As for accruals and earnings, write downs are deflated with one year lagged total assets. To test if unexpected write downs are different from zero t-tests and non-parametric tests are used. Moreover, the differences in behavior between routine and non-routine turnovers will, as for accruals, be examined using t-tests and the Mann Whitney U-test.

5. Data

CEO Turnovers

We investigate CEO changes in companies listed on the Stockholm Stock Exchange A-list over the time period 1995 to 2004. The A-list is chosen for

[1] Later research on aggregated accruals models has introduced a regression approach, the so called Jones model, to control for nondiscretionary factors influencing accruals, specifying a linear relation between total accruals and change in sales and property, plant and equipment (Jones 1991). However, this approach requires substantial time-series or cross-section of data as well as a stationarity assumption, as opposed to the prior methods used that only assumes stationarity over two subsequent periods. Moreover, evidence has been presented indicating on firms with greater expected earnings growth are likely to have greater accruals which may result in possible misspecification of the Jones model (McNicols 2000). The Jones model has been shown to have a rather low explanatory power and more research is needed to complement this model. In short, this paper chooses to use a non-regression approach when examining the occurrence of accruals management.

three reasons. First, the general focus in the Swedish debate concerning CEO compensation contracts and the potential implications of these are centered on these larger firms. Second, this sample also constitutes a diversified sample of companies and we aim to examine the relation between CEO turnover and earnings management in large Swedish corporations in a general context. Finally, it is also likely that the behavior of each of these larger corporations is norm setting for accounting practices in their particular industry. The method used in the study requires financial reporting from one year after the CEO change. Hence, no observed CEO turnovers after 2004 can be included in the sample since there are no data available to extend the period further. Moreover, the study stretches over ten years from 2004 to 1995 and the intention of choosing a time span of roughly ten years is to reduce the impact from business cycles and general market trends. For each firm on the A-list, the year book Owners and Power in Sweden's Listed Companies (1995-2004) was used to identify CEO changes that occurred during the chosen time period. These books publish lists of all CEO changes in companies on the Stockholm Stock Exchange. We confirmed these CEO changes by using annual reports from the same firms. Annual reports of those companies listed on the Stockholm Stock Exchange A-list but not listed in these books (ABB, Nokia, Tietoenator and Autoliv) were examined in order to determine whether a change took place or not during the relevant period.

The initial sample consisted of 120 CEO turnovers reported by 90 firms. Due to the special nature of financial institutions (defined as banks and insurance companies) and the regulations that apply for these firms they where excluded from the sample. A further reason to exclude financial institutions was the inapplicability of the variables. Since a period of three years are observed around each CEO turnover the incoming CEO have to stay on the post until the end of the second accounting year after the change in order produce the data needed. When two or more changes occur in a too narrow time span the last change is the only observation recorded. The reason for this is that data is needed for the years before and after the year of the actual change and also for consistency reasons. Eight observations were excluded due to this reason. In line with similar previous studies and due to the nature of extraordinary events such as divestures, bankruptcy and CEO turnovers due to takeovers or mergers are excluded from the sample (Pourciau (1993), Wells (2002)). For these reasons, 32 more observations were excluded which gave a total 40 excluded firms from the sample. That left a final sample of 80 observations. Hence, 80 observed changes made in 63 corporations form the final sample examined in this study. The entire sample as well as excluded observations can be found in Appendices 12.A and 12.B respectively. Descriptive statistics of the observed CEO changes are presented in Table 1 and 2. Table 1, Panel A, shows how the number of changes has evolved over the examined time period. Table 1, Panel B, displays the sample subdivided by industry. The industry classification is made using OMX guidelines. The sample consists to a large extent of the Industrials sector as well as the Financials sector. However, the categorization used is rather wide and the OMX classification includes a number of industries in these two categories. Industrials, for example, includes most kinds of heavy engineering industries

but also, for instance companies within transportation such as SAS, Linjebuss and Nordström & Thulin and consulting firms such as Ångpanneföreningen. The Financials category not only includes different forms of financial institutions and investment trusts but also real estate firms and companies like OMX itself. Panel B also includes the excluded companies and displays the total number of observed CEO changes that were made during the period 1995 to 2004.

Table 1

CEO changes

Financial Year	No.	%
1995	6	7.50%
1996	5	6.25%
1997	12	15.00%
1998	12	15.00%
1999	8	10.00%
2000	10	12.50%
2001	8	10.00%
2002	9	11.25%
2003	7	8.75%
2004	3	3.75%
Total	80	100.00%

Summary of CEO turnover data

Panel A. Changes per year.

Panel B. CEO turnovers divided by sector classification.[2]

Sector	No. of CEO changes	%	No. of Companies	%	No. of Companies (including excluded obs.)	%
Energy	1	1.25%	1	1.58%	1	0.84%
Materials	8	10.00%	7	11.11%	11	9.24%
Industrials	33	41.25%	26	41.27%	40	33.62%
Consumer Discretionary	12	15.00%	7	11.11%	14	11.76%
Consumer Staples	2	2.50%	2	3.18%	4	3.37%
Health Care	3	3.75%	3	4.76%	3	2.52%
Financials	12	15.00%	11	17.46%	31	26.05%
Information Technology	9	11.25%	6	9.53%	13	10.92%
Telecommunication Services	0	0.00%	0	0.00%	2	1,68%

[2] Classification made using the OMX Nordic Stock Exchange guide lines.

Utilities	0	0.00%	0	0.00%	0	0.00%
Total	80	100.00%	63	100.00%	119	100.00 %

The next step is to classify each CEO turnover into either routine or non routine. We use company press releases and annual reports as a primary source of information in order to find the reason behind a CEO turnover. Press releases were found in the Affärsdata database and these were complemented with information from company web-sites. Based on this material a first classification into routine and non routine turnovers was made. Companies rarely state in press releases if there have been diverse opinions or if there have been conflicts involved when taking the decision of a CEO change. “Leaving to be able to spend more time with family” or “leaving for personal reasons” are two examples of frequently used statements when companies explain why they are changing their CEO. Thus, it is almost impossible to find the actual reason behind a turnover only by looking at press releases. Other sources of information were therefore needed in order to obtain more reliable information about the reason behind the turnover.

In order to be able to draw more accurate conclusions about the reasons behind CEO turnovers the Affärsdata database was once again used in order to search for articles covering the turnovers. By studying articles published in some of the major Swedish newspapers and journals like Dagens Industri, Dagens Nyheter, Svenska Dagbladet and Affärsvärlden a more reliable view of the turnovers was found. These findings were then used to complement the information given in the press releases and a second and final classification of the sample was then made based on both sources of information. The subdivision of the total sample into routine and non-routine turnovers can be found in Table 2.

Table 2

Nature of CEO changes determined by reviewing press releases, annual reports and newspaper articles.

Nature of CEO Change	No. of changes	%
Routine	57	71.25%
Non-routine	20	25.00%
No info	3	3.75%
Total	80	100.00%

Accounting Data

Due to the chosen time period (1995-2004) and the fact that the chosen variables are measured one year prior to the change and one year following the year of change, accounting data from the period 1994 to 2005 was included. The data was collected from the financial reports for each company. Hence, more than 360 financial reports were collected, most of them were found in the archives of the SSE library (which is made up of the Six Trust non electronic database) and the rest were obtained through direct contact with the firms included in the sample. Accounting data for some of the observed CEO changes was not available. This was in most cases due to companies no longer being listed. Some had been acquired by another company a few years back and some had ceased to exist. For this reason 20 observations were deleted from the sample due to lack of accounting data.

6. Results

Table 3 present descriptive statistics for the 80 firms included in the sample. The sample includes small cap, mid cap as well as large cap companies. Table 3 also shows how company earnings and revenues evolve over a three-year period surrounding a CEO-turnover. The data shows a general pattern of a reduction of mean earnings in the year of the change, year t, and increasing mean earnings in the year following the change, year t+1. Thus, earnings form a V-pattern which is graphically displayed in Figure 1 and also verified through a non-parametric sign test presented in Table 3, Panel B. The sign test examines whether earnings are more likely to display a V-pattern than the opposite and the test shows a highly significant p-value.

Revenues on the other hand, although on average showing a slight decrease in the year of the change, seem to be fairly stable over the observed three-year period. This is verified through a non-parametric sign test presented in Table 3, Panel B, showing highly insignificant values. The fact that the sample constitutes of observations equally spread over a 10 year period gives further strength to the observed V-pattern since business cycle factors are less likely to affect the result.

Table 3

Characteristics of Earnings

Panel A. Descriptive Statistics of Company Earnings.

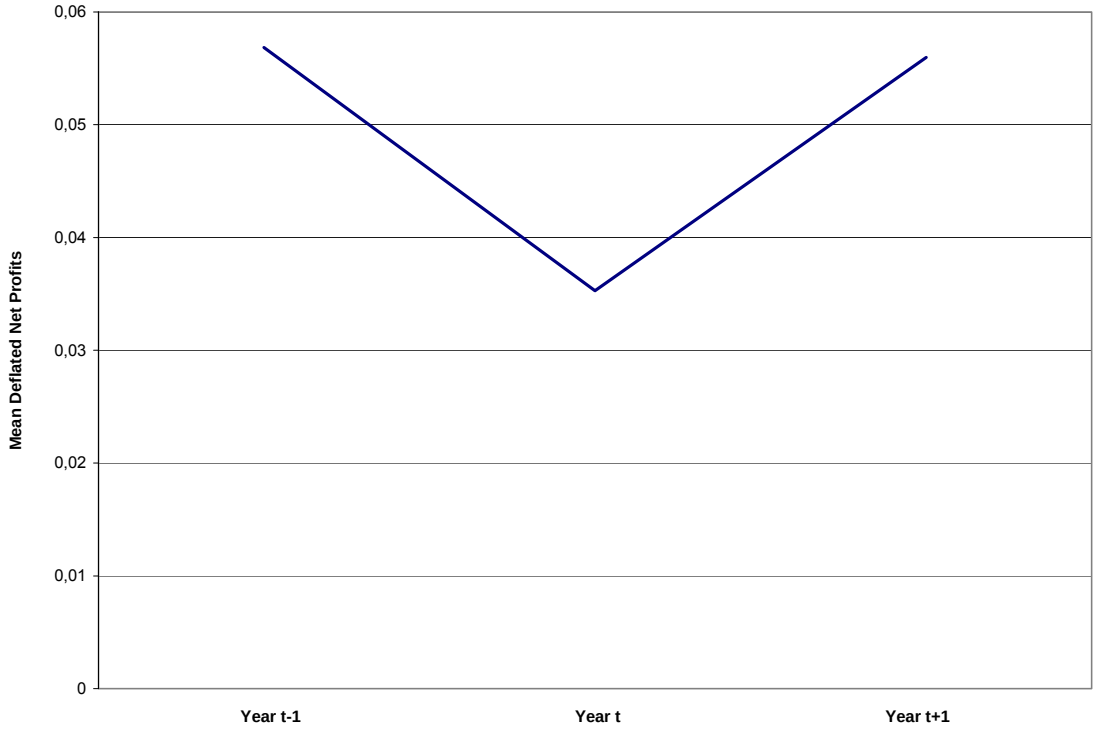
	Mean	Median	Max	Min
Year t-1				
Net Profit After Tax	1089.90	380.40	13041.00	-19013.00
mSEK	32718.37	8870.50	320766.32	97.65
Total Assets mSEK				
Year t	897.79	270.00	12130.00	-10844.00
Net Profit After Tax	33270.46	9077.50	335083.80	48.23
mSEK				
Total Assets mSEK				
	1625.55	394.65	21018.00	-7946.12
Year t+1	33577.26	9611.50	305961.88	53.17
Net Profit After Tax				
mSEK				
Total Assets mSEK				

	Mean	Median
Year t-1		
Net Profit After Tax	0.05686	0.04944
Deflated by Total		
Assets t-2	1.17337	1.04157
Revenues Deflated by		
Total Assets t-2		
Year t	0.03528	0.04435
Net Profit After Tax		
Deflated by Total	1.16977	1.12014
Assets t-1		
Revenues Deflated by		
Total Assets t-1		
	0.05572	0.04759
Year t+1		
Net Profit After Tax	1.17848	1.11209
Deflated by Total		
Assets t		
Revenues Deflated by		
Total Assets t		

Panel B. Non-parametric sign test of how earnings and revenues evolve over a period of three years surrounding a CEO turnover. The test examines if the earnings and revenues from year t-1 to t+1 form a "V-pattern".

		z-statistic (p-value)
Net Profit After Tax		
$n_{V\text{-shape}}$: $n_{Л\text{-shape}}$	32:17	(0.00454)
Revenues		
$n_{V\text{-shape}}$: $n_{Л\text{-shape}}$	19:28	(0.9566)

Figure 1
Graph of the characteristic "V pattern" obtained from mean deflated Net Profits for the years surrounding the CEO change.



The results presented in Table 3 clearly display that earnings are reduced in the year of the turnover and increased in the year following the turnover, forming a V-pattern. Although revenues show a slight tendency of a similar pattern, revenues cannot be held as the main explanatory variable for reduced earnings in the year of the CEO turnover.[3] Compared to the year prior to the change mean net profits deflated by one year lagged total assets are reduced by approximately 38%. In the same time period mean revenues

[3] Revenues do not seem to show the pronounced V-pattern that earnings do. This is also verified by a non-parametric sign test performed on revenues presented in Table 3, Panel B, examining the occurrence of a V-pattern. The sign test shows a highly insignificant value.

deflated by one year lagged total assets are reduced by less than 0.5%. In the year following the turnover mean net profits deflated by one year lagged total assets show an increase of almost 58%. During the same period revenues increase by approximately 0.7%. Hence, revenues are held fairly constant over the observed time period. By dividing the change in revenues deflated by one year lagged total assets for one year by the change in earnings deflated by one year lagged total assets for that same year one can extract the proportion of observed change in earnings that can be explained by fluctuations in revenues. Thus, approximately 17% of the earnings drop in the year of the turnover and 43% of the increased earnings in the subsequent year can be explained by fluctuations in revenues. In short, earnings are reduced by 31.5% [(1- 0.17)*0.38] due to costs taken in the year of the CEO turnover. Earnings increase in the year subsequent to the CEO turnover by 33% [(1-0.43)*0.58] due to cost reductions.

These results are interesting since there seems to be great potential for earnings management through moving costs between the two periods and thus to affect the outcome of performance based compensation contracts linked to accounting data. Since, on average, approximately 30% of earnings have been found altered by managing costs and keeping in mind that changes in earnings affect the compensation of CEOs, such discretionary practice must be seen as economically significant for CEOs to engage in. In Sweden pay practices between companies and their CEOs are not public data. It is therefore hard to estimate the exact economic magnitude this kind of behavior might have. However, it is empirically established that a large part of the total compensation paid to CEOs comprises of performance-based compensation linked to accounting data (Jensen 2001, Samberg and Swenson 2004).

Hence, there seem to be an earnings reducing effect that can be derived from the cost side in the year of the change. This may indicate that the CEOs are taking “earnings baths” in the turnover year. To further investigate this, accruals are examined in relation to CEO turnovers. We expect to find large negative unexpected accruals in the year of the change contributing to reduced earnings. Table 4 summarizes the data and the tests performed on accruals in association with CEO turnovers. The data presented in Panel A shows that, on average, unexpected accruals is negative in the year of the change, year t, and positive in the year following the change, year t+1. The median values also describe this pattern as negative unexpected accruals are found in the year of the change and positive unexpected accruals are found in subsequent year. The t-tests as well as the Wilcoxon Rank Sum tests presented in Table 4, Panel A, verify this impression as they all show highly significant results. These results indicate that accruals management generates negative unexpected accruals in year t and positive unexpected accruals in year t+1. Furthermore, as can be seen in Panel A, more observations are showing negative unexpected accruals than positive ones in the year of the turnover. The reverse is found in the year following the change.

In Table 4, Panel B, the firms have been divided into either routine or non-routine CEO turnovers. The mean and median unexpected accruals are lower for the routine sub-sample than for the non-routine sub-sample in year t the and higher in the following year. Furthermore as can be seen in Table 4, Panel B, none of the Mann Whitney U-tests shows significant values. These tests are used to determine if the mean of unexpected accruals in year t is more negative for the firms experiencing a non-routine turnover than for the companies experiencing a routine change and if the opposite is true for year t+1.

Table 4

Summary of Unexpected Accruals

Panel A. Descriptive statistics of unexpected accruals.

	Mean	Median	t-statistic [a]	z-statistic [b]
				(p-value)
Unexpected Accruals Deflated by Total Assets	-0,02345826	-0,02428512	-1,931351558 (0.0286) [d]	
Unexpected Accruals$_{t+1}$ Deflated by Total Assets	0,045075183	0,012930068	2,409255984 (0.0092) [d]	
Positive: Negative$_t$	31:49			-2,49886563 (0,0064) [d]
Positive: Negative$_{t+1}$	48:32			-1,98086661 (0,0239) [d]

Table 4 (cont.)
Panel B. Unexpected Accruals, Routine vs. Non-routine.

	Mean	Median	t-statistic [a] (p-value)	z-statistic [c] (p-value)
Routine				
Unexpected Accruals$_t$ Deflated by Total Assets	-0,034802479	-0,03023788		
Unexpected Accruals$_{t+1}$ Deflated by Total Assets	0,057144316	0,01229471		
Non-Routine				
Unexpected Accruals$_t$ Deflated by Total Assets	0,003752416	-0,02144929		
Unexpected Accruals$_{t+1}$ Deflated by Total Assets	0,00744092	-0,00052348		
Testing the difference of sample means Routine versus Non-Routine				
Routine: Non-Routine$_t$			Not significant [d]	Not significant [d]
Routine: Non-Routine$_{t+1}$			Not significant [d]	Not significant [d]

[a] Tests that mean unexpected accruals <0 (>0).
[b] Calculated from the non-parametric Wilcoxon Rank Sum Test. Tests that the number of positive (negative) unexpected accruals is greater than the number of negative (positive) unexpected accruals.
[c] Calculated from the non-parametric Mann Whitney U-test examining the hypothesis that the central location of the two populations differ.
d One-tailed significance levels.

The values presented in Table 4, Panel A, support the hypothesis as the mean unexpected accruals are negative and highly significant in the year of the turnover, using both a parametric t-test and a non-parametric Wilcoxon Rank Sum Test. Furthermore, we expect that unexpected accruals should be positive in the year following the turnover, thus contributing to increased earnings. The data presented in Table 4, Panel A, also support this hypothesis as the mean unexpected accruals are positive and highly significant using both a parametric t-test and a non-parametric Wilcoxon Rank Sum Test. In fact, accruals seems to be a widely used tool for attributing costs

to different accounting periods among the firms included in the sample and, thus, accruals seems to be a widely used tool for managing earnings.

The findings are in line with prior non-Swedish studies that have found accruals to be an important tool for earnings management (Merchant 1990; Jones 1991; Pourcaui 1993; McNichols 2000). Empirical evidence, indicates that incoming CEOs are managing accruals in order to decrease earnings in the year of the CEO change followed by upwards earnings management in the years that follow to give a more favourable impression of their performance (Watts and Zimmerman 1978; Murphy and Zimmerman 1993). One outcome of this kind of behavior is a potential increase in their performance based compensation linked to accounting data (Watts and Zimmerman 1978; Merchant 1990; Jensen 2001).

Table 5 describes the data and the tests performed on write-downs made in relation to CEO-turnovers. As can be seen from Panel A unexpected write downs are on average negative in the year of the turnover, year t, and positive in the year following the change, year t+1. The median, however, shows a less pronounced difference between these values. The t-tests as well as the non-parametric Wilcoxon Rank Sum tests show highly significant values. Moreover, the data shows that the number of observations showing negative unexpected write downs in year t is almost four times as many as the number of observations showing positive unexpected write downs. In the following year the number of observations showing positive unexpected write downs is almost twice as many as negative ones.

Table 5

Summary of Unexpected Write-Downs

Panel A. Descriptive statistic of unexpected write downs.

	Mean	Median	t-statistic[a] (p-value)	z-statistic[b] (p-value)
Unexpected Write Downs$_t$ Deflated by Total Assets	-0,016040531	-0,000466979	-2,599679753 (0.0057)[d]	-4,608099856 (0,00)[d]
Unexpected Write Downs$_{t+1}$ Deflated by Total Assets	0,014640702	0	2,202027325 (0.0153)[d]	-2,756542363 (0,0029)[d]
Positive: Negative$_t$	11:41			
Positive: Negative$_{t+1}$	32:18			

Panel B. Routine vs. Non-routine

	Mean	Median	t-statistic[a] (p-value)	z-statistic[c] (p-value)
Routine				
Unexpected Write Downs$_t$ Deflated by Total Assets	-0,019203838	0		
Unexpected Write Downs$_{t+1}$ Deflated by Total Assets	0,014971538	0		
Non-Routine				
Unexpected Write Downs$_t$ Deflated by Total Assets	-0,00867815	-0,002536704		
Unexpected Write Downs$_{t+1}$ Deflated by Total Assets	0,014327644	0,002866698		
Testing the difference of sample means Routine versus Non-Routine			Not significant[d]	Not significant[d]
Routine: Non-Routine$_t$			Not significant[d]	Not significant[d]
Routine: Non-Routine$_{t+1}$				

[a] Tests that mean unexpected accruals <0 (>0).
[b] Calculated from the non-parametric Wilcoxon Rank Sum Test. Tests that the number of positive (negative) unexpected accruals is greater than the number of negative (positive) unexpected accruals.
[c] Calculated from the non-parametric Mann Whitney U-test examining the hypothesis that the central location of the two populations differ.
[d] One-tailed significance levels.

A Mann-Whitney U-test is performed in order to find potential differences between routine and non-routine turnovers concerning the use of write-downs. The results from these tests are presented in Panel B showing non-significant values. Furthermore, looking at the t-tests for the two sub samples the mean values clearly describes a pattern of negative unexpected write-downs in the year of the change and positive write downs in the year following the change. However, the mean values of the routine turnovers show a much more pronounced difference between the two years than the mean values of non-routine turnovers.

We hypothesized that unexpected write downs will reduce earnings in the year of the change. This hypothesis gains support from Table 5, Panel A. The table presents results from a t-test and a non-parametric Wilcoxon Rank Sum Test that both show significant values, indicating that firms actually use unexpected write downs to reduce earnings in the year of the change. In the year subsequent to the CEO turnover the results are as anticipated. Table 5 shows statistically significant values indicating positive unexpected write-downs that year. However, it also shows mean values of unexpected write-downs deflated by lagged total assets that are considerably lower than mean unexpected accruals deflated in the same manner. An explanation for this might be that only approximately 75 percent of the firms included in the sample actually used write downs during the period. According to the accruals definition of this paper all firms use accruals. Furthermore, as can be seen in Table 5 the sample median for write downs is zero. Since firms not using write downs are still included in the sample this has an effect on the mean unexpected write downs by reducing the values. Hence, although not as widely used as accruals, write downs seem to be a frequently used tool for managing costs and earnings among the firms included in the sample. In short, Table 5, Panel A, presents evidence consistent with downward earnings management at the time of the CEO turnover and upward earnings management in the following year.

Our findings are in line with several US studies that have found increasing write downs in association with CEO turnovers (Moore 1973; Strong and Mayer 1987; Elliot and Shaw 1988). These studies suggest that taking on large write downs in the year of the change is a way for a newly appointed CEO to blame predecessors for poor past performance and consequently to create a favorable platform for positive earnings development in years to

come. However, as suggested above, earnings management undertaken through this mechanism should be relatively easy to identify in the year that it is undertaken compared to accruals. Potential benefits from this kind of behavior should therefore be more limited (Defond and Jiambalvo 1994). One would therefore not expect CEOs to use write downs as the primary tool for discretionary earnings management.

Previous research has pointed out that the probability of a CEO change occurring increases significantly as corporate performance is relatively poor (Murphy and Zimmerman 1992; Coughlan and Schmidt 1985; Warner et al. 1988; Weisbach 1988). This constitutes a problem for the interpretation of the results. When a company is performing poorly there are potential needs for restructuring and taking on considerable restructuring costs will affect earnings negatively. Therefore, by looking at a restructuring situation, it is hard to draw reliable conclusions whether costs are taken by the newly appointed CEO as a remedy for prior poor economic performance or because of management opportunistic behavior. Moreover, in a scenario when a company is performing poorly, revenues will most likely on average be a major cause of reduced earnings. However, as illustrated in Table 3, firms included in the sample seem to be rather well-performing throughout the entire observation period. Panel A shows positive mean values for earnings after tax. During the same time period revenues stay relatively stable and only a small portion of the earnings decrease can be attributed to reduced revenues. Furthermore, one can argue that companies engaging in earnings management in order to smooth earnings would do so by increasing costs in the year of the change, thus taking a cost bath, without reducing revenues. Reducing revenues involves operations that are hard to reverse and could be detrimental for the company. The reduction in mean revenues that is seen in the year of the change is therefore probably an effect derived from companies included in the sample that actually performs poorly. Moreover, as illustrated in Table 3, a cost reduction as well as a slight revenue increase is detected in the year following the turnover. The cost reduction is hard to evaluate.

If necessary restructuring costs were taken by the newly appointed CEO in the year of the change, costs would most likely have peaked during this year. Hence, the new CEO would thus be better at tracking costs and a cost reduction would therefore be expected in the year following the CEO turnover. If costs were taken in order to deliberately manage earnings in the year of the turnover, this will most likely generate a similar cost reduction in the year subsequent to the change. Either way, costs are expected to decrease and revenues to increase from the previous year making it hard to distinguish between discretionary earnings management and restructuring costs taken in association with the appointment of a new, more capable CEO.

Hence, the V-pattern illustrated in Figure 1 might have two possible explanations. First, as already discussed above is the one of opportunistic managers engaging in earnings management in order to affect accounting

data and thus to boost their performance-based compensation. Another possible explanation might be that the departing CEO has been performing poorly and is replaced by a better suited successor, more capable of running the company by for example tracking and cutting costs. This is somewhat contradicted since the sample in this study consists largely of routine turnovers and one could doubt for example the likelihood that the board of directors would wait for the old CEO to retire if they could find a better suited person in advance. Prior research has examined the effect of a CEO turnover on firm performance subsequent to the turnover. Some research has found negative relationship between CEO turnovers and performance. An explanation for this would be that changing CEO causes disruptive effects on an organization's processes and routines, which affect performance negatively (Grusky 1963). Other researchers have suggested that changing CEO is a critical mechanism of organizational adaptation. It provides an occasion to replace decision makers with others who are better suited for dealing with the firm's critical issues (Pfeffer and Salancik 1978). A third view on the subject suggests that changing CEO has no effect on the firm performance since firm performance is a function of the firm-specific processes which to a large extent is outside the control of managers (Gamson and Scotch 1964). Finally, complementing these views on the subject, a study argues that the degree of organizational disruption created by the circumstances around the predecessor CEO's departure (e.g. non-routine versus routine turnover) and the potential for organizational change existing within the company are important factors affecting firm performance subsequent to the turnover (Khurana and Nohria 2000).

Based on the discussion above there is little evidence that newly appointed CEOs in general can affect the corporate performance solely based on their competencies. Moreover research has presented evidence in recent years that corporations increasingly are seeking CEOs who are charismatic, well known and whose personality impresses analysts (Khurana 2002). Thus, the task of finding CEOs whose experience and abilities are right for companies' specific needs has become less important. In short, there is little evidence supporting the hypothesis that newly appointed CEOs in general are more capable of running the company and thus acts as the company's savior when appointed. Consequently, it is not likely that the earnings pattern observed in the years surrounding the CEO turnovers examined in this study can be explained by the competence of the newly appointed CEO.

For the 57 turnovers classified as routine, mean accruals deflated by total assets as well as mean write downs deflated in the same manner show the anticipated V-pattern. This is illustrated in Tables 4 and 5. However, as can be seen from the same tables, mean accruals deflated by total assets do not show this pattern for non-routine turnovers. Moreover, the difference between the two samples are not consistent with hypothesis h5, suggesting that earnings management should be more pronounced for turnovers classified as non-routine. The t-tests as well as the non-parametric Mann-Whitney U-tests provide further evidence presented in Tables 4 and 5 against hypothesis h5.

This does not concur with previous research suggesting that incentives for earnings management are greater for non-routine turnovers than for routine (Pourciau 1993). However, the results presented in this paper may suffer from flawed data. For example, the size of the sample may be too small to subdivide. To a large extent the total sample consists of routine turnovers and the non-routine sub-sample is therefore very small. The non-routine sample consists of only 20 observations which imply that single observations will have high impact on the results. Moreover, the 20 observations form a sample that is too small for extracting data in order to draw reliable statistical conclusions about non-routine turnovers in general. Another explanation for the results presented in Tables 4 and 5 might be that CEOs are as likely to engage in earnings management under routine circumstances as under non-routine circumstances. Moreover, taking into account that more than 70 percent of the sample consists of routine CEO turnovers, this suggests that poor performance is not the underlying cause of most of the turnovers included in the sample. Thus earnings management seems to be a frequently used practice in association with routine turnovers although not recognized by some prior research (Pourciau 1993).

7. Conclusions

This paper aims to investigate whether CEOs undertake earnings management in association with CEO turnovers for Swedish corporations listed on the Stockholm Stock Exchange A-list during the years 1995 to 2004. It presents strong evidence of earnings management in the form of accruals management as well as in the form of write downs management both in the year of the CEO turnover and in the year following the turnover. However, we cannot with certainty determine whether observed earnings management are due to managers behaving opportunistically at the expense of the shareholders in order to boost accounting-based compensation or if observed earnings management are due to necessary costs taken as a result of the financial position of the company.

This paper also examines whether earnings management is more frequently used in association to non-routine CEO turnovers than to routine CEO turnovers. The study finds no empirical evidence supporting this hypothesis. This is somewhat contradictory to what could be anticipated from previous research. This might be explained by the small data sample for non-routine turnovers. Nevertheless, the little evidence found of differences in accounting behavior between routine and non-routine CEO turnovers indicates that there are no considerable differences present. The fact that earnings management is found even though the sample consists to a large extent of routine turnovers is interesting since it indicates that routine turnovers are well worth investigating in an earnings management context.

This is the first study specifically examining earnings management in association with CEO turnovers in Swedish corporations. The findings are interesting since they indicate that earnings are being managed as a CEO turnover takes place. This is in line with studies performed outside Sweden and also in line with theories covering the subject. The study has shown that a significant part of the corporate results can be altered. Since, a large part of the compensations enjoyed by CEOs are based on accounting measures, mostly related to earnings, managers do benefit from managing earnings. It is therefore to a large extent advisable to avoid the use of compensation contracts linked to accounting data.

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Appendices

I Data Sample

The table bellow presents the data sample used in the study.

Munksjö	A	Per Rodert	Rolf Ekedahl	2000	non routine
NCC	A	Alf Göransson	Jan Sjöqvist	2001	non routine
Nobel Biocare	A	Heliane Canepa	Jack Forsgren	2001	non routine
OM Gruppen	A	Per E Larsson	Olof Stenhammar	1996	routine
Perstorp	A	Åke Fredriksson	Gösta Wiking	1997/98	routine
Platzer	A	Birger von Hall	Claes Levin	1998	routine
PLM	A	Fredrik Arp	Rolf Börjesson	1996	routine
Sandvik	A	Lars Pettersson	Clas Åke Hedström	2002	routine
SAS	A	Jörgen Lindegaard	Jan Stenberg	2001	non routine
SCA	A	Jan Åström	Sverker Martin Löf	2002	routine
Scandiaconsult	A	Kristina Larsson-Götzén	Olof Hultén	1997	non routine
Scribona	A	Lennart Svantesson	Örjan Håkansson	2000	routine
Scribona	A	Tom Ekevall	Lennart Svantesson	2003	routine
Seco Tools	A	Håkan Bergström	Jan Erik Forsgren	2000	routine
Seco Tools	A	Kai Wärn	Lars Renström	2004	routine
Senea	A	Anette Brodin Rampe	Christer Carlsson	2000	non routine
Siab	A	Lars Wuopio	Jan Jepsson	1995	reason uncertain
Skanska	A	Claes Björk	Melker Schörling	1997	routine
Skanska	A	Stuart Graham	Claes Björk	2002	non routine
SKF	A	Peter Augustsson	Mauritz Sahlin	1995	routine
SKF	A	Sune Carlsson	Peter Augustsson	1998	non routine
SKF	A	Tom Johnstone	Sune Carlsson	2003	routine
SSAB	A	Torsten Sandin	Leif Gustafsson	1998	routine
SSAB	A	Anders Ullberg	Torsten Sandin	2000	routine
Stena Line	A	Bo Severed	Bo Lerenius	1998	routine
Swedish Match	A	Lennart Sundén	Göran Lindén	1998	routine
Swedish Match	A	Sven Hindrikes	Lennart Sundén	2004	routine
Sydkraft	A	Lars Frithiof	Göran Ahlström	1998	routine
Ticket	A	Dag Tveterås	Anders Holst	2000	routine
Ticket	A	Mats Frid	Dag Tveterås	2003	routine
Trelleborg	A	Fredrik Arp	Kjell Nilsson	1998	non routine
TV4	A	Torbjörn Larsson	Krister Forsström	1998	non routine
TV4	A	Jan Scherman	Thorbjörn Larsson	2001	non routine
WM-data	A	Lars Harrysson	Tord Wilkne	1997	routine
WM-data	A	Crister Stjernfelt	Lars Harrysson	2001	routine
Volvo	A	Leif Johansson	Sören Gyll	1997	routine
Ångpanneföreningen	A	Jonas Wiström	Gunnar Grönkvist	2002	non routine

II Firms Excluded From the Data Sample

The table bellow presents the companies excluded from the sample and the reason for exclusion.

Company	List on OMX	Year of change	Reason for excluding observation
Stadshypotek	A	1995	2
J&W	A	1996	4
JP Bank	A	1996	2
Skandia	A	1996	2
United Tankers	A	1996	1
Linjebuss	A	1996	4
Nordström&Thulin	A	1996	4
Evidentia	A	1996	3
Spectra Physics	A	1996	1
Autoliv	A	1996	1
Allgon	A	1997	3
Graphium	A	1997	4
SEB	A	1997	2
Stora	A	1997	1
Sifab	A	1997	1
Hufvudstaden	A	1997	1
Ericsson	A	1998	3
JP Bank	A	1998	2
Scancem	A	1998	4
Ratos	A	1998	4
Föreningssparbanken	A	1999	2
Hemköp	A	1999	4
Seco Tools	A	1999	3
TietoEnator	A	1999	1
Allgon	A	2000	3
Nordea	A	2000	2
Svedala	A	2000	1
Telia	A	2000	1
Holmen	A	2000	3
Axfood	A	2000	1
SHB	A	2001	2
Bure Equity	A	2001	3
Bergman&Beving	A	2001	1
Nordea	A	2002	2
Telia Sonera	A	2002	1
Föreningssparbanken	A	2003	2
Skandia	A	2003	2
Skandia	A	2003	2
OM HEX	A	2003	1
Lindex	A	2004	3

Reason for excluding		Nr excluded
Merger, acquisition or divesture	1	13
Financial institution	2	12
Too many changes	3	8
Lack of data	4	7
Total		40