

Impression Management in Financial Reports Surrounding CEO Turnover

Author:

Nadesa Goundar

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Declaration

Name of candidate: Nadesa Goundar

This Thesis/Dissertation/Research Project entitled “Impression Management in Financial Reports Surrounding CEO Turnover” is submitted in partial fulfilment for the requirements for the Unitec degree of Master of Professional Accountancy.

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I confirm that:

- This Thesis/Dissertation/Research Project represents my own work;
- The contribution of supervisors and others to this work was consistent with the Unitec Regulations and Policies.
- Research for this work has been conducted in accordance with the Unitec Research Ethics Committee Policy and Procedures, and has fulfilled any requirements set for this project by the Unitec Research Ethics Committee.

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Candidate Signature:

Date:

Student number: 1124972

Abstract

This study focuses on whether new management uses impression management to influence the presentation of performance in the firm's annual reports surrounding a changeover in CEO. The study considers the use or non-use of graphs for presenting information as well as distortions in the graphs.

Overall there is some evidence for impression management, but it is not strong. Thus impression management as implemented through graphs does not appear to be used as widely in New Zealand as in other jurisdictions where it has been studied.

Table of Contents

1	Introduction	1
1.1	Overview	1
1.2	Outline of the rest of the paper	1
2	Theoretical Framework and Literature Review	2
2.1	Theoretical Framework	2
2.2	Literature Review	3
2.2.1	Earnings Management	3
2.2.2	Non-accounting Financial Disclosure	4
2.2.3	Impression Management	5
2.2.4	CEO Turnover and Financial Reporting	10
3	Research Methodology	13
3.1	Selectivity	13
3.2	Distortion	14
3.3	Development of Hypotheses	14
3.4	Sample Selection and Data Sources	16
4	Results	18
4.1	Selectivity	18
4.1.1	Earnings	20
4.1.2	Turnover	20
4.1.3	Earnings per Share	21
4.1.4	Dividends per Share	21
4.2	Distortion	21
4.3	Discussion of Results	29
4.3.1	Selectivity	29
4.3.2	Distortion	30
5	Conclusion	32
5.1	Summary & Implications	32
5.2	Limitations	32
6	Reference List	33

List of Tables

Table 1:	Reconciliation of Sample	Page 17
Table 2:	The Frequency of Graphs Displaying Key Financial Variables	Page 18
Table 3:	The Frequency of Graphs Displaying Key Financial Variables Increase or Decrease	Page 19
Table 4:	The Frequency of Graphs Displaying the Distortion of Key Financial Variables when the Key Financial Variables Increase	Page 22
Table 5:	The Frequency of Graphs Displaying the Distortion of Key Financial Variables when the Key Financial Variables Decrease	Page 23
Table 6:	Proportion of Graphs Exhibiting Positive or Negative GDI for Earnings and Turnover	Page 24
Table 7:	Proportion of Graphs Exhibiting Positive or Negative GDI for Earnings per Share and Dividends per Share	Page 25
Table 8:	Mean Graph Discrepancy Index for each of the Key Financial Variables for each of the Periods	Page 26
Table 9:	Descriptive Statistics for Earnings and Turnover	Page 28
Table 10:	Descriptive Statistics for Earnings per Share and Dividends per Share	Page 29

1 Introduction

1.1 Overview

Management's performance is largely evaluated and remunerated on the performance of the firm which is displayed in the annual reports. This provides management with a motivation to influence the content and prominence of the information presented in the annual reports. One tactic new management may choose is to blame initial poor performance on its predecessor and then take credit for subsequent good performance. Godfrey et al. (2003) argue that new CEOs have incentives to increase their welfare by establishing tenure. This is because managers receive a substantial portion of their wealth in the form of human capital (Fama, 1980). That is, labour markets effectively award managers with increases in remuneration and continuity of employment based on the perceived success or failure of the firms they are managing (Godfrey et al, 2003). Hence, new CEOs strive to create an impression that they are performing better than their predecessor so as to quickly secure tenure. Also, most compensation contracts are tied to performance so better performance and/or the impression of better performance may be expected to lead to increased compensation.

This study examines one device, graphs, that management can use to influence perceptions surrounding a change in top management. It finds some support that graphs are used to influence perceptions, but the overall results are mixed.

1.2 Outline of the rest of the paper

This research project is structured as follows. Section 2 provides the theoretical framework and literature review. Section 3 follows and describes the research methodology including the development of the hypotheses and sample selection. In section 4, the results are discussed while in section 5 the research project is concluded. And finally in section 6 a reference list is provided.

2 Theoretical Framework and Literature Review

2.1 Theoretical Framework

An agency relationship is defined as a contractual agreement between two parties conventionally called the principal and the agent. The principal engages the agent to perform some service on the principal's behalf and delegates some decision making authority to the agent (Jensen and Meckling, 1976). Jensen and Meckling argue that if both parties (the principal and agent) are utility maximisers then it is likely that the agent may not always act in the best interests of the principal. Hence the principal incurs monitoring and bonding costs designed to limit the aberrant activities of the agent. Given that both the principal and the agent are utility maximisers, it is generally impossible to assume that the agent will always make optimal decisions from the principal's viewpoint. The divergence between the agent's decisions and the optimum decisions for the principal gives rise to a reduction in the value of the welfare of the principal. This reduction is referred to as the residual loss. The sum total of the costs incurred by the principal is referred to as the agency costs (Jensen and Meckling, 1976).

Two of the many problems that may arise from the agency relationship in most business settings include adverse selection and moral hazard. Adverse selection is the existence of the condition where the principal is not able to ascertain if the agent accurately represents his/her ability to carry out the work for which compensation is made and moral hazard is the condition under which the principal is not sure whether the agent has given the utmost to the business (Eisenhardt, 1989).

According to Jensen and Meckling (1976) since both principals and agents (CEO's) are utility maximisers there exists motivation for agents to engage in some decisions that are sub-optimal for the principals. This suggests that CEO's at times may have incentives to engage in self-interested wealth maximising behaviour at the expense of principals' (shareholders). Thus one can argue that within this framework, CEO's may be motivated to manage both the accounting numbers and the way the numbers are represented.

Financial reporting researchers have recognised that there exist strong economic and social incentives for managements to display self interested behaviour in annual reports. Research has found that some managements make discretionary financial reporting choices in the areas of measurement, disclosure and presentation (Murphy and Zimmerman, 1993, Beattie and Jones, 2000). The current study seeks to determine if new managers frequently choose to use graphs as a means for displaying financial results in a self-interested manner.

2.2 Literature Review

The financial disclosure literature suggests

that managers, shareholders, auditors and standard setters all derive benefits from selective financial misrepresentation (Revsine, 1991, p.17).

The literature emphasises that management has incentives for ‘selective financial representation’ (Revsine, 1991). One strand of the literature focuses on manipulation of accounting numbers by management. This is referred to as earnings management. A second strand involves the use of non-accounting financial disclosures, and the third is impression management. The discussion that follows highlights the literature in earnings management.

2.2.1 Earnings Management

Revsine (1991) argues

...that financial reporting is sometimes better characterised by the phrase ‘selective financial representation’ (p.17)

And that

This selective financial misrepresentation hypothesis cuts across both public and private sectors since participants in both sectors are motivated to support standards that selectively misrepresent economic reality when it suits their purpose (p.17)

Revsine illustrated the incentives that motivate various parties to misrepresent financial events. He reviewed and highlighted prior literature that provided support for his selective financial misrepresentation hypothesis. The parties that were considered were those that derived benefits from selective financial misrepresentation and included, managers,

shareholders, auditors and standard setters. The evidence gathered from the extensive literature review supported the hypothesis that observers (the authors of the literature considered) made inferences about the behaviour of the parties that were consistent with the misrepresentation hypothesis.

Schipper (1989) provided a framework for thinking about the implications of research design choices in earnings management research. She defined the object of earnings management, explores the conditions that give rise to earnings management and provided a design for empirical tests for earnings management. She defined earnings management as “disclosure management” in the sense of purposeful intervention in the financial reporting process with the intention of obtaining some private gain. She argued that research findings related to earnings management so far are suggestive but not conclusive.

Dechow et al (1995) evaluated alternative models to detect whether in certain circumstances management uses the financial reporting process to manage reported earnings. They found that all models they considered appeared to produce reasonably well-specified tests for a random sample of event-years. However they found that the power of the test for earnings management was low for economically plausible magnitudes. Of all the models considered they found that the modified version of the model developed by Jones (1991) provided the most powerful test of earnings management. The findings also provided three major implications for research on earnings management. First was that regardless of the model used to detect earnings management, the power of the tests were relatively low for earnings management of economically plausible magnitudes. Secondly subtle cases of earnings management (such as one percent of total assets), require sample sizes of several hundred firms to provide a reasonable chance of detection. And finally, further research needs to be carried out to develop models that generate better specified and more powerful tests to detect earnings management.

2.2.2 Non-accounting Financial Disclosure

Another strand of the financial disclosure literature focuses on the inclusion of disclosures other than the underlying accounting numbers. Gibbins et al. (1990) theorised that firms

develop a stable, two dimensional internal preference for managing disclosures. The first dimension being the uncritical acceptance of the norms while the second being the propensity to seek firm-specific advantage in how disclosures are being made and developed. Norms are defined to be the informal or formal rules, procedures, and standards believed by the managers to apply to a particular disclosure issue. Twenty interviews were conducted:

- 1) To develop a vocabulary of constructs and variables to describe disclosure processes and
- 2) To identify relations amongst these constructs and variables.

They found five variables that influenced the set of disclosure outputs:

- 1) The firm's disclosure position
- 2) The antecedents of the firm's disclosure position
- 3) The specific disclosure issues faced by the firm
- 4) External consultants and advisors
- 5) Structure

The findings also suggested that the disclosure position (one of the variables that influences disclosure outputs), was influenced by several internal organisational factors such as the firm's history, its financial performance, and its CEO. Their theory suggested that there exists a relation between the changes in the above mentioned internal factors and changes in the firm's disclosure position. For example a change in CEO may precipitate a change in a firm's disclosure position.

2.2.3 Impression Management

The third strand of the financial disclosure literature is impression management which is the focus of this study. Impression management refers to management's attempts to manipulate the interpretation of disclosed data. The most popular form of impression management is the use/abuse of graphs. With impression management, firms use graphs contained within annual reports to present self-interested representations of corporate performance. This approach, serves to legitimise the actions of management and to convince the owners/shareholders that the company is being run competently and efficiently.

Managements of firms regularly use graphs to convey information to shareholders. Impression management with graphs occurs when managements use financial graphs in annual reports to display selected information and present information in ways to convey a favourable portrait of management in the annual report. Beattie et al. 1999 suggests that

Impression management using financial graphs occurs in three principal ways. First, management can decide, on an annual basis, whether or not to use graphs at all and, if used, which specific variables to graph. Second, graphical construction techniques can be used to manipulate the message conveyed (e.g. non-zero axes or altering a graph's shape). Finally, graph design features can be used to enhance the message conveyed by the accounting numbers in an unwarranted way (e.g. by unduly emphasising the colour of the last specifier (column) in a sequence). (Beattie and Jones, 1999. p.47)

One of the first studies on impression management was done by Johnson, Rice and Roemmich (1980) which considered the issue of distortions in graph construction. Johnson et al. (1980), examined 50 annual reports randomly selected from US Fortune 500 companies. These firms included 423 graphs in their annual reports over the period 1977-1978. Their findings suggested that at least one graph was incorrectly constructed in 42% of the annual reports and 29.5% of all graphs reviewed were constructed incorrectly.

Taylor and Anderson (1986) provide guidelines for the accountant on the construction of graphs. They suggest that graphs should be consistent with the financial data so as not to mislead users or violate certain auditing standards. One such suggestion was that the percentage change in graphs should reflect the percentage change in the underlying financial data. When this condition is not met, they said the graph suffers from distortion.

Steinbart (1989) subsequently studied the annual reports of 319 companies from US Fortune 500 companies. Steinbart (1989) examined both distortion and selectivity in annual reports. His findings suggested that distortion in the graphs of three key financial variables (sales, profits and dividends) exaggerated the magnitude of change by about 11%. He found an absolute distortion of greater than 10% in approximately 26% of the graphs of key financial variables. He also found evidence of selectivity in the use of graphs. His findings suggested that “good news” companies were more likely (74% compared to 53%) to include graphs of key financial variables in annual reports while “bad news” companies were more likely to

include distorted graphs. He defined “good news” companies as those having an increase in the net profit for the relevant year while “bad news” companies were those that had a decline in net profit.

Beattie and Jones (1992), examined the use and abuse of graphs in the UK. They used the 1989 annual reports for 240 UK listed companies and tested hypotheses relating to selectivity and distortion in the use of graphs. Selectivity refers to management systematically choosing to include or exclude graphs based on their relation to the firm’s performance. Similar to Godfrey et al (2003) “favourable selectivity” refers to inclusion of graphs where the performance trend on the financial variable is positive and deletion of graphs where the performance trend on the latter is negative. The opposite applies to unfavourable selectivity.

Distortion on the other hand is concerned with the extent to which graphs of financial variables accurately reflect the underlying data.

Beattie and Jones (1992) found that:

- Graphs were widely used;
- Companies with “good” performance were significantly more likely to use graphs;
- Measurement distortion was significant; and
- The effect of measurement distortion was generally to portray the company’s performance more favourably (p. 301)

Beattie and Jones (1999) extended the understanding of graphical reporting practices in the Australian accounting environment. Their study posed four objectives.

- 1) Establish the nature of graphs used in the annual reports of Australian companies,
- 2) Document and analyse cases where the principle of representational neutrality is violated with regards to selectivity, measurement distortion, orientation distortion and presentational aspects of graph use,
- 3) Determine whether differences exist in graphical reporting practices between the industrial and service, extractive, financial services and diversified sectors, and
- 4) Compare and contrast the results of this study with those of other Australian, USA, UK and Canadian practices.

The 1991 corporate annual reports for eighty-nine of the top hundred Australian listed companies were sampled. The sample was then categorised into four broad industrial categories that included industrial or service, extractive, financial services and diversified companies.

The results revealed that:

- 1) Eighty-nine percent of Australian companies graphed at least one performance or non-performance variable and that seventy-two percent of companies graphed at least one of the four generic key financial variables (sales, profit, earnings per share, dividends per share).
- 2) Significant associations were found between the inclusion of at least one Key Financial Variable (KFV) and the five-year profit and sales trend. Measurement distortion was also evident with 34.2% of the graphs containing material distortions. Profit and dividends per share were more than twice as likely to be favourably rather than unfavourably presented.
- 3) The findings reinforced the results of earlier studies. In United States of America (USA) and United Kingdom (UK) studies, strong evidence of selectivity was found. These results were consistent with this Australian study. However, selectivity and the level of mean measurement distortion were lower for Australian companies compared to the USA and UK.

Beattie and Jones (2000) investigated whether changes in companies' use of key financial graphs, at both the aggregate and individual company level are associated with corporate performance. A sample of 137 companies from the top 500 listed UK companies as at 31, March 1989 were selected. The annual reports for five years historical data (1988-1992) were analysed for each company.

The hypotheses tested were:

- 1) The aggregate incidence of KFV graphs over time are related positively to aggregate corporate performance, and
- 2) Individual company's changes in KFV graph use are related positively to the individual company's performance

The evidence supporting the manipulation hypothesis in relation to graph selectivity was very strong. The results suggested that income and EPS were the dominant determinants. Overall results clearly showed that companies were significantly more likely to include graphs in their annual reports when income and EPS increased.

Marther, Ramsay and Sherry (1996), studied the use and representational faithfulness of graphs in the 1991 and 1992 annual reports of 143 Australian listed companies and in the 1991 annual reports of 44 not-for-profit entities. Their findings were that:

- For the sample of 143 companies, no significant relation between the use of key financial variables in graphs and company performance was found . However when the sample was partitioned according to market capitalisation, smaller companies (those ranked 51-150), were significantly more likely to include graphs of key financial variables when their performance improved.
- Similarly no significant overall relationship between distortion and company performance was found.
- The not-for profit entities had very few graphs of key financial variables other than turnover which was also found to be insignificant.
- For not-for-profit entities, it was found that 51% of graphs were distorted by more than 5%, with 32% exaggerated and 19% understated.

Mather, Ramsay and Steen (2000) further examined the use and representational faithfulness of graphs used by Australian companies engaged in an initial public offering (IPO) of shares. They selected a total of 484 Australian IPO prospectuses and tested for selectivity and distortion in the graphs included in the prospectuses. The overall findings suggested that there was significant evidence of selectivity. However for post -1991 IPO's there was no such evidence. The change reflects the introduction of institutional and regulatory rules that reduced managements' discretion in the choice of graphs. However there was no significant evidence for distortion in graphs.

Arunachalam, Pei and Steinbart (2002) reported the results of three experiments that investigated the effects of improperly designed graphs on decision making. The results indicated that the decision makers' choices were indeed influenced by improperly designed graphs, even though such graphs also presented precise, accurate numeric data.

2.2.4 CEO Turnover and Financial Reporting

The impact of a change in top management of a firm has attracted research attention regarding both earnings management and impression management. Pourciau (1993) investigated the relation between top executive changes and discretionary accounting choices. A total of 73 companies that had executive changes were sampled. The results suggested that incoming executives record accruals and write-offs in a way that decreases earnings in the year of the executive change and increases earnings in the year after the change. However it was recognised that the research design did not account for the reported changes in earnings as a result of normal company performance since no control was established.

Murphy and Zimmerman (1993) examined and documented the behaviour of several financial variables surrounding CEO change and considered the implications of simultaneous changes among the variables. Their primary objective was to estimate the extent to which changes in discretionary variables were explained by poor economic performance rather than direct managerial discretion. The two discretionary decisions considered were:

- 1) Managerial horizon problem whereby departing CEOs in good performance firms, having knowledge of their pending retirement commit to investment decisions that further enhance short-term performance.
- 2) In firms having deteriorating economic health, the outgoing CEOs cover up the extent of their poor performance while the incoming CEOs then take a “big bath”.

A sample of 1063 CEO departures during the period 1971 – 1989 from Forbes 500 firms was considered. Eight financial variables were selected to describe the behaviour of CEOs surrounding their departures. The Eight variables considered were:

- 1) Research and Development
- 2) Advertising
- 3) Capital Expenditures
- 4) Accounting Accruals
- 5) Earnings
- 6) Sales
- 7) Assets
- 8) Stock Prices

The evidence presented suggested that firm performance and managers' exercise of discretion over financial variables were inextricably linked. They found that all financial variables fall surrounding CEO turnover. The findings suggested that generally poor performance is correlated with both CEO turnover and changes in discretionary variables. However there was little evidence to support the hypothesis that outgoing CEOs exercise their discretion over accounting or investment variables to increase their earnings based compensation in the year prior to, or in the year of their departure. But some evidence existed consistent with the hypothesis that the incoming CEOs take a big bath.

Across the Tasman, Wells (2002) investigated the extent of opportunistic earnings management in the periods surrounding CEO changes for Australian firms. A total of 100 of the largest Australian Stock Exchange (ASX) listed firms were identified from 30 June 1984 to 30 June 1994. Firms having CEO changes during the period were identified and a final sample of 65 CEO changes reported by 42 firms was selected. The evidence gathered provided little empirical support for CEOs undertaking upward earnings management either before or after a CEO change. However there was evidence to suggest that incoming CEOs take an 'earnings bath' in the year of the CEO change.

Godfrey, Marther and Ramsay (2003), tested a sample of 63 Australian firms for earnings and impression management surrounding a change in CEO. They developed hypotheses on the view that new CEOs have incentives to engage in earnings and impression management such that they attribute poor performance to their predecessors and claim to be a better manager. Accordingly they tested their predictions that there will be unfavourable earnings and impression management in the year of CEO change and favourable earnings and impression management in the year following the CEO change.

Their findings suggested that there is only limited evidence to suggest that incoming CEOs take a "big bath" while in the period following CEO change there existed evidence of favourable earnings management.

For impression management relating to selectivity in the inclusion of graphs there was no support for the hypothesis that unfavourable selectivity occurred in the year of CEO change,

while there was strong support for the hypothesis that favourable selectivity existed in the year subsequent to the change of CEO.

Impression management results relating to distortion revealed no evidence for favourable or unfavourable distortion of KfV in either the year of CEO change or the subsequent year.

3 Research Methodology

The current study extends the Godfrey, et al. (2003) study to the New Zealand environment. Specifically it tests:

Do CEOs engage in unfavourable impression management in the year of CEO change (year of change to the new CEO); and

Do CEOs engage in favourable impression management in the year following a CEO change (first full year of the new CEO)?

Impression management is measured using both:

- a. Selectivity, and
- b. Measurement distortion

3.1 Selectivity

Selectivity at its most fundamental level, involves the decision of whether or not to use graphs. If they are used, there may be further selectivity in the particular choice of the financial variables graphed (Beattie and Jones (1992), p. 291).

In this study, the presence or absence of the graph of a key financial variable (KFV) was tested for an association with performance (Beattie and Jones, 1992, 1999; Mather et al., 2000) across the sample for the years, t-1 (the last full year of the former CEO), t (the year of the change to a new CEO) and t+1 (the first full year for the new CEO). Consistent with earlier studies the key financial variables (KFV) examined were earnings, turnover, earnings per share and dividends per share. Selectivity was tested cumulatively and individually. The cumulative test considered all the KFVs combined, while individual tests considered each KFV separately.

3.2 Distortion

Measurement distortion is concerned with the extent to which the graphs of any of the four KfV deviate from a faithful representation of the underlying data. Tufte (1983) called this the “lie factor”. His “lie factor” was amended slightly in an accounting setting by Taylor and Anderson (1986) and Steinbart (1989) to produce a graph discrepancy index (GDI). The GDI was used in this study and was measured as follows:

$$GDI = 100 * ((a/b) - 1)$$

Where

a = percentage change depicted in the graph

b = percentage change in the underlying data

A GDI of 0% indicates that a graph represents the data faithfully while a GDI of anything greater than or less than 0% indicates positive or negative distortion.

3.3 Development of Hypotheses

The specific research questions addressed were:

Do CEOs engage in unfavourable impression management in the year of change to a new CEO (year t)

and

Do CEOs engage in favourable impression management in the first full year following the CEO change (year t+1)?

Based on prior literature and the associated research results it was expected that CEOs have incentives to engage in impression management. The predicted effect was that graphs are

used to imply poor or unfavourable performance by the predecessor CEO and subsequent improved performance by the new CEO. Hence it was expected that management would engage in unfavourable impression management in the annual reports in the year of CEO change (year t) and favourable impression management in the annual reports for the first full year for the new CEO (year $t+1$). The mechanism examined for conveying favourable or unfavourable impressions was the use of selectivity and/or distortion when presenting information using graphs in annual reports.

The nature of the impression management utilised was expected to be conditional on the firm's performance. If there are increases in KFVs (referred to as good results) in the year of the change in CEO, the selectivity of the graphs were expected to display results "unfavourably" and the opposite would apply when the KFVs decrease (referred to as poor results). In the new CEO's first full year after the change (year $t+1$), when the KFVs increase (good results), more graphs were expected to present the results "favourably". The opposite was anticipated when there is a decline in the KFVs (poor results).

Similarly, distortion was expected to enhance displays of poor performance in the year of CEO change (year t) and to understate good performance. But in the year following the change (the first full year for the new CEO ($t+1$)), it was expected that there would be a positive distortion of good news and an understatement of bad news.

Hence the hypotheses to be tested were as follows:

In the year of CEO change (year t):

H1a: Changes in the inclusion of Key Financial Variables graphed in the financial reports reflect unfavourable selectivity

H1b: Key Financial Variables are graphically distorted to give an unfavourable portrayal of firm's performance

In the year following the CEO change (year $t+1$):

H2a: Changes in the inclusion of Key Financial Variables graphed in the financial reports reflect favourable selectivity

H2b: Key Financial Variables are graphically distorted to give a favourable portrayal of firm's performance

3.4 Sample Selection and Data Sources

The data for this project was obtained from the annual reports of listed companies on the New Zealand Stock Exchange. The annual reports are available electronically in the NZ Datex Database. At the time the data was gathered, the NZ Datex Database had electronic copies of annual reports of listed New Zealand companies for the period 1996 to 2007. This became the sample frame.

The data collection involved firstly identifying corporations who had new CEO appointments during the 1997-2006 period. The CEO changes/appointments were obtained from the New Zealand Stock Exchange Announcements. The Stock Exchange announcements were analysed to determine when the change was effected. The year of change became year t for that firm. Once the effective change period was determined, for those corporations that had a CEO change/appointment, the annual reports of the year the appointment took place referred to as (t) , the year prior to the CEO change/appointment $(t-1)$, and the year subsequent to the year of CEO change $(t+1)$ were gathered. These annual reports were then analysed to gather selectivity and distortion measures. For selectivity these annual reports were examined to determine which of the KFVs graphs were displayed. The next step was to measure distortion in the graphs displayed by physically measuring the dimensions of the graphs and calculating the GDI for each.

A total of 82 announcements of a change in CEO were identified during the period 1997 to 2006. Of those announcements, two changes were excluded because the firms also changed their financial year dates, two changes were excluded because there were multiple intra-period CEO changes during the period considered, and one change was excluded because of

missing data. Hence, the total number of changes considered for analysis was 77. Table 1 provides the reconciliation of the sample.

Table 1: Reconciliation of Sample

Total Number of changes / new appointment of CEOs	82
Less: Change not included due to change in financial year dates	(2)
Less: Change not included due to multiple intra-period changes of CEOs	(2)
Less: Change not included since one of the periods data not available	(1)
Total Changes included in sample	77

4 Results

Unfortunately the small number of CEO changes observed in the study period precludes testing for statistical significance of the results obtained. Consequently only qualitative results are presented.

4.1 Selectivity

Table 2 reveals the frequency of graphs displaying key financial variables for the final full year of the former CEO (t-1), the year of change to a new CEO (t) and the first full year for the new CEO (t+1). The total number of graphs in year t+1 was 89 compared to 78 in t and 76 in the year t-1. Thus the incidence of graphs increased for all three reporting periods.

Table 2: The Frequency of Graphs Displaying Key Financial Variables

The Key Variables	Last Year of the Former CEO (t-1)	Year of the Change to the New CEO (t)	First Full Year of the New CEO (t+1)
Earnings	32	29	35
Turnover	17	21	28
Earnings per share	15	14	13
Dividends per share	12	14	13
Total	76	78	89

In order to determine whether there exists impression management using selectivity, the inclusion of graphs must be related to firm performance. Table 3 (Panels A and B) displays the frequency of graphs for the individual KFVs when the KFVs increase or decrease during years t-1, t, and t+1.

Table 3: Frequency of Graphs Displaying Key financial Variables when the Key Financial Variables Increase or Decrease

Panel A			
<i>The frequency of Graphs Displaying Key Financial Variables when the Key Financial Variables Increase</i>			
The Key Variables	Last Year of the Former CEO (t-1)	Year of the Change to the New CEO (t)	First Full Year of the New CEO (t+1)
Earnings	23	17	25
Turnover	15	15	19
Earnings per share	8	11	4
Dividends per share	10	11	10
Total	56	54	58
Panel B			
<i>The frequency of Graphs Displaying Key Financial Variables when the Key Financial Variables Decrease</i>			
The Key Variables	Last Year of the Former CEO (t-1)	Year of the Change to the New CEO (t)	First Full Year of the New CEO (t+1)
Earnings	9	12	10
Turnover	2	6	9
Earnings per share	7	3	9
Dividends per share	2	3	3
Total	20	24	31

From a cumulative perspective, when there were increases in the KFBs, the total frequency of graphs for all KFBs in the years of change to a new CEO was 54 compared to 56 in the last year of the former CEO. Overall this suggests that good results have been “unfavourably” displayed. When there were increases in the KFBs, the total frequency of graphs in the first full year for the new CEO was 58 compared to 54 in the year of change to new CEO implying that good results have been “favourably” displayed.

When there were decreases in the KFVs, there were more graphs (24 in total) in the year of the change to the new CEO when compared to the last full year of the former CEO (a total of 20) suggesting that poor results have been “favourably” displayed. However the total frequency of graphs in the first full year of the new CEO was 31, which is 7 more when compared to the year of the change to the new CEO which is contrary to the hypothesis.

The next section examines the presentations for the individual key financial variables.

4.1.1 Earnings

When earnings increased in the year of the change to a new CEO, the frequency of earnings graphs decreased from 23 to 17 and in the first full year of the new CEO, the frequency of graphs increased from 17 to 25. This is consistent with the hypothesis that good performance is de-emphasised in the year of change to the new CEO and emphasised in the first full year of the new CEO.

When earnings decreased, the frequency of graphs in the year of the change to a new CEO (t) increased from 9 in the prior year to 12, while in the first full year of the new CEO (t+1) it declined from 12 to 10. This is also consistent with the hypothesis that poor results are emphasised in the year of the change to the new CEO and poor results are de-emphasised in the first full year of the new CEO.

4.1.2 Turnover

Turnover data was inconclusive when turnover increased in the year of the change to the new CEO, but it was supportive of the hypothesis in the first full year of the new CEO. When turnover declined the hypothesis was supported in the year of the change to a new CEO, but the data is inconsistent with the hypothesis in the first full year of the new CEO.

4.1.3 Earnings per Share

All the frequency data for earnings per share was contrary to the hypothesis.

4.1.4 Dividends per Share

When dividends per share increased, the data for both periods were inconsistent with the hypothesis. When there was a decline in dividends per share, the data supported the hypothesis for the year of the change to the new CEO (year t), but it was neutral with respect to the first full year of the new CEO (year t+1).

4.2 Distortion

Table 4 provides the frequency details for distortion in graphs when the KFVs increase for the years (t+1) and (t). The results reveal that when the KFVs increase, the earnings and turnover graphs were more likely to display exaggeration in the first full year of the new CEO compared to the year of the change to a new CEO. The results also reveal that when the KFVs increased, earnings, turnover and dividends per share had more graphs depicting understatement in the years of change compared to the first full years of the new CEO. When all KFVs were considered in total, it was observed that when the KFVs increased, the percentage of graphs exaggerating the KFVs in the first full year of the new CEO (t+1) was much higher (76%) than the percentage (61%) in the year of the change to a new CEO (t).

Table 5 provides the frequency details of distortion in graphs when the KFVs decreased. When the KFVs decreased, only earnings had fewer understatement of graphs in the first full year of new CEO (t+1) compared to the year of change to the new CEO (t).

However, when there was a decrease in KFVs, more graphs were exaggerated (52%) in the year of change to the new CEO than in the first full year of the new CEO of 48%. However, a

marginally greater percentage was understated in the year t+1 (45%) than the 44% in the year of the change to the CEO.

Table 4: Frequency of Graphs Displaying the Distortion of Key Financial Variables when the Key Financial Variables Increase

The Key Variables	Year of the Change to the New CEO (t)			First Full Year of the New CEO (t+1)		
	Exaggerated	Understated	None	Exaggerated	Understated	None
Earnings	10	7	0	19	4	2
Turnover	9	6	0	16	3	0
Earnings per Share	9	2	0	2	2	0
Dividends per Share	5	5	1	7	3	0
Total	33	20	1	44	12	2
Percentage	61%	37%	2%	76%	21%	3%

Tables 6 and 7 present the proportion of graphs exhibiting positive and negative distortion conditional on whether the underlying key financial variables increased or decreased.

When the KfVs increased, in (t+1), the exaggeration, measured by positive GDI was higher (83%, 83% and 70% respectively for earnings, turnover and dividends per share) compared with the year of the change to the new CEO (59%, 60% and 50% respectively). When

turnover decreased, the year of the change to a new CEO had a greater proportion of exaggeration (67% positive GDI) than the full first year of the new CEO (44% positive GDI)

Table 5: Frequency of Graphs Displaying the Distortion of Key Financial Variables when the Key Financial Variables Decrease

The Key Variables	Year of the Change to the New CEO (t)			First Full Year of the New CEO (t+1)		
	Exaggerated	Understated	None	Exaggerated	Understated	None
Earnings	6	5	1	5	4	1
Turnover	4	2	0	4	5	0
Earnings per Share	1	2	0	4	4	1
Dividends per Share	2	1	0	2	1	0
Total	13	11	1	15	14	2
Percentage	52%	44%	4%	48%	45%	7%

Table 6: Proportion of Graphs Exhibiting Positive or Negative GDI for Earnings and Turnover

<i>Panel A:</i> <i>Earnings</i>	Year of the Change to the New CEO (t)		First Full Year of the New CEO (t+1)		Consistent with hypothesis?
	Positive GDI	Negative GDI	Positive GDI	Negative GDI	
Earnings Increase	59%	41%	83%	21%	Yes
Earnings Decrease	55%	45%	56%	44%	No
<i>Panel B:</i> <i>Turnover</i>					
	Year of the Change to the New CEO (t)		First Full Year of the New CEO (t+1)		Consistent with hypothesis?
	Positive GDI	Negative GDI	Positive GDI	Negative GDI	
Turnover Increase	60%	40%	83%	27%	Yes
Turnover Decrease	67%	33%	44%	56%	Yes

Table 7: Proportion of Graphs Exhibiting Positive or Negative GDI for Earnings per Share and Dividends per Share

<i>Panel A:</i> Earnings per share	Year of the Change to the New CEO (t)		First Full Year of the New CEO (t+1)		Consistent with hypothesis?
	Positive GDI	Negative GDI	Positive GDI	Negative GDI	
Earnings per Share Increase	82%	18%	50%	50%	No
Earnings per Share Decrease	33%	67%	50%	50%	Yes
<i>Panel B:</i>					
<i>Dividends per Share</i>	Year of the Change to the New CEO (t)		First Full Year of the New CEO (t+1)		Consistent with hypothesis?
	Positive GDI	Negative GDI	Positive GDI	Negative GDI	
Dividends per Share Increase	50%	50%	70%	30%	Yes
Dividends per share Decrease	67%	33%	67%	33%	No

Additional analysis for distortion is provided in Table 8. It provides the mean graph discrepancy index (GDI) for the changes in the KFVs for the first full year of the new CEO and the year of the change to the new CEO.

Table 8: Mean Graph Discrepancy Index for each of the Key Financial Variables for each of the Periods

Mean Graph Discrepancy Index (GDI)	Year of the Change to the New CEO (t)	First Full Year of the New CEO (t+1)	Consistent with Hypothesis?
Earnings Increase	27.36	128.36	Yes
Earnings Decrease	-5.66	-52.42	Yes
Turnover Increase	115.1	59.69	Yes
Turnover decrease	53.69	-91.62	Yes
Earnings per Share Increase	-23.01	5.1	Yes
Earnings per Share Decrease	-9.39	-31	Yes
Dividends per share Increase	3.13	88.41	Yes
Dividends per share Decrease	-14.86	5.08	No

The results show that when earnings increased, the mean GDI in t+1 was 128.36 compared to 27.36 in the year of the change to the new CEO. This is consistent with exaggerating earnings in the first full year of a new CEO compared to the year of the change in CEO. On the other hand when earnings decreased, the GDI in t+1 was -52.42 compared to -5.66 in the year of the change to the new CEO. This is consistent with the hypothesis that the new CEO understates the bad earnings news graphically in his/her first full year relative to the year of change.

When turnover decreased, there was an understatement (mean GDI = -91.62) in the first full year of the new CEO and an exaggeration (mean GDI = 53.69) in the year of change to the new CEO. This is consistent with the hypothesis. However when turnover increased, the mean GDI in the first full year of the new CEO was 59.69 which suggests exaggeration but it was lower compared with a GDI of 115.1 in the year of change to the new CEO. So the hypothesis is not supported.

When earnings per share increased, there was an exaggeration (mean GDI = 5.1) in year t+1 while there was an understatement (mean GDI = -23.01) in year t. When earnings per share decreased, there was an understatement (mean GDI = -31) in the first full year of the new CEO (t+1). These results are consistent with the hypothesis.

For dividends per share, the results are mixed. When there was an increase, the mean GDI was 88.41 in year t+1 suggesting exaggeration for the first full year of the new CEO and consistent with the hypothesis. However in the year of change to the new CEO, the GDI was 3.13 which is inconsistent with the hypothesis. The results of GDI when dividends per share decreased are inconsistent with the hypothesis since in year t the GDI was negative while in the year t+1 it was positive.

Tables 9 and 10 provide more descriptive statistics for each of the KFBs for the year of change to the new CEO and the new CEO's first full year.

Table 9: Descriptive Statistics for Earnings and Turnover

	N	Mean GDI	Standard. Deviation	Minimum	Maximum
Earnings in year t, Increase	17	27.3641	103.31250	-83.46	399.35
Earnings in year t+1, Increase	25	128.3612	420.05566	-133.38	2005.26
Earnings in year t, Decrease	12	-5.6575	72.94821	-207.79	116.67
Earnings in year t+1, Decrease	9	52.42	138.03663	-358.14	36.59
Turnover in year t, Increase	15	115.0700	360.72668	-39.79	1408.77
Turnover in t+1, Increase	19	59.6884	98.45716	-16.24	351.80
Turnover in t, Decrease	6	53.6883	135.47555	-89.87	305.26
Turnover in t+1, Decrease	9	-91.6178	225.03720	-671.43	40.63

Table 10: Descriptive Statistics for Earnings per Share and Dividends per Share

	N	Mean GDI	Standard Deviation	Minimum	Maximum
Earnings per share in t, Increase	11	-23.0109	204.01500	-622.88	110.66
Earnings per share in t+1, Increase	4	5.0950	93.69983	-89.64	125.47
Earnings per share in t, Decrease	3	-9.3900	11.71248	-21.97	1.20
Earnings per share in t+1, Decrease	9	-31.0067	63.23287	-168.59	23.20
Dividends per share in t, Increase	11	3.1318	11.83320	-13.04	29.87
Dividends per share in t+1, Increase	10	88.4110	245.44434	-45.50	776.32
Dividends per share in t, Decrease	3	-14.8600	44.11203	-65.71	13.13
Dividends per share in t+1, Decrease	3	5.0800	10.39795	-3.43	16.67

4.3 Discussion of Results

4.3.1 Selectivity

When firms have CEO changes, the incoming CEOs were predicted to have incentives to highlight poor performance by the previous management by showing graphs of poor results while dropping graphs that show good results. Hence, when the key financial variables increase, it was hypothesised that there would be fewer graphs in the year of change to the new CEO than the prior year. Alternatively when the key financial variables decrease, the year of change to the new CEO (t) should have more graphs than the prior year. The results supported the hypothesis for the key financial variables of “earnings”, “turnover” and “dividends”. KFVs also cumulatively supported Hypothesis 1a where the number of graphs in the year of the change to a new CEO (24 graphs) is higher than the number of graphs in the prior year.

It was hypothesised (Hypothesis 2a) that when the key financial variables increase, the first full year of the new CEO should have more graphs than in the year of the change to a new CEO. The results for earnings and turnover are consistent with the hypothesis because the number of graphs for earnings and turnover are higher in year t+1 (25 and 19 respectively) compared to year t (17 and 15 respectively). Alternatively, when there was a decrease in KFVs (poor results), the number of graphs in t+1 should be less than the number of graphs in year t. The results for earnings are consistent with this hypothesis since when there was a decrease in earnings, the number of graphs in the first full year of the new CEO (t+1) is less (10 graphs) compared to the year of the change to a new CEO (12 graphs).

The selectivity results reveal that earnings and turnover were dominant in supporting the impression management hypothesis. This result is consistent with the results of Beattie and Jones (2000) study.

4.3.2 Distortion

In the year of the change to a new CEO, it was hypothesised (Hypothesis 1b) that the key financial variables would be graphically distorted to give an unfavourable portrayal of a firm’s performance. Hence when there was an increase in the KFVs (good results), graphs were expected to be distorted by understating performance as measured by negative GDI. Earnings per share was the only variable that was consistent with Hypothesis 1b. When there was a decrease in KFVs, graphs were expected to be distorted by exaggerating poor

performance as measured by positive GDI. Turnover was the only variable that had a positive GDI in the year of change to a new CEO. Hence the support for the hypothesis is weak.

It was also hypothesised that in the first full year of the new CEO, key financial variables would be graphically distorted to give a favourable portrayal of the firm's performance (Hypothesis 2b). As such when there was an increase in the key financial variable, graphical performance should be exaggerated as measured by a positive GDI. In the first full year of the new CEO all KFVs showed positive GDI when the key financial variables increased. These results support the hypothesis that there is exaggeration of KFVs when the KFVs increase. The hypothesis also suggested that when there was a decrease in the KFVs, the new CEO would understate them in year $t+1$, as measured by negative GDI. Earnings, turnover and earnings per share display negative GDI providing further support for Hypothesis 2b.

5 Conclusion

5.1 Summary & Implications

This study focussed on whether new management uses impression management to influence the presentation of performance in the firm's annual reports surrounding a changeover in CEO. The study considered the use or non-use of graphs for presenting information as well as distortions in the graphs.

Only the presentation of graphs for earnings was consistent with the existence of impression management using selectivity. The graphs for the other variables examined were not. Distortion in turnover graphs was consistent with impression management, both when turnover increased and decreased. However the results for earnings and earnings per share were consistent with the impression management only when they declined. In all cases the small size of the sample precluded tests for statistical significance.

Hence overall there is some evidence for impression management, but it is not strong. Thus impression management as implemented through graphs does not appear to be used as widely in New Zealand as in other jurisdictions where it has been studied.

5.2 Limitations

The primary limitation in this study is the sample size. The sample size, however, was consistent with the size of the securities market in New Zealand. However the sample was not large enough to produce results that could be subjected to statistical analysis. Also in all cases even the individual KfVs data size was too small to test for statistical significance of the results.

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