

FRED H.M. GERTSEN

# Riding a Tiger without Being Eaten

How Companies and Analysts  
Tame Financial Restatements and  
Influence Corporate Reputation



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Hoe bedrijven en analisten  
Financial Restatements temmen en  
de ondernemeningsreputatie beïnvloeden

PROEFSCHRIFT

ter verkrijging van de graad van doctor aan de  
Erasmus Universiteit Rotterdam  
op gezag van de rector magnificus  
Prof. dr. S.W.J. Lamberts  
en volgens besluit van het College voor Promoties.

De openbare verdediging zal plaatsvinden op  
dinsdag 16 juni 2009 om 16.00 uur

door  
Hendrik Frederikus Maria Gertsen  
geboren te Winterswijk



PROMOTIECOMMISSIE

Promotor: Prof.dr. C.B.M. van Riel

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Prof.dr. J. Kleinnijenhuis

**Erasmus Research Institute of Management – ERIM**  
**Rotterdam School of Management (RSM)**  
**Erasmus School of Economics (ESE)**  
Erasmus University Rotterdam  
Internet: <http://www.erim.eur.nl>

**ERIM Electronic Series Portal:** <http://hdl.handle.net/1765/1>

**ERIM Ph.D. Series Research in Management, 171**  
Reference number ERIM: EPS-2009-171-ORG

ISBN 978-90-5892-214-4

**DESIGN**

Cover: B&T Ontwerpen advies, [www.b-en-t.nl](http://www.b-en-t.nl)  
Lay-out: 2 op 10B - Femke van der Stoep  
Cover Illustration: Tsongkhapa as a Mahasiddha (Tibet, ca. 19th century), pigments on cloth,  
29,5 x 19 inches / collection Rubin Museum of Art, New York

**PRINT**

Haveka [www.haveka.nl](http://www.haveka.nl)

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# Acknowledgments

Boundary spanning can only be achieved if you push yourself, and a few others, to the limits! Leaving the comfort zone of your own knowledge and skills and traversing safely into other domains of expertise requires a coach you can trust, has enough patience, and is willing to guide you into these new territories. Cees van Riel, my promoter, has been that person. Time and time again, and without any signs of fatigue, he absorbed the accounting jargon I nearly drowned him in, effortlessly made sense of my typical accountant's/consultant's reasoning processes, and made me aware of how research is conducted in the academic realm. Cees, I vividly remember the first session we had many years ago, and those that have followed since. I have kept all your mentoring notes, drawings, diagrams and words written and consider them proof of the best teaching and coaching capabilities – thank you for sharing your wisdom with me and for removing some of my own professional blinders. You moved me to explore a new field with no limits of wonder.

Scientific work in behavioural sciences requires a sound knowledge and application of research standards, methodologies and statistical data processing. For me this meant going way back in memory to the dark ages of the 1970s, when I dealt with Boolean algebras, some actuarial instruction, and of course, general application of correlation techniques. I clearly was in need of somebody who has mastered all the developments since – both in terms of mathematical and statistical insights, scientific methods, and also regarding software tools. I have been very fortunate to be able to rely on Guido Berens' help and relentless education; without his sharp brain and endless energy, I would have had great difficulty in accomplishing these studies – Guido, thank you very much.

Erasmus protocol only allows to name members of the so-called 'kleine commissie' on the official pages of the dissertation. I would like to thank those members for their constructive comments which helped me to improve the dissertation. I also do want to express my sincere gratitude to Prof J.C.A. Gortemaker, Prof.dr. J.A. van Manen and

Prof.dr. C.G. Koedijk for their participation in this dissertation process. They have read the thesis and have promised to contribute to a lively debate on 16 June. Professors, I look forward to that session and thank you for keeping me alert!

I would also like to thank all the members of the Erasmus Corporate Communication Centre for their feedback and positive comments during the various progress meetings we had on my research efforts. Mignon, Patricia, Johan, Edwin, and all the others, thank you for being optimistic and trying to grasp this strange world of accountancy. The Corporate Communication Centre is well managed by Joke van Oost who kept all the administrative procedures in check – Joke, I am grateful for that support and please continue to keep a close eye on Cees, including his travel arrangements!

In the course of approximately six years, I have been blessed with personal research assistants who all believed in my project and were not afraid of making suggestions. Rachel Blok, Manon and Steven Ouwerkerk, and finally Heleen van Schooneveld, you all made sure I thoroughly kept enjoying my academic efforts next to my ‘normal’ job – without your extensive help and energy this venture would never have come to an end! During the first study Rachel kept a tight reign on the four content coders, who fortunately worked well together: Fleur, Christian, Marien and William, thank you for your perseverance and keeping your coding efforts efficient and reliable.

Throughout the studies two knowledge/information providers warrant special mention. Nowadays, academic research would be impossible (or highly inefficient) without direct access to the vast domains of scientific knowledge embedded in huge electronic repositories. I am very grateful to Eduard Cohen of Elsevier for his continuous support on my project. Next to being an excellent and reliable friend, travel guide and boatman (less so), access he gave me to Scopus and Science Direct facilitated my dipping into other knowledge domains. The multi-disciplinary nature of my investigations would have been impossible without these best-in-class search and support engines – Eduard and Elsevier, thank you. Eduard, I owe you a few Amarones (not to be confused with Amazonas).

Access to scientific papers, without a gateway to actual data, would have turned me even more into a scholarly recluse. Luck has it that our Rotterdam office was

neighbours with Thomson Financial (now Thomson Reuters). Throughout my studies, Chris Voogd of Thomson provided my research team with access to their databases containing analysts' earnings estimates, reports, addresses and much more. I am also grateful to Glass, Lewis & Co., for providing me with their restatement databases, essential for Study 2. Similarly, Factiva was very helpful by contributing media analyses of the cases we examined in Study 1. Again, without that support, my endeavours would have stalled early. To ensure that all data made sense and was 'connected', I was lucky enough to receive the tremendous help of brilliant hardware and software technicians Bas and Chris Groenveld. And, yes, we should invest in a company combining automated pattern recognition and using the semantic engines we all worked on and developed – both Thomson and Elsevier could be very interested.

Composing academic prose requires special editorial skills. I am very grateful to Mike Lyonette, who helped me in structuring the analysts' questionnaire and making the questions as succinct as possible. Getting a questionnaire drafted is one thing, getting it working interactively in real-time on the Internet is something else! Elseke Hooglugt and Bas van de Veldt provided excellent hands-on support. To corroborate findings of these studies, Dennis Larsen of Acuityinsight, proved to be a master of seduction. In a span of just over three weeks he managed to get hold of some 25 analysts. His persistence, energy and skipping a few nights permitted successful elicitation of analysts' views in a highly efficient manner.

Next, I want to express special acknowledgement to Alicia Korney who provided editing support throughout the final drafting of this thesis, right up to and including these words of gratitude (which of course I drafted). Alicia was empowered to purge words from my usual vocabulary, and she did! She deleted: pressvertuosity, pressversity and media-hyp-hoptics to mention just a few!

Obviously, and last but not least, I am highly indebted to my family members and their friends. (Please note: The following are thanked in order of ascending age – just to avoid arguments.) My youngest son Bob, who together with his friend Thomas Douqué, filled more than 1,500 envelopes with invitation letters to analysts, stickered them and glued them tight (without mouthwash) – well done! Nicole, my youngest daughter, was my wizard at home, and as usual is the only one capable of providing a

double check on the statistics and mathematics embedded in my studies, in particular the correlation algorithms carefully crafted by Guido. Emma, teaming up with friend Nine Weijenborg, made sure that the address databases of analysts were reliable and included postal codes. She also drafted the three format pictures used in the analysts' survey. Fredric, and his start-up company beam<sup>2</sup>, developed the analysts' introduction DVD – writing the script, shooting the video movie, and making the final cuts. Thereafter, he also set up the webpage dedicated to this study (please visit: [www.beam2.nl/fgertsen](http://www.beam2.nl/fgertsen)).

Willemijn, you are the last who touched this document, but were the first to get involved in this project. Therefore, you have had to deal with 'it' and me (as recluse in research mode) for a rather long period. Thank you for your patience and support throughout this project, and in particular during the last few weeks. By now I also know a bit of what it takes to make a book – which is very different from keeping them!

Fred Gertsen



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# Introduction and theoretical background of dissertation

This dissertation consists of five chapters. The first chapter provides a brief historical overview of financial reporting fraud, describing the financial statement restatement phenomenon and placing it within the context of accounting standards focused on the proper handling of such errors in financial statements. Correction of accounting and/or financial reporting errors in such situations involves numerous technical concepts, and, therefore, we will summarize a few salient points necessary to understanding this topic's significance. In addition, Chapter 1 will provide a summary of restatement studies by regulatory bodies, and will also provide an overview of the various perspectives from which academics have historically studied the restatement phenomenon, including the often-devastating effects on share price and corporate reputation. The chapter concludes with the overall research question and introduces sub-research questions for the three empirical studies which we conducted.

Chapter 2 presents our first study and provides a model for gauging restatement severity. In this study we aim to examine some of the factors clouding corporate transparency regarding restatements once they are announced. We will dive into the discourse between firm executives and financial analysts, and attempt to draw out the forces obscuring restatement disclosure as well as what actions can be taken by management to improve corporate communication during a restatement situation.

Chapter 3 describes our second study, which focuses on the factors that cloud analysts' perceptions of CEOs in restatement situations. We describe a survey among analysts that measures their perceptions of CEO behaviour and its causes and consequences, such as CEO earnings-management pressures, executive job demands, CEO dominance and competence. We use this survey to test a model of the factors that determine analyst perceptions of CEO behaviour before and during a restatement crisis.

Chapter 4 contains the details of our third study and complements Study 2. We engaged analysts in interviews as a means to corroborate the findings of the first

two studies, and to elicit possible explanations directly from them as to how and why analysts have a bounded awareness. We also use the interviews to share with analysts the factors that play into the development of biases, and explore with them some of the important endogenous and exogenous factors determining their perceptions of CEO behaviour in restatement situations.

The final section, Chapter 5, summarizes our three studies and provides answers to our principal and secondary research questions. Next, we provide in more detail our conclusions on which factors obscure restatement perceptions, alongside what consequences this has for company executives and analysts following the restating firms. In addition, on the basis of our primary research findings from each of the three studies, combined with an overview of how other gatekeepers are affected by so-called ‘board-capture’ mechanisms and human biases, we will discuss the implications our findings have for the current gatekeeper and governance paradigm. The chapter also includes recommendations for improving the effectiveness of the current gatekeeper monitoring function, and finishes with a summation of the theoretical and managerial contributions of our studies, address some of its limitations, and offers a few suggestions for future research.



# Chapter 1

## **1.1 Introduction and Historical Overview of Financial Reporting Fraud**

### **1.1.1 INTRODUCTION**

An avalanche of accounting scandals, starting in the beginning of this century, and extending to the recent global credit crisis and massive private frauds, have eroded public trust in large companies, the banking institutions, and the financial system as a whole. In all instances, these organizations were supervised and/or regulated, and had numerous watchdogs tasked with monitoring the reliability of not only their business models, but the soundness of their personal ethics as well.

Many of the earlier accounting scandals were accompanied by financial statement restatements, in which previously approved and adopted financial statements were publicly adjusted. In most cases, these restatements triggered the discovery of significant internal control and governance problems within these companies, causing substantial damage to corporate reputation and market value, and occasionally, leading to a historic bankruptcy or two (e.g. the demises of Enron Corp. and WorldCom Inc.). While the restatements themselves were obviously not directly responsible for such devastating consequences, as mentioned above they did set a chain of events in motion that eventually led to a total loss of investor confidence in management. In the period extending from 2001 to 2007, the incidence of restatements substantially increased. In 2008, that figure dropped significantly; however, the current credit crisis is expected to generate a new wave of restatements stemming from anticipated corrections of errors, mostly tied to the valuation of complex financial products.

### 1.1.2 HISTORICAL OVERVIEW

The separation of ownership from internal controls and management is considered to be at the heart of many of the corporate governance breakdowns seen over the last 50 years, including the phenomenon of financial reporting fraud. Shareholders, put at great distance by proxy and voting requirements, have no effective monitoring tools or corrective measures at their disposal – they are left only to watch, despair and try to recoup their losses through the avenue of litigation. Meanwhile, executives are allowed wide-ranging strategic freedom, predominantly operating in an irrational and biased ‘short-term memory’ mode, and oftentimes neglecting long-term and responsible value creation in the process (Paredes, 2005).

Gatekeepers<sup>1</sup> - who are not aligned, under-educated for their roles, and mainly operate according to their own agendas - are often exposed to conflicts of interest and tend to fail in their monitoring roles. Corporate gatekeepers<sup>2</sup> include auditors, credit rating agencies, financial analysts, lawyers, directors, investment advisors, and underwriters. In the public domain, it is argued that corporate gatekeepers tend to focus on their own professional standing, losing sight of the larger responsibility to

<sup>1</sup> The term ‘gatekeeper’ is not simply an academic concept. In Securities Act Release No. 7870 (Securities Act Release, 2000), the SEC recently noted that ‘the federal laws make independent auditors “gatekeepers” to the public securities markets.’ This is further discussed in a speech by SEC Commissioner Hunt (Hunt, 2001).

<sup>2</sup> For more theoretical consideration of the concept of the corporate gatekeeper, see R. Kraakman, Corporate Liability Strategies and the Costs of Legal Controls (Kraakman, 1984).

look after the interests of stakeholders (Fox, 2008). These factors are the foundation on which an overview report of the last 50 years in US financial reporting is based. Prepared by the American Academy of Arts and Sciences, 'Restoring Trust in American Business' (Lorsch, Berlowitz & Zelleke, 2005), reveals a variety of corporate governance breakdowns mainly resulting from overconfident, 'me-first' executives, and the fundamental lack of countervailing power that rests with gatekeepers. The report also details:

- Uncontrolled executive powers and management discretion that originated in the 1950s, leading to societal concerns centered on wealth distribution. Antitrust measures preventing ever-larger conglomerates from achieving a stranglehold on the marketplace in the 1950s and 1960s was the regulatory answer to such power accumulation.
- Expansion for the sake of size (sales), and not of profits. Executives looked to maximize their power and prestige in the 1960s and 1970s, leading to the introduction and development of 'behavioural' concepts that were expected to explain decision making by executives, such as satisficing, bounded rationality and behavioural theory of the firm (in economic theory).
- Conglomerates in the 1960s and 1970s were seen as a possible solution to the agency problem; it became commonplace for managers at head offices to monitor and control operating managers.
- Hostile takeovers and competitive failures in the 1980s aided the ascent of Japan and Europe. Conglomerates and their corresponding bureaucracies were seen as the culprit. A rise of leveraged buyouts, which effectively made managerial commitments to stakeholders unreliable, resulted in heavy critiques of US capitalism.
- Insider trading in the 1980s gave birth to the analysts' (investment banking) collusion model (see Partnoy, *Infectious Greed*, 2003).
- Excessive executive pay in the 1990s gave rise to 'the number's game' – the interaction between executives and analysts to beat market expectations; executives tested the limits of their power, and found that they could cash in on their position without recourse, or countervailing actions by gatekeepers (see Berenson, *The Number*, 2003).
- Financial reporting scandals caused by earnings management and perverse

executive rewards culminated in the first of a series of corporate failures in early 2000; revelations of fraudulent behaviour at Enron soon gave way to similar industry-rocking revelations at WorldCom, Tyco, Ahold and many more, as will be described further.

The report also provides insight into the ethical culture that contributed to the stock options backdating scandals in 2005-2006 and the credit crises and bank failures of 2008-2009, which resulted from excessive leveraging couple with the unhealthy and 'off-balanced' risk appetite of bankers.

Most of the above historical evidence of corporate misbehaviour in the last half-century can be traced to greed (for money and power), and self-enrichment carried out by executives who were empowered to manage the world's corporate assets. In fact, greed, bad faith and mistrust, appear to have a much longer track record in the author's home country, the Netherlands.

*Tulipmania* by Goldgar (2007) tells of speculation schemes involving tulip bulbs in the 1630s, an example of easily-convinced crowds and the dangers of financial risk taking. Goldgar demystifies the tulip 'bulb bubble' as well as subsequent panics over falling prices, by revealing that the root causes of tulipmania were loss of trust, concerns around capitalistic forces, and a rapidly-changing society. Goldgar repeatedly describes the association between obscurities of 'value-relevant information', and the societal mistrust that culminated in panic. Deceit carried out by the so-called 'bloemisten' (florists) is nicely illustrated, and was recognized by the pamphleteers (the media) of those days. Goldgar writes: 'When pamphleteers criticized the inability of bloemisten to judge value, some made a connection between this kind of monetary confusion and a fundamental confusion about trust' (p. 266). In all, quite comparable to the notion that in the build up to the more recent credit crisis, bankers allegedly did not understand the pricing (nor value), of complex financial derivatives. As Bernard Mandeville (1670-1733), born in Rotterdam and educated at the Erasmus school, wrote: 'The vices, and only the vices, are the building blocks of good social order.' In 1714 he published his famous *Fable of the Bees: or, Private Vices, Public Benefits*, in which he writes that enjoyment of the 'public benefits' of power, population, and prosperity, requires unshackling the 'private vices' of fraud, avarice

and pride. Mandeville writes: 'The seven deadly sins may mean moral ruin, but they turn out to be economic salvation.' We now know that the last only holds to a certain extent.<sup>3</sup>

Greed, as a vice and as a driver of power in society, has been studied extensively as playing a tremendous role in the history of the past 3,000 years. Balot (2001), in his *Greed and Injustice in Classical Athens*, mentions that authors such as Solon, Thucydides, Herodotus and Plato frequently commented on greed in the context of social disruption and distributive fairness between the upper and lower classes. In his introduction, Balot shows that critiques of greed are woven into the economic and political history of the past 25 centuries, arguing that the distributive justice of economics leads to the dominant position in some current capitalistic societies, e.g. Gordon Gekko's infamous proclamation that, 'Greed [...] is good' in the 1987 film *Wall Street*. Newhauser (2000), in *The Early History of Greed: The Sin of Avarice in Early Medieval Thought and Literature*, shows that various kinds of greed in the period spanning from the First through the Tenth centuries were considered serious vices in society. Remediation of these sins was the driving force for those trying to convert pagan materialists to the Christian faith. In *Avarice & the Avaricious* (originally by Jahiz, born in southern Iraq around 776, translator Colville, 1999), author Jahiz mentions the high degree of social discrimination between the conquering Arabs and the Persian tribal and clan-based inhabitants. This leads Jahiz to treat avarice sometimes as a vice, and on other occasions as a virtue, but always attributes greed to be a universal human characteristic. A more recent book, *Corporate Scandals, the Many Faces of Greed: The Great Heist, Financial Bubbles, and the Absence of Virtue* by Gray, Frieder and Clark Jr. (2005), finds the authors providing a short history of business scandals, starting with The Mississippi Company Bubble of France (1719), continuing through a summary of the Railroad Scandals of the mid-1800s in the United States, the Ponzi schemes of the 1920s (the United States), the savings and loans scandals of the mid-1980s (again in the United States), and concluding with the more recent global corporate financial misreporting scandals (such as Enron, WorldCom, Tyco, Ahold and Parmalat), the Global Analysts' Settlement and the Mutual Fund scandals thereafter.

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<sup>3</sup> From: *Reflections on Commercial Life; An Anthology of Classic Texts From Plato to Present* (Murray, 1997)

Next to greed, many philosophers, politicians, poets and writers have written about the concept of self-interest throughout history. A common theme is that greed and self-interest are drivers of unacceptable social behaviour; though we all know and recognize that greed exists, still society and its gatekeepers fail to effectively address the problem. The ascent of the corporation, and the increase of powers assigned to corporate executives during the past 50 years, has only exacerbated the situation. In this study, we will address some of the behavioural limitations inherent in gatekeepers, and in the communications between executives and those gatekeepers who are assigned responsibilities to act as a countervailing power to potential misbehaviours.

Traditionally, annual financial statements were designed to enable shareholders to monitor and control the actions of management; in some views, the statements carried the additional burden of being a means to discharge the independent board and management of their duties to responsibly manage the company. However, greed and lust for power resulted in an unprecedented increase in financial fraud and misreporting during the past 10 years.

The primary subject of our research is such misreporting, how companies should manage them, and the perceptions of analysts in their role as gatekeepers, as it concerns the behaviours of the chief executive officer. Analysts, and their firms, have a reputational interest in warning investors for executive behaviour (earnings management) which could result in financial restatement. Analysts' professional standards require them to exercise diligence and thoroughness in analyses before making investment recommendations. If they ignore clear warning signs of corporate wrongdoing, they will be blamed for incorrectly advising investors, which can lead to litigation and will affect the analyst's reputation and position in analysts' league tables. The next section will deal with describing the restatement phenomenon. Thereafter, we will continue with an overview of the more significant restatement studies, conducted both by regulatory bodies (section 1.2) as well as academics (section 1.3). That overview will be concluded with a summary of how those academic studies are connected with our research into restatements. The section thereafter (section 1.4) will give a short overview on how restatements affect corporate reputation. This overview on corporate reputation is provided as we plan to research how analysts' perceptions of pressures on the CEO, both before and after a restatement, are

associated with their views on reputation remediation actions by the CEO (and the company), once the restatement has occurred. We will conclude this chapter with a description of the overarching research theme of our studies and provide background to the more detailed sub-research questions (section 1.5).

### 1.1.3 FINANCIAL STATEMENT RESTATEMENTS – DESCRIPTION OF THE PHENOMENON

Financial Statement Restatements (hereafter referred to as restatements), are the corrections of errors and/or irregularities in public company financial statements filed with regulatory authorities. In particular, this study focuses on restatements filed with the US Securities and Exchange Commission (SEC) in accordance with US Generally Accepted Accounting Principles (GAAP), either by domestic US companies, or by so-called foreign registrants (foreign companies with securities issued and quoted on the US exchanges). Although historically the European Union has lacked harmonized reporting guidelines (Van der Tas, 1995), with the mandatory introduction of International Financial Reporting Standards (IFRS) in most EU countries (and other countries) becoming effective in 2005, the restatement concept and occurrences are a phenomenon which can be readily expected in financial statements drawn up under IFRS.

However, to date, few instances involving IFRS restatements have been reported. Thus, IFRS restatements are excluded from this study for two reasons. First, data on the occurrence of IFRS restatements, in particular to the date of our second sub-study (on analysts' CEO perceptions), has been very limited and not entirely coherent. Second, the Committee of European Securities Regulators (CESR), which has the task of supervising and enforcing IFRS implementation in the European Union, published its first review of enforcement actions and inherent restatements in November 2007 (CESR, 2007). Contrary to the US environment, the CESR enforcement publication is anonymous and shows only in generic terms which accounting rules were misapplied. In March 2003, the Committee of European Securities Regulators issued its 'Standard No. 1 on Financial Information: Enforcement of Standards on Financial Information in Europe', which was developed specifically to assist harmonization and coordination of enforcement systems across EU member states.

In implementation of the standard, CESR members (the national securities regulators and, in some member states, the related enforcers), have laid out 21 principles

providing guidance around the definition of enforcement; identification of competent enforcement authorities with reference to powers and responsibilities; identification of issuers and types of documents; methods of enforcement; actions available to enforcers (e.g. requests for reconciliation or corrective notes, restatements etc.); and finally, coordination between enforcement authorities and reporting by enforcement authorities to the public.

Restatements are triggered by the discovery of ‘fundamental errors’, or ‘accounting irregularities’, which are defined as, ‘Errors (or irregularities) that destroy the fair presentation of the financial statements of the relevant periods or render those financial statements completely unreliable.’

The term ‘accounting error’ in US GAAP is defined in accordance with the Statement of Financial Accounting Standards 154 (FAS 154), ‘Accounting Changes and Error Corrections’. Paragraph 2(h) of FAS 154 defines an error as, ‘An error in recognition, measurement, presentation, or disclosure in financial statements resulting from mathematical mistakes, mistakes in the application of Generally Accepted Accounting Principles in the US (US GAAP), or oversight or misuse of facts that existed at the time the financial statements were prepared.’ FAS 154 went into effect for (fiscal/ book) years beginning after December 15, 2005 and superseded APB 20, ‘Accounting Changes’.

To summarize, Statement FAS 154 ‘Accounting Changes and Error Corrections’, paragraph 2 (j) defines a restatement as, ‘The process of revising previously issued financial statements to reflect the correction of an error in those financial statements.’ Furthermore, FAS 154 paragraph 2(h) defines an error as:

An error in recognition, measurement, presentation, or disclosure in financial statements resulting from mathematical mistakes, mistakes in the application of GAAP, or oversight or misuse of facts that existed at the time the financial statements were prepared.

Errors also include a change from an accounting principle that is not generally accepted, to one that is generally accepted. In the event that an error is identified, a restatement is required if the error is considered material. FAS 154 paragraph 25, requires that errors in previously-issued financial statements be reported as a prior

period adjustment by restating those financial statements, requiring that:

- a. The cumulative effect of the error on periods prior to those presented shall be reflected in the carrying amounts of assets and liabilities as of the beginning of the first period presented.
- b. An offsetting adjustment, if any, shall be made to the opening balance of retained earnings (or other appropriate components of equity or net assets in the statement of financial position) for that period.
- c. Financial statements for each individual prior period presented shall be adjusted to reflect correction of the period-specific effects of the error.

An important aspect of the process of establishing whether an error should be restated is the determination that the error is material. FASB Concept Statement (CON) No. 2, 'Qualitative Characteristics of Accounting Information', describes materiality as:

The magnitude of an omission or misstatement of accounting information that, in the light of surrounding circumstances, makes it probable that judgment of a reasonable person relying on the information would have been changed or influenced by the omission or misstatement.

In the context of CON No. 2, SEC Staff Accounting Bulletin (SAB) No. 99, 'Materiality', provides the SEC staff view that registrants and auditors should consider not only quantitative factors in determining materiality, but should also consider qualitative factors, examples of which are listed. The consideration of both quantitative and qualitative factors can result in errors that, although they may be considered quantitatively immaterial, are determined to be material to the financial statements. Therefore, there is no prescriptive or formulaic definition of materiality. Instead, the materiality determination is left to the judgment of management (and the auditors), after considering all relevant circumstances. In Appendix 1.1 we provide a more extensive discussion on materiality considerations in restatement situations.

The current credit crisis is expected to increase the number of new restatements. This can be deduced on the basis of current litigation in process. Some more details on the Subprime Mortgage Crisis and Restatements can be found in Appendix 1.2.

#### 1.1.4 SCOPE OF THE RESTATEMENT PHENOMENON

The past ten years have shown a strong increase of restatement activity, from

some 90 cases in 1997, to around 1,500 in 2005-06 (see Figure 1.1). As mentioned previously, this period followed well-known accounting scandals involving major corporations such as Enron, WorldCom, Adelphia, Tyco, Freddie Mac, Ahold, Parmalat and HealthSouth, all of which engaged in (alleged) management fraud. In 2008, restatements decreased in number, however, the credit crisis and related fair value issues of complex financial instruments are expected to generate a new wave of restatements.

The scope of the restatement phenomenon can be reflected in a number of statistical indicators, one of which is the number of financial restatements and class action suits filed for alleged securities fraud, both of which rose significantly in the latter part of the 1990s. Until then, financial restatements were relatively uncommon and the number of cases filed rarely exceeded 50. In 1997, however, the number increased to 97 and by 2005, the number exceeded 500. According to a 2002 report issued by the General Accounting Office (GAO, renamed the Government Accountability Office in 2004), between 1997 and 2002 nearly 10 per cent of the firms listed on the three major stock exchanges announced plans to file restatements. Over the next three years, the rate of restatement announcements increased; in the period spanning from 2002-05, nearly 16 per cent of all companies listed on those three exchanges announced restatements. In roughly the same time period (1997-2005) over 2,200 class action lawsuits alleging securities fraud were filed in federal courts, according to a 2007 report from the Securities Class Action Clearing House. Restatement announcements caused market capitalization losses of about US \$100 billion (for the period 1997-2002), and substantially reduced public confidence in the business community and capital markets (GAO, 2002). Also of note is that around 80 per cent of restatements revised net income downwards, 12 per cent revised net income upwards, 5 per cent had no impact on the net income figure, and 3 per cent never filed restated net incomes.

A more recent study, issued in 2007 by the Public Company Accounting Oversight Board (PCAOB) Office of Research (PCAOB, 2007), found that of 1,711 restatements during the eight years spanning from 1998 to 2005, only 325 restatements caused a 'statistically significant' movement in the price of the reporting entity's shares – less than 20 per cent. The report states that after the implementation of the Sarbanes-Oxley Act, the negative impact on companies announcing restatements declined

by 71 per cent on average (as measured by the cumulative abnormal return on days 0 and +1). Since Sarbanes-Oxley implementation, the positive market response to announced restatements is 33 per cent less than prior to the legislation. In dollar terms, the reduction represents a net reduction in lost market value of US \$207 million per restatement announcement, or US \$74.4 billion in total market value for the two-day announcement event window. Additionally, the report suggests less uncertainty on the part of investors regarding the announcements of restating companies, perhaps because investors believe the disclosed information conveyed by the restated financials is timelier and of higher quality.

Like Palmrose, Richardson and Scholz (2004), the PCAOB Office of Research (2007) calculates the average two-day cumulative abnormal return (CAR) for days 0 and +1 at -5.4 per cent for all 1,711 restatements covered in the period spanning from 1998 to 2005. However, separating announcements with a negative market response (as opposed to those with a positive market response), revealed that the decrease in the average abnormal return for negative market responses nearly doubles the average abnormal return increase, with a two-day cumulative abnormal returns of -12.2 per cent for negative restatements, and +4.8 per cent for positive restatements (both statistically significant). Not surprisingly, the size of average abnormal return nearly triples when statistically insignificant market reactions to announcements are excluded; the two-day CAR jumps to negative 18.6 per cent for all restatements combined, negative 32.8 per cent for negative reactions, and to positive 14 per cent for positive reactions.

## **1.2 Review of Restatement Studies (and Databases) by Regulatory Bodies**

### **1.2.1 REPORTS BY REGULATORY BODIES**

Restatements had a significant effect on trust in corporations, their executives and in their gatekeepers. They also led to some well publicized significant bankruptcies. In some cases, employees lost big portions of their pension savings and the corporate reputation of 'US Inc' was at stake. Hence, interest by US regulators and law makers was extensive. When we started our studies in 2002-03, these regulators were the first to provide overviews of the effects of restatements on stock markets. In addition, they provided the first authoritative lists of companies which had encountered restatements and gave some more details on restatement specifics. Regulators and law makers in the US reacted vigorously to the restatement problem (and its causes) which led to the enactment of the Sarbanes-Oxley Act. This was followed by numerous improvements of corporate governance regulations in the world. The reports also describe the role of executives in restatements and illustrate that a significant number of CEOs and CFOs were prosecuted because of suspected intent to defraud. One of the reports also considers, in some more detail, the role analysts played in the accounting irregularities. Management intent and the role of analysts, and also the corporate governance measures (and their effect on analysts' perceptions) will be considered in more detail in studies 1 and 2, hence, this overview.

During the ten-year period (1997 to 2006), in which the occurrence of restatements proliferated, a number of reports/studies by regulatory bodies have been issued, shedding light on the relevance of restatements to capital markets and the significance of market reactions to restatements (both in the near term as well as further out in the future). These reports were initiated by either the US Senate or other regulatory bodies (e.g. the US Treasury, the SEC, the Department of Justice), and addressed the possible causes and consequences of questionable accounting practices. Those practices included causes, such as pressures on corporate executives to meet quarterly earnings projections, executive compensation practices, complexities of rule-based accounting standards, complex corporate financing arrangements, the usage of special purpose vehicles, and stock market reactions. Outlined consequences included implications for the accounting and auditing professions, the effect on analysts' governance and independence, and corporate governance recommendations.

Next to these reports, which were issued largely out of governmental attempts to engage in the policing of public responsibility, detailed analysis of causes and consequences of restatements can also be found in reports by the Huron Consulting Group (HCG), such as the ‘2004 Annual Review of Financial Reporting Matters’.<sup>4</sup> From 2005 onwards, Glass, Lewis & Co. has issued a number of its own detailed annual reports, including ‘Restatements – Traversing Shaky Ground’ (covering the restatement phenomenon as it built steam in 2004); and following up with ‘Getting it Wrong the First Time’ (2005), and ‘The Errors of Their Ways’ (2007). Audit Analytics, a commercial database, also keeps track of restatements, and has been used as a data source for the US Treasury studies referenced above. An earlier report on fraud, issued in March 1999, was commissioned by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), an organization sponsored and funded by five main professional accounting associations and institutes, with the mission to improve the quality of financial reporting through internal controls, governance, and ethics. In its report, ‘Fraudulent Financial Reporting: 1987-1997: An Analysis of US Public Companies’, COSO (1999) concluded that smaller companies were more prone to committing reporting fraud and CEO involvement appeared to be a general shared trait – in 72 per cent of the cases studied, the CEO appeared to be associate, while the CFO was involved in 43 per cent of the cases. The study was based on data kept by the SEC on alleged fraudulent financial reporting, so-called Accounting and Auditing Enforcement Releases (AAERs). COSO concluded that one of the major limitations of prior academic research regarding fraud risk factors was the lack of a robust conceptual model describing the link between fraud risk factors and the likelihood of financial statement fraud. In that conclusion, the committee refers to one of the first conceptual models that was proposed by Loebbecke and Willingham (1988), and which described the probability of material misstatement due to fraud as a function of three factors:

1. The degree to which conditions are such that a material management fraud could be committed,
2. the degree to which the person or persons of authority and responsibility in the entity have a reason or motivation to commit management fraud, and
3. the degree to which persons in positions of authority and responsibility

<sup>4</sup> Huron was formed in 2002 by previous Arthur Andersen employees and reported a yearly restatement overview starting with a review of 2001 restatements; the group issued restatement reports until 2004.

in the entity have an attitude or set of ethical values such that they would allow themselves to commit management fraud.

In the section on Methods, for Study 2, we shall use current insights into drivers of fraud as the basis for developing our model of CEO perceived behaviour. All the reports cited by name in this section have been considered in this study.

One of the first reports on restatements was a report to Paul Sarbanes, the US Senate chairman of the Committee on Banking, Housing, and Urban Affairs, issued by the GAO in October 2002. The report, entitled 'Financial Statement Restatements, Trends, Market Impacts, Regulatory Responses, and Remaining Challenges (GAO-03-138)', addressed the following aspects of restatements:

- The number of, and reasons for, other trends in financial restatements since 1997;
- The impact on the restating companies' stock market capitalization;
- The research and data available to determine the effect of restatements on investors' confidence in the existing US system of financial reporting;
- SEC enforcement actions involving accounting and auditing irregularities; and,
- The major limitations of governance and oversight structures.

This first regulator-involved major report on restatements found that the type of companies involved in restatements had moved significantly into the domain of larger listed companies, not into the realm of small companies and companies operating in the technology industry who had previously been responsible for the bulk of issued restatements. Based on total assets, the proportion of large companies (assets in excess of US \$1 billion), increased from 25 per cent in 1997, to more than 30 per cent in 2001. The report also found that revenue recognition accounts for some 40 per cent of the accounting misstatements identified in the 1997-2002 period. (Later in this research, we will focus more on earnings management, which often leads to revenue misstatements as one of the primary causes of managements' involvement and intent in causing restatements.) The report also confirmed findings from academic researchers that restatements involving revenue recognition resulted in relatively greater losses in market capitalization.

The GAO report stated that the SEC, during the late 1990s and in the beginning of

the new millennium, considered pursuit of accounting fraud and/or irregularities as one of its top enforcement priorities. The GAO report addressed enforcement actions taken by the SEC on the basis of possible violations of securities laws by companies and executives, enforcement actions involving accounting firms and the charges against these firms on the basis of audit failures, failure to comply with Generally Accepted Auditing Standards (non-GAAS), failure to take appropriate action when fraud is discovered by the auditors (Section 10A); and auditor failure to act independently as a result of conflict of interests, often caused by consulting (or other significant) fee-paid assignments.

The GAO report did not stop there; it criticized the role of both security analysts and credit rating agencies, making reference to the possible conflicts of interest between analysts and their firms' investment-banking and underwriting services. Already, mention has been made of the New York State Attorney General investigation and subsequent prosecution of a number of larger investment banking firms, actions that ultimately resulted in the so-called 'Global Settlement' of a US \$1.1-billion payout by 10 firms. The enforcement actions brought by the SEC alleged that, from approximately mid-1999 through mid-2001 or later, all of the 10 firms engaged in practices that created or maintained inappropriate influence by investment banking over research analysts, imposing conflicts of interest on the analysts that the firms failed to manage in an adequate manner. In addition, the regulators found supervisory deficiencies at every firm. The 10 firms who were part of the settlement were Bear, Stearns & Co. Inc., Credit Suisse First Boston LLC, Goldman, Sachs & Co., Lehman Brothers Inc., J.P. Morgan Securities Inc., Merrill Lynch, Pierce, Fenner & Smith, Inc., Morgan Stanley & Co. Inc., Citigroup Global Markets Inc., Salomon Smith Barney Inc., UBS Warburg LLC and US Bancorp Piper Jaffray Inc. The agreement included measures meant to avoid future effects of conflicts of interest between investment banking and analyst departments.

The GAO report concluded with a detailed case study of 20 major US companies, providing a business overview, and exploring restatement data, accounting/auditing firms, stock price movements, security and credit rating agencies' recommendations and actions, and legal and regulatory actions. The report also included the first 'paper' database of 919 restatements from 1997 to 2002. In January 2003, the GAO updated its previously issued report, and, to accommodate researchers, published

stock ticker symbols, exchange market names, dates of the announcement, entities that prompted the restatement, and the reason for the restatement. The GAO also made this database electronically available. One obstacle for impact within either the capital or financial markets and/or in the academic arena was that the GAO failed to include stock price movements around the dates of the restatement announcements, as the agency obtained such data from proprietary resources.

In July 2006, the GAO again updated its 2002 report alongside its second restatement report to the US Senate<sup>5</sup>. A major finding in the new report, covering the period from 2002-05, was that stock price movement in the days surrounding a restatement announcement were much lower than found in the original 2002 report (-9.5 per cent for the period from 1997 to mid-2002, and -2 per cent for the mid-2002 to 2005 period). The report also compares the restatement database developed by GAO to databases developed by both Huron Consulting and Glass, Lewis & Co.<sup>6</sup>

Following the implementation of the Sarbanes-Oxley Act in July 2002, the July 2006 report signaled that the strong increase in restatements in the initial 2002-05 period may indeed have been caused by:

- Company executives focusing on financial reporting accuracy that resulted from the certification of financial reports by management as required by Section 302 of the Sarbanes-Oxley Act.
- Company self-assessment of the quality of internal controls on financial reporting as required by Section 404 of the Sarbanes-Oxley Act, and the opinion thereon issued by the independent auditors.
- Issuance of new auditing standards also covering standards on fraud identification by the newly founded PCAOB (responsible since 2003 for the supervision of the accounting profession).
- Increased staffing and review by SEC and other regulatory/judicial bodies.

The report found that in the period 2002-05, large companies (those with assets greater than US \$1 billion), continued to account for an increasing share of companies engaging in restatement, growing from some 30 per cent in 2002, to more than 37 per

<sup>5</sup> 'Financial Restatements: Update of Public Company Trends, Market Impacts, and Regulatory Enforcement Activities (GAO-06-678)' – it also includes an electronic (updated) version of the restatement database (GAO-06-1079SP).

<sup>6</sup> These reports/databases are important as they will be used for determining the sample of restatement companies we have used in the quantitative analysis sub-study on analysts perceptions (see Study 2).

cent in 2005. Also in the same period, market capitalization of a restating company increased from US \$3 billion (in the latter half of 2002), to over US \$10 billion in 2005. The updated report identifies that cost- or expense-related issues surpassed revenue recognition issues as the predominant cause of restatements.

The 2006 report also mentioned some ambivalence on the part of investors and analysts when it came to interpreting the severity of restatements (GAO, 2006: 34). Restatements since the enactment of the Sarbanes-Oxley Act and the creation of the PCAOB could have resulted from any number of factors, such as (a) reaction to aggressive or abusive accounting practices; (b) greater complexity and stricter application of accounting standards; and, (c) improved internal controls on financial reporting and/or past accounting (recording) deficiencies. The report noted that some analysts consider the increased number of restatements to have been no more than a by-product of increased efforts by company executives and their auditors to achieve higher-quality financial reporting (restatements as part of a 'cleansing process'), with the added inducement to comply, arriving in the form of heightened judicial actions and more severe penalties that accompanied enactment of the Sarbanes-Oxley Act.

A progress report on financial reporting issued by the SEC in February 2008 provides the following explanation for the steep increase in the number of restatements in 2006 (SEC, 2008: 60):

The increase in restatements has been attributed to various causes. These include more rigorous interpretations of accounting and reporting standards by preparers, outside auditors, the SEC, and the PCAOB; the considerable amount of work done by companies to prepare for and improve internal controls in applying the provisions of section 404 of the Sarbanes-Oxley Act; and the existence of control weaknesses that companies failed to identify or remediate. Some have also asserted that the increase in restatements is the result of an overly broad application of the concept of materiality and discussions regarding materiality in SAB 99, Materiality (as codified in SAB Topic 1M) – that is, resulting in errors being deemed to be material when an investor may not consider them to be important.<sup>7</sup>

<sup>7</sup> Studies considered by the SEC in drafting their Progress Report include the GAO study, 'Financial Restatements: Update of Public Company Trends, Market Impacts, and Regulatory Enforcement Updates' (March 2007); Glass, Lewis & Co. study, 'The Errors of Their Ways' (February 2007); and two Audit Analytics studies, '2006 Financial Restatements: A Six Year Comparison' (February 2007) and 'Financial Restatements and Market Reactions' (October 2007). The SEC also considered findings from the PCAOB's Office of Research and Analysis's (ORA) working paper: 'Changes in Market Responses to Financial Statement Restatement Announcements in the Sarbanes-Oxley Era' (October 18, 2007).

A third report was issued pursuant to Section 704 of the Sarbanes-Oxley Act of 2002, which directs the SEC to study enforcement actions over the five years preceding the act's creation, in order to identify areas of issuer financial reporting most susceptible to fraud, inappropriate manipulation, or inappropriate earnings management. In addition, Section 704 directs the commission to report its findings to Congress, along with a discussion of recommended regulation or legislation. This study involved the review of all of the commission's enforcement actions filed from July 1997 to July 2002, and which were based on improper issuer financial reporting, fraud, audit failure, or auditor independence violations. Next to categorizing of restatements, the study revealed the following, with respect to the parties held responsible:

The majority of the persons held responsible for the accounting violations were members of issuer senior management. The study found that 157 of the 227 enforcement matters involved charges against at least one senior manager. In these enforcement matters, charges were brought against 75 Chairmen of the Board, 111 Chief Executive Officers, 111 Presidents, 105 Chief Financial Officers, 21 Chief Operating Officers, 16 Chief Accounting Officers and 27 Vice Presidents of Finance. In addition, the study determined that the commission brought charges against 18 auditing firms and 89 individual auditors.

A fourth report was issued in February 2008 by a committee the SEC commissioned in July 2007 and tasked with examining the US financial reporting system and making recommendations intended to increase the usefulness of financial information to investors, and reduce the complexity of the financial reporting system to investors, companies, and auditors. The report from the Advisory Committee on Improvements to Financial Reporting contained a number of proposals focused on how to eliminate unnecessary restatements. The majority of suggestions centered on restatements of the most recent years at the time (2006-07), when there were significant numbers of restatements (mainly related to lease classification and option accounting), for which there was lack of a statistically-significant market reaction. The reasoning behind the proposal was that in the absence of a significant reaction, the restatement contains no information of value, and thus the restatement is without meaning.

A fifth report was issued to the US Department of the Treasury in April 2008, 'The Changing Nature and Consequences of Public Company Financial Restatements,

1997-2006' (Scholz, 2008); commissioned to Suzan Scholz, an associate professor of accounting at the University of Kansas. Scholz's study analysed 6,633 restatements announced during the 1997-2006 period, addressing and expanding on a number of issues identified in earlier GAO reports. The report also analyses restatement trends and characteristics, including restatement severity, accounting issues (typology) and the number of periods/years affected (these characteristics are also covered in academic studies on restatements which we will cover shortly). Next, the study analyses the characteristics of restating companies, their industries, exchange listings, size and profitability. Finally, it provides an analysis of market reactions to restatements, both nearby (+2 days) and further out (up to +250 days).

Major findings of the study include that:

- The strong increase in the number of restatements (1,577 in 2006), comes mainly from companies not being listed on the major US stock exchanges (NYSE, AMEX and NASDAQ).
- Over the years, the market reaction to restatements has declined; however, restatements caused by fraud and those resulting from revenue recognition issues tend to have more negative market reactions. Fraud was attributed to 29 per cent of all restatements in 1997, while only 2 per cent of restatements in 2006 were linked to fraud.<sup>8</sup>
- Restating companies are typically loss-making; in the year prior to announcing a restatement, more than half of the companies reported a net loss.

The report contains a number of illustrative graphics, a number of which have been attached to this research as appendices.

While Section 704 of the Sarbanes-Oxley Act directed the SEC to study enforcement actions over the period between the 1998-2002 fiscal years, it should be noted that misreporting is not a phenomenon exclusively occurring in US markets. In many other countries, misreporting and subsequent adjustments to financial statements have occurred. The misreporting phenomenon seems to exist in different periods

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<sup>8</sup> Note that in absolute numbers they average to some 26 per annum.

for different countries. In the early 1990s, questionable accounting practices led to corporate collapses in the United Kingdom. These scandals led to the introduction of more stringent accounting guidelines.<sup>9</sup> However, no extensive reports and/or studies are available that document these events systematically. This is also due to different treatment for the correction of accounting errors under various GAAP frameworks.

#### 1.2.2 REPORTS ON SPECIFIC CORPORATE SCANDALS AND/OR FINANCIAL REPORTING FRAUD

Some of the more significant corporate scandals have been the subject of in-depth studies. The pervasive economic effects and implications of these frauds on governance systems, the role of gatekeepers, management decision making, whistleblowers and corporate ethics can be seen as explanation for heightened attention. For example, the Powers Report on the Enron accounting scandal – formally titled, ‘The Report of the Investigation by the Special Investigative Committee of the Board of Directors of Enron Corp’ (Powers, Trough & Winokur, 2002) – explains the substance of the most significant related-party transactions involving ‘special purpose vehicles’, and highlights the most important associated accounting, corporate governance, management oversight, and public disclosure issues. The investigators found that personal enrichment had taken place (Enron’s chief financial officer Andrew Fastow profited some US \$30 million from the deceitful accounting practices), and that many transactions served to hide the true nature of Enron’s operations and transactions. Enron had taken out hedges with itself, which led to significant losses in the end (effectively there was no hedge). The resulting restatement reduced shareholders equity by a total of US \$1.2 billion, and led to Enron’s demise. The report indicates that both internal gatekeepers (the audit committee, the independent board, internal audit and legal counsel), as well as outside gatekeepers, (in particular independent Arthur Andersen auditors and external counsel), failed in their roles mainly because of complacency, a lack of deeper probing, and insufficient accounting and financial reporting knowledge. In addition to the Powers Report, the Committee on Governmental Affairs of the Senate (the Permanent Subcommittee of Investigations) issued a report in December 2002, ‘Oversight of Investment Banks’ Response to the Lessons of Enron’, Volumes I and II’, consisting of some 1,750 pages with depositions, hearings and comprehensive documentation on the special purpose vehicles and transactions used in the Enron case. As Senator and Committee Chairman Joe

<sup>9</sup> See Moriarty and Livingston (2001).

Lieberman put it in an October 2002 press release (Lieberman, 2002):

This report – submitted to us by Committee staff - examines the roles of the private and public sector watchdogs – the Securities and Exchange Commission, the Wall Street stock analysts, and the credit rating agencies – that monitored the financial activities of Enron in the years leading up to its spectacular meltdown. What we found was systemic and catastrophic failure across-the-board. ... The watchdogs were asleep at the gate. Despite the magnitude of Enron's implosion, virtually no one in the multi-layered, public-private system that is supposed to protect investors saw the disaster coming or did anything to prevent it. ... Why didn't the watchdogs bark?

In the case of US home mortgage giant Freddie Mac, which had a significant restatement resulting from an understatement of reported earnings (and equity) by some US \$1.5 to US \$4.5 billion, a variety of investigative reports were produced by independent legal counsel Baker & Bots. Known as the Doty Report (Doty, 2003), the document served as evidence in a hearing before the Subcommittee on Commerce, Trade, and Consumer Protection for the House of Representatives in September 2003. Similarly, the Office of Federal Housing Enterprise Oversight, which has regulatory responsibilities for the mortgage lender (including sister agency Fannie Mae amongst others), also issued a lengthy report on the accounting irregularities at Freddie Mac.

These independent investigations are massive in scope and also referred to by Gertsen, Van Riel and Berens (2006) in terms of how they paralyzed the operations and management of a company. To illustrate, in the Freddie Mac case, Baker & Bots reviewed over 250,000 pages of documentation. They imaged the hard drives of numerous employees, obtained e-mail records stored on company servers, and searched over two terabytes of electronic files. They conducted over 200 interviews of Freddie Mac employees, senior management and members of the board. They also listened to over 11,000 minutes of trader tapes – recordings of telephone conversations by securities traders – a time-consuming and laborious process for all touched by the investigation.

In March 2003, the GAO issued a report to the Senate Committee on Banking, Housing, and Urban Affairs and the House Committee on Financial Services (GAO, 2003a) entitled, 'Investment Banks: The Role of Firms and Their Analysts with Enron and Global Crossing'. As part of yet another mandate falling out of the Sarbanes-

Oxley Act, the GAO was asked to study the involvement of investment banks with two companies, Enron and another business harmed by accounting irregularities, Global Crossing. Following the failures of those institutions, analysts at investment banks who had made favourable recommendations for the companies came under public scrutiny. The banks allegedly pressured analysts covering Enron and Global Crossing to provide favourable or misleading investment recommendations in order to keep or win lucrative work from the two companies, creating serious conflicts of interest. The GAO then reviewed publicly available documents pertaining to investment bank involvement with Enron in five structured finance transactions and other client relationships.

The five transactions the GAO analysed were typical of a variety of relationships that Enron had with several investment banks, and were among those in which investment bankers allegedly assisted Enron in manipulating its earnings. However, those transactions were not included in Enron's restatement of its financials for the period spanning 1997 to the second quarter of 2001. The GAO report also examined whether it was the same investment bankers at those securities firms who pressured the research analysts covering Enron and Global Crossing to issue favourable or misleading investment recommendations (i.e. buy ratings), in order to keep or obtain lucrative investment banking work from those companies. These practices resulted in conflict-of-interest issues that have led the public to question the independence and objectivity of recommendations research analysts make about public companies and prospects for those investors' equity securities.

In May 2002, the SEC approved changes to both NASD and NYSE rules that re-established a required separation between the investment banking and research departments of a securities firm. That same December, both NASD and NYSE proposed additional analyst rules, which were eventually implemented by the SEC in 2003. Those rules aimed to achieve compliance with the directives on analysts' independence and reward structures falling out of the Sarbanes-Oxley Act. Also in December 2002, the GAO convened a governance and accountability forum (GAO, 2003b), which discussed challenges facing regulators, the profession, and boards of directors and management of public companies in effectively implementing the Sarbanes-Oxley Act and related regulatory actions that could be taken to improve public confidence in US corporate governance and accountability systems. The

major accountability breakdowns of 2001 and 2002 were only exacerbated by the unprecedented massive breakdowns and bankruptcy of giants such as Enron and WorldCom. The GAO forum focused on four interrelated areas that needed to be strengthened – corporate governance, the financial reporting model, the accounting profession, and regulation and enforcement.

#### 1.2.3 RATINGS AGENCY REPORTS ON RESTATEMENTS

Fitch Ratings, in a credit policy update report issued in March 2005 (Fitch, 2005), predicted that 2005 would be the year of financial restatements. Outside the United States, Fitch argued restatements would result from thousands of companies switching from local accounting standards to International Financial Reporting Standards (IFRS), and restating their opening 2004 balance sheets to present comparative figures. The prophecy came true; however, it was unfortunately not related to IFRS implementation. More than 970 US public companies restated their earnings in the first 10 months of 2005, versus 619 for the whole of 2004. In a similar 2006 outlook on accounting and financial reporting risk (Fitch, 2006), Fitch argues again that the impact of IFRS and global convergence to fair value accounting standards would be felt. The ratings agency also warned of the possible effects of new accounting standards for stock options, pensions and other post-employment benefits, merger and acquisition accounting, and derivative and hedge accounting.

In the 2007 outlook (Fitch, 2007), Fitch warned that fair value accounting would be the major accounting theme for 2007 – indeed, with the benefit of hindsight, they were spot on. Fitch warned that the ramifications of stock option accounting and expected delinquent filings and restatements, due to the backdating of stock options, may well continue into 2007. Furthermore, the ratings agency mentioned that criminal investigations against high-profile executives were expected to continue gracing the headlines and keeping the spotlight on that issue. In their January 2008 report (Fitch, 2008) the emphasis was again on fair value accounting, which would be exacerbated by the ongoing credit crisis.

#### 1.2.4 RELEVANCE OF REGULATORY REPORTS TO OUR RESEARCH

This concludes our overview of significant reports issued by regulators (and other official ‘rule-making’ entities) on financial restatements. These regulatory reports were relevant for our studies for the following reasons:

- The reports show that the scope of the restatement problem increased in the period 2002-06; the reports support the notion that restatements became a very relevant issue in corporate financial reporting and the role of gatekeepers;
- The reports provided information on the type of restatements, who prompted these, and their market effects;
- They provided some insights into the effects of legislation and governance measures and created awareness of the importance of concepts, such as, materiality, tone at the top, whistleblower issues, and the 'tip of the iceberg' effect, caused by subsequent forensic investigations;
- Finally, they provided lists of restatement cases which could be used for sampling purposes in our next studies.

### 1.3 Review of Academic Studies into Restatements

For many of the larger fraud and/or restatement cases, reports by regulators, independent counsel or forensic investigators have been made public. The strong increase in restatements in the period 2002-06, has led standards-setters and regulators to respond with a number of initiatives and legislation aimed at curbing those trends. Some of the causes and effects of restatements have been addressed in those reports and studies, however, deeper underlying causes and effects have been addressed in more detail in the following academic studies. These studies on restatements can be grouped into the main categories which follow. We will provide an overview of the more significant studies first. Thereafter, in section 1.3.11, we will present how these various studies tie in with our own investigations of how restatements are managed by executives and how analysts perceive the causes and consequences of those managerial actions. In each of our three studies we shall consider relevant research in more detail.

#### 1.3.1 EFFECTS ON MARKET CAPITALIZATION (STOCK PRICES); INCREASE IN THE COST OF CAPITAL AND/OR THE EFFECT ON CORPORATE AND EXECUTIVE REPUTATION

Owers, Lin and Rogers (2002) found that the negative market effect of restatements is strengthened when management fraud and/or subsequent CEO resignation is involved. Their research was based on some 170 restatements identified by text-searching *the Wall Street Journal* for restatement news in the period between 1994 and 1997. Callen, Livnat and Segal (2002), also found that for restatements during the period between 1986 and 2001, downward revenue-adjusting restatements, decreased return on assets on average by some 8 per cent; Palmrose et al. (2004) documented some 400 restatements covering a period between 1995 and 1999, finding that restatements associated with negative implications for management integrity had more severe stock price reactions; documenting a corresponding negative 9 per cent average abnormal return around the two-day restatement announcement period. Anderson and Yohn (2002) found a negative 3.49 per cent cumulative abnormal return during a seven-day window surrounding the announcement of the accounting problem in a sample of 161 restatements that took place from 1997-1999. Similar results were found by Dechow, Sloan and Sweeney (1996), Richardson, Tuna and Wu, (2002), Wu (2004) the GAO (2002) and Turner, Dietrich, Anderson and

Bailey (2001). Also, restatements related to fraudulent activity and that affect core accounts, cause the greatest stock price declines (Palmrose et al., 2004; Anderson & Yohn, 2002; Owers et al., 2002) (see Figure 1.3). In a draft paper by Barniv and Cao (2006) the authors develop a theoretical framework to gauge investor reactions on restatement announcements, based not only on subsequent analysts' revisions in earnings forecasts, but also including the level of information innovation and analyst characteristics. They find that high-innovation level restatements, defined as forecasts that are both above the analysts' prior forecasts and above the consensus forecast, trigger a stronger immediate price response. They confirm earlier research that documents containing forecasts by reputable analysts (All-Stars by Zacks, and/or StarMine, a Thomson-Reuters subsidiary), are on average more accurate compared to those of unranked analysts. Their study confirms the importance of analysts as 'reputational intermediaries' in an era in which restatements have proliferated and analysts' judgments are under scrutiny by investors (see Figure 1.2).

In summary, a number of studies covering different restatement periods, have estimated the impact of restatement announcements on market capitalization, estimating average negative declines of 4.2 per cent (Agrawal & Chadha, 2005), and negative 9 per cent (Palmrose et al., 2004) when using a two-day window surrounding the restatement announcement; negative 9.5 per cent (GAO 2002 report), and negative 11 per cent (Richardson et al., 2002) using a three-day window; and negative 13.4 per cent using a seven-day window (Anderson & Yohn, 2002). Cheng and Chung (2006) document post-announcement drift subsequent to restatements. They find an average buy-and-hold abnormal return of negative 34 per cent over the 36-month horizon for a sample of restating companies. They did not, however, examine the determinants of the under reaction.

Another study, conducted by Professors John Graham of Duke University, Si Li of Wilfred Laurier University and Jiaping Qiu of McMaster University (2008), looked at data from a GAO database of 919 restatements announced by 800 public companies between January 1997 and June 2002. They then combed through a database maintained by Loan Pricing Corp., which collects data on commercial loans made to both United States and foreign corporations.

They found that the subsequent loan spreads for companies that made restatements,

measured in basis points over Libor (the London Interbank Offered Rate), increased to some 210 basis points from an average of 141. At companies where restatements were a result of fraud rather than of error, the spread increased by another 35 basis points, to 245 points over Libor. The study found that loans contracted after restatements tended to have 'significantly shorter maturity, higher likelihood of being secured (by assets) and more covenant restrictions.' The loans, post-restatement, also tended to be more concentrated, with fewer lenders participating. The authors presume that lenders perceived a greater risk in the loans and thus heightened monitoring activities, something for which they also charged higher annual and upfront fees.

### 1.3.2 RESTATEMENTS AS PROXIES FOR EARNINGS MANAGEMENT

In a number of studies (Palmrose & Scholz, 2003; Palmrose et al., 2004; O'Connor, Priem, Coombs & Gilley, 2006; Bergstresser & Philippon, 2006; Desai, Hogan & Wilkins, 2006; Burns & Kedia, 2006; Burns & Kedia, 2008; Efendi, Srivastava & Swanson, 2007 and Devers, Cannella, Reilly & Yoder, 2007), authors consider restatements as a proxy for earnings management. Management intent is specifically addressed by Hennes, Leone & Miller (2006 & 2008), who find that when using independent or forensic investigations in restatement situations (examining some 250 restatements in the period 2002-06) as a proxy for management intent, the executive turnover is 70 per cent for CEOs, and 92 per cent for CFOs. For unintentional cases, these percentages are much lower, 14 per cent and 27 per cent, respectively. For restatement research, Hennes et al. stress the importance of making the distinction around the basis of management intent as it provides a meaningful measure of the severity of the restatement, its governance consequences, and its subsequent market price reactions. Examining the period between 1995 and 2002, Burns and Kedia (2008) find that the likelihood of a restatement is positively related to the sensitivity of the CEO's option holdings to stock price changes. They also found that other components of CEO compensation (in particular equity, restricted stock, long-term incentive payouts, and salary plus bonus), do not have a significant impact on the propensity to misreport in financial statements.

### 1.3.3 RESTATEMENTS AND FINANCIAL REPORTING KNOWLEDGE / EXPERTISE BY FINANCIAL EXECUTIVES

The Blue Ribbon Committee on Improving the Effectiveness of Corporate Audit Committees was established in October 1998 by the NYSE and the National

Association of Securities Dealers to address concerns expressed by the SEC regarding the effectiveness of audit committees. Abbott, Parker and Peters (2004), in a study on the effectiveness of the Blue Ribbon Committee recommendations, find a significant association between audit committees who lack a member with financial expertise, to the occurrence of financial restatements covering restatements in the period from 1991-99. In a more recent study, Plumlee and Yohn (2008b) investigate the underlying causes of restatements occurring in the period 2003-06. Based on an analysis of the corporate disclosures on the restatements, they find that some 37 per cent of those restatements were due to misinterpretations of complex accounting standards. However, they also conclude that half of the restatements analysed were caused by basic internal control errors. Of the restatements caused by complexity of the accounting rules, more than 50 per cent can be attributed to lack of clarity in those rules, and some 35 per cent to erroneous rule application judgment. Plumlee and Yohn also expect that the convergence of US GAAP with IFRS will lead to more management judgment, and hence, to more restatements.

#### 1.3.4 RESTATEMENTS AND CORPORATE GOVERNANCE AND THE ROLE OF GATEKEEPERS

Agrawal and Chadha find that the probability of restatement is lower in companies whose boards or audit committees have an independent director with financial expertise; they also note that the restatement probability is higher in companies in which the chief executive is related to the founding family (Agrawal & Chadha, 2005). Abbott et al. (2004) and Rezaee (2005) both find a significant number of cases that result in CEO and/or CFO turnover; Arthaud-Day finds that CEOs and CFOs involved in material financial restatements are more than twice as likely to be replaced, compared to a non-restatement sample. However, they could not associate severe restatements – defined as those triggered by external parties (SEC and/or auditors) – with a higher rate of turnover of the CEO/CFO (Arthaud-Day, Certo, Dalton & Dalton, 2006; Desai et al., 2006 and Beasley, Carcello, Hermanson & Lapides, 2000). Farber (2005) reports on a sample of some 90 restatements for which SEC investigations are used as a proxy for fraud, finding that those fraud firms have fewer outside board members, fewer audit committee meetings, use audit firms other than the Big Four public accounting firms, and also have a higher percentage of instances in which the CEO is also the chairman of the board.

Interestingly, some three years after the restatements/fraud, the above indicators

of poor governance have been addressed. In fact, the number of audit committee meetings exceeds those of the control group. Farber also finds that institutional interest and/or analyst following a restatement does not increase in the governance repair period. This is explained as a logical result from investors doubting the fiduciary responsibilities of firms and their management post-fraud event. John C. Coffee (2006) has written extensively on the role of gatekeepers, or rather, lack thereof, in the corporate scandals referred to earlier. In his book *Gatekeepers: The Professions and Corporate Governance*, he continues his earlier work on explaining gatekeeper failures as documented in a series of working papers at the Columbia Law School and in the Berkeley Program in Law & Economics ('Understanding Enron: It's About the Gatekeepers, Stupid', (July 2002); 'Gatekeeper Failure and Reform: The Challenge of Fashioning Relevant Reforms', (2004), respectively). He has defined gatekeepers as 'reputational intermediaries' whose value is derived from their ability to add value and/or credibility to financial information based on attaching their name and reputation to the information attested to. He asserts that gatekeeper failures have been caused by a) a decline in deterrence and legal threats during the 1990s initiated by changes in securities legislation; b) increased managerial pressures to perform (short-term earnings management), linked with perverse executive compensation systems; and, c) escalating stock prices and related euphoria, over-confidence and positivity biases (Coffee Jr., 2006). Coffee provides an interesting analysis of the causes of gatekeeper failure based on gatekeeper market competitiveness and based on whose reputation is at stake. Of interest to our study is Coffee's conclusion that for analysts, it is their personal reputation and table position which drives their gatekeeper performance. This conclusion could imply that compared to the other gatekeepers which Coffee scrutinizes (auditors, rating agencies and law firms) analysts are more prone to individual prestige battles which could imply a greater sensitivity to biases. Corporate governance relates to the way in which a firm deals with the so-called 'agency problem.' Shareholders of publicly traded companies cannot monitor or influence management's actions directly, meaning that they cannot exert direct control over the day-to-day actions and transactions executed by management. As managers might not have the same interests as shareholders, this separation of ownership and control leads to the agency problem.

The agency problem is an essential element of the so-called contractual view of the firm, first developed by Jensen and Meckling (1976) and Fama and Jensen (1983).

Viewing the firm as a network of contracts among various stakeholders, the agency problem is expected to be controlled or mitigated by the board of directors (either through a one-tiered board which includes non-executives and is the predominant model in the United States and United Kingdom, or alternatively, by the two-tiered board structures predominantly found in continental Europe).

The responsibilities of boards, along with their structures and objectives, have come under severe scrutiny after the recent corporate scandals (including restatements). The Sarbanes-Oxley Act and comprehensive corporate governance practices in many countries have been enhanced since these scandals occurred. Recent advances in corporate governance have included:

- Chief executive officers and chief financial officers must take explicit responsibility for fairly and accurately reporting their firm's financial position by certifying the financial statements;
- Companies must file annual internal control reports that evaluate the effectiveness of internal controls on financial reporting and disclosures;;
- Audit committees must comply with new regulations governing their composition, expertise and procedures; and,
- Greater penalties have been introduced and imposed for managerial misconduct as part of these attempts to prevent accounting fraud.

By 2003, the three major stock exchanges in the United States required that each listed firm have a completely independent audit committee. In 2003, these exchanges also required that all members of the audit committee be financially literate, and at least one member have financial expertise. In addition, the Sarbanes-Oxley Act tightened regulation of auditors and provided the SEC with expanded enforcement authority against auditors, officers and directors. Now, with the introduction of the Sarbanes-Oxley Act a few years in the past, a number of studies and surveys have revealed that senior management considers such governance changes to be an impediment in the execution of corporate strategy (Zhang, 2007; Barger, Lehn & Zutter, 2007). In its deliberations over the Sarbanes-Oxley Act, Congress's final conclusion regarding the importance of internal financial controls was consistent with what academic literature had been saying for years. Experts in accounting theory have long emphasized the importance of internal controls in ensuring the production of

accurate corporate financial statements for all interested parties.

From a historical point, and considering the impact of the current credit crisis, it is interesting to note that the internal control provisions of the Sarbanes-Oxley Act were taken nearly verbatim from another act implemented more than a decade earlier, the Federal Deposit Insurance Corporation Improvement Act of 1991, which required managers of all covered banks to annually evaluate risks and corresponding mitigating internal controls. Altamuro and Beatty's (2007) recent empirical study found evidence that the provision accomplished its purpose by improving the quality of earnings reporting by regulated banks.

Byard, Li and Weintrop (2006) have studied the association between corporate governance and the quality of information available to analysts. Their research shows that analysts' information on corporate performance increases with the quality of corporate governance. Farber (2005) finds that firms encountering financial reporting fraud had poor governance compared directly to a sample of non-fraudulent firms. He also finds that these firms took actions to improve their corporate governance in the period following the fraud announcement. The firms that followed-through on improvement of governance measures had superior stock price performance in the period of governance remediation – though it must be noted that his findings on those points were only observed over a period of about three years.

Even more recently, Brown and Caylor (2008) have examined which governance provisions are associated with higher firm operating performance. Out of 51 governance provisions, they found only six provisions positively associated to firm financial performance. However, none of those six provisions were mandated by the three major US stock exchanges after the corporate governance revisions following 2002's corporate scandals. In addition, none of those provisions were anywhere close to Brown and Caylor's findings of which governance provisions 'protect' against earnings management. One of those provisions – no former CEO is allowed to serve on the board – could be considered a provision capable of unfreezing so-called board capture.

The Sarbanes-Oxley Act also required that companies carry out a self-assessment of internal controls over financial reporting and disclosures. These self-assessments

were followed by the issuance of a review and opinion by independent auditors. At the end of 2005, a summary report of 10-K filings with internal control provision audit opinions, revealed that from 3,665 filings, in 542 cases an adverse opinion was rendered by the respective independent audit firms (PwC Report). The categorization of material weaknesses on internal controls, which lead to these adverse opinions, showed that some 10 per cent of these weaknesses consisted of GAAP applications. More than anything else, this clearly should have signaled to analysts that additional restatements were highly likely. However, to our knowledge, and based on a sample review of analysts' reports following companies with an adverse 404 opinion, not a single analyst made reference to these material weaknesses in controls, an important subset of corporate governance measures.

### 1.3.5 RESTATEMENTS AND LOWER EARNINGS AND ACCRUAL QUALITY

Accounting accruals are often used by researchers to examine issues concerning earnings quality. Researchers have either used short-term working capital accruals or longer term assets/liabilities accruals to investigate earnings manipulation (Sloan, 1996; Richardson, Sloan, Soliman & Tuna, 2005; Dechow, Ge, Larson & Sloan, 2008). In a recent and comprehensive study based on some 2,190 AAERs<sup>10</sup> filed by the SEC (spanning the period from 1982-2005), various accrual measures are used to develop a model for predicting material accounting manipulations. Dechow et al. enhance the research carried out by Beneish (1999), and extend the basic model for predicting manipulations based on discretionary accrual accounting by also introducing measures of non-financial (primary) statement factors, such as off-balance items, abnormal changes in employee numbers, operating leases, and finally, incorporating financial market performance measures into a model. In the analyses however, it is concluded that the primary accruals concept in the model has the highest predictive power of manipulation. Richardson et al. (2002) find that a primary motivation for companies to manage earnings through accrual accounting abuse is to be able to attract capital at lower rates/prices. They also document that information underlying accrual accounting decisions contain significant indicators for earnings misstatements (restatement population between 1971-2000), and cite work by Richardson et al. (2002) and Coles, Hetzel and Kalpathy (2006).

<sup>10</sup> The SEC issues 'Accounting and Auditing Enforcement Releases' (AAERs) during or at the conclusion of an investigation against a company, an auditor, or an officer for alleged accounting and/or auditing misconduct. These releases provide varying degrees of detail on the nature of the misconduct, the individuals and entities involved and the effect on the financial statements.

### 1.3.6 RESTATEMENTS AND CONTAGION EFFECTS<sup>11</sup>

The existence of a 'contagion effect' has been well documented around a variety of corporate events such as bankruptcy announcements, dividend announcements, earnings releases, and stock split announcements (Lang & Stulz, 1992; Laux, Starks & Yoon, 1998; Tawatnuntachai & D'Mello, 2002, respectively). The explanation for contagion effects is that homogeneity of firms within an industry causes investors to re-assess the strengths and/or weaknesses of industry rivals. Whether accounting restatements are contagious has been studied from a number of angles. First, Gleason, Jenkins and Johnson (2008) find that, after a restatement, (non-restating) firms in the same industry have share price declines unrelated to analysts' earnings per share revisions. In particular, they find that there is a larger share price penalty for peer firms with higher accounting accruals, and firms that use the same external audit firm. Gleason et al. confirm the findings from an earlier study by Gonen (2003), which produced results indicating that for allegedly fraudulent restatements, there is, on average, a significant negative abnormal return for industry rivals of the announcing firm around the announcement day. Akhigbe, Martin and Whyte, in a study of the WorldCom bankruptcy, examine how information released about WorldCom prior to its bankruptcy filing affected institutional investors, creditors, and competitors (2005). Despite the heightened uncertainty facing investors during this period, they find that apparently well-diversified institutional investors and creditors were largely unaffected by the events leading to WorldCom's failure. However, large competitors were affected. Akhigbe et al. believe this to be an indicator that shareholders, analysts, and portfolio managers consider how firms with indirect ties to a financially distressed company may be affected. An additional explanation for the contagion, according to Akhigbe et al., is that the allegations of accounting fraud in this bankruptcy coupled with SEC probing into the operations of other telecom companies, dominated investors' sentiments and clouded their decision making.

Second, Kang (2008), based on signaling and attribution theory, finds that reputational penalties for alleged financial reporting fraud have spill-over effects for firms with director interlocks – situations in which a director serving on the board of the (alleged) fraudulent firm is also a board member of the 'infected' non-

<sup>11</sup> The phrase 'information transfer effect' is used in the accounting literature to refer to a positive or negative cross-sectional dependence in the stock returns of announcing and non-announcing firms. This phenomenon is also known as an 'information spill over' or 'contagion' in the finance literature.

fraud firm. Attribution theory (and the so-called fundamental attribution bias), has provided evidence that observers overestimate internal causes and underestimate external causes when explaining negative outcomes. Desai et al. (2006a) find that the reputational penalty for executives of restating firms is substantial – 60 per cent of these firms replace senior executives within 24 months, compared to 35 per cent for the control group of non-restating firms. Arthaud-Day et al. (2006) also study the reputational and stigmatization effects of restatements, not only on the CEO and CFO, but of the contagious effects on independent directors' reputation and positions. They find that turnover compared with control firms is as follows – CEO turnover is 24.2 per cent, versus 13.7 per cent; CFO turnover is 59 per cent, versus 30 per cent; and director turnover is 34.6 per cent, versus 19.3 per cent. Finally, audit committee member turnover is 47.8 per cent, versus 27.5 per cent. Thus, these turnover figures are significantly higher for restatement firms compared to control firms.

Long-term stock price effects have also been studied by Cheng and Chung (2006), who document post-announcement drift, subsequent to restatements. They find an average buy-and-hold abnormal return of negative 34 per cent over the 36-month horizon for the sample of restating companies.

Finally, a paper by Xu, Najand and Ziegenfuss (2006) investigates the intra-industry effects of earnings restatements due to accounting irregularities. The researchers detected a significant contagion effect for rival firms whose cash flow characteristics are similar to those of the restating firm. The restatement does not seem to influence all the firms in the industry, or firms that have a high probability of involving the same type of accounting irregularity as the restating firm does. Being unable to detect any competitive effect, nor a significant change in the implied cost of equity capital of the rival firms, the trio suggests that the contagion effect is due to the revision in the expected short-run future earnings of the rival firms.

### 1.3.7 RESTATEMENT STUDIES OUTSIDE THE UNITED STATES

Academics in other countries have also studied the restatement phenomenon, while chiefly exploring the practice in terms of market capitalization. Sun and Zhang (2006) studied restatements in China, finding that similar to the US environment, fraud firms have higher management turnover than corresponding non-fraud firms. However, in tracking down instances where the chairman and CEO take executive positions

after having been dismissed, they find a large portion of those leaving the fraud firms move to management positions in other firms. In fact, some 15 per cent of CEOs, and some 25 per cent of chairmen, receive promotions in those firms. Only a very small portion of CEOs and chairmen receive legal or administrative penalties. They further find that CEOs and chairmen in China, with a certain political background, are less likely to receive legal or administrative penalties. In Korea, 290 company executives, bank managers, bureaucrats and shareholders have been indicted for alleged public fund-regulated fraud in the period following the Asian Crash. Daewoo (1997-98), was the biggest corporate failure in Korea's history, and sparked a domino effect leading to numerous other corporate bankruptcies. The former CEO was arrested and charged with accounting fraud and embezzlement after allegedly inflating Daewoo's financial statements by an estimated US \$40 billion. Kamran and Goodwin (2006) studied some 195 earnings restatements by Australian firms for the period between 1970 and 2003 and found that restatement firms have higher growth potential and are smaller than non-restating firms from the same industry. They confirm findings from other studies mentioned above – restatements are generally negatively associated with market value.

Coffee, in a working paper entitled, 'A Theory of Corporate Scandals: Why the US and Europe Differ' (2005), theorizes that differences in the structure of share ownership account for differences in corporate scandals, both in terms of the nature of the fraud, the identity of the perpetrators, and the seeming disparity in the number of scandals at any given time. In dispersed ownership systems, corporate managers tend to be the rogues of the story, while in concentrated ownership systems, it is the controlling shareholders who play the corresponding role. Coffee cites Parmalat (Italy), and Hollinger (Canada), as primary examples. Corporate managers tend to engage in earnings manipulation, while controlling shareholders tend to exploit the private benefits of control. Ferrarini and Guidici (2005) attribute the litigation proceedings in the Parmalat case to be a result of significant differences between law enforcement in Italy as compared to the United States.

#### 1.3.8 RESTATEMENTS WITH SPECIFIC ACADEMIC ATTENTION

The highest-profile corporate scandals, Enron and WorldCom, have been addressed by academics on numerous occasions from a variety of angles. The Elsevier academic search engine Scopus produces 442 scientific articles with Enron in the title field (December 2008); WorldCom produces 36 hits.

In Special Issues 6 and 7 (August 2004) of *Critical Perspectives on Accounting*, the overarching theme of various contributions is the disappointing failure of the accounting and auditing firms, considered to be the primary external gatekeepers (O'Connell, 2004; Reinstein & McMillan, 2004). Next, the regulatory framework and responsibilities of both the SEC and FASB are considered, as well as the conflicts of interest which the external auditor (Arthur Andersen), had in the Enron case. In the special issue, Briloff (2004) provides a host of examples demonstrating that the auditing profession has failed in its key duty to assure reliable external financial reporting. Further articles address the quality differences and procedures within auditing firms to detect financial statement fraud. Craig and Amernic (2004) carried out a discourse analysis (content coding) of Enron's letter to shareholders, which is paired with a content analysis of the testimony provided by Berardino, the Arthur Andersen CEO at the time. In addition, a large number of business schools around the globe have issued articles and/or case studies dealing with the phenomenon of corporate scandals.

#### 1.3.9 RESTATEMENTS AND THE MEDIA AND POPULAR PRESS

In 2003, the Pulitzer Prize for Explanatory Reporting was awarded to *the Wall Street Journal* for a series of articles called, 'The Corporate Scandals of 2002: Causes and Effects'. In his introduction to the 10 articles that were awarded the prize, managing editor Paul Steiger wrote:

Suddenly, the forbidding, behind-the-scenes mechanics of corporate accounting, finance and regulation were of urgent relevance to every American. As complex revelations about one big company after another burst forth, even the most sophisticated readers found themselves hard-pressed to make sense of them.

Steiger also noted that his reporters tracked investigations, even triggering investigations in some cases, with their reporting. In a 2007 study, Dyck, Morse and Zingales (2007) found that, based on a sample of some 230 companies written about in the period between 1996 to 2004 (including cases such as Enron, HealthSouth and WorldCom), that the Factiva search engine contained an average of some 800 articles per case, reflecting the newsworthiness of those scandals. Dyck et al. also found that members of the media actually prompted some 16 per cent of the fraud cases in his sample. Interesting to note is that Dyck et al. also argue that the Texas edition of *the*

*Wall Street Journal* was the whistleblower of the Enron fraud, further substantiating the publication's contributions to the root of reporting on the fraud.

The Enron and WorldCom cases have inspired many authors, including insiders, to write about these scandals from a variety of angles. To illustrate this point by using the online Amazon book title search engine, a search results in some 500 hits for Enron, and some 90 for WorldCom. A December 2008 search on Factiva, searching all news sources on Enron, returned some 70,000 results, while a search for WorldCom returned some 20,000. Interestingly, some of the more 'popular' books on corporate scandals, such as: *Conspiracy of Fools* (Eichenwald, 2005, on Enron), *The Smartest Guys in The Room: The Amazing Rise and Scandalous Fall of Enron* (McLean & Elkind 2003), *Confessions of an Enron Executive: A Whistleblower's Story* (Brewer, 2004), *Het Drama Ahold* (Smit, 2006) and *De Prooi* (Smit, 2008, on ABN-AMRO), are based partly on publicly available information, but also contain significant and revealing references to minutes of board meetings, off-the-record interviews with executives, independent board members, politicians and regulators, and reviews of confidential corporate and governance documents (in Enron's case, including FBI notes of interviews, testimonies before federal grand juries, and finally, personal diaries). These publications prove that in the age of the Internet, historical 'immune systems' of secrecy and corporate confidentiality, combined with aggressive information-mining capabilities of business journalists and reporters, no longer protect corporate executives from public scrutiny and moral judgment.

#### 1.3.10 ANALYSTS' ABILITY TO ANTICIPATE AND/OR PREDICT RESTATEMENTS

A number of studies document that restatements with revenue recognition and/or management fraud issues are associated with greater adverse stock price movements. Analysts rate companies on asset management and portfolio attributes, and they are required to estimate, among other factors, the future earnings of the companies they follow. Analysts also issue buy/sell recommendations and target share prices for the companies they follow. Consequently, they are expected to have a professional interest in recognizing restatement warning signs (red flags), and/or predicting forthcoming restatements as these restatements will effect share prices and future earnings potential. There is mixed evidence regarding the ability of analysts and/or other market participants (internal or external), to predict restatements. Papers by Efendi, Kinney and Swanson (2005), and Desai, Krishnamurthy and Venkataraman

(2006), show that short-sellers and insiders predict restatements, while Griffin (2003), reveals that analysts do not anticipate and/or predict restatements. Griffin also finds that in a few instances, analysts downgrade companies before the restatement announcement; however, the biggest revision by far occurs the month after the restatement announcement is made, thereby suggesting that many analysts simply react to the bad news. Griffin examines how analysts and other 'insiders' react to those corrective restatements that lead to securities fraud. The analysis provides interesting insights into how and why analysts respond to bad news, however, the fraud cases he includes have not been categorized into specific legal allegations, including violations of federal securities laws. In a recent draft paper, Givoly, Hayn and Yoder (2008) assess to what extent analysts anticipate earnings management and, if so, whether they use this capability to produce earnings forecasts which adjust for the earnings management component. They find that analysts' forecasts are much closer to the number that management will report – the 'managed' earnings number, rather than the 'clean' unmanaged earnings number.

#### 1.3.11 RELEVANCE OF ACADEMIC STUDIES FOR THIS DISSERTATION

Until the end of 2001, restatement companies were smaller than the average of about 9,000 companies contained in ratings agency Standard & Poor's Compustat database (see Figure 1.4). However, beginning in 2002, average assets of restatement companies were greater than the average, peaking in 2005 with average assets of US \$7 billion (compared to the Compustat average of US \$5.2 billion), and documented in a 2008 report to the US Treasury. This means that from being a more or less insignificant issue for capital market participants and regulators, it became a phenomenon with unprecedented impact on corporate 'well-being' and it tarnished reputations of companies, their executives and gatekeepers. If there is an increased likelihood of encountering restatements for larger companies, a reasonable expectation would be that analysts develop some kind of 'radar' function, signaling to them suspect corporate situations. However, empirical evidence shows that analysts ignored many red flags, which – without the benefit of hindsight – could be identified in pre-restatement periods. Excessive executive remuneration packages, earnings management pressures, dominant and often narcissist CEOs, audit committees with insufficient financial expertise, the ever-increasing complexity of accounting rules, and gatekeepers with substantial conflicts of interest, are all among those red flags. Our study will show that four key factors – earnings management, CEO competence,

CEO job demands, and factors relating to integrity and governance – are to a large extent, ignored by analysts in their assessments.

In summary, the academic studies reviewed above, are of relevance to our studies in the following ways. (Also of note is that in Study 2 we will get back to some of these studies in more detail in developing our hypotheses):

- Studies (1.3.1) on the effects of restatements on market capitalization provide background on factors determining the severity of restatements, in particular when management intent is applicable. In Study 1, the concept of severity, and which factors enhance or mitigate severity, will be studied in more depth.
- Studies (1.3.2) on restatements as proxy for earnings management will be relevant in Study 2. In that study on analysts' perceptions of CEO behaviour, we will define 'Earnings Management Pressures' as a key cause for executives getting involved with earnings management, often leading to restatement situations.
- Studies (1.3.3) on financial reporting literacy will be used both in Studies 1 and 2, as important ingredients for defining the role of countervailing powers; more specifically, does financial expertise in audit committees change the perceptions of analysts on CEO pressures and behaviour?
- Studies (1.3.4) on corporate governance and the role of gatekeepers provide support for studies 1 and 2. In both studies the strength of governance measures before and after the restatement announcement will be considered. In particular in the restatement recovery period, we expect that our studies will demonstrate a strong relationship between governance remediation actions and how analysts perceive the company in its abilities to regain trust and reputation through CEO behaviour.
- Studies (1.3.5) on earnings and accrual quality deal with the issue of accounting discretionary space of executives and the related topic of management judgment in choosing and applying accounting principles. In Study 2 we will consider how analysts' perceptions of this 'accounting discretionary space' influence their assessments of CEO behaviour in restatement situations.
- Studies (1.3.6) on contagion effects of restatements are of interest to our studies because the threat of spill-over effects of restatements on

independent board members (and other gatekeepers) could affect the views of analysts in assessing effective countervailing powers in the restatement recovery period.

- Other studies (1.3.7 through 1.3.9) deal with restatement studies on companies outside to US, to illustrate they are not just a US phenomenon, in particular considering the implementation of IFRS. Finally, we mention a few academic studies which addressed particularly significant and/or high profile restatement cases. These studies provide colour to the earlier studies.
- Finally, studies in 1.3.10 deal with analysts' ability to anticipate restatements. Both studies 1 and 2 deal with analysts' perceptions in restatement situations, hence their relevance. Study 2 in particular will consider in greater depth academic studies into judgement and decision making by analysts.

ILLUSTRATIONS AND FIGURES

FIGURE 1.1 NUMBER OF RESTATEMENTS: 1997-2006 (SOURCE TREASURY REPORT; SCHOLZ 2008)

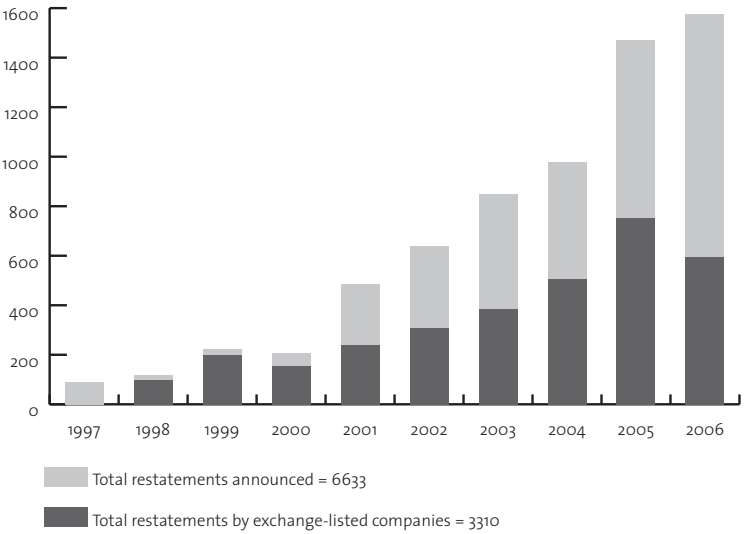


FIGURE 1.2 RESTATEMENT ANNOUNCEMENT RETURNS AND MARKET RETURNS OVER THE DECADE (SOURCE TREASURY REPORT; SCHOLZ 2008)

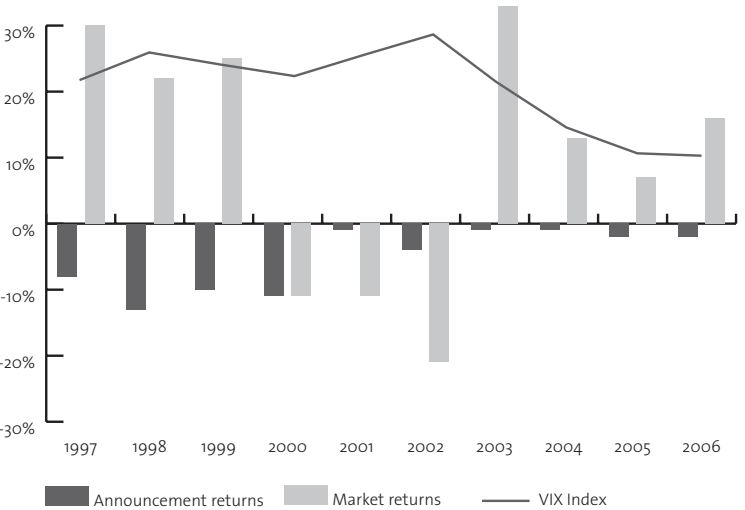


FIGURE 1.3 AVERAGE RETURNS FOR FRAUD AND REVENUE RESTATEMENT ANNOUNCEMENT (SOURCE TREASURY REPORT; SCHOLZ 2008)

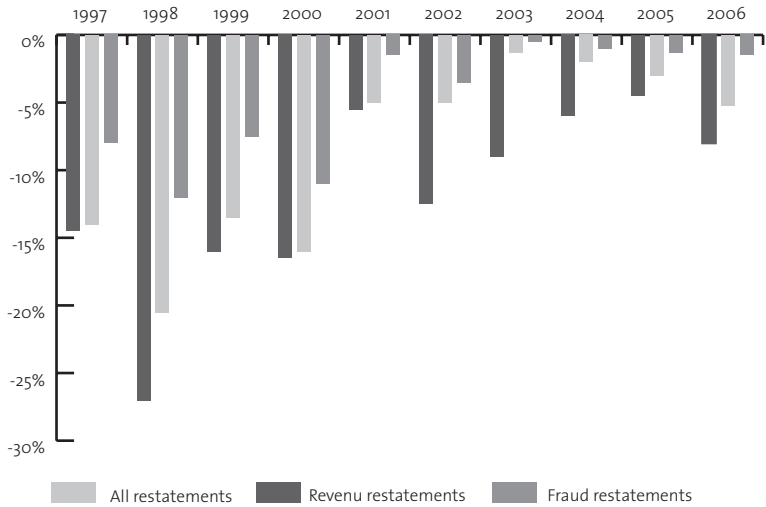


FIGURE 1.4 AVERAGE ASSETS FOR RESTATING AND COMPUSTAT COMPANIES (\$B) (SOURCE TREASURY REPORT; SCHOLZ 2008)

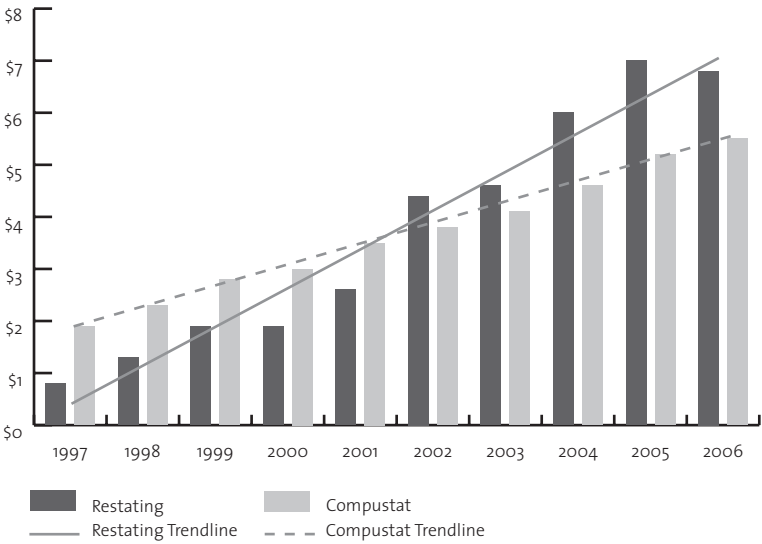


TABLE 1.1 INCIDENCE OF RESTATEMENTS WITH SEVERE CHARACTERISTICS

|                             |         | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | Total |
|-----------------------------|---------|------|------|------|------|------|------|------|------|------|------|-------|
| All restatements            |         | 90   | 119  | 224  | 205  | 484  | 640  | 847  | 979  | 1468 | 1577 | 6633  |
|                             |         |      |      |      |      |      |      |      |      |      |      |       |
| Restatements characteristic |         |      |      |      |      |      |      |      |      |      |      |       |
| Income-decreasing           | count   | 71   | 84   | 117  | 159  | 435  | 570  | 755  | 865  | 1353 | 1397 | 5806  |
|                             | percent | 79%  | 71%  | 82%  | 78%  | 90%  | 89%  | 89%  | 88%  | 92%  | 89%  | 88%   |
| Core earnings               | count   | 68   | 79   | 110  | 158  | 304  | 426  | 540  | 570  | 889  | 809  | 3956  |
|                             | percent | 76%  | 66%  | 49%  | 77%  | 63%  | 67%  | 64%  | 58%  | 61%  | 51%  | 60%   |
| Fraud                       | count   | 26   | 30   | 33   | 50   | 39   | 59   | 28   | 18   | 36   | 31   | 350   |
|                             | percent | 29%  | 25%  | 15%  | 24%  | 8%   | 9%   | 3%   | 2%   | 2%   | 2%   | 5%    |
| Any severe characteristic   | count   | 78   | 95   | 139  | 185  | 465  | 614  | 818  | 922  | 1405 | 1491 | 6212  |
|                             | percent | 87%  | 80%  | 62%  | 90%  | 96%  | 96%  | 97%  | 94%  | 96%  | 95%  | 94%   |
| Core earnings or fraud      | count   | 68   | 80   | 120  | 164  | 307  | 435  | 545  | 571  | 895  | 813  | 3998  |
|                             | percent | 76%  | 67%  | 54%  | 80%  | 63%  | 68%  | 64%  | 58%  | 61%  | 52%  | 60%   |

## 1.4 Impact of Financial Statement Restatements on Corporate Reputation

### 1.4.1 THE VALUE OF GOOD CORPORATE REPUTATION

One of the core assumptions in reputation management is that a good corporate reputation provides a company with a license to operate. A corporate reputation describes what people think and feel about a company, based on information they have been exposed to about its products, employees, social initiatives, past performance, or future prospects (Van Riel & Fombrun, 2007). Corporate reputations represent aggregated assessments of organizations' institutional prestige (Shapiro, 1987). Stakeholders need these aggregated assessments to reduce uncertainty in general, and specifically with regard to the decision-making process (Poesz, 1989).

Among an organization's financial stakeholders, there are two types of financial audiences that are especially critical in an organization's reputation-building activities – lead analysts and institutional investors. Financial analysts have been known to possess a 'herd mentality,' meaning that analysts are influenced by opinion leaders within their own field of work (see Bernhardt, Campello & Kutsoati, 2006). Hence, having a good corporate reputation with lead analysts will create a positive aura for a company. A good corporate reputation positively impacts analysts' earnings forecasts because of the future profitability associated with higher reputations – evidence has shown that such a corporate reputation has beneficial implications for future profitability by helping organizations attain superior performance outcomes (Cordeiro & Sambharya, 1997; Roberts & Dowling, 1997). Stark (2002), for example, notes that shareholder returns for companies with a strong corporate reputation have been, on average, 25.5 per cent, versus 10.7 per cent for their peers. Similarly, reputation also affects investment decisions by institutional investors. From an organizational perspective, maintaining a good corporate reputation with institutional shareholders is most critical, given the power that these shareholders can exert (Van Riel & Fombrun, 2007).

There is some evidence that organizations with a strong corporate reputation are less likely to experience restatements (Cao, Myers, & Omer, 2008). Presumably they are motivated to prevent damage to their reputations. In addition, CEOs and other top executives might be motivated to prevent damage to their personal reputations

(Wiesenfeld, Wurthmann, & Hambrick, 2008). Hence, the value of having a good corporate reputation works both ways – it can increase a company's financial performance, but also prevent damage to its performance. On the other hand, there is also evidence that rather than avoiding fraudulent behaviour to protect their reputations, companies can try to protect their reputations by colluding with board members and other gatekeepers to provide legitimacy for their actions (Tillman, 2008).

No matter whether or not a good reputation can help to prevent restatements, once a restatement does occur, it seems likely that it can severely damage a company's reputation. The fact that restatements can be critical for a company's reputation is highlighted by the amount of media coverage devoted to many restatement cases. For example, in a 2007 study, Dyck et al. found that based on a sample of some 230 companies written about in the period 1996 to 2004 (including cases such as Enron, HealthSouth, and WorldCom), the Factiva search engine contained an average of some 800 articles per case, reflecting the newsworthiness of those scandals (see Table 1.1).

As perceptions of the organization by key resource providers change, and the expectations of the organization's future profitability are adjusted downward, corporate reputation will be damaged (Van Riel & Fombrun, 2007). As we will show, a restatement cannot only directly damage a company's profitability by making downward adjustments to its profits, but can also decrease the level of trust that stakeholders have in the truthfulness of the company's financial reporting. This decrease in trust, which is especially likely when fraud is involved, can damage the level of trust in the company as a whole, and hence its reputation.

#### 1.4.2 MEASURES OF CORPORATE REPUTATION

There are basically three conceptual paradigms within reputation measurement that influence the way that corporate reputation is measured (Berens & Van Riel, 2004).

The first paradigm is built on the stance that a corporate reputation is based on the social expectations that people have of companies. Within this paradigm, there are basically two ways of looking at reputation. The first sees reputation as equal to attitude. The supposition is that a corporate reputation can be decomposed into

various partial images corresponding to different social expectations, e.g. the image of a company as employer, or the image of the company as a sound investment. Reputation measurement within this paradigm entails the identification of relevant attributes and subsequent rating of a company based on these attributes. The reputation score is formed by the average score on all attributes. An example of a reputation ranking based on this method is Fortune's Most Admired Companies. Companies within the Fortune 500 are grouped into industries and a customized questionnaire is created. This questionnaire is sent to more than 12,000 executives within the companies, board members of those companies, and financial analysts who follow that particular industry (Stark, 2002). Respondents rate companies in their own industry on eight criteria – innovativeness, overall quality of management, long-term investment value, social responsibility to the community and the environment, ability to attract and retain talented people, quality of products or services, financial soundness, and finally, the wise use of corporate assets. A company's final Fortune score is the average of its scores across the eight criteria.

The foundation of the second stream within the social expectations paradigm is that corporate reputation is an overall assessment (Gestalt). Corporate reputations are measured directly by asking respondents about their feelings toward a company. An example of this is the RepTrak™ Pulse, developed by the Reputation Institute. The Pulse score is the result of four questions regarding the feeling, trust, admiration and esteem a respondent feels towards a company. Beyond the four Pulse questions, respondents are also asked to rate a company on 23 key performance indicators that are grouped around seven reputation drivers that stimulate stakeholders to support the company, regarding aspects such as purchasing and investment decisions, products and services, innovation, workplace, governance, citizenship, leadership and performance. To identify the implications of corporate reputation, respondents also fill out a section on their supportive behaviour intentions, such as the willingness to purchase. The RepTrak™ study takes place via an online survey and is held annually among the general public. In 2008, the RepTrak™ study was executed in 27 countries on six continents (Reputation Institute, 2008). Companies included for measurement are the world's largest companies as judged by total revenue. Rated companies also must have significant consumer presence and be familiar to the general public.

The second paradigm distinguishes associations on the basis of different corporate

personality traits that people attribute to companies (Berens & Van Riel, 2004). An example is the corporate personality scale developed by Davies, Piger and Sedor (2008). The corporate personality scale consists of 49 items belonging to seven dimensions – agreeableness, enterprise, competence, ruthlessness, chic, informality, and machismo.

Finally, the third paradigm within reputation measurement is focused on corporate associations with a basis consisting of different reasons people have to trust or distrust a company (Berens & Van Riel, 2004). The corporate credibility scale developed by Newell and Goldsmith (2001) falls within this paradigm. The corporate credibility scale contains eight attributes within two main dimensions, namely, expertise and trustworthiness.

#### 1.4.3 CORPORATE REPUTATIONS OF RESTATING COMPANIES

In order to get an approximate feeling for the effect of financial restatements on corporate reputations, the reputation scores of restating companies before and after the restatement were examined. Given the financial nature of the topic, the Fortune database provides the best entrance to determine the reputational effect of restatements, as the reputation database is composed of perceptions of executives, directors and analysts. The RepTrak™ Pulse survey measures corporate reputations among the general public, which may not be aware of the announcement of a financial restatement. Moreover, the Pulse construct has only been in use since 2006, putting strenuous limitations on the sample. The corporate personality and corporate credibility scales have mainly been used for scientific purposes, hence there are no readily available databases containing the results of multiple companies.

The sample consists of some of the restating companies used in the empirical parts of this thesis. The Fortune database is built on surveys executed in the first two months of a calendar year. Hence, the month of a restatement is important in pinpointing the years before and after a restatement. Companies with restatement dates in January or February of a certain year are removed from the sample, as it is ambiguous to determine whether the effect of the announcement is fully incorporated at the time of reputation measurement. Crosschecking the company names of the restating companies with the available reputation data in the Fortune databases resulted in the following useable sample, as stated in the table below.

**TABLE 1.2 COMPARATIVE OVERVIEW RESTATING COMPANIES WITH AVAILABLE REPUTATION DATA**

|                | Announcement date | Year of reputation score preceding announcement | Year of reputation score after announcement |
|----------------|-------------------|---|---|
| BP             | June 2006         | 2006  | 2007  |
| Credit Suisse  | March 2004        | 2004  | 2005  |
| General Motors | March 2006        | 2006  | 2007  |
| Goodyear       | October 2003      | 2003  | 2004  |
| Norsk Hydro    | April 2006        | 2006  | 2007  |
| Time Warner    | September 2006    | 2006  | 2007  |

The reputation scores of the restating companies as listed in the Fortune database are provided in the table below.

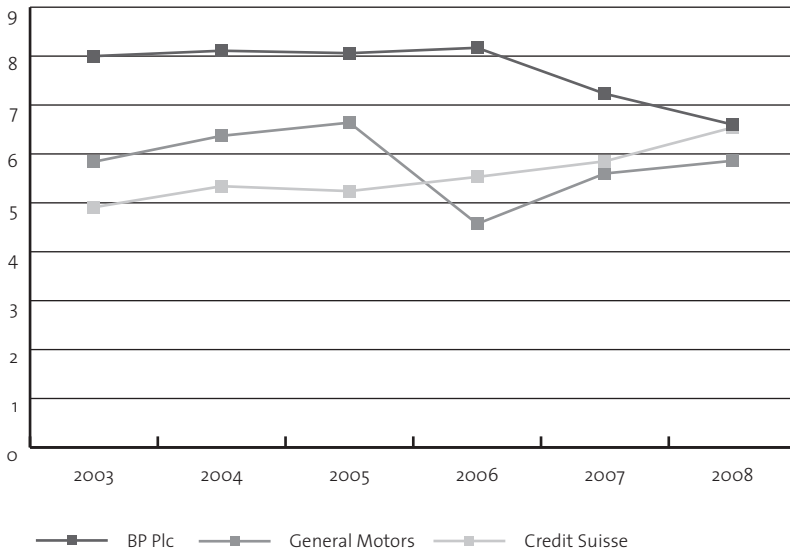
**TABLE 1.3 REPUTATION SCORES OF A SAMPLE RESTATING COMPANIES**

|                | Reputation score preceding announcement | Reputation score after announcement | Difference |
|----------------|---|-------------------------------------|------------|
| BP             | 8.17                                    | 7.32                                | -10.4%     |
| Credit Suisse  | 5.34                                    | 5.24                                | -1.9%      |
| General Motors | 4.57                                    | 5.60                                | +22.5%     |
| Goodyear       | 5.56                                    | 4.86                                | -12.6%     |
| Norsk Hydro    | 6.81                                    | 6.68                                | -1.9%      |
| Time Warner    | 6.50                                    | 5.71                                | -12.2%     |

Despite the limited number of cases in the sample, it is very interesting to see that financial restatements appear to have a negative effect on the attitude towards a company after the statement (as measured by Fortune). Five out of the six companies show a decline in their reputation score after they announced a financial restatement. Only one company, General Motors, experienced an improvement in its corporate reputation.

In order to gain more insights in these results, the window around the restatement was broadened to gather more years, capturing potential effects of temporal bias. The available data did not allow us to establish a time series with at least two years before and after the restatement announcement date for Goodyear, Norsk Hydro and Time Warner. The results for the remaining three companies are shown in the graph below.

FIGURE 1.5 REPUTATION ANALYSES BP, CREDIT SUISSE AND GENERAL MOTORS



As the graph highlights, BP's reputation was at its peak just before the restatement announcement in June 2006. The years following the announcement show a sharp decline in BP's reputation. Credit Suisse only experienced a local low point around the time of the announcement and consistently showed improving reputation scores after the announcement. General Motors' reputation score dropped dramatically in the Fortune measurement in the beginning of 2006, though this is most likely due to its poor financial performance and talk of potential bankruptcy at that time. The revelation of General Motors not entering into bankruptcy may have caused the upsurge of its reputation score in 2007.

The case of General Motors is consistent with findings from the literature which suggest that the amount of the impact of a crisis is affected by what the reputation of the company was beforehand (see Van Riel & Fombrun, 2007; Rhee & Valdez, 2009). In the case of General Motors, its reputation was already severely damaged before the restatement and hence, the effect of the financial restatement did not translate into a further decline of General Motors' reputation.

Given the limited sample size, it is not possible to draw solid conclusions about the effect of financial restatements on corporate reputation. Nonetheless, it is very interesting to see that in three out of six cases, the reputation loss after the restatement announcement is more than 10 per cent. As research shows that reputational losses during a crisis average to 8-15 per cent of the market values of affected companies (Palmrose et al., 2004; Van Riel & Fombrun, 2007), it becomes clear that the negative impact on the company can be enormous.

#### 1.4.4 CEO REPUTATION OF RESTATING COMPANIES

Not only is the reputation of the company at stake during a financial restatement situation, but also the personal reputation of the CEO him/herself:

Executives and directors experience personal devaluation when their companies perform poorly. They tend to be fired, they tend not to be rehired elsewhere, and those who are rehired tend to be hired in lesser capacities or at lesser firms. (Wiesenfeld et al., 2008: 231)

The underlying reason for this, as stated by Wiesenfeld et al. (2008), is that corporate failure can lead to stigmatization and subsequent denigration of the CEO, who, as the figurehead of the company, often takes most of the blame. This is because the media has the propensity to attribute the company's performance to the actions of the CEO (Hayward, Rindova & Pollock, 2004).

Wade, Pollock, Porac and Graffin (2008) find that the higher the reputation of the CEO before the crisis, the harder the fall in status after the crisis. With respect to financial restatements, this is clearly visible in the case of Kenneth Lay, the CEO of Enron. In only a few months time, his status as a revolutionary leader in the public utility industry was completely destroyed, and he was crucified in the media (Wade et al., 2008).

Such damage to a CEO's reputation is often not only a personal misfortune, but can have serious consequences for the company as well. The image of the celebrity CEO serves as an intangible asset for the company and is directly tied to the company's reputation (Ketchen, Adams & Shook, 2008; Wade et al., 2008). A celebrity CEO serves as a benefit to the corporate reputation so long as business takes its normal course. However, in times of crisis, the negative effects of CEO celebrity might rise to the

surface. A celebrity CEO receives increased attention and hence any gaps between actual and expected firm performance are magnified (Ketchen et al., 2008). In particular, unethical or illegal behaviour by a celebrity CEO provides the company with added negative media attention, further highlighting damage to the corporate reputation.

#### 1.4.5 FACTORS MITIGATING THE IMPACT OF RESTATEMENTS

Handling the crisis in a proper way will mitigate the negative effects of a financial restatement. For example, in a study by Knight and Pretty (1999), it was shown that companies experiencing man-made catastrophes could be divided into two groups: the 'recoverers,' whose stock after an initial dip ultimately rose 10 per cent; and the 'non-recoverers' whose stock dropped by 15 per cent. It seems likely that the amount of the impact is affected by the steps a company takes to handle the crisis (Van Riel & Fombrun, 2007). As Knight and Pretty (1999) explained it: these catastrophes offer an opportunity for management to demonstrate their talent in dealing with difficult circumstances.

In order to shield the CEO's and the company's reputation during a restatement crisis, it is important that a CEO engages in damage control. This is a factor that Wade et al. (2008) label 'social astuteness' – being able to understand perceptions and respond accordingly. A good example of this is the decision of CEO James Burke of Johnson & Johnson to remove Tylenol from the store shelves after the 1982 product tampering scare. Not only did the decision positively reflect on Burke, it also restored the corporate reputation of Johnson & Johnson as a supplier of safe products. In the empirical parts of this thesis, we will take a close look at the nature of these reputational remediation actions.

## 1.5 Principal Research Questions and Thesis Overview

### 1.5.1 INTRODUCTION AND PRINCIPAL RESEARCH QUESTION

The primary purpose of financial statements is to provide capital market participants (investors, creditors, financing entities and other stakeholders) with information that enables them to make informed decisions (Lev & Zarowin, 1999). To be useful, financial information should be relevant, timely and faithfully represent real-world phenomena as well as be comparable and understandable (FASB & IASB, 2006). In other words, financial statements must serve to increase the quality of financial judgment and the ability of market participants to make informed decisions. Judgment based on financial statements works in two directions.

The first, *backwards-looking judgement*, answers questions such as how has the company and its management performed compared to industry peers, and whether the company utilized its resources (e.g. capital, employees, etc.) in an efficient, effective and competitive manner. The second, *forward-looking judgement*, predicts such considerations as whether the company and its management team will deliver adequate (above peer group) returns in the future, and whether the company will utilize its resources in such a manner that it will attract financial resources, customers, employees and investors in the future.

A Discussion Paper (FASB & IASB, 2006), jointly developed by the US Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB), and issued in July 2006, described the objectives of financial reporting as follows:

The objective of general purpose external financial reporting is to provide information that is useful to present and potential investors and creditors and others in making investment, credit, and similar resource allocation decisions.

To help achieve its objective, financial reporting should provide information to help present and potential investors and creditors and others to assess the amounts, timing, and uncertainty of the entity's future cash inflows and outflows (the entity's future cash flows). That information is essential in assessing an entity's ability to generate net cash inflows and thus to provide returns to investors and creditors.

Financial statements also serve to alleviate the so-called ‘agency problem’ (Jensen & Meckling, 1976; Fama & Jensen, 1983) – which chiefly asks, how outsiders (e.g. investors, lenders, etc.), who are in a principal-agent relationship with insiders (e.g. executives and the chief executive officer, in particular), ensure that their outsider interests are properly served. Insiders have access to a wide range of proprietary information on their firm’s competitive strengths, such as its technologies, its customer base, the power of its workforce (including its top management team) and contractual positions. Add to that information the knowledge they have about their firm’s relative weaknesses, such as aging production facilities, new (threatening) technologies, impairments in tangible and/or intangible asset bases, and so on. Insiders may also have private (adverse) information on their own investment choices (assets/projects), or discover negative qualities of assets/liabilities in the course of business transactions – making them privy to sensitive information well before such information is made known to outsiders, or the public, if such information is ever made known.

Another facet of the agency problem is that outsiders are unable to observe insiders’ risk appetite and other less-quantifiable business actions, such as assessing insiders’ diligence in making investment decisions and/or the selection of business partners. Transparent financial reporting should mitigate these insider-outsider informational asymmetries by providing information on a firm’s earnings, investments, capital strengths (solvency) and financing position (including liquidity) – not only in an absolute quantitative sense, but also in the more difficult to measure qualitative sense. Such qualitative measures include quality of earnings, quality of debtors/customer base, quality of workforce and its knowledge base, and – last but not least – quality of a firm’s top management team and the appropriateness of its management reward system. The collective of these qualitative company characteristics should be considered as a key component and/or contributor to both a company’s reputation and that of a company’s top management team.

Restatements render earlier published financial statements (and the information contained therein) unreliable. Restatements threaten the subtle balance in the information supply-and-demand equilibrium and, by definition, substantially increase the agency problem. A restatement announcement creates instantaneous doubts, not only on the exact quantitative measures of a company’s financial performance (such

as net earnings and shareholders' equity), but it also creates immediate uncertainty as to the reliability of a company's management team, the team's integrity and can call into question whether management's private objectives and behaviours (the motivations and actions of the insiders), were aligned with the interests of investors and other stakeholders (the outsiders). Therefore, restatements represent a phenomenon tied to myriad implications for the judgment and decision making of capital market participants, in particular analysts, in terms of their assessments of both quantitative and qualitative aspects of a company's performance as well as its top management.

In section 1.3, we described and summarized earlier research on the restatement phenomenon. Basically, two strings of research can be distinguished. The first group of studies deal with the quantitative aspects of the effects of restatements on share prices, alongside the consequences of restatements on analysts' earnings estimates and expected future financial performance. Most of these studies are based on archival data and statistically associate financial or other characteristics of restatements with capital market data. A second collection of research deals with causes and consequences of governance measures, executive reward systems, contagion, and the reputational effects of restatements. Again, these studies are predominantly based on associations between the more qualitative characteristics of the restatement environment (e.g. board composition, CEO and/or CFO accounting expertise, network relationships), and after-the-fact occurrences and characteristics of the restatement phenomenon.

Both strings of research reveal that behavioural attributes of firm executives (and of CEOs in particular), and those attributes of analysts themselves, play a key role in how the market ultimately reacts and interprets restatement situations. Consequently, the tenor of communications by both the company and the analysts following the company is coloured accordingly. The overarching theme in our research is to assess how well and to what extent analysts, as gatekeepers to the health of a company, are able to distinguish between restatement facts (financial information), and restatement 'coloured background' information (e.g. perceptions of CEO pressures, assessments of CEO abilities and strength of countervailing powers).

For our purposes, important drivers of analysts' judgment and decision making will include an examination of the effects of perceptions of CEO pressures, executive job demands, CEO confidence levels, and CEO dominance on analysts' work in the wake of a restatement. Do analysts' perceptions of CEO pressures and characteristics influence analysts' judgments of CEO behaviour before and after a restatement announcement?

The main research question in this thesis is:

*Which factors ('blindness') in a restatement situation can obscure gatekeepers' (in particular analysts') perceptions and tarnish corporate reputation?*

More specifically, we address the following questions:

- Which factors obscure communication on restatements and thereby affect perceived severity of a restatement?
- Which factors blur analysts' views (as gatekeepers) of CEO behaviour and a company's reputation when taking remedial actions as part of restatement situations?
- Do such blinders explain gatekeeper failure and why restatements come as a 'predictable surprise'?

We shall use a combination of qualitative studies, along with a survey approach, to enable us to answer the primary research questions. Therefore, our planned theoretical contribution is to uncover how restatement situations are coloured by a firm's internal governance and power struggles alongside informational demand forces imposed by capital market participants. Next, we will assess and model how certain behavioural biases and bounded awareness influence analysts' judgment and decision making in restatement situations.

Our contribution to management and accounting practice can be summarized as follows: If companies, their executives and gatekeepers would have an improved understanding of how restatements, and in particular their behavioural effects on monitoring functions, affect the potential longer-term value drivers of a firm, then they (both management and gatekeepers) can take more adequate actions in the future to protect firm value and corporate reputation. In that context corporate

reputation is considered to be of essence for a company in its ability to attract and secure capital, employees and customers. Restatements can affect a company's license to operate. Therefore, a deeper insight into which factors obscure a clear view by capital market participants (in particular analysts) in restatement situations, can help managers and gatekeepers in making better decisions to remediate damage caused by a restatement.

Bonner (2008) provides a framework for studying judgment and decision-making issues in the domain of accounting information. Judgment and decision making in that context involve not only producers and users of financial and/or accounting information, but also regulators and gatekeepers. Her framework greatly informs our sub-study steps and will provide justification for many of the research methodologies that follow. The steps followed in this thesis are shown in Figure 1.6 (Study Overview). In this chapter, we have explained that judgement and decision making by market participants following a restatement are of vital importance in determining the impact of the restatement. In the following sections, we will explain how the other chapters of the thesis build on this premise.

#### 1.5.2 STUDY 1 – CONTENT CODING STUDY AND RESTATEMENT COMMUNICATIONS

The various regulatory reports and academic studies into the restatement phenomenon, as described in section 1.2 and 1.3, provide evidence that restatements have serious consequences for a firm's perceived financial performance. However, restatements not only imply that past financial performance was misstated and/or misunderstood, they also contain significant, more intangible messages on factors such as strength of corporate governance, (in)adequacy of internal controls, pressures on management to outperform competitors, and evidently, how management could manoeuvre itself into such a trust-imploding position. Trust and reputation, as more fully described in section 1.4, are precisely the two most vulnerable intangibles driving a firm's value – they take long to build, however, they may vanish within moments of a restatement, or other (financial) crisis announcements.

FIGURE 1.6 STUDY OVERVIEW

BACKGROUND DESCRIPTION SECTION I

Judgment and decision making following restatement(s) is an important task for capital market participants.

STUDY 1

Certain dimensions of restatements are expected to have a significant impact on severity judgment by capital market participants and impact reputation assessments. **Which factors obscure a clear/untainted view?**

Quality of financial analysts' judgment following restatement situations can have significant impact on a firms' reputation and that of its CEO. **Which factors blur analyst's views?**

**Can we quantify the factors that influence analysts' judgment of CEOs in restatement situations? And hence influence firms' reputational assessments?**

STUDY 2

Do analysts recognize earnings management pressures on CEOs?

Do analysts recognize executive job demands of CEOs?

Are analysts influenced by biases in their JDM on restatements?

STUDY 3

Do analysts confirm these biases and bounded awareness? (Through direct questioning.)

CONCLUSIONS AND DISCUSSIONS

Do these blinders explain gatekeeper failure? (Provide suggestions for improving the role of the independent board.)

(Following Bonner's Framework (2008) – *Judgment and Decision-making in Accounting* – adapted to this thesis.)

Restatements deal with misstatements of financial information and/or disclosures in a company's primary financial communication mechanisms. Understanding the precise nature of the financial information distortion in itself is already a demanding task, given the current complexities of financial accounting standards and the wide topological variety in type of restatements, as Figure 1.7 (Simplified Typology of Restatements) reveals.

However, both companies and financial analysts are expected to have adequate in-house financial expertise, which enables them to make judgments in the context of restatement announcements and their subsequent follow-up communications. We would expect that companies, particularly the CEO and CFO, would know what, how, and when to communicate on restatement matters. Similarly, we would expect financial analysts to be able to ask the 'right' questions and probe their sources deeply enough to gather the information they need to assess the company's now-revised financial position and assess its future performance potential.

Next, restatements not only imply that corrective financial disclosure actions need to be taken; they require an explanation as to what caused them to happen in the first place. Again, what makes this issue complex to judge is the 'discretionary space' available to senior management in selecting and applying accounting principles. As can be seen in the current disclosures required to be made by management in the 'Management Discussion and Analysis' section of financial statements (or comparable sections), management uses considerable judgment, and applies significant estimates, in its application of accounting principles to financial reporting. Therefore, along with the dimension of the 'simple' financial distortion, is the dimension of management's integrity and/or intent when using this 'discretionary' accounting space. This dimension is important as it will be the basis for distinguishing accounting errors (unintentional), from accounting irregularities (intentional misstatements). Unfortunately, in all too many cases, management did not stay within the discretionary accounting space in issuing its financial statements, but instead propelled its company into accounting and reputational limbo. Obviously, applying judgment to this dimension of information supply (from the CEO and CFO), and information demand (from analysts, auditors, and regulators) is a much more tedious task.

Therefore, our first research question is to consider which primary dimensions can be developed to assess the severity of restatements. We plan to apply a grounded-theory approach to this question, and will utilize content coding to corporate (executive) communication expressions (press releases), analysts' reports, and the combined communications between executives and analysts (transcripts of conference calls hosted by the restatement company).

Study 1 – Sub-research question 1:

*What type of restatements can be distinguished in terms of severity?*

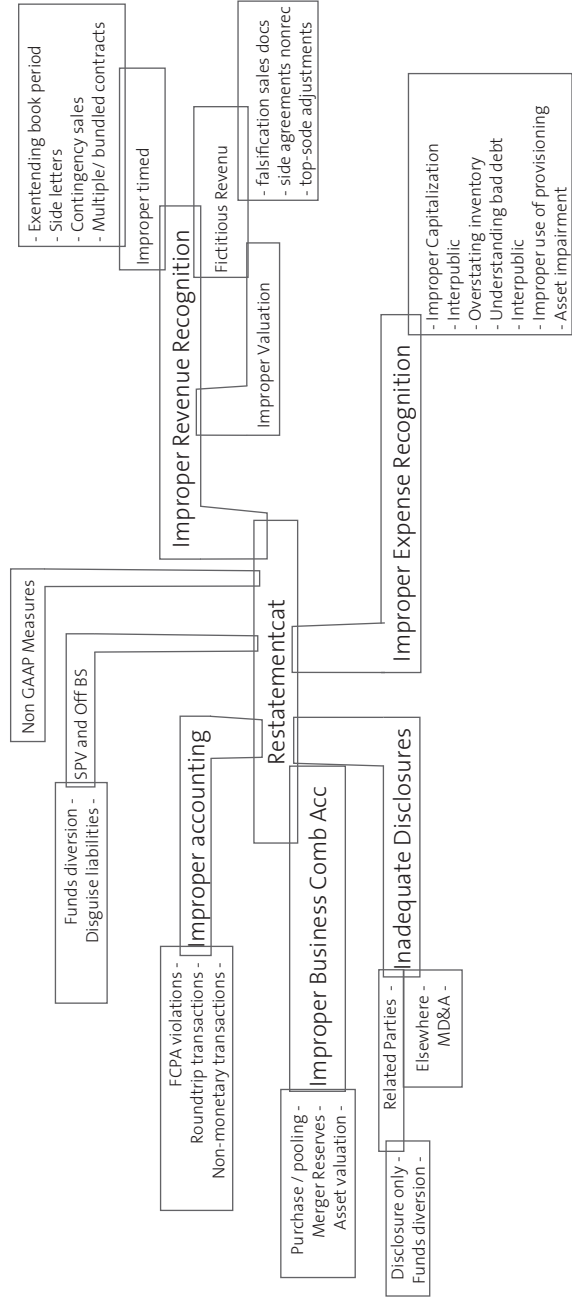
From studying the restatement literature, and also based on practical experience, it becomes evident that each and every restatement situation is different. Different, not in the sense of its 'birth' (the restatement origin is always a correction of fundamental errors in accounting), but rather on its 'genetic' makeup, composition and development/ grooming. The process of how restatements come to life within an organisation, how pressures of governance and executive power-play influence the disclosure and communication processes, and finally, how restatement causes are remediated, determine to a large extent how the assault on the company's 'reputational' and financial health will be judged by stakeholders. We need to be able to strip away the colouring influence of noise factors, which enhance the perceived severity of restatements and assess whether analysts are able (and enabled) to recognize those factors that serve to exacerbate the perceived severity of restatements. Again, our grounded-theory approach will help us to discover these restatement 'noise' factors. On that basis, our next research question will be:

Study 1 – Sub-research question 2:

*Which factors obscure communication on restatements and enhance reputational risks in restatement situations?*

Once a restatement hits a company, its senior executives are under severe pressure from the independent board, forensic investigators, the company's independent auditors, and legal counsel (both internal and external). Practice also reveals that in many instances, particularly when there are doubts about the integrity and/or intent

FIGURE 1.7 SIMPLIFIED TYPOLOGY OF RESTATEMENTS



of senior management, independent legal counsel, together with forensic experts, will start investigating the causes and background factors that contributed to the restatement. Credibility of senior leadership is at stake. Management needs to provide comfort on dual dimensions of the restatement severity plane – first, is management taking appropriate governance, internal control and compliance actions? And second, is management in a position to communicate openly in order to mitigate information distortion concerns? Therefore, our third sub-research question will be:

Study 1 – Sub-research question 3:

*Which steps can be taken by a company to mitigate reputation risks in restatements?*

The answers to the above questions will help us understand how restatement situations tend to become clouded, or coloured, by background noise. Stakeholders and outside gatekeepers, including analysts, are often only allowed to see the communication ‘outcomes’ of deliberations taking place within a company. Should a company fail to put such ‘background noises’ into the right context – adding to pressing uncertainties that the market is already struggling with on both dimensions of restatement severity – then restatement recovery can be seriously impaired. The need to better understand factors obscuring communication around restatements, and understand how uncertainties arise, is the fundamental reason for our research questions in Study 1. Providing transparency around the primary causes of restatement severity can help us understand how analysts react to restatements in their role of gatekeeper. This knowledge can help executives and boards to improve their management and communications during a restatement crisis.

**1.5.3 STUDY 2 – ANALYSTS’ SURVEY: MEASURING ANALYSTS’ PERCEPTIONS OF CEO BEHAVIOUR IN RESTATEMENT SITUATIONS**

With the objective of the first sub-study being to gain a deeper understanding of the severity dimensions of a restatement situation, we additionally expect to uncover forces enhancing reputation risk in restatement situations, along with the remedial actions that can be taken by the firm’s executives and/or board to mitigate reputation risks. These forces and subsequent remedial actions must be ‘peeled off’ in order to obtain a clearer view of the underlying forces which contributed to pressuring

companies, and, in particular, the CEOs of those companies, into misstating their financial position. In Study 2, we plan to develop a model of analysts' perceptions of CEO behaviour. In particular, we are interested in uncovering whether in the period leading up to the restatement, analysts recognize pressures on the CEO to commit and/or support accounting practices that will result in financial misstatements. Next, we seek to uncover which forces, biases and perceptions taint analysts' views of CEO behaviour in restatement situations. As discussed in section 1.2 and 1.3, regulatory reports and academic research show that financial performance pressures often lead to misstatements. Literature in organizational psychology indicates that CEOs (particularly those of larger public companies), under numerous pressures to perform, share certain character traits that might make them more prone to succumbing to these financial performance pressures and reverting to the use of accounting irregularities.

In developing our model with an eye towards identifying and categorizing these pressures, we referred to academic literature on earnings management pressures (including executive rewards), executive job demands, corporate governance and the effects of CEO confidence levels. In addition, in new standards that became effective on January 1, 2006, the (US) Institute of Chartered Financial Analysts (CFA) requires compliance with the following standard (Standard V) on 'Investment Analysis, Recommendations and Action'(CFA Institute, 2006):

Diligence and Reasonable Basis. Members and Candidates must:

1. Exercise diligence, independence, and thoroughness in analyzing investments, making investment recommendations, and taking investment actions.
2. Have a reasonable and adequate basis, supported by appropriate research and investigation, for any investment analysis, recommendation, or action.

However, as the CFA does not provide detailed guidance on which steps can be taken to discover fraud, we will look at, and borrow heavily from, another gatekeeper profession – that of the independent auditor, which offers comprehensive guidance on fraud detection. In that profession, comprehensive standards and working practices have been developed to uncover pressures, opportunities, and rationale for financial fraud. In developing our analysts' survey, we shall consider guidance provided by the

American Institute of Certified Public Accountants (SAS 99), and the fraud discovery auditing standards of the Public Company Accounting Oversight Board. Taking this work a step further, the first part of our second study can be defined as follows:

Study 2 – Sub-research question 1:

*Do analysts recognize earnings management pressures and executive job demand pressures on CEOs before a restatement?*

Analysts often disregard information that does not neatly fit into their proprietary spreadsheet models, which have been developed specifically to assist them in assessing current earnings and predicting future income streams. This assertion is partly based on academic studies focused on detailing how analysts collect company performance data, studies focused on their innate abilities, and studies exploring the information-processing routines of analysts (see Ramnath, Rock & Shane, 2008). In our second study, not only do we plan to uncover how CEO performance pressures influence analysts' judgment and decision making, we also aim to assess whether and how, countervailing powers – such as CEO competence, the strength of internal gatekeepers and governance – help to keep the CEO in check. Therefore, in addition to the first layer of reputation factors concealing the misstatement kernel, and which were peeled away in Study 1, these layers of pressure on CEOs, and the corresponding countervailing powers therein, are a deeper external covering that must be dissected.

Next, a large number of archival data studies provide support for the notion that analysts are biased in their assessments of company and CEO performance. There generally is an under reaction to good news and an overreaction to bad news; analysts tend to overestimate private information and underestimate public information (e.g., Odean, 1998). Therefore, we need to make an attempt to peel away the third layer surrounding restatement situations. This layer consists of biases, and so-called 'bounded awareness'; we expect these more irrational factors, caused by common human biases, to play a not-insignificant role in analysts' judgment of restatement situations. Therefore, our second question in Study 2 follows:

### Study 2 – Sub-research question 2:

*Do performance pressures and job demands influence analysts' judgment of CEO behaviour in the period before a restatement is announced?*

Our first study intends to analyse the communication remediation efforts for the period immediately following a restatement announcement – the so-called restatement reputation remediation period. In terms of market sensitivity, this period can be considered extremely demanding on a firm's executive and non-executive leadership team, their gatekeepers and communication experts. The same is true for the analysts following a restatement company, particularly if they ignored earlier warning signs (red flags) in the period to be restated. Analysts' regret and annoyance around their issuance of 'mis-ratings' can be expected to influence their judgments. Similar to the previous step, our model and research attempt to distinguish for this period between the rational information sources (earnings and job demand pressures as well as countervailing powers), and the more difficult to gauge biases in analysts' formation of judgment. We shall also consider whether the perceptions of analysts in the period before the restatement influence their perceptions in the reputation remediation period. The third question in Study 2 is as follows:

### Study 2 – Sub-research question 3:

*Do analysts interpret reputation remediation behaviour of CEOs in the restatement recovery period in a rational manner? Is there an influence of biases?*

#### 1.5.4 STUDY 3 – ANALYSTS' INTERVIEWS CORROBORATING STUDIES 1 AND 2

In Study 3 we plan to corroborate the findings of our previous two studies. At the same time, we will attempt to obtain background material focusing on analyst judgment and decision-making in restatement situations. This material can then be put to use in the discussion section as we interpret and seek explanations for the findings of the studies. We are particularly interested in some of the endogenous CEO characteristics, such as integrity, dominance and confidence. We believe that semi-structured interviews provide a good basis for obtaining such information, as the interviewer has the ability to make reference to the specific restatement situation

and explain the context of the CEO characteristics being assessed.

The following research questions will be addressed:

Study 3 – Sub-research question 1:

*Do analysts assess CEO endogenous factors (e.g. integrity, dominance, confidence) in restatement situations, and does it impact their assessment of the role of the CEO before and after the restatement?*

Study 3 – Sub-research question 2:

*Do analysts recognize and assess exogenous factors (earnings management pressures and executive job demands) in restatement situations, and do these factors impact analysts' judgment and decision-making of CEO behaviour both before and after the restatement?*

Study 3 – Sub-research question 3:

*Do analysts consider which constituents failed in their gatekeeper role?*

Study 3 – Sub-research question 4:

*Do the interviewees corroborate or contradict findings of Study 1 and Study 2 (other than the above)?*

#### 1.5.5 CONCLUSIONS AND DISCUSSION

We will conclude our thesis with a section providing answers to the above questions. In addition, we shall consider how our research findings around the functioning of analysts as gatekeepers in restatement situations can be extrapolated to other gatekeepers who monitor corporate and CEO performance. On the basis that behavioural biases can play a significant role in the monitoring functions of all gatekeepers, we will discuss how boards, and in particular their audit committees, can enhance their countervailing powers and assist the firm in dealing with a restatement crisis, or other crisis situations. Finally, we will describe the limitations of our research,

and offer suggestions for future research in the domain of behavioural accounting, crossing over into the area of corporate communication, including suggestions for additional research in the area of reputation management.

# Chapter 2



## Study 1: Restatement Communication and Factors Enhancing or Mitigating Corporate Reputation Damage<sup>1</sup>

### 2.1 Introduction

As described in detail in sections 1.2 and 1.3 of this thesis, previous academic research on restatements has addressed their causes and consequences, including breakdowns in corporate governance structures, effects on market value, the role of management reward systems, the occurrence of management fraud, the restatement categories that are most likely to attract litigation (e.g. shareholder lawsuits) and the role of auditor failures, possibly caused by conflicts of interest (e.g. selling consulting services). In section 1.4 of this thesis, we addressed the impact of financial restatements on corporate and CEO reputation. However, research to date does not

<sup>1</sup> This chapter is adapted from: Fred H.M. Gertsen, Cees B.M. van Riel, & Guido Berens, Avoiding Reputation Damage in Financial Restatements, *Long Range Planning* 39 (2006) 429-456. It is based on a first qualitative study which was carried out in the period 2003-2005, shortly after an avalanche of accounting scandals had hit both the US and European capital markets. The study was published in 2006 in a Special Issue of *Long Range Planning*, entitled: 'Controlling the Public Corporation' and was edited by Robert Eccles, Robert Grant and Cees van Riel. The five papers in that Special Issue provide an overview on how weaknesses in corporate strategies, failures in corporate governance mechanisms, and breakdowns in internal controls all interconnect. The articles also contained suggestions on how to limit collateral damage in restatement situations and how to regain trust and reputation after such an event.

provide a theoretical framework for classifying restatements in a manner which can be used to develop guidelines around dealing with a restatement when the time comes for issuance. Further, due to the great variety in accounting technicalities which cause companies to restate, there exists a need to develop a more simplified typology which will enable both researchers and practitioners to assess the severity of a restatement situation and develop appropriate reputation remediation actions.

Academic research on restatements, as described in more detail in section 1.3, can be grouped along the lines of the following two dimensions:

- A. Quantitative effects due to information distortion leading to restatement.
- B. Qualitative effects due to governance and/or integrity failures surrounding a restatement.

The quantitative effects of financial restatements find their cause directly in the accounting essence of a restatement – the adjustment of a fundamental accounting error and/or irregularity. In many cases a restatement implies a significant (material) adjustment (mostly downwards), in net income and shareholders' equity of the firm. Consequently, share prices drop. The capital markets, including analysts, adjust future earnings potential downwards. Typically, these aspects of restatements can serve as relatively straightforward inputs into the future corporate earnings models used by capital market participants to assess the future value of a firm. In section 1.3 of this thesis, the following academic studies were considered to be part of this dimension (the original LRP article references: Rezaee (2005); Agrawal & Chadha (2005); Healy & Wahlen (1999); Dechow et al. (1996); Cheng & Farber (2005); Erickson, Hanlon & Maydew (2006); Burns & Kedia (2006); Leuz, Nanda & Wysocki (2003); Palmrose et al. (2004); Coffee (2004) and Kinney, Palmrose & Scholz (2004). Their work focused on:

- Effects on market capitalization (stock prices) and/or cost of capital (section 1.3.1);
- Restatements as proxies for earnings management (section 1.3.2), and
- Lower earnings quality and/or accrual quality (section 1.3.5).

The qualitative effects of financial statements are caused by a reassessment in the market of the reliability, integrity and strength of the firm's executive team. Simply put, the market re-rates the firm's reputation and that of its senior executives. This reassessment is caused by a perceived lack of executives' capabilities to manage the company, missing industry knowledge, apparent weaknesses in the governance and internal control environment, and/or a lack of integrity. Evidently, these more intangible aspects of restatements are much more difficult to assess, and, consequently, market participants will fall back to heuristics (rules of thumb) to gauge the implications to a firm's future. These qualitative, reputational aspects of restatements are more susceptible to subjective interpretation by market participants, and hence, lead to biases in judgment on the value and reputation of a firm. Similar to the previous paragraph, the following studies were grouped here in our overview of academic studies in part 1.3:

- Lack of financial reporting knowledge/expertise by executives (section 1.3.3);
- Poor corporate governance (section 1.3.4.);
- Contagion effects of restatements (section 1.3.6); and,
- Effect on corporate and executive reputation (section 1.4).

In order to gain a deeper understanding of these two primary dimensions of restatements, distortion and intent, we designed a case study to uncover whether the 'communication actions' of the primary players in restatement situations can be associated with the dimensions of information distortion and/or that of intent/integrity. Next, based on experience in the accounting practice with one of the major public accounting firms, we wanted to discover and model those forces which play a role in exacerbating the apparent crisis situation caused by restatements, and those factors which could be identified as mitigating the crisis. In other words, which forces have an impact on how market participants assess a firm's position on the two dimensions of a restatement?

Therefore, Study 1 aims to provide and test a model in which the following sub-research questions can be answered:

- (I a): What type of restatements can be distinguished?
- (I b): Which factors enhance reputation risks in restatements?
- (I c): Which factors mitigate reputation risks in restatements?

## 2.2 Theoretical Framework: Classification of Restatements – Just Black, or Shades of Grey?

Research by Dechow et al. (1996) and by Palmrose et al. (2004) has shown that the reaction of the stock market to a restatement is caused by two main factors – the decline in the firm’s future prospects, and the increase in uncertainty about these prospects.

The decline in the firm’s prospects is partially determined by the degree to which the restatement lowers the company’s net income. The perceived pervasiveness of the problem (how many areas are affected), and its persistence (how many years/quarters are restated), also determines the decline in value as pervasive and persistent problems may continue for some time. Furthermore, the nature of the restatement is also a relevant factor. Restatements may relate to a number of different accounting issues (see Table 2.1).

**TABLE 2.1 MAJOR TYPES OF ACCOUNTING ISSUES INVOLVED IN RESTATEMENTS**

|                                      | Percentage of all financial restatements, 2000-2004 |
|--------------------------------------|---|
| Revenue recognition                  | 19%   |
| Equity                               | 15%   |
| Reserves, Accruals and Contingencies | 15%   |
| Capitalisation/ Expense of Assets    | 9%  |
| Inventory                            | 5%  |

Research has shown that restatements involving revenue recognition issues have greater adverse effects than restatements involving other issues (Anderson & Yohn, 2002). The reason is presumably that revenue figures are considered especially indicative of a company’s future profit potential. In addition, revenue recognition issues are more likely to attract lawsuits (Palmrose & Scholz, 2003). Similarly, revenue recognition ranks high on the agenda of the Securities and Exchange Commission (SEC) because it is the most frequent cause of a restatement and underlies many cases of accounting fraud.<sup>2</sup> Finally, the risk of material misstatement of financial

2. Staff Accounting Bulletin No. 101: Revenue Recognition in Financial Statements, US Securities and Exchange Commission, Washington DC, (1999). Available at: <http://www.sec.gov/interp/account/sab101.htm> (1999); L.E. Turner, *Speech by SEC staff: Revenue recognition*, Securities and Exchange Commission, Washington DC, (2001). Available at: <http://www.sec.gov/news/speech/spch495.htm> (2001).

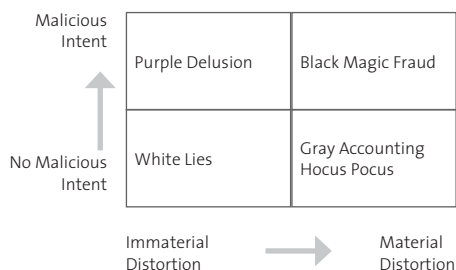
statements is generally greater when accounting estimates are involved, as opposed to essentially factual data. Estimates, such as those for goodwill impairment, stating acquisitions at fair value, inventory obsolescence, uncollectible receivables and warranty obligations, are subject to the unpredictability of future events as well as errors arising from data mismanagement. Besides diminishing the perceived future prospects of a company, restatements tend to create further uncertainty, as they often damage the credibility of management and the company's reporting system, particularly when fraud is involved. If management has tried to mislead its stakeholders, investor confidence in the trustworthiness of information from the management is diminished. Consequently, investors vary more widely in the value they place on the company. As Dechow et al. (1996) point out, this wider variation can in turn lead to a lower company value. While previous studies have looked at the different mechanisms through which restatements affect firm value, they do not provide a classification of different types of restatement. On the basis of previous findings, we propose two dimensions that categorize a restatement situation according to its severity, namely:

1. The degree of distortion of value-relevant information; and,
2. The degree of management intent.

The degree of distortion refers to the decline in the perceived value of the company, as a result of the income effect of the restatement, and its pervasiveness and persistence (among other things). Intent refers to the degree to which management has knowingly and purposely distorted its financial figures and is likely to do so again. It is related to investor uncertainty about the company's value.

The two dimensions of the severity of restatements are illustrated in Figure 2.1. These two dimensions create four types of restatements, differing in their overall severity. 'White Lies' rate low on both intent and distortion, and are therefore relatively harmless. More serious are what we call 'Grey Accounting Hocus Pocus' and 'Purple Delusion'. The former implies a high degree of distortion performed more or less by accident. This will likely decrease the company's perceived future prospects (because it usually decreases the company's performance), but not the credibility of its future financial reports.

**FIGURE 2.1 PERCEIVED INTENT AND DISTORTION AS TWO DIMENSIONS OF FINANCIAL RESTATEMENTS**



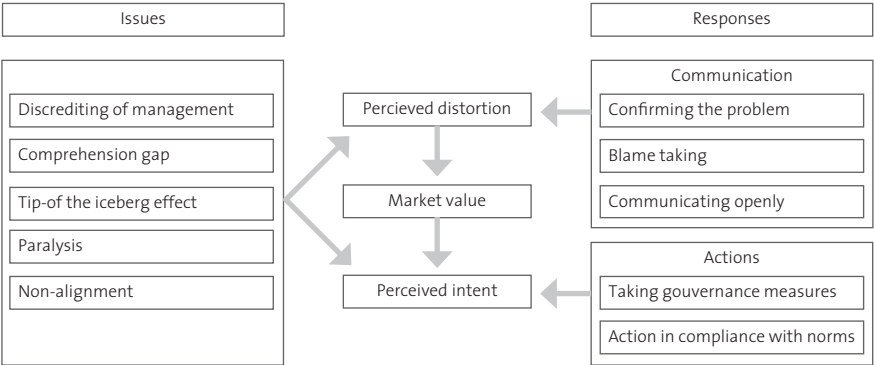
On the other hand, ‘Purple Delusion’ implies a low-level, but deliberate distortion. This will not decrease the company’s future prospects much, but will decrease investors’ faith in the truthfulness of the company’s future financial reports, leading to uncertainty in the market over the company’s prospects. Finally, there is ‘Black Magic Fraud’ which involves the deliberate creation of a high level of distortion. These are the most serious cases because they decrease both the company’s future prospects, and the credibility of its future financial reports. Because of the complexity of accounting issues, what is relevant is not so much the objective level of distortion and intent, but the level of distortion and intent as it is perceived by the market and other stakeholders.

In every restatement case, there are factors that can aggravate the perceived level of distortion and intent, and also factors that alleviate them. For example, the credibility of a company’s corporate communication could be of vital importance in determining the reaction of the public. We will discuss these factors in our Empirical Findings section.

However, the ‘objective’ level of distortion and intent matters less than the level perceived by the public and other stakeholders. There are a number of issues that can put tremendous pressure on restatement scenarios, increasing the level of distortion and intent the public perceives to be present, and thereby damaging a company’s market value. There are also opportunities to respond to these issues in a way that can limit the damage. These include forthright communication about the problems as well as actions to solve them. Table 2.2 shows the overall results of our analysis

with respect to these five responses, and our reasoning with respect to the issues and responses in dealing with restatements. As is clear, companies that are successful in taking these proactive actions suffer less damage to their share price than companies that are less successful. In the following sections, we will expound on the results of our study in greater detail.

FIGURE 2.2 ISSUES AND RESPONSES WITH RESPECT TO PERCEIVED INTENT AND PERCEIVED DISTORTION



## 2.3 Methods

We developed our classification of restatement situations as well as issues and responses in dealing with them through a grounded theory approach. Grounded theory refers to ‘the discovery of theory from data’, and involves a continuous interaction between a research model and the data (Glaser & Strauss, 1967). This means that the categories and relationships distinguished in the research model are generated from initial data, and further data is subsequently interpreted in light of the research model, but may also lead to adjustment of the model. Our main research material consisted of archival data for about 14 European and U.S. restatement cases between January 2002 and December 2004, listed in Table 2.3. These 14 cases were selected from a larger sample of restatement cases on which the researcher had collected company press releases, conference call transcripts and analyst reports. From this larger set of restatements we selected these 14 cases based on the following considerations: the restatements should be for a sizeable company, well covered by analysts; the stock-price effects were significant in the days following the restatement announcement; we selected both US cases and a few well publicized European cases; the cases should have different positions (based on preliminary data available) on the scale of information distortion and the scale of management intent.

The data of the 14 cases we selected, consists of some 400 press releases, conference call transcripts and analysts’ reports containing about 5,175 restatement-related quotations (see Appendix 2.3 for an overview of documents and quotations selected; gross a number of 500 documents were selected, however, after perusal on their relevance, some 400 remained). We chose the beginning of 2002 as the starting point because at this time the SEC regulation on ‘Fair Disclosure’ (FD) became effective.

This means that, from this date forward, company conference calls with analysts and representatives of the media are part of the public domain. We chose the companies’ press releases as their first (and subsequent) official explanation of the restatement background, its causes, financial implications and consequences. Next we used analyst-produced reports from analysts following the companies as both a response and ‘opinion’ on how these analysts perceived the restatement situation, and also how they perceived the actions of senior executives. Finally, the conference call transcripts were used to analyse the interactions between analysts and the executives under scrutiny and interrogation. Timelines for each restatement

case were composed in order to assist the coders in placing text pieces in context of time development – timelines for Freddie Mac and Nortel have been illustrated in Appendix 2.1 In addition to analysing the documents, we interviewed nine experts in the field, analysed media reports and studied literature on the market response to restatements. This provided a validation of the conclusions drawn from analysing the documents. Specifically, we interviewed a senior risk management partner and four other senior executives at a major accounting firm, a directors' and officers' (D&O) insurance executive at a major insurance company, a managing director at a major business information service provider and two professors of accountancy at two leading European business schools.

Consistent with Glaser and Strauss's notion of theoretical sampling (Glaser & Strauss, 1967), we selected restatement cases to achieve a maximum level of variability. For example, after we had identified the level of 'distortion' and 'intent' as two relevant dimensions in our model, we selected further cases on the basis of their variation in these two dimensions (see Heugens, Van Riel and Van den Bosch, 2004). In addition, because of the differences between accounting principles in the United States and Europe, we selected cases from both regions. We conducted a content analysis of the archival data, designing a coding scheme which aimed to identify the types of action that protect companies from damage triggered by financial statement restatements.

Content analysis is a technique that enables the researcher to make quantifiable and/or qualitative inferences based upon written or transcribed spoken language. Content analysis has been defined as 'a research method that uses a set of procedures to make valid inferences from text' (Weber, 1990). Content analysis provides a number of advantages generally associated with qualitative methods such as richer domain detail, preservation of context information, and the advantage of a good fit with grounded theory development. In the accounting domain, content coding has been used to analyse social and environmental disclosures (Milne & Adler, 1999), and to analyse self-serving behaviour of executives in accounting narratives (Hooghiemstra, 2003).

The coding analysis was conducted with the help of AtlasTi content analysis software. This software allows for grouping/categorising of documents, codes and (descriptive)

memos in various levels. This suited our research objectives well as we wanted to employ three levels of coding: abstract (positive/negative actions), intermediate (broad categories of actions below positive/negative), and concrete (more detailed codes describing specific behaviours underneath each intermediate-level code). This coding scheme was applied to the archival data by four independent coders. These coders were instructed on the background and relevance of restatements for companies and capital market participants. They were also handed a coding support schedule which provided a description of what they needed to look for in the texts provided to them. Inter-coder reliability was ensured by mixing the four coders into different combinations on the 14 cases. Inter-coder reliability was measured using Cohen's Kappa, which on average was in excess of 0.7, details of which can be found in Appendix 2.2 (Cohen's Kappa is used to adjust inter-coder reliability for the expected frequency of coders assigning the same codes by chance). The code categories, and sub codes that we used in the coding scheme are also shown in Appendix 2.2.

The codes related to 'openness' and 'governance' were by far the most frequently occurring (45 per cent and 32 per cent of all codes respectively), with codes related to confirming, blame taking/giving, and conformity occurring relatively infrequently (5 per cent, 5 per cent and 11 per cent, respectively). Therefore, the results regarding openness and governance might be more reliable as they generally are based on a larger number of quotations. The table in Appendix 2.3 provides some more detail on the positive and negative codes as assigned by the coders. Of interest are the averages of both the coding scheme: positive communication codes attracted a 75 per cent score, and negative, a balancing number of 25 per cent.

To generate an illustrative overview of companies' behaviour with respect to the managerial responses that we have identified (provided in Table 2.2), we used a number of heuristics and control measures. For every case, we tabled the number of occurrences of every type of behaviour over time, from the time of the announcement of the restatement, to the time the issue was resolved, i.e., when the actual restated results were filed. We did this both for the positive actions and for the corresponding negative behaviours. For behaviours associated with confirming the problem and openness, we looked especially at the early period. Our reasoning was that these behaviours are only useful to the market if they occur early. For example, Freddie Mac and Cablevision largely 'defused' the issues by confirmative communication

TABLE 2.2 OVERVIEW OF SAMPLE COMPANIES - YEARS AND DATA AVAILABLE

|                     | Confirming | Taking the blame | Communicating openly | Governance measures | Compliance with standards and rules | Total | Market reaction |
|---------------------|------------|------------------|----------------------|---------------------|-------------------------------------|-------|-----------------|
| Adelco              | --         | -                | --                   | +                   | --                                  | --    | -               |
| Ahold               | ---        | --               | --                   | --                  | +                                   | --    | +/-             |
| Cablevision         | ++         | -                | --                   | +                   | -                                   | +     | ++              |
| Computer Associates | +/-        | +                | ---                  | +/-                 | +/-                                 | -     | -               |
| El Paso             | -          | -                | +/-                  | +                   | +                                   | +     | +               |
| Freddie Mac         | ++         | +                | ++                   | +++                 | +                                   | +++   | +               |
| Goodyear            | ++         | +                | +++                  | -                   | -                                   | +     | ++              |
| Interpublic         | --         | -                | -                    | ---                 | -                                   | --    | --              |
| Nortel              | --         | -                | ---                  | --                  | -                                   | ---   | -               |
| Parmalat            | ---        | ---              | --                   | --                  | -                                   | ---   | --              |
| Qwest               | +          | ++               | --                   | +                   | +                                   | +     | --              |
| Shell               | +          | +                | --                   | ++                  | +++                                 | ++    | -               |
| Symbol              | -          | -                | +/-                  | -                   | -                                   | -     | ++              |
| Tyco                | +          | --               | +                    | -                   | +                                   | +     | +++             |

at the beginning of the crisis. If a company only communicates about the details of its restatement after months of investigations and governance changes, this does not help to restore trust. For behaviours with respect to governance, we looked at behaviours throughout the period, although here too we considered early action as better than subsequent measures. Finally, for actions with respect to blame taking and acting in compliance with rules and standards, we looked at the entire period without favouring early actions over subsequent measures. In fact, compliance with standards and rules is mainly relevant at the end of the restatement episode, i.e. when it is resolved.

We also obtained input from the original coders and asked them to assess the five managerial responses based on their coding involvement on specific cases. On average, the coders substantially came to the same conclusions, compared with applying the above mentioned heuristics.

Based on the detailed coding analyses and resulting coding tables as presented in Appendix 2.3, we provide examples of graphs of the occurrence of some types of positive company behaviour in Figures 2.6 and 2.7. Figure 2.6 shows Freddie Mac's scores on communicating openly and taking governance measures. Figure 2.7 shows a similar graph for the Nortel case. In section 2.4.3 we will discuss these two opposing cases in greater detail.

## 2.4 Empirical Findings

### 2.4.1 ENHANCERS OF REPUTATION DAMAGE

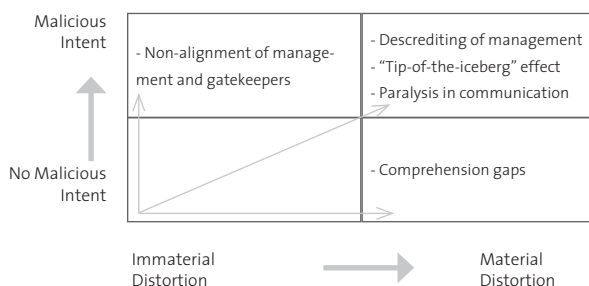
In our research, we observed issues that can increase either the perceived intent, or the perceived level of distortion involved in a restatement, or even a combination of the two. We distinguish among five such issues, as shown in Figure 2.3. We will explain them in the following paragraphs.

#### Discrediting of Management

Managers are often discredited following a restatement – be it in a court of law, the court of public opinion, or as they suddenly find themselves in search of a job. Senior management is frequently implicated in class-action lawsuits and/or SEC actions. Also, in many cases executives are ‘suspects’ in internal corporate investigations, or regulatory investigations. The Justice Department and other criminal investigators all potentially discredit senior management. Furthermore, remedial actions, often agreed upon with regulators, can lead to immediate executive changes. In such cases, the new management – based on hindsight – may question (or even reject), prior and current assertions. In accounting, many judgments and estimates need to be made based on a high degree of uncertainty, and their accuracy can often only be evaluated afterwards. Hindsight may induce new managers to be particularly negative about the judgments made by previous managers. In addition, previously settled issues of accounting judgment (often dating back many years), and estimates will be revisited.

Expansion in the scope of an investigation will often lead to minute scrutiny of management’s previous role in accounting decisions. In such cases, even things that were rightly considered ‘immaterial’ when they occurred can qualify as material if there is evidence to substantiate that intent was there to distort the financial position on purpose. Discrediting can also spring from relatively minor events. For example, the absence of Shell’s chairman during an initial conference call about the company’s reserves restatement could be seen as the start of a series of publicly debated credibility issues involving Shell’s senior management. This includes the potential leaking to the press of confidential (internal) e-mails to discredit senior management involved in this case.

**FIGURE 2.3 ISSUES INFLUENCING PERCEIVED INTENT AND DISTORTION**



Management credibility is a precious commodity that can easily be damaged in a restatement situation. Damage to management credibility is one reason why investors respond more negatively to a restatement than would be justified by only looking at its net income effect. This is consistent with marketing research, which has demonstrated that credibility acts like a halo – low credibility puts all of a company's actions in a negative light (Arnold, Goldsmith, Lafferty & Newell, 2000; Newell & Goldsmith, 2001). Therefore, when management is publicly discredited, this can strongly influence the market's perception of intent as well as distortion, affecting the market value of the company.

### Comprehension Gaps

The fundamental difference between a restatement originating from an accounting irregularity (perpetrated with clear intent), as opposed to an accounting error (perpetrated accidentally or resulting from a genuine misinterpretation), is often not sufficiently appreciated and/or recognized and hence results in unfair media treatment. The full spectrum of accounting adjustments, ranging from 'changes in estimates,' 'correction of errors,' and 'restatements,' is subject to many complex technical rules and judgment calls within the accounting domain. There may be a significant comprehension gap between the actual event and the message that is communicated. Senior executives often do not fully comprehend the significant differences in restatement categories and the perceptions that markets (i.e. analysts) have of the restatement. This may lead to misunderstandings and uncertainty in the market, and therefore to an additional loss of market value. For example, in one conference call by Nortel, the company stated that the impact of its restatement would not be 'material,' but when pressed was unable to give an exact definition of

this phrase, leaving analysts guessing.

Q: Material, how does Nortel define material? Five per cent? Ten per cent? I mean, is there a metric you use in saying you don't think it will have a material change at this point?

A: Well, I think material was - you know, material in the marketplace. We're just trying to make sure people understand that if there's an adjustment, it would be in an immaterial way.

Following this lack of clarity, there was an additional drop in Nortel's share price<sup>3</sup>. If management is not able to articulate the restatement category with the required nuance, then the dialogue with the market will fail miserably.

Research into the way in which audit committees evaluate the quality of financial reports has shown that a significant difference exists between financial 'experts' and financial 'literates' (McDaniel, Martin & Maines, 2002). Financial literates are people who can read and understand basic financial statements, while financial experts have professional experience or certification in accounting or finance. Financial literates are more likely to react to reporting issues that are prominent in the business press or are of a non-recurring nature. Therefore, markets (which are financially literate rather than expert), tend to overreact to restatements. It requires considerable force of argument and the right accounting rhetoric to differentiate between good and bad restatement situations. Therefore, the ability of management to communicate in a timely and proper manner about the category and nuance of a restatement is a crucial driver when it comes to the degree of distortion and intent perceived by the public.

### 'Tip-of-the-Iceberg' Effect

Empirical evidence suggests that many financial restatements share a 'tip-of-the-iceberg' effect. What is, in many cases, a financially-immaterial restatement, can oftentimes trigger a complete loss of credibility. In many cases an expansion in the scope of accounting investigation takes place, resulting in other transactions, accounts and balances coming under scrutiny (Dooley, 2002). Also, a single restatement often

<sup>3</sup> Nortel Networks Conference Call with the Investment community to Provide Update on Business Performance, Status of Restatements and Related Matters, *Fair Disclosure Wire*, 2 June, 2004; see also R. Le Maistre, Nortel leaves all doors open, *Light Reading*, (2004). Available at: [http://www.lightreading.com/document.asp?doc\\_id=53776](http://www.lightreading.com/document.asp?doc_id=53776) (2004).

leads to a questioning of the company's other accounting and disclosure practices. When more irregularities and errors come to light, more damage to the company's market value follows.

Palmrose et al. (2004) have shown restatements that affect more financial statement accounts trigger more negative stock market reactions. For example, Ahold's restatement in 2003 led to an investigation of not only its U.S. subsidiary Foodservice, for which accounting fraud had been discovered, but also of all the company's North and South American businesses. The news of this expansion in scope triggered an additional negative stock price reaction<sup>4</sup>. Thereafter, the forensic accounting investigation, commissioned by the Supervisory Board, found some 400 issues that needed to be adjusted in order to bring Ahold's accounts back into compliance with Generally Accepted Accounting Principles (GAAP). When looking at the long-term effects of the restatement, we can see that although Ahold recaptured part of its market value at the end of the restatement period, it did not recover completely.

This tip-of-the-iceberg effect can also take place at the level of industry players. For example, in the wake of the Ahold case, the vendor allowance accounting practice of the entire U.S. food industry was questioned. The effect can be attributed to a number of 'demand for information integrity' forces, such as:

- Overly harsh cleansing operations, in which executives throughout the company are sacrificed before due and fair investigation has been completed. This may be due to the escalation of the investigation to the level of the independent supervisory board, thereby encompassing the personal reputations of board members. Remedial actions often qualify as reputation repair actions which have a highly rhetorical character, serving mainly to insist that the board has control over the company. In addition, regulators press companies to take remedial actions within a certain timeframe.
- A change of auditor, leading to a radical scrutiny of fine-grained technical accounting and disclosure issues: 'All (small-boned) skeletons out of the closet!'

<sup>4</sup> Raghavan & Bryan-Low, Ahold probes expand beyond unit; *Wall Street Journal* (July 8, 2003)

- The involvement of forensic accountants, who exercise extreme professional scepticism. They are appointed by the board and essentially takeover accounting data discovery and control from management, leaving no stone unturned.

The above 'demand for information integrity' forces may result from the behind-the-scenes- power play that takes place, most often in the corporate boardroom. Management needs to be fully aware of these forces as such forces tend to lead a life of their own, and prove to be most difficult to manage. They are likely to aggravate the level of perceived distortion and the degree of perceived intent involved in a restatement situation.

#### Paralysis in Corporate Reaction and Communication

In corporate crisis situations of the magnitude triggered by restatements, fear and lack of experience intuitively lead to a defensive communications strategy, or worse, to no communication at all. This can be seen in the case of Adecco, after the company announced an internal control 'issue' in January 2004 (interpreted by the market as a potential restatement), a period of silence and secrecy followed that left the market guessing. Finally, nine months later, independent counsel concluded that there were no material financial issues to be reported. But by then, the damage to public trust had already been done. Adecco's stock price had decreased substantially shortly after the initial announcement and did not quite recover at the time the crisis was dissolved.

Of course, silence is understandable. The threat of shareholder lawsuits can serve to gag a company and/or individual executives who do not wish to risk making even reasonable, good-faith disclosures. Further, involvement in (potential) litigation implies a fundamental change in a company's communication strategy. As noted above, in many cases, the board appoints forensic investigators to take control, and as a consequence, the command structure of a restatement process shifts away from the chief executive and chief financial officer to the independent board, and ultimately to the independent auditors, lawyers and forensic investigators. This often leads to what is called 'Kaltstellung' in German, i.e. a complete operational paralysis and shelving of executives, which will impair morale and normal communication with stakeholders for a considerable period. Paralysis in corporate reaction and

communication most likely leads to a worsening of both the perceived intent and the perceived impact of the restatement.

#### Non-Alignment of Management, Auditors and Other Gatekeepers

Following a restatement, a lack of alignment between management, the auditors and other gatekeepers can often aggravate the situation (Coffee, 2002). 'Alignment' refers to a common view over how to handle a problem. Because of their different professional backgrounds and experience, different groups each employ their own codes (language, vocabulary) and cognitive frames (see Prahalad & Bettis, 1986; Bettis & Prahalad, 1995), discussing theories and mental maps. These codes and frames enable groups to define and solve problems, but will also lead to different opinions, attitudes, and hence, communication behaviour. This limits their ability to strike up a dialogue with other disciplines and with external stakeholders. Researchers in strategy have argued that such a dialogue (i.e., alignment) seems especially important when extreme pressure and unusual circumstances are involved (Prahalad, 2004). Indeed, most restatement cases create enormous pressure on the corporate governance status quo, because such an event can lead to irrevocable loss of reputation, financial disaster, and even imprisonment. As a consequence, the 'normal' rules of corporate (and collective) management suddenly change. In such a situation, alignment is particularly important.

Before a restatement is filed, a lack of alignment can be apparent from the lack of information flow from management to the board and the auditors. In addition, it may be reflected in a lack of responsiveness of management to recommendations made by the auditors. The result of such nonalignment can be the filing of a report under Section 10A of the Securities Exchange Act. Section 10A 'requires reporting to the Securities and Exchange Commission (SEC) when, during the course of a financial audit, an auditor detects likely illegal acts that have a material impact on the financial statements and appropriate remedial action is not being taken by management or the board of directors.' This language implies that the auditors have alerted management to the questionable nature of its accounting practices, but that management took no heed of the warning. Such a situation signals misalignment between management and auditors because the dialogue between them has failed. Ultimately, the auditors then decide that they have to report the matter to the SEC, which may lead to a restatement.

According to the U.S. General Accounting Office (GAO, Gramling 2000 & 2003), only six Section 10A reports were filed between 1996 and 1999. The GAO concluded that the most likely reason for this low incidence was that in most cases in which illegal acts likely occurred, management took appropriate remedial actions when their auditors alerted them to the problems. Simply put, in the majority of cases a dialogue was possible. However, between 2000 and 2003, the number of Section 10A reports rose to 23. Therefore, while such extreme cases of non-alignment in which a Section 10A report is necessary are relatively rare, their number has increased considerably in recent years. It seems likely that when the stock market perceives such a misalignment between the company and its auditors, it will react more negatively to the announcement. Non-alignment may signal to investors that internal controls have failed and that top management is involved in the underlying problems. Investors are then more likely to suspect malicious intent, leading to uncertainty in the market and therefore to a loss of market value. Although not focusing specifically on alignment, Palmrose et al. (2004) argued that when the auditor announces a restatement, rather than the company, the market reaction is negative.

After a restatement is announced (possibly following a Section 10A report), problems of non-alignment generally only become worse. Following a restatement announcement, new management team members and/or new independent auditors are often appointed. The relationship with previous management and predecessor independent auditors then tends to become even more strained. If we pile on to this an ongoing SEC investigation, short-sellers, market reaction, and the natural tendency of 'new' management to start with a clean slate, the pressure can become quite intense. Therefore, the non-alignment of management with gatekeepers creates the risk that the public perception of the company's intent will spiral out of control. If managers do not cooperate, this increases the risk that the effect of the four previously mentioned issues gains in power, resulting in devastating damage to the firm's reputation and market value.

#### Summary of Findings on Restatement Severity Forces

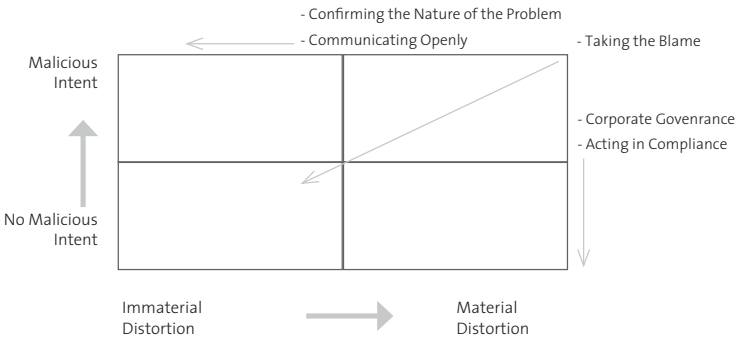
The five issues discussed above are not absolute, nor are they necessarily disastrous. However, the fact that all these factors tend to occur in combination may create substantial pressure. Management, reaffirming its prior accounting and reporting, and independent auditors (whether incumbent, predecessor, or successor), may be

able to withstand such mounting pressure. However, in circumstances where the 'old' management team has been removed or suspended, and auditors have been replaced, who is responsible for the previously reported financial statements? Who stands for their validity? Who or what is left to countervail restatement pressure, where appropriate? In such cases, independent boards and their audit committees and executives share this heavy responsibility.

#### 2.4.2 MITIGATING FACTORS ON REPUTATION DAMAGE

So far, we have seen that the severity of a restatement case can be categorized according to the degree of malicious intent perceived by stakeholders, and by the degree of perceived material distortion. In addition, there are several problems and pressures that can aggravate a company's position in terms of either intent or distortion. However, we argue that companies can also influence the perceived degree of intent and distortion by the way in which they act and communicate to analysts and other gatekeepers. Based on our analysis, we distinguish five ways in which companies can limit the damage (see Figure 2.4). The first three ways deal with communication about the underlying problems, and mainly serve to reduce the amount of perceived distortion (though some of them may also reduce the degree of perceived intent). The other two means deal with actions to solve the underlying problems, and mainly serve to reduce the degree of perceived intent.

**FIGURE 2.4 RESPONSES TO ALLEVIATE PERCEIVED INTENT AND DISTORTION**



### Confirming the Nature of the Problem

In the restatement cases we analysed, providing confirmative statements regarding the nature of the problem and voluntary explanations to analysts or the media noticeably improved the understanding of these stakeholders. Confirmatory statements are also likely to reduce the perceived amount of distortion, because a lack of understanding may lead to 'wild' – and most likely, negative – speculation. This contention is consistent with research in consumer inference making, which has shown that people tend to lower their evaluation of a product when they have insufficient information about it (Lim & Kim, 1992). Our cases also show that executives often answer the analysts' questions in a rather straightforward manner. Few executives see questions as an opportunity to flesh out issues raised, or use a question as an opening to persuade the markets that correct strategic decisions have been taken (see the section on 'Communicating Openly,' which follows).

### Taking the Blame

When executives start blaming each other or third parties, this is likely to lead analysts to question whether corporate governance is still in control. Research in corporate communication has suggested that when management tries to shift the blame for a crisis away from itself, this can aggravate the perceived severity of the situation because stakeholders believe that control mechanisms have failed (Ashforth & Gibbs, 1990). Therefore, blame giving can increase the amount of perceived distortion. Additionally, refusing to take the blame can damage executives' perceived trustworthiness (Kellerman, 2006). Such a lack of trustworthiness can affect the belief that the company has misled the market and will try to do so again. Unless executives are clearly not to blame for the problems, appointing blame should be avoided; explaining how and why the restatement need occurred suggests to be a better strategy.

Our sample showed that the amount of blame taking behaviour in a number of cases was consistent with the reaction of the market; however as no larger sample was tested, this serves as illustration only. Nevertheless, important to note is that apologies are rare in most restatement cases; often a public apology is avoided because of possible litigation. In a few cases, no apology whatsoever was made. An exception to this fear for litigation is Shell's Jeroen van der Veer, who has admitted

to errors made in the past on several occasions, and whose candour has been greeted positively by analysts<sup>5</sup>:

They shouldn't have happened and all of what we can do as new team about that, we deal with it, we deal with it as quickly as possible, as fully as possible and as openly as possible.

### Communicating Openly

Many investors and market participants use a company's scope of disclosure as a proxy for the degree of seriousness of the accounting issues. Similar to confirming the general nature of the problem, the more detail offered, the less widespread the problems are assumed to be, leading to a decrease in the perceived level of distortion. Furthermore, upfront disclosure of the damage that the restatement may cause on business operations and/or financing facilities is a constructive factor in the dialogue between companies and analysts. An overview of experimental research by Healy and Wahlen (1999) suggests that analysts are more likely to 'see through' earnings management practices when financial statements clearly discuss and provide disclosure of the 'managed' items. This supports the notion that voluntary disclosures enhance the information supply chain's understanding and increases transparency. Gietzmann (2006) and Mazzola, Ravasi and Gabbioneta (2006), also provide evidence for the positive influence of openness when communicating a company's strategy to investors. Open communication is likely to reduce the perceived degree of distortion involved in a restatement situation, which in turn should reduce the damage to market value. In our research, and for illustrative purposes only, the degree of openness was consistent with the market's reaction to the restatement in 13 of the 14 cases. While previous restatement research has not looked at openness in depth, Palmrose et al. (2004) did show that if a company offers an estimate of the financial effect of the restatement in its initial announcement, the negative effect on its share price is diminished.

The cases we analysed provide suggestive evidence that precise command of accounting language as a quality of financial leadership has been dismissed in favour of 'governance credos' and sound business performance litany. For example, and to illustrate only, in one conference call by Qwest, the chief executive outlined measures that have been taken to improve future business performance, rather than providing

<sup>5</sup> Royal Dutch Petroleum Co (Shell) Conference Call: 'Recategorisation of proved hydrocarbon reserves'; *Fair Disclosure Wire*, March 18, 2004

details on the effect of the restatement:

I don't think we're ready to put another number out yet. But if you look at what we announced last week in our enterprise space, we consolidated our general business branches with our national account branches, eliminating a lot of redundant directors and middle management. We did not take any sales people out. We look across the business at what the opportunities are for consolidation within the various segments that had not been yet integrated. We also, in our IT space, have, I think, tremendous opportunity for ongoing continued in that 8 per cent productivity increase range or for better to make a huge, huge difference.<sup>6</sup>

Using such general, reassuring words instead of giving precise figures regarding the impact of the restatement is plausible from a reputation-repair point of view. However, any suspicion of accounting hocus-pocus must be addressed in clear and understandable language.

If there is no suspicion of fraud (i.e. if the degree of malicious intent is low), then executives seem to pay greater attention to communicating openly on the financial reporting issues of the restatement. This seems natural given the lower risk of litigation involved. For example, in one conference call by Shell, Malcolm Brinded, executive director of exploration and production, displayed his detailed knowledge of the situation by responding in an open and explanatory fashion, volunteering details and background.<sup>7</sup>

Q: Your 2003 reserve replacement ratio is now 63 per cent; am I right in thinking that is a change from April the 19th, when it was 60 per cent?

A: That's correct, Andrea. That's a small technical change.

Q: A small technical change. Well, what exactly -

A: Well, essentially, the 63 per cent is based on the production in that year of 1,408, I think it is, million barrels divided by the production as at the end of the year - the reserves as at the end of the year. Just to give you some feel, the 63 per cent is for 2003; the five-year figure - because I think it's important to highlight that, because on April 19th I talked about the five-year figure which we hadn't worked out then of being 50 to 60 per cent - is actually around 66 per cent; and the three-year reserves replacement figure is around 94 per cent. Those are all on an organic basis.

<sup>6</sup> Q1 2003 Qwest Communications Earnings Conference Call; *Fair Disclosure Wire*, May 29, 2003

<sup>7</sup> Royal Dutch Petroleum Co (Shell) Conference Call 'Advance Advice to Annual Report Publication'; *Fair Disclosure Wire*, May 24, 2004.

What is remarkable is the relatively low level of attention that most companies devote to explaining the accounting background or accounting judgments causing the restatement of incorrect accounting information. Chief executives clearly avoid dialogue on technical matters and leave technicalities to the chief financial officer. However, various cases show that the markets nevertheless expect the chief executive to explain the technical details and to show that he or she has command of technical accounting issues. For example, during a conference call with Ahold, one analyst posed the following question to the interim CEO: ‘... In terms of the reconsolidation, or the proportional consolidation of the joint ventures, what has driven that decision to do that at this point?’<sup>8</sup> Answering such a question adequately requires considerable knowledge of accounting principles.

With the introduction of the required explicit sign-off by the CEO and CFO on financial statements, a clear market signal was given. Numerous restatement cases and subsequent litigation document the unsuccessful efforts by corporate executives in claiming, ‘But the auditors agreed!’ This provides clear evidence that the ultimate responsibility for the true and fair presentation of financials is the domain of both the CEO and CFO. The executives also must face closer scrutiny by regulators. The SEC has the objective of reviewing every listed company at least every three years. As of August 2004, comment letters by the SEC and companies’ responses have been made publicly available; companies must assume that the financial press will obtain copies. The tactic of the SEC to make such comment letters public is likely to be copied by other securities regulators, who want to avoid drawing in responsibility for financial reporting by pushing their comments back to management publicly. By making this process of critiquing the application of GAAP public, the SEC clearly again establishes that the CEO and CFO bear ultimate responsibility for resolving the problems diagnosed by the regulators.

In addition, the CEO and CFO are responsible for ‘unadjusted audit differences’. This technical phrase refers to the auditors’ list of proposed adjustments to the financial statements, which, on an individual basis or taken as an aggregate, do not warrant adjustment of those financial statements due to them not being considered material (hence the phrase ‘unadjusted differences’). Most audit firms require the

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<sup>8</sup> Q4 2002 Royal Ahold Earnings Conference Call, *Fair Disclosure Wire*, February 24, 2003

CEO or CFO to concur with this decision, by attaching the schedule of unadjusted differences to the letter of representation. This letter of representation is the instrument auditors use to have management provide representation on aspects of the financial statements on which the auditors were not able to independently obtain corroborative or satisfactory audit evidence. For example, the completeness of contracts concluded, guarantees issued, minutes of meetings held, off-balance sheet arrangements and full disclosure of litigation and claims typically find their way into the management representation letter. Under most Generally Accepted Auditing Standards frameworks, this letter is part of a normal audit procedure. The inclusion of the summary of unadjusted differences requires management to be on guard for a number of reasons. In subsequent years, and if confronted with a restatement, these unadjusted differences will be one of the focal points of forensic investigators or regulators trying to uncover whether accounting decisions were subject to an unacceptable accounting 'bias'.

In summation, lack of technical accounting knowledge will no longer be considered as an excuse or a 'mitigating' factor when judging management's involvement in financial reporting matters. If anything, in order to create trust and build financial reputation, precise command of accounting language will be necessary for not only the CFO, but also the CEO, as the latter is the figurehead of the company and carries primary responsibility for its financial viability and strategic direction.

#### Taking Corporate Governance Measures

In cases where there was a suspicion of intent or fraud, CEOs and/or board members of the companies we studied made frequent attempts to persuade analysts and the media that appropriate remedial actions had been taken. In fact, a number of cases illustrate that (often regulatory) remedial actions were taken under time pressure, sacrificing senior members of management for cause, without publicly justifying precisely what that cause was. This is substantiated by five of our 14 cases, where relatively high scores on governance actions combined with relatively low scores on communicating openly about the problem.

Similarly, previous restatement research has shown that when a company takes appropriate governance measures (such as increasing the number of outside directors), it often results in an improvement in stock and bond prices (Farber, 2005;

Anderson, Mansi & Reeb, 2004). The reason is presumably that proper governance decreases the expectation that the company will act with malicious intent again. In addition, Gietzmann (2006) and Mazzola et al. (2006) demonstrate the role of governance in assuring investors of the credibility of a company's strategy.

In order to avoid the alignment problems discussed under 'Issues in Restatement Situations', it seems important that companies take remedial governance actions in cooperation with both the internal audit committee and external auditors. In the past, the relationship between executives and internal audit committees could be characterised as one of 'act and inform'. With the changes resulting from new governance regulations, boards and audit committees now need to actively, rather than passively, involve themselves with management when it comes to financial controls and reporting matters. The new regulations imply that the board/audit committee's active role should extend to overseeing at least the following:

- Management's antifraud programs and controls, including management's identification of fraud risks and implementation of antifraud measures;
- Management's potential to override controls, or other inappropriate management influence;
- Mechanisms for employees to report concerns (whistle-blowing procedures);
- Receiving and reviewing periodic reports describing the nature, status and eventual disposition of alleged or suspected fraud and misconduct; and,
- An internal audit plan that addresses fraud risk and mechanisms to ensure that the internal audit committee can express any concerns about management's commitment to appropriate internal controls or to report suspicions or allegations of fraud.

A good example of the start of such a governance reform programme can be seen at Tyco (Pillmore, 2003). The company's reforms included separating financial management from operations management, establishing new positions dealing with corporate governance that report directly to the board, and establishing clear principles and policies. Such programs give a positive signal to the market. By the time the restatement issues were resolved, Tyco's share price had recovered substantially, and was actually significantly higher than just before the restatement.

For their part, external auditors are working in a zero-tolerance environment as a result of the corporate scandals – a much greater focus is placed on what is material, both from a quantitative and a qualitative perspective. Accounting and auditing rules are very complex; and the ways for auditors to defend themselves are quite limited. Furthermore, the changes brought about by the convergence of different accounting frameworks led to the use in accounting of more ‘fair values,’ resulting in higher inherent subjectivity (more use of judgment), and consequential volatility. Audit firms have learned their lessons from the restatement phenomenon.

In issuing audit opinions on financial statements, risk aversion was a trait of the accounting profession for many decades. Now, with the introduction of International Financial Reporting Standards (IFRS), and corporate governance changes, audit firms are avoiding any risk with respect to the application and/or interpretation of GAAP. Audit partners will often use the so-called technical office of their firm (a department that advises technical accounting matters), to obtain a final ‘blessing’ on accounting and/or auditing issues. Auditors strictly apply the rules, leaving no room for management’s interpretations and/or wishes. Management, for its part, increasingly uses its own legal advisors to check its auditor’s opinions on technical accounting issues. This can jeopardise the trustful, open and direct communicative relationship between auditors and their clients that previously existed. In most cases the relationship between companies and their auditors will become more formal, often sterile, and always highly technical. In turn, this may lead to polarisation, with each party looking after its own interests first and foremost. In sum, while resolving complex financial reporting matters should be a team effort by management, current changes in regulation may render such a team effort increasingly difficult.

#### Acting in Compliance with Standards and Rules

The objective of regulators is to weed out the underlying causes of restatements. In the United States enactment of the Sarbanes-Oxley Act in mid-2002 was the political reaction to corporate and executive misconduct. Many other countries followed suit with stricter and more comprehensive corporate governance rules. Most of these frameworks cover such issues as whistle-blower protection, audit committee responsibilities and expertise requirements, auditor independence and a ban on the provision of certain consultancy services. Last, but not least among those provisions,

was executive responsibility for internal control systems.

The internal control provisions item has required U.S.-listed entities to invest heavily in (re-) designing, testing and documenting their internal controls. As a consequence, auditors have also upgraded their audit methodology by expanding the scope of their procedures, the compliance standards they test against and upgraded their internal quality and documentation standards. Tyco is an example of a company that clearly stated its adherence to rules and regulations:

We've implemented new conservative standards for financial reporting, which, by the way, accounts for a substantial portion of the charges we are announcing today. We have instituted a new spirit of transparency with investors and regulators and we've instituted changes to the company's internal culture with new compensation guidelines, and stronger standards of internal disclosure and reporting. With regard to the internal audits, and operating reviews, we've acted with deliberation, but with a sense of urgency.<sup>9</sup>

As we saw earlier, Tyco's share price successfully recovered after its restatement. It seems likely that by closely adhering to policies and regulations after being confronted with the necessity for a restatement, companies can regain some of the trust that was lost following the restatement. The reason is presumably that when a company complies well, the market will be more confident that it will not act with malicious intent again.

#### 2.4.3 TWO OPPOSING CASES: FREDDIE MAC AND NORTEL

We will further illustrate the validity of 'damage-containing' responses in dealing with financial restatements by discussing two of the cases we have analysed, Freddie Mac and Nortel. Both cases concerned the timing of revenue recognition – revenues were shifted from previous years to future years, or vice versa. Of the cases that we analysed, they are also the ones that attracted by far the most media attention.

However, the two companies differ greatly in how they handled the restatement crisis.

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<sup>9</sup> Q2 2003 Tyco International Earnings Conference Call, *Fair Disclosure Wire*, April 30, 2003.

## **Freddie Mac**

The Federal Home Loan Mortgage Corporation, known as Freddie Mac, is one of the largest participants in the U.S. secondary mortgage market, where financial institutions buy and sell mortgages in the form of loans and mortgage-related securities. In 2003 for example, Freddie Mac purchased some 25 per cent of the U.S.-originated conventional mortgages, which totalled US \$2,800 billion. In December 2003 Freddie Mac's total assets amounted to US \$800 billion, making it one of the largest financial institutions in the world. In January 2003 Freddie Mac announced that it expected to restate its previously issued (and audited) financial statements for 2002, 2001 and 2000. The ensuing legal, accounting and forensic investigations, regulatory scrutiny, SEC involvement, shareholder litigation, management changes and employee turmoil lasted for more than 12 months. The net cumulative effect of Freddie Mac's restatement was an increase of US \$5 billion in the company's net income in the year ended December 2002, which included a net cumulative increase of US \$4.4 billion for 2000, 2001 and 2002 and US \$600 million for periods prior to 2000. These corrections of past accounting errors could be considered material to the company's financial position; in other words; the accounting errors were large enough to substantially distort the financial picture of the company. The investigation into the restatement revealed that Freddie Mac had engaged in substantial earnings management practices, deliberately delaying the accounting recognition of earnings in order to achieve a steadier, smoother growth curve (Yurday & Duffie, 2004; and OFHEO, 2003).

The Freddie Mac case scores relatively high on the recommended actions that we have described, as judged from our analysis of the archival data pertaining to the case (see Table 2.2). The initial restatement underestimated the ultimate accounting effects of the restatement, and mentioned the complexities of hedge accounting as the major cause for the restatement. However, once management intent with respect to the smoothing of income became apparent, remedial actions were taken immediately with full disclosure of details. The newly-appointed management adopted a full and fair disclosure strategy, providing open and confirmative details of the complexities of hedge accounting for Freddie Mac's portfolio of derivatives. Mastering the accounting rhetoric and volunteering accounting explanations were key characteristics of management's communication strategy. Remedial and governance actions were taken swiftly and discussed comprehensively in press releases and conference calls.

Compliance with standards and corporate reporting regulations was announced as an explicit strategic (and tactical) goal. Ultimate reporting by independent counsel provided many details of the accounting issues that needed to be resolved and of the remedial actions being taken. Before the restatement, a lack of alignment was evident. For example, one analyst concluded:

Independent counsel Baker Botts found that information given to the board was often ‘tightly scripted and controlled.’ Various accounting issues were often presented in such a way to make it seem that the company was in compliance with GAAP. Furthermore, the investigation found that CEO Brendsel and Vice-chairman David Glenn had not addressed the need for ‘prompt corrective action’ when the board and audit committee had concerns over accounting policy in the fall of 2001 and the spring of 2002.<sup>10</sup>

However, comments made by the company in a conference call after the restatement was resolved suggested that it realised the detrimental effects of such a situation:

... along with management practices that are described in the report and found their way into the Treblay Report will be a principle that management needs to be sure that information gets up to the board, that raises the questions that delivers to the board the opportunity to deliberate on difficult questions. To challenge or to probe the wisdom of general strategies, that is a mistake for management to keep those bottled up and to micro-manage the transmission of that information to the board.<sup>11</sup>

The behaviour of Freddie Mac is also reflected in media reports surrounding the restatement. We asked Factiva Insight to conduct an analysis of media reports covering the 14 financial restatement cases we had selected, also with the aim to corroborate our own findings. Nortel and Freddie Mac had by far the most extensive coverage in global major business publications (Factiva covered some 260 articles on Nortel, and 200 on Freddie Mac). The Factiva analysis showed topics of media coverage, which confirmed our own findings. A large part of those reports described the accounting issues under consideration, reflecting the fact that Freddie Mac was open on what these issues were (see Figure 2.5 for details). Freddie Mac’s shares dropped about 7 per cent immediately after the restatement, but steadily increased in the subsequent

<sup>10</sup> FRE, Internal Investigation Reveals Widespread Accounting, Control, and Disclosure Weaknesses; Troubling Excerpts Below, *Prudential: analyst report*, July 23, 2003; Thomson One Analytics.

<sup>11</sup> Freddie Mac Conference Call, *Fair Disclosure Wire*, July 23, 2003

12 months, ending above the original price by the time of the restatement's resolution. It seems that the company was able to limit the damage caused by the restatement. Obviously, presentation of these data is for illustrative purposes only. Future research, using appropriate sample sizes of restatements (or other crisis situations) and our proposed model for analysing corporate communication efforts could try to statistically associate and validate communication efforts and share price movement.

### **Nortel**

Nortel is a global communication technology provider specialising in the business-to-business market. In 2003, its revenues totalled US \$9.81 billion. On 23 October, 2003, Nortel announced that it had discovered some revenue recognition issues that would lead to a reduction in previously reported revenue, part of which would need to be deferred. The revenue adjustments were estimated to result in a net decrease in revenues for 2001, 2002 and 2003. Nortel's audit committee undertook an independent review assisted by an independent law firm. Judging from our analysis of the company's conference calls and press releases, as well as reports by analysts and the media, Nortel scored relatively low on the positive behaviours that we have identified in dealing with this situation (see also Table 2.2).

Over and over again, the outcome of this investigation was postponed. Only limited information was disclosed on the scope and depth of the accounting problems. The company merely stated that the impact of the restatement would not be 'material,' without clearly explaining what this meant (see the section on comprehension gaps above). Six months after the initial restatement, a number of management changes were announced, including to the president and chief executive, chief financial officer and controller positions. However, these actions were taken without publicising the underlying reasons. The uncertainty continued another almost nine months. Analysts then became suspicious and interpreted other changes in reporting practices as a negative sign. For example, one analyst's report stated:

Our concern is that investors and analysts will find it difficult to regain confidence in Nortel if the company does not provide the level of granularity the investment community needs to check its results against comparable

and standalone companies...,<sup>12</sup> adding, 'While Nortel has talked the talk on disclosure, we are very concerned that it may not walk the walk - specifically on its business segment reporting.'

Clearly, this analyst was concerned about the effectiveness of Nortel's changes because the information the company provided was not sufficiently detailed and substantiated. Such concerns were also apparent in the financial press. Most reports describe Nortel's measures to hold executives accountable as well as the ongoing internal and external investigation, but devote relatively little attention to the accounting issues (see Figure 2.5).

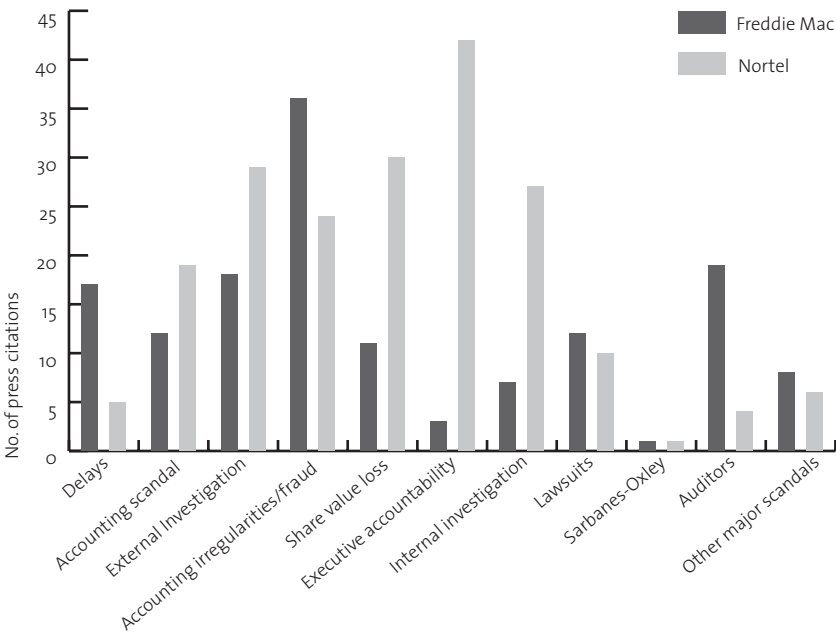
Finally, in January 2005, some 15 months after its initial announcement, Nortel provided details of its accounting restatements and simultaneously announced substantial leadership changes. New key positions had been established, including chief marketing officer, chief strategy officer, president of federal systems, president of charity and president of professional services. In addition, the position of chief information officer had been given more strategic importance. The company had also appointed additional directors. Finally, Nortel commissioned Accenture to lead a comprehensive assessment of, and assist with, the transformation of its financial processes, organisation structure and the underlying systems and tools. Nortel expected this project to be completed within 18 to 24 months.

Nortel's shares fell about 19 per cent on the day of the restatement and were even lower by the time the restatement was resolved, although investors did react positively to the rigorous changes at the end of the restatement episode. Nortel did not quite succeed in restoring investor confidence after the announcement of the restatement.

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<sup>12</sup> Earnings Update, Networking & Data Infrastructure, Canadian Imperial Bank of Commerce, *analyst report*, August 19, 2004: Thomson One Analytics.

FIGURE 2.5 CONTENT OF MEDIA REPORTS FOR FREDDIE MAC AND NORTTEL



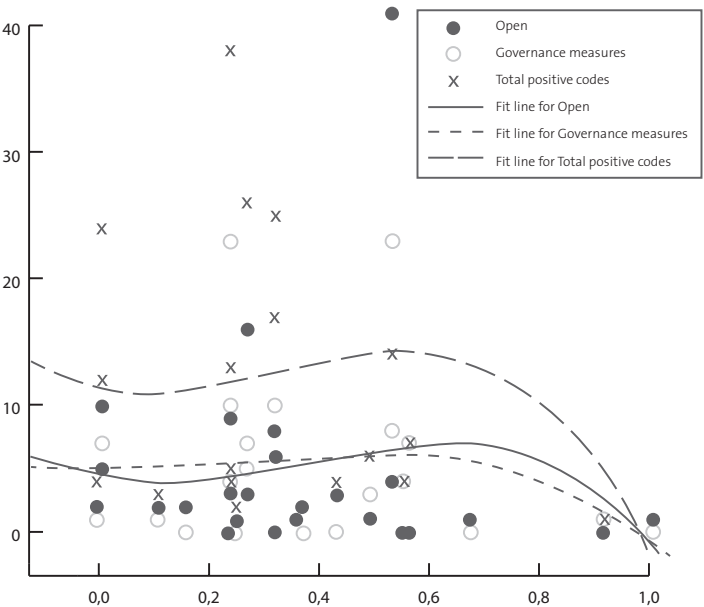
In comparing the cases of Freddie Mac and Nortel, the relationship between the positive managerial actions that we have identified, and the relative movement in the share price, provides (illustrative) support for the notion that an open, confirmative and explanatory communication strategy helps the recovery of the share price after a restatement (see Figure 2.6 for Freddie Mac, and Figure 2.7 for Nortel). While both companies suffered an initial decrease in their share prices close to the day they issued their restatement, Freddie Mac recovered from this decrease to a much higher degree than Nortel. Because the initial market reaction was similar for the two companies, it seems likely that this difference in recovery can be attributed to the differing ways in which the companies handled the crisis.

Similar, illustrative graphs were set up for all 14 cases. Put together, a pattern can be recognized which shows that positive communication behaviour (as per our coding scheme results) has a favourable impact on share price development. However, we reiterate that only testing with appropriate sample sizes and with application of proper statistical techniques, valid statistical conclusions can be drawn. Nevertheless,

to provide an estimate of the effect of a restatement on the market value of a company, we calculated for each case the percentage change in the adjusted share price during:

1. The three days surrounding the restatement announcement; and,
2. The period between the day before the announcement, and the day the restatement was resolved.

**FIGURE 2.6 SAMPLE GRAPH OF CONTENT CODES FOR THE FREDDIE MAC CASE**



This method, similar to the one used by Palmrose and Scholz (2003), provided us with an estimate of how severe the initial market reaction to the restatement was, and to what degree the company managed to recover. For purposes of putting our overall, illustrative results table together (Table 2.2) we rated companies based on the degree to which they recovered, attributing a higher rank to companies that recovered from a more serious negative market reaction in share price just after the restatement announcement. When the adjusted share price at the end of the episode was even lower than just after the announcement, we rated this as ‘-’; when the price was about the same as just after the announcement, we rated it as ‘\_’; when it had gone

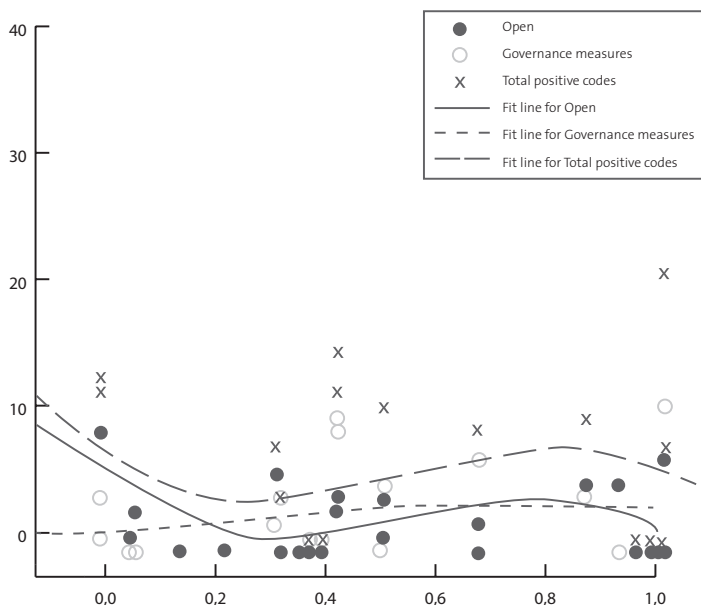
up but did not quite reach the level it had just before the announcement, as '+/\_'; when it had about reached the original level, as '+'; and when it exceeded the original level, as '++'.

As mentioned before, we also analysed media reports. This analysis was based on world-wide major news and business publications in the English language. Search keywords and search strings for companies and market issues were constructed and searches were conducted through Factiva with the number of quotes mentioning each content category for each company tabled (see Figure 2.5).

To expand on why Freddie Mac and Nortel were selected for a more detailed comparison, the companies both:

1. Were involved in the same restatement issue (revenue timing);
2. Received the most media attention of all cases (with 206 and 256 articles in our media analysis for Freddie Mac and Nortel, respectively); and,
3. Differed substantially in the way they responded to the crisis.

FIGURE 2.7 SAMPLE GRAPH OF CONTENT CODES FOR THE NORTEL CASE



Although Freddie Mac's restatement involved adjusting the results for previous years upwards, while for Nortel this was the reverse, we believe that this does not undermine the comparability of the cases. In both cases a revision upwards in one period was compensated by a revision downwards in another period (either past or future), thus leaving net revenues over the longer term unaffected. Also, the fact that fraud was involved is likely to weigh much more heavily on the market than whether the revision was upward or downward. This conclusion can be drawn from the fact that in both cases, the company's stock price decreased immediately after the announcement.

## 2.5 Results

### Making up the Balance: Do's and Don'ts of Responding to Restatement Pressures

Restatements of financial statements can trigger serious damage to public trust in large companies. However, recent high-profile scandals may have obscured the fact that the consequences of a restatement are not necessarily disastrous and that companies can limit the amount of damage to some degree. Previous research on restatements has focused on the causes and consequences of restatements. Relatively little work has been done on the way companies are – and should be – managing restatements. In this section, we have argued that there are several issues that may increase the damage a restatement inflicts on the public trust. These issues involve obstacles to ‘proper’ communication and actions, such as the difficulty of communicating clearly, if at all, about the causes of the restatement and the loss of management credibility after the announcement. These factors can aggravate the level of distortion in the financial statement that the public perceives, as well as the degree to which the public believes that actions were taken with malicious intent. They may then lead to a substantial reduction in public trust, accompanied by a decline in the company's market value.

It is important for managers to recognise these issues and to act upon them using a proper communication strategy and taking appropriate remedial actions. Doing so will limit the level of distortion and intent perceived by the public. For example, the cases that we have analysed suggest that communicating openly, taking the blame, and complying with rules and regulations can limit the amount of damage done by the restatement. However, while many of the companies we studied implemented corporate governance changes and adhere to new rules and regulations, only a few communicated clearly and openly about the restatement. Most managers tend to focus on getting their business ‘back on track’, rather than explaining exactly what the causes of the restatement were in the first place. However, a proper understanding by the market of what exactly was the problem, and how it was fixed, is vital for restoring trust in the company.

Given this finding, why do managers focus so little attention on offering explanations? One reason may be that the job demands a restatement situation places on managers

is too high for most executives to handle. And for many executives, extremely detailed insight into financial matters may be beyond their expertise. In addition, a restatement situation may put intense pressure on executives to perform.

As recent research suggests, such intense pressure may interfere with executives' information processing and decision-making capabilities (Hambrick, Finkelstein & Mooney, 2005a). This in turn can lead to inadequate information-providing behaviour by managers. Other recent research in managerial decision making by Bazerman (2005) and his colleagues has suggested that managers may not only be 'bounded' by limits on their cognitive capacities, but also by systematic biases. For example, because people want to think of themselves as capable, moral and deserving, they sometimes do not see the ethical doubtfulness of their own behaviour (Chugh, Bazerman & Banaji, 2005; Bazerman, 2005). In a restatement situation, some managers may truly believe they have not done anything wrong and act accordingly by not complying, or complying inadequately, with stakeholder requests for information.

Finally, executives might be so focused on some aspects of a situation that they completely overlook other aspects. Bazerman et al. termed this phenomenon 'bounded awareness' (Bazerman & Chugh, 2006). For example, managers' focus on the future of the company, rather than its past, might not only make them reluctant to talk about what happened, but in some cases make them completely oblivious to stakeholder demands for information. Investigating the role of executive job demands and other 'bounding' factors in the degree to which managers succeed in communicating adequately about a restatement may be a worthwhile avenue for future research.

Taking the blame for the problems underlying the restatement was also rarely witnessed among the cases we studied. This seems natural given the fact that taking the blame for misdeeds leaves one more vulnerable to litigation. However, as Kellerman (2006) and other researchers have argued, in many cases blame taking is essential in restoring trust. When managers avoid blame for something that is clearly their responsibility, this is likely to erode public trust even further. On the other hand, recent studies by Kim and his colleagues have suggested that while blame taking can restore trust in the case of 'honest' mistakes (which we have termed 'White Lies,' and, 'Grey Accounting Hocus Pocus'), this does not necessarily hold for ethical lapses (Kim, Dirks, Cooper & Ferrin, 2006). When malicious intent is clearly present

(which we termed ‘Purple Delusion,’ and, ‘Black Magic Fraud’), admitting blame might do little to restore trust and could even damage trust further. When judging integrity, people attach particular importance to negative behaviours. In other words, we generally consider one highly unethical act (such as fraud), as sufficient grounds to regard a person (or company) as unethical, no matter how ethical the person’s other acts are. While blame taking might be perceived as a morally right behaviour in itself, it might not be enough to counter the influence of the preceding unethical behaviour. However, when a company facing a restatement can also convince stakeholders that it will do everything necessary to avoid repeating its mistakes (e.g. by replacing executives and taking appropriate corporate governance measures), it seems likely that an apology acknowledging some responsibility will enhance trust, rather than decrease it. Such a forgiving reaction by stakeholders also makes sense from a utilitarian perspective.

Research in game theory has demonstrated that long-term success in a ‘prisoner’s-dilemma situation’ is determined largely by the degree to which a player can forgive occasional non-cooperative (defecting) behaviour from the opponent. For example, in Axelrod’s research (1984), the most successful strategy was ‘tit for tat,’ a strategy in which a player mirrors all of the opponent’s actions – defecting when the opponent defects, but cooperating again as soon as the opponent cooperates. Refusing all further cooperation after one ‘malicious’ (non-cooperative) act is likely to be detrimental for both parties.

Finally, blame taking could also be the best strategy from a legal perspective. While it is true that admitting responsibility could be used against a company or person as evidence for guilt in a court case, it could also positively influence the outcome of the case (Patel & Healy, 2003).

## 2.6 Conclusions and Discussion

In addition to highlighting the types of remedial actions that are effective in resolving restatement crises, our findings from the qualitative content coding study indirectly confirm that market participants recognize the two dimensions of our proposed typology of restatements. Open and confirmation coding, which accounted for some 35 per cent of all codes assigned, can be seen as supportive evidence for the significance of the information distortion dimension of restatements. Similarly, Governance and Norm Conformity coding also accounted for some 35 per cent of all codes that, in turn, confirm the importance of information on the more qualitative dimension of restatement situations.

On the 'negative' side of the coding scheme, only the 'closed' communication code averaged a 12 per cent score, which again supports the assertion that factors increasing uncertainty about the precise nature of the restatement tend to weigh heavily in judging the information-distortion dimension. Seen over time, the coding exercise shows that in the period immediately following the restatement announcement, uncertainties on both dimensions lead to more 'negative' codes being applied. This confirms our proposition that the five issues which we identified as 'reputation risk enhancing' factors play an important role in determining the perceptions of analysts. Communicating openly and the confirming codes provide support for the notion that such underlying corporate responses help alleviate information uncertainties, hence remediating the reputation risks of both a company and its executives.

Because of the complexity of each of the restatement situations, we have been unable to draw firm conclusions about a causal link between company actions and the impact of a restatement. While our conclusions are consistent with previous literature, the conditions surrounding the different restatements that we studied differ in many more ways than can be accounted for by the issues and managerial responses that we have described. For example, the restatements took place in different industries, different countries, and in different periods. All of these factors may have had an influence on the damage triggered by the restatement. Therefore, further research is needed to investigate the degree to which the different actions a company undertakes following a restatement can truly be helpful in limiting damage.

In spite of such limitation, our study is among the first to discuss the set of issues and managerial responses surrounding financial restatements, and provide guidelines for dealing with this complex problem.

**TABLE 2.3 SUMMARY OF RESTATEMENT CASES ANALYSED**

| Company             | Region of origin | Industry category                 | Restatement issue  | Start of case     | Length of case (days) | No. of documents (quotations) analysed |
|---------------------|------------------|-----------------------------------|--|-------------------|-----------------------|--|
| Adecco              | Europe           | Human Resources Services          | Internal control issue   | January 12, 2004  | 239                   | 16 (188)                               |
| Ahold               | Europe           | Wholesale and Retail Trade        | Fictitious revenue, purchase accounting and various other restatements | February 24, 2003 | 549                   | 58 (788)                               |
| Cablevision         | North America    | Media Entertainment               | Expense acceleration   | June 18, 2003     | 258                   | 22 (138)                               |
| Computer Associates | North America    | ICT                               | Revenue timing   | October 8, 2003   | 350                   | 27 (237)                               |
| El Paso             | North America    | Oil and Gas                       | Reserves   | February 17, 2004 | 188                   | 23 (201)                               |
| Freddie Mac         | North America    | Financial institutions            | Swaptions accounting/ smoothing  | January 22, 2004  | 574                   | 41 (963)                               |
| Goodyear            | North America    | Tyre Manufacturing                | Various accounting   | October 21, 2003  | 381                   | 17 (120)                               |
| Interpublic         | North America    | Communication Consulting Services | Intercompany expenses  | August 5, 2002    | 226                   | 16 (210)                               |
| Nortel              | North America    | Communication Technology          | Revenue timing   | October 23, 2003  | 446                   | 41 (366)                               |
| Parmalat            | Europe           | Food                              | Off-balance sheet accounting and Special Purpose Vehicles              | November 11, 2003 | 188                   | 12 (206)                               |
| Qwest               | North America    | Telecommunication                 | Purchase accounting  | March 11, 2002    | 619                   | 45 (443)                               |
| Shell               | Europe           | Oil and Gas                       | Oil-reserves Accounting  | January 9, 2004   | 228                   | 26 (531)                               |
| Symbol              | North America    | ICT                               | Revenue and Expense Recognition  | August 13, 2002   | 820                   | 29 (381)                               |
| Tyco                | North America    | Manufacturing                     | Management fraud/ avrious restatements                                 | June 3, 2002      | 610                   | 34 (403)                               |

# Chapter 3

## Study 2: Analysts' Perceptions of CEO Behaviour in Restatement Situations

### 3.1 Introduction

Our second study focuses on analyst perceptions of CEO behaviour in restatement situations. Analysts rate companies on asset management and portfolio attributes, and they are required to estimate, amongst other factors, the future earnings of the companies they follow. Analysts also issue buy/sell recommendations and target share prices for the companies they follow. There is extensive evidence that analysts' stock recommendations have a material impact in stock trading behaviour and stock market implied valuations (Ryan & Taffler, 2006; Womack, 1996). Regulation FD (which became effective in August 2000), and many other corporate governance regulations, made these conference calls public

domain – all investors have access to these conference calls (for example, through services such as the web-based FD Wire). In addition, analysts' assessments of corporate and executive performance (the analysts' reports), are readily accessible to participants in the capital markets. Hence, analysts play a key role in the functioning of capital markets.

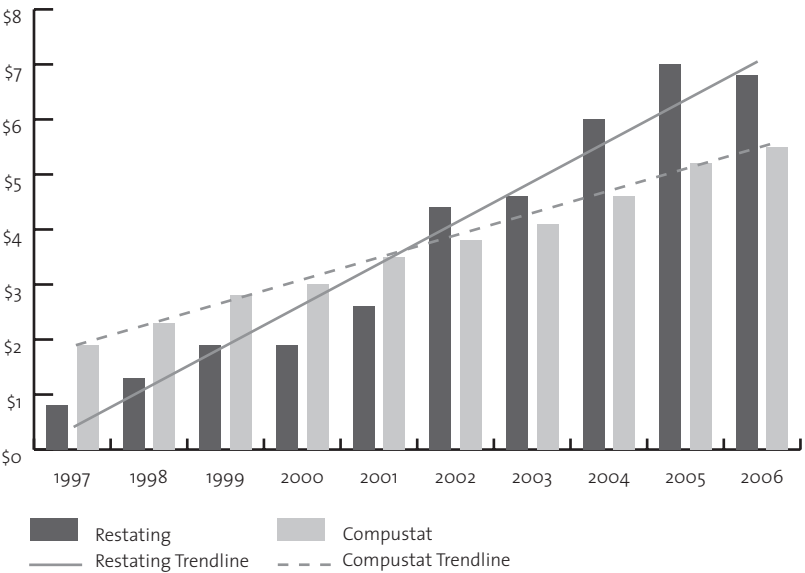
A large body of literature documents that analyst forecasts provide the best proxy for investors' earnings expectations, and tend to outperform the time-series models (Brown & Rozeff, 1978; Fried & Givoly, 1982; Givoly & Lakonishok 1984; Conroy & Harris, 1987; Brown, Hagerman, Griffin & Zmijewski, 1987; O'Brien 1988; Kross, Ro & Schroeder 1990). Also, analysts' stock recommendations and the corresponding effect on stock prices affect a firm's general reputation and influence its ability to raise capital, how it sets its compensations policies and the career prospects of that firm's executives. Therefore, analysts' judgment and decision making is very relevant for CEOs (Fombrun, 1996) as analysts become an important external constituent of a firm.

Consequently, analysts are expected to have a professional interest in recognizing restatement warning signs (red flags) and/or predicting forthcoming restatements as these restatements will effect share prices and future earnings potential. There is mixed evidence regarding the ability of analysts and/or other market participants (internal or external) to predict restatements. Papers by Efendi et al. (2005) and Desai et al. (2006) show that short-sellers and insiders predict restatements; Griffin (2003) reveals that analysts do not anticipate and/or predict restatements. Griffin also finds that in a few instances, analysts downgrade companies before the restatement announcement, however, the biggest revision by far occurs the month after the restatement announcement, thereby suggesting that many analysts simply react to the bad news. Griffin examines how analysts and other 'insiders' react to those corrective restatements that lead to securities fraud.

Until the end of 2001, restatement companies had smaller revenues than the average revenues of around 9,000 companies contained in ratings agency Standard & Poor's

Compustat database. However, starting in 2002, the average assets of restatement companies were higher than the average, peaking in 2005 with average assets of US \$7 billion (compared to the Compustat average of US \$5.2 billion), and documented in a 2008 report to the U.S. Treasury (see Figure 3.1). If there is an increased likelihood of encountering restatements for larger companies, a reasonable expectation would be that analysts develop some kind of ‘radar’ function, signaling to them suspect corporate situations. However, empirical evidence shows that analysts ignored many red flags that without the benefit of hindsight could be identified in pre-restatement periods. Excessive executive remuneration packages, earnings management pressures, dominant and often narcissist CEOs, audit committees with insufficient financial expertise, the ever-increasing complexity of accounting rules, and gatekeepers with substantial conflicts of interest are all among those red flags.

FIGURE 3.1 AVERAGE ASSETS FOR RESTATING AND COMPUSTAT COMPANIES (\$B)



Generally, analysts have a bad track record when it comes to seeing these early warning signs that could signal an impending financial restatement. There are only a small number of instances in which analysts, based on the information obtained from

their ‘traditional’ company research – management contacts (conference calls) and data gathering – were able to anticipate and disclose earnings management, which ultimately resulted in a financial restatement<sup>1</sup>. Considering the strong increases over the last 10 years in the number of restatements, this inability to accurately anticipate the need for a restatement begs the question as to whether or not the traditional ‘analyst forecasting model’ will ever be able to identify restatement situations in a timely manner.

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<sup>1</sup> For example, the Government Accountability Office’s 2006 database only mentions two instances (out of some 1,400), in which the media prompted for the restatement and some 15 other which fell under the category of ‘other’ prompts.

### **3.2 Theoretical Framework and Previous Studies on Analysts' Decision-Making**

Ronen and Yaari (2008) discuss the literature on the role of analysts in earnings management. They focus on two key questions:

- Do analysts take into account the financial information released by firms, and if they do, do they discount reports that are suspected of being inflated by earnings management?
- Do analysts have incentives to collude with management in an attempt to manage earnings rather than to issue unbiased reports; or do they provide countervailing power to management's earnings management?

In the following paragraphs, we shall consider the literature on both these issues in more detail, particularly as they apply to the role of analysts in earnings management.

#### **3.2.1 ANALYSTS' DECISION PROCESSES**

The following research focuses on the question of what information affects the development of analysts' earnings forecasts and recommendations.

In a content analysis study of analyst reports issued between 1987 and 1992, Previts, Bricker, Robinson and Young (1994), conclude that analysts place significant weight on earnings-related information, trying to 'normalize' results, often excluding non-recurring or unusual items in the process. Additionally, analysts rely on management to a great extent for information that is not included in the annual and/or quarterly financial statements. Previts et al. (1994), note that analysts prefer to follow companies with effective earnings management tools, thus creating a low-risk environment for forecasting. This finding suggests an interesting dilemma in analysts' choice of which companies to follow – companies managing earnings create a 'stable' prediction environment, however, once the earnings management is discovered and acted upon, often through an earnings restatement, analysts are then blamed for missing the red flags indicative of reporting fraud.

Ramnath et al. (2008) look at Previts et al.'s observation in the context of the present day, noting that while analysts prefer to follow firms with effective strategies for presenting smooth earnings streams, it would be interesting to know whether analysts have the same preferences after the SEC's Regulation Fair Disclosure (FD). Future archival research might consider the relationship between analysts' following decisions (their preferences as to which companies to follow), and the ability of managers to consistently meet earnings expectations before and after FD.

Rogers and Grant (1997) evaluate company annual reports through a content-coding study to determine how analysts use those reports to write their own research reports. They find that sell-side analyst reports rely primarily on the narrative portions of annual reports, with the management discussion and analysis section proving to be the largest single source of information. Lang and Lundholm (1996) find that the dispersion in analysts' forecasts declines with higher quality annual report disclosures, and better investor relations. They also find that a higher quality of corporate communications and investor relations improves the analysts' forecast accuracy. Healy, Hutton and Palepu (1999) also find that quality and candidness in the management discussion section of the annual report are key factors valued by analysts. Their research results are consistent with disclosure model predictions, wherein expanded disclosure leads investors to revise upward valuations of a sample firms' stocks, increase stock liquidity, and create additional institutional and analyst interest in those stocks. Bowen, Davis and Matsumoto (2002) find that information provided during conference calls improves analysts' forecast accuracy and reduces the analysts' earnings forecast dispersion. The study also finds that conference calls help 'level the playing field' when it comes to analyst earnings forecast dispersion.

### 3.2.2 NATURE OF ANALYSTS' EXPERTISE

Studies exploring the nature of analysts' expertise mainly deal with issues such as firm-specific expertise, industry focus, the number of firms followed by analysts, and analyst years of experience, linking past performance to current and future forecast accuracy.

Understanding the nature of an analyst's expertise is important because it can help explain why some analysts perform better than others. This is relevant for analysts themselves (considering their rewards and bonuses), but is also important for their

employers and anyone who uses analysts' research and recommendations to make investment decisions. Analysts who follow a particular company longer produce more accurate forecasts (Clement, Koonce & Lopez, 2007). Learning from past experience seems to be an important part of forecasting, particularly when task-specific experience is considered. Clement et al. (2007) found that analysts who obtained experience with corporate downsizing and restructuring issues increased their forecast accuracy by some 8 per cent annually for every year of experience on companies they follow.

In their article 'Who Herds?', Bernhardt et al. (2006) define herding bias as part of a broader context, writing that (p. 658):

A forecast is unbiased if it corresponds to the analyst's best estimate of earnings given all available information, i.e., if it corresponds to the mean or median of the analyst's posterior distribution over earnings. In its most basic form, herding amounts to biasing a forecast away from an analyst's best estimate, toward the consensus forecast of earlier analysts; while anti-herding amounts to biasing a forecast away from that consensus.

It is very possible that analysts do herd, in the sense that they may ignore their own private knowledge/information to follow the rest of the pack. A number of archival studies, often using mathematical models, provide insight into analyst herding behaviour. And various studies show that confident analysts are more likely to issue bold forecasts (Ramnath et al. 2008). Hirshleifer notes, 'Investors and managers are often accused of irrationally converging in their actions and beliefs, perhaps because of a 'herd instinct' or from a contagious emotional response to stressful events' (Hirshleifer & Teoh, 2001). In particular, this last reference to stressful events is interesting in the context of our research.<sup>2</sup>

Investors may herd (converge in behaviour), or cascade (ignore their private information signals), in deciding whether to participate in the market, what securities to trade, and whether to buy or sell. Both analysts as well as investors may herd when deciding what securities to invest in. Analysts may also herd in their forecasts

<sup>2</sup> See, for example, *Business Week* (1998) on 'Why Investors Stampede: And why the potential for damage is greater than ever,' or the advertisement by Scudder Investments in *Forbes* (10/29/01) with the heading, 'MILLIONS of very fast, slightly MISINFORMED sheep. Now that's opportunity.'

of future earnings levels of companies they cover. An individual is said to be in an informational cascade if, based upon his observation of others (e.g. their actions, outcomes, or words), his chosen action does not depend on his private information signal (see Bikhchandani, Hirshleifer, & Welch, 1992; Banerjee, 1992; Devenow & Welch, 1996).

### 3.2.3 ANALYSTS' BEHAVIOURAL BIASES, INCENTIVES AND RECIPROCITY

Biases are consistent errors made in decision making under uncertainty. To reduce human information-processing demands, people develop rules of thumb, or heuristics – cognitive tools to simplify decision-making. Cognitive bias occurs when inappropriate heuristics are applied in decision-making, or when persons have an over-reliance on these judgmental rules of thumb. The concept of heuristics was first used by Tversky and Kahneman (1974) to explain departures from normative models.

Over the past 40 years, research in the field of decision making has revealed that there are many different biases. Currently, a unifying concept has yet to be discovered. However, some order has been created in this great variety of departures from normative models. Baron, in his book *Thinking and Deciding* (2008), develops a model in which the biases are linked to the normative models they violate and provide a possible explanation. Bazerman and Chugh (2006) summarize 13 important biases into three groupings: biases emanating from the availability heuristic; biases emanating from the representativeness heuristic; and finally, those beyond availability and representativeness. The following four biases are considered relevant for our research and will be considered below in further detail:

- Overconfidence
- Optimistic/Pessimistic Bias
- Confirmation Bias
- Commitment Bias

#### Overconfidence

In their 2007 article, 'Arrogance can be a virtue: Overconfidence, information acquisition, and market efficiency,' Ko and Huang (2007) argue that overconfident investors will invest resources in finding information not yet available in the

marketplace. Contrary to other researchers, who believe overconfidence generates security mispricing, they believe that overconfident investors can cause stock prices to move closer to their true values. The incentive for overconfident investors to acquire information is a possible countervailing effect that makes prices more informative and efficient. Rubinstein (2001) also mentioned this possibility as an argument for efficient markets (also quoted by Ko & Huang, 2007: 530):

While overconfidence can express itself in other ways, surely it causes many investors to spend too much on research. As a result, there is a sense in which asset prices become hyper-rational; that is, they reflect not only the information that was cost-effective to impound into prices but also information that was not worthwhile to gather and impound. Overspending on research is not in one's self-interest, but it does create a positive externality for passive investors who now find that prices embed more information and markets are deeper than they should be.

Daniel, Hirshleifer and Subrahmanyam (1997) develop a behavioural model based on the assumption that investors display overconfidence and self-attribution bias with respect to private information concerning stock returns. Overconfidence causes investors to attach excessive weight to private information, oftentimes discounting public information in the process. Self-attribution bias refers to the tendency to attribute success to skill, and conversely, to attribute failure to misfortune, thus accentuating the effect of overconfidence in the short term.

#### Optimistic/Pessimistic Bias – Overreaction and Under-Reaction

Abarbanell and Lehavy (2003) mention that four decades of research into the biases of analysts' forecasts have produced conflicting evidence, and that the literature as a whole still fails to deliver a definitive answer as to why and how analysts are biased. The main focus of the work they refer to attempts to analyse the bias of analysts solely in terms of whether the analysts themselves are either overly optimistic or overly pessimistic, and how that disposition plays out in their earnings forecast errors.

A similar set of studies, exploring the degree of analyst reaction to information that contradicts earlier business economics expectations (earnings estimates, cash flow estimates, etcetera), found corresponding analyst overreaction to bad news, and vice versa, analyst under-reaction to good news, with respect to these variables. Further,

a wealth of behavioural finance literature has reported that there exist behavioural tendencies in both analysts' and investors' reactions to unexpected earnings information. In the context of reactions to earnings information, such behavioural tendencies of analysts and investors have been characterized as overreaction, under-reaction, or optimism.

Amir and Ganzach (1998) argue that these over- and under-reactions in analysts' earnings forecasts are linked to the following heuristics applied in analysts' decision making –anchoring, representativeness, and leniency. Bradshaw (2000) and Hunton, McEwan and Bhattacharjee (2001) also find that analysts over-extrapolate growth and earnings, in applying heuristics to determine stock recommendations.

#### Commitment Bias

Going a step further, because previously-announced earnings and previously-made forecasts can serve as anchors, Amir and Ganzach (1998) suggest that a previous forecast is a more powerful anchor than previous earnings. People tend to have a strong commitment to staying on a course of action once a choice is made, judgment is expressed, or a forecast is communicated – the so-called commitment bias (Staw, 1976).

#### Confirmation Bias

In addition to overconfidence, Friesen and Weller (2006) consider another bias extensively documented in the psychology literature, that of cognitive dissonance.<sup>3</sup> An individual who is overconfident overestimates the precision of his private information. Cognitive dissonance can be characterized by the proposition that individuals tend to acquire or perceive information to conform to a set of desired beliefs – and neglect or disregard information to the contrary.<sup>4</sup> As the authors write:

Thus, if an analyst issues an optimistic earnings forecast on the basis of favourable private information, he will have a tendency to interpret subsequent information in such a way as to support or conform to the prior belief.

<sup>3</sup> The theory was first expounded by Festinger (1957). It has been described as one of the most influential theories in social psychology and has been the stimulus for a great number of experimental studies.

<sup>4</sup> The theory of cognitive dissonance has been applied in an economic context in Akerlof and Dickens (1982) and in a financial context in Goetzmann and Peles (1997).

Stracca (2004: 383) notes:

A similar need to protect self-esteem may lead agents to belief perseverance and confirmatory bias: as there is an emotional cost associated to the recognition of having been wrong, agents tend to look for additional support for initial hypotheses (Rabin & Schrag, 1999) and to exaggerate correlations which might be due to chance, interpreting them in the light of a preconceived theory.

### Reciprocity

Next to the above biases, analysts are also sensitive as to how their relationship with the CEO develops. Further, an important objective for executives is to maintain support from their external constituents. This is particularly true for the relationship between the CEO and analysts, as analysts can strongly influence a CEO's relationship with the stakeholders of the company, in particular its shareholders. Earlier studies have noted that social exchange and favour rendering are more pervasive in relationships with repeated interactions (Axelrod, 1984) – these frequent interactions are indeed applicable to CEO-analysts contacts. Executives can render the following favours to security analysts – provide critical information on industry developments (not the company in particular); organize contacts with supplier firms; meet with analysts' clients (institutional investors); recommend them for jobs and get them into 'exclusive' high-prestige clubs. When a CEO expects, or is confronted with negative information about the company, it can be expected that the CEO may use favour rendering to influence analysts' decision processes.

Westphal and Clement (2008) find strong supportive evidence that executives render personal and professional favours to analysts when they expect to announce negative financial information, such as an earnings surprise. This is of relevance to our study, as in many cases restatements result in a downward adjustment of revenues, and in a reduction of net profit and shareholders' equity. Possibly, this will have an impact on analysts' blame giving behaviour and their assessment of CEO characteristics such as integrity.

Next to this body of literature, cognitive psychologists have also studied biases and boundedness, and a number of studies are relevant to this research.

### 3.2.4 CONCLUSIONS AND CURRENT LIMITATIONS IN ANALYSTS' RESEARCH LITERATURE

Research on the role of financial analysts in capital markets is mainly based on either archival studies or on experiments. The number of studies in which analysts are polled directly is very limited (see Ramnath et al., 2008). Recently, the literature on financial analyst forecasting has paid more attention to the investigation of the incentives and decision processes that influence analysts' measures of company performance (their buy/sell recommendations, and/or earnings estimates). Included in these studies is the role of heuristics, which might better explain analysts' decisions about how to weigh the factors, used in determining a company's value.

Academic research on analysts does not pay attention to some crucial (and observable) factors that could impact analysts' assessment of a firm's (and its CEO's) performance and financial-reporting integrity. However, some of these factors are being independently studied by academics in isolation (as unrelated topics), even though they are mostly not considered within the context of analysts' judgment and decision making. These factors include:

- **CEO Competence:** Implicitly assumed by analysts; however, financial reporting skills prove essential for creating trust with stakeholders and investors—no measures or indicators currently exist for objectively assessing this CEO attribute.
- **CEO Task Challenges:** Extremely high job demands can lead to extreme executive behaviours (acquisitions for the sake of size and power, reorganizations, etcetera) and/or to engage in aggressive accounting practices. Highly pressured executives do take shortcuts in decision making (Pralhalad, 2004; Hambrick et al. 2005a; Gangster, 2005), but analysts often do not notice or critique such 'blinded' behaviour, which oftentimes leads to inferior performance by companies.
- **CEO Integrity and Openness:** Corporate governance failures of the last 50 years, including the recent corporate reporting scandals, show that CEO integrity is a primary component in protecting the interests of shareholders in an environment where ownership is separated from management (the agency problem). Analysts seem to ignore these CEO attributes.
- **Governance:** Proper governance measures should act as countervailing powers.

In determining financial reporting integrity, these four factors warrant assessment by analysts. We will argue that considerable academic studies now exist, supporting our assertion that there are 'observable clues,' for anticipating executives engaging in financial reporting fraud, other than the traditional archive-study-based indicators (explored after the fact). The study of the perceptions of analysts as to the causes of earnings management and/or reporting fraud are important, as it can help to identify whether or not analysts are able to identify red flags, or warning signs which could hint at a forthcoming restatement.

If we hold the view that the function of evidence is to disprove incorrect theories, then judged against the classical 'analyst decision model,' we can conclude that we have found evidence that the model fails. The old analyst's judgment paradigm and decision model needs calibration and re-balancing. But we then face shaping a new alternative model, which includes assessment of CEO intangibles. The evidence above, that analysts are biased and bounded, amounts to a vast collection of independent pieces of research, but these do not painlessly assemble themselves into a new theory for explaining analysts' perceptions of executives in crisis situations.

### 3.3 Development of Hypotheses

Two steps are needed before we can develop a model that will explain perceptions by analysts of the behaviour of a CEO during a restatement crisis. In the first step, we shall investigate the focus of research in financial analyst forecasting literature, with the aim of identifying those studies that have addressed analysts' judgment and decision-making processes in the context of earnings management, CEO perceptions and/or reporting fraud. This literature tackles issues impacting analysts' forecasting and ability to spot earnings management, their ability to anticipate or predict forthcoming restatements and/or reporting fraud, and finally, the factors analysts use to gauge CEO characteristics.

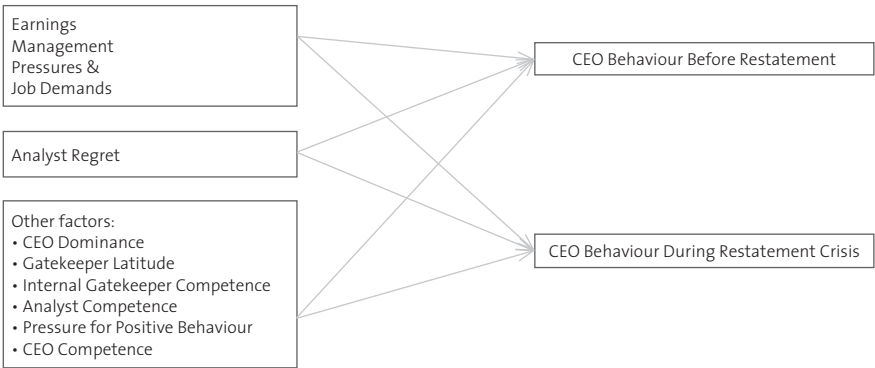
In the second step, we will analyse what is missing from the current forecasting model, and what tangible and intangible indicators may help analysts evaluate a CEO's behaviour during a restatement crisis. On the basis of the work that has been researched to date, we will develop a number of hypotheses about the drivers of analyst perceptions of CEO behaviour. The constructs we develop should help explain analysts' behaviour in restatement situations, including rationale or logic for earnings estimates and analysts' recommendations. This analysis includes comments on analysts' dominant logic, cognitive dissonance, and a variety of other significant biases.

Our objective will be to develop and test a model of how perceived pressures on CEOs to commit earnings management and/or reporting fraud are associated with perceived CEO behaviour in restatement situations. These perceptions by analysts on causes (CEO pressures), and effects (CEO behaviours), in restatement situations are expected to be influenced by analysts' biases and incentives. During the last 15 years, research on the role of financial analysts has evolved from mainly descriptive studies on the statistical inputs and outputs of analyst forecasting, to in-depth studies of the decision processes underlying analyst forecasting.

In Figure 3.2, we display the basic research model that we test in this study. With respect to the antecedents of analyst perceptions of CEO behaviour, we focus on the perceived pressure on the CEO to manage earnings on the one hand, and on the

other, the degree to which analysts feel regret. In addition, we include a number of other antecedents of perceived CEO behaviour as control variables. With respect to CEO behaviour, we take the dimensions that we have identified in Chapter 2 as a starting point. However, because some of these dimensions are rather similar, we regroup them based on the two main dimensions of restatement severity that we have identified. We have argued that openness and confirming behaviour mainly serve to reduce the amount of perceived distortion that is present, while governance and compliance serve to reduce the amount of perceived intent. Finally blame taking helps to reduce the severity on both dimensions. Therefore, we focus on the following three dimensions of CEO behaviour: (1) openness/confirming, (2) governance/compliance and (3) blame taking. In addition, we include a fourth dimension that is likely to be influential on analysts' judgment of the CEO, namely, the degree to which they perceive the CEO as behaving with integrity.

**FIGURE 3.2 RESEARCH MODEL STUDY 2**



There are two important arguments why analysts need a clear view as to the integrity of executives:

- Research shows that there is an association between integrity and transformational leadership. Further, perceived integrity also positively correlates with leadership and organizational effectiveness. Therefore, high integrity and firm performance are associated. Analysts should be aware of firm-value-enhancing factors. In the reputation remediation period, openness and integrity of the CEO (and their gatekeepers), is expected to

accelerate recovery from the damage caused by the restatement.

- If integrity is low, or executives are unethical (and/or narcissistic), research has shown that firms managed by such executives have greater risk and occurrence of financial reporting fraud. Research has shown that companies which restate as a result of management fraud suffer a greater negative stock price effect.

Regarding the first argument, Joyner, Payne and Raiborn (2002) note that, 'There is growing recognition that good ethics can have a positive economic impact on the performance of firms. Many statistics support the premise that ethics, values, integrity and responsibility are required in the modern workplace.' Brown, Trevino and Harrison (2005) also found that leader cognitive moral development is positively related to transformational leadership, and unrelated to transactional leadership style.

Integrity in leadership is becoming of increasing concern within business and organizations (Kanungo and Mendonca, 1996). Many organizational theorists and practitioners now believe that leadership without integrity may ultimately place the organization at risk (Mowday, Porter & Steers, 1982; Parry, 1998; Posner & Schmidt, 1984). Gottlieb and Sanzgiri (1996) highlight that leaders with integrity always encourage open and honest communication, particularly in discussions concerning decision making.

Parry and Proctor-Thomson (2002: 15) note:

Perceived integrity was found to correlate significantly and positively with a range of effectiveness measures, but specifically leader integrity correlated most strongly with rater satisfaction and rater perceptions of leadership effectiveness. Perhaps one could say that no longer is ethical conduct simply a desirable 'feel good' quality of organizational functioning, but rather it is becoming recognized as an essential component of success.

It is argued that leaders with more comprehensive moral reasoning are more likely to value goals that go beyond immediate self-interest, rather serving the collective good.

Conversely, regarding the second argument, there are a number of studies which show a strong association between management intent in committing financial reporting fraud, and negative stock price effects. Palmrose et al. (2004) report that the market reaction to restatement announcements related to fraud (i.e. deliberate misreporting), is negative 20 per cent, but is only negative 6 per cent for non-fraud example restatements.

### 3.3.1 HYPOTHESES EARNINGS MANAGEMENT PRESSURES

Following the corporate failures and significant restatements of 2001-02, scholars have placed heavy emphasis on investigating the structure of companies' reward and bonus systems, and exploring the relationship of those systems to earnings management and fraudulent financial reporting (Bebchuk & Fried, 2003; Jensen, Murphy & Wruck, 2004). Agency theory<sup>5</sup> suggests that incentive pay aligns the interests of executives and shareholders, and that incentive pay is intended to motivate executives to behave and take actions that maximize shareholder value (Bebchuk & Fried, 2003). However, the conclusion of Devers et al. (2007) is that corporate goal misalignment might be one of the more reliable outcomes of executive pay. Devers et al. illustrate this conclusion on the basis of studies into a more recent phenomenon, that of stock option backdating and the opportunistic release of information by executives around scheduled award dates. The goal misalignment conclusion is also supported by a number of recent articles quoted by Devers et al., all dealing with earnings management studies and studies focusing on the relationship between executive reward systems and restatements. Devers et al. conclude that, 'Evidence to date strongly supports the conclusion that executives use incentive compensation in ways that benefit themselves at the expense of shareholders.'

Bergstresser and Philippon (2006) and Bebchuk and Fried (2004) confirm and extend the findings of Beneish and Vargus (2002), that highly-incentivized executives appear more likely to manipulate reported measures of corporate financial performance. More incentivized CEOs (those whose overall compensation is more sensitive to company share price), lead companies with higher levels of earnings management. In

<sup>5</sup> Agency theory research is typically directed at the ubiquitous agency relationship. As defined by Eisenhardt (1989), the agency relationship is one in which one party (the principal) delegates work to another (the agent), who performs that work. Agency theory is concerned with resolving two problems that can occur in agency relationships. The first is the agency problem that arises when (a) the desires or goals of the principal and agent conflict and (b) it is difficult or expensive for the principle to verify what the agent is actually doing. The second is the problem of risk sharing that arises when the principal and agent have different attitudes towards risk.

addition, Burns and Kedia (2006) found that higher incentives from stock options are not only associated with a higher propensity to misreport, but are also associated with higher magnitudes of misreporting. Interesting for our study is another conclusion they were able to draw with respect to market reactions – that large option exercises in periods of alleged misreporting are associated with a greater market reaction at the time of the restatement announcement (Burns & Kedia, 2006). This knowledge of the extent of prior option exercises (in the misreporting period), can therefore be considered essential information for analysts who need to predict future market/target prices for the shares that they follow.

Bebchuk, Fried and Walker (2002) argue that options entice managers to extract ‘rents’ (wealth), from their remuneration contracts at the expense of other shareholders. Holding option positions causes executive wealth to become a convex function of the stock price – while increasing stock prices benefits holders of options, the magnitude of option losses are limited in the event of a decline in stock price. This asymmetric feature of options on shares may cause executives to focus on short-term period results. The focus on short-term profits is further enhanced by the bias with respect to time-value of money and other measures of value. Bebchuk et al. found that misreporting, as measured by the incidence of restatements, is more likely to occur when the convexity is greater. What the trio of researchers did not uncover was evidence to support their hypothesis that offerings of long-term incentive plans (LTIPs) and restricted stock reduced the propensity of companies to misreport.

Managers with larger stock and option holdings are more likely to engage in earnings management – a prediction confirmed in articles by Beneish and Vargus (2002), Bergstresser and Philippon (2006), Burns and Kedia (2006) and Bartov and Mohanram (2004). In all of those studies, the data reveals that during the misreported period, CEOs exercised a significantly higher fraction of their exercisable options than the CEOs of comparable firms.

One final point in this area made by Burns and Kedia (2008) was that the sensitivity of compensation from options, as measured by the change in value of the option for a percentage change in stock price (delta), is greater in restated firm years than in non-restated firm years. This provides evidence consistent with the hypothesis that

incentives from option compensation encourage misreporting, and that misreporting results in a restatement.

The above research shows that CEO rewards, and in particular, stock options, are associated with earnings management. Those rewards, in many cases, result in the consequential restatement of financial statements. Our research focuses on analysts' perceptions of CEO behaviour in restatement situations, both during the period leading up to the restatement announcement, and the restatement adjustment period. The perceptions and knowledge of analysts on CEO rewards schemes are relevant because research shows that the involvement of senior management, and in particular the CEO, in earnings management and the implied reporting fraud, has a significantly higher negative effect on the downward stock price adjustment following a restatement announcement (Palmrose et al. 2004). The research also shows that CEO stock options schemes are associated with a higher propensity of reporting fraud alongside more material adjustments to the financial statements. Essentially, more significant misstatements of the financial position have a greater impact on the ability of analysts to predict future earnings and share price targets. Or, in other words, stock options schemes should work as an important warning sign (red flag) for analysts when assessing the risk of a company and its senior management, being involved in earnings management or reporting fraud.

On the other hand, research in decision making suggests that individuals often do not 'see' accessible and perceivable information during the decision-making process, a phenomenon which Chugh and Bazerman (2007) dubbed 'bounded awareness.' This type of change blindness illustrates the 'slippery slope' theory of unethical behaviour (Schrund & Zechman, 2008), which predicts that individuals are more likely to engage in unethical behaviour that occurs in small increments than in unethical behaviour that occurs suddenly. One last note on this subject is that in an international comparison of how analysts use information to predict future earnings, Moyes, Saadouni, Simon and Williams (2001) found that analysts in the United Kingdom and analysts in the United States used the same kind of data; however, US analysts appeared to utilize management guidance more than other analysts. This shows that analysts differ in the degree to which they use different types of available information to form an opinion about a company.

In addition to executive remuneration, other pressures on the CEO can be instrumental for the practice of earnings management. Hambrick et al. (2005a) have discussed the role of pressures on executives to achieve objectives they have set for themselves and their firms on their behaviour. Hambrick et al. argue that these pressures could lead to extreme behaviours, which could form the basis for an explanation as to why executives engage in aggressive accounting practices.

In the professional accounting literature and/or working practices we can also find examples of risk factors relating to misstatements arising from fraudulent financial reporting:

Excessive pressure exists for management to meet the requirements or expectations of third parties due to the following:

- Profitability or trend level expectations of investment analysts, institutional investors, significant creditors, or other external parties (particularly expectations that are unduly aggressive or unrealistic), including expectations created by management in, for example, overly optimistic press releases or annual report messages.
- Need to obtain additional debt or equity financing to stay competitive – including financing of major research and development or capital expenditures.
- Marginal ability to meet exchange listing requirements or debt repayment or other debt covenant requirements.
- Perceived or real adverse effects of reporting poor financial results on significant pending transactions, such as business combinations or contract awards (AICPA 2007).

Similarly, the standards identify the following fraudulent reporting pressures arising from management reward systems; and we mention in particular parts c and d:

c. Information available indicates that management's or those charged with governance's personal financial situation is threatened by the entity's financial performance arising from the following:

- Significant financial interests in the entity
- Significant portions of their compensation (for example, bonuses, stock options, and earn-out arrangements) being contingent upon achieving aggressive targets for stock price, operating results, financial position, or cash flow
- Personal guarantees of debts of the entity

- d. There is excessive pressure on management or operating personnel to meet financial targets set up by those charged with governance or management, including sales or profitability incentive goals (AICPA 2007).

These standards underscore the importance of recognizing the factors we identified from the academic literature as red flags for potential financial reporting fraud. Therefore, we expect to find that both before and after a restatement is announced, when analysts perceive CEO rewards and other pressures to stimulate the CEO in the direction of earnings management, they will have a more negative opinion on the CEO's behaviour before and during the restatement crisis. This culminates in the following hypotheses:

H1a: The higher the degree of perceived pressures on the CEO to manage earnings before the restatement, the less positive will be the perceived reputation management behaviour of the CEO before the restatement.

H1b: The higher the degree of perceived pressures on the CEO to manage earnings before the restatement, the less positive will be the perceived reputational remediation behaviour of the CEO during the restatement resolution period.

### 3.3.2 HYPOTHESES EXECUTIVE JOB DEMANDS

In an *Academy of Management Review* article, Hambrick et al. (2005a) defined executive job demands as, '[The] degree to which a given executive experiences his or her job as difficult or challenging.' Hambrick et al. argue that high executive job demands could lead to extreme behaviours, such as earnings management. This is because high job demands limit executives' understanding of the situation, and hence their ability to judge the appropriateness of their decisions. Therefore, we expect analysts to rate a CEO's behaviour, both before and after the announcement of the restatement, as less positive when they believe the CEO's job demands are high. We formulate the following hypotheses:

H2a: The higher the perceived job demands on the CEO, the less positive will be the perceived behaviour of the CEO before the restatement.

H2b: The higher the perceived job demands on the CEO, the less positive will be the perceived behaviour of the CEO during the restatement resolution period.

Hambrick et al. (2005a) also identify three antecedents of executive job demands, namely the degree to which the environment of the CEO is challenging (what Hambrick et al. call 'task challenges'), the level of performance that is required from the CEO, and the level of CEO aspiration. Challenges from the environment are, for example, the complexity of the industry, the resources that the company has at its disposal, and the complexity of the organization's structure. We expect these challenges to exert a negative influence on analyst perceptions of CEO behaviour, leading to the following hypotheses:

H3a: The higher the perceived task and performance challenges on the CEO before the restatement, the less positive will be the perceived reputation management behaviour of the CEO before the restatement.

H3b: The higher the perceived task and performance challenges on the CEO before the restatement, the less positive will be the perceived reputation management behaviour of the CEO during the restatement resolution period.

### 3.3.3 HYPOTHESES ANALYST'S REGRET AND/OR DISAPPOINTMENT

Disappointment and elation are the counterparts of rejoice and regret (Bell, 1985). Disappointment and elation involve comparisons of different outcomes caused by different states within a single choice. Similarly, rejoice and regret involve comparisons caused by different choices within a single state (Baron, 2008). The emotion of regret results from a comparison between an actual outcome and a better outcome that might have occurred had another option been chosen (choice- or behaviour-focused counterfactuals). Conversely, disappointment stems from the comparison of an actual outcome with a better outcome that might have resulted had events occurred differently (situation-focused counterfactuals) (Van Dijk, Van der Pligt & Zeelenberg, 1999). In line with literature on counter-factual thinking we expect that analyst's regret will be associated with their judgment of CEO behaviour in the period following the restatement announcement (Period B – the restatement remediation period). We therefore formulate the following hypothesis:

H4: The larger the analyst's disappointment by, and regret about the occurrence of the restatement, the less positive will be the perceived behaviour of the CEO during the restatement resolution period.

### 3.3.4 HYPOTHESES CEO DOMINANCE

Academic literature and the popular press attribute strong financial performance to CEO power. Daily & Johnson (1997) distinguish a number of power constructs, all of which are based on board composition, remuneration packages, founder/owner attributes, CEO prestige and CEO participation in other power structures. None of these concepts, however, address the more negative associations between CEO dominance, narcissistic characteristics and financial statement fraud.

However, the popular press has identified many CEOs involved in financial restatements (and fraud) as clearly having dominant and/or narcissistic traits. Hall (2006) identifies chronic dishonesty as a key element in the recent financial scandals. Hall states that advances in cognitive and social psychology have shown self-serving cognitive biases (egocentric or motivational biases) to be fundamental to human behaviour.<sup>6</sup>

In the literature on fraud and its accompanying warning indicators, the presence of a dominant top management team (and/or CEO) is considered to be a leading indicator of financial statement fraud (Rezaee, 2005). As Rezaee notes, an aggressive managerial attitude to meeting unrealistic corporate goals is an important precedent for fraud and he identifies the following organizational characteristics as red flags for financial statement fraud:

- A highly domineering top management team;
- An ineffective, illiterate, and incompetent audit committee;
- Management override; and,
- Autocratic management.

Similar results were obtained by Halebian and Finkelstein (1993). In their sample of 26 computer companies, profitability is negatively related to top management teams with dominant CEOs. Earlier, Hambrick and D'Aveni (1992) discovered a positive association between CEO dominance and firm bankruptcy, finding in a study of 57 large corporate bankruptcies, that failing companies have more dominant CEOs than non-failing companies.

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<sup>6</sup> See, generally, Fox (2004), Swartz and Watkins (2003), Bryce (2002), McLean and Elkind (2003), Jeter (2003), and Clarke (2003).

Based on these considerations, we expect analysts to have a less favourable view on the CEO's behaviour, both before and after the restatement, when they perceive the CEO as having a domineering management style. This leads to the following hypotheses:

**H5a: The higher the degree of aggressive (dominant) behaviour of the CEO before the restatement, the less positive will be the perceived reputation management behaviour of the CEO before the restatement.**

**H5b: The higher the degree of aggressive (dominant) behaviour of the CEO before the restatement, the less positive will be the perceived reputational remediation behaviour of the CEO during the restatement resolution period.**

### 3.3.5 OTHER HYPOTHESES

In addition to putting pressure on the CEO to manage earnings, or conversely, putting pressure on the CEO to engage in proper governance and reporting behaviour, gatekeepers can also passively encourage earnings management by increasing managerial discretion. Managerial discretion can be defined as the space of choices executives face. Such managerial discretion, or latitude of action, typically exists when there is an absence of constraints, be they laws, rules, or a predefined logic. Hambrick (2007) describes this as follows, 'Discretion exists when there is an absence of constraint and when there is a great deal of means-ends ambiguity – that is when there are multiple plausible alternatives.' Paredes (2005) argues that by virtue of the powers entrusted to a CEO, top executives are far more likely to derive overconfidence from their ability to apply discretion in numerous strategic choices whose appropriateness is hard to control by most corporate governance measures.

For our study, such managerial discretion is of interest in the context of accounting and reporting choices. Accounting manoeuvring space is defined here as the alternatives executives have in making accounting choices, all the while staying within the 'boundaries' of what is permissible under the current Generally Accepting Accounting Principle (GAAP) framework. In the field of accounting, many studies have been conducted on how and why executives use this 'discretionary accounting space.' Some studies suggest that executives might use this accounting discretion to 'manage earnings.'

Hambrick (2007) notes that this discretion can only be utilized in the absence of 'constraints'. However, the authors do not elaborate on the specifics of these constraints. They mention only environmental conditions and organizational factors, such as board weakness, or they allude to the possibility that such constraints might include so-called 'board capture' on the part of the CEO. More simply put, the board has its own interests (dependencies), and/or biases preventing it from taking harsh actions.

In developing our overall construct of CEO job demands, we anticipate that the skill levels of the CEO, the CFO, and the Audit Committee act as a countervailing power on earnings management pressures. However, this countervailing power to keep such pressures in check is made all the more difficult by cognitive constraints playing a crucial role in the board's work. The informational financial reporting environment is complex, possibly contains manoeuvring space, and is often opaque, all of which are contributing factors to board capture. As such, confirmation bias and collective egocentric attitudes tend to paralyze corporate boards.

Accounting discretion (and its close relation, manoeuvring space), has been studied previously by Ronen and Yaari (2008, Part 4), Healy (1985) and Dechow and Sloan (1991), and a number of other prolific accounting theory and practice writers. The existing research in the field makes a distinction between non-discretionary accruals, most linked to ordinary business transaction cycles, and discretionary accruals. Such non-discretionary accruals arise because of the cut-off phenomenon in accounting, which is a result of the necessity of drawing up periodic income reporting (hence balance sheets). Inter-period allocation is the result of this accrual process.

In addition, discretionary accruals result in accounting areas in which greater management judgment and more financial estimations are required. Accounting for business combinations (and related purchase price allocations), goodwill impairment assessments, valuation of intangibles, complex revenue recognition and hedge accounting are just a handful of the areas in which significant management judgment is required.

Based on this reasoning, we expect that when analysts perceived insufficient countervailing power by gatekeepers, and abundant manoeuvring space regarding

financial reporting, they are likely to see the CEO's behaviour, both before and after the restatement announcement, in a less positive light. Therefore, we hypothesize the following:

H6a: The higher the degree of latitude of gatekeepers regarding earnings management before the restatement, the less positive will be the perceived reputation management behaviour of the CEO before the restatement.

H6b: The higher the perceived latitude a for negative CEO reputation management behaviour before the restatement, the less positive will be the perceived reputational remediation behaviour of the CEO during the restatement resolution period.

H6c: The higher the degree of competence of gatekeepers regarding earnings management before the restatement, the more positive will be the perceived reputation management behaviour of the CEO before the restatement.

H6d: The higher the perceived competence a for negative CEO reputation management behaviour before the restatement, the more positive will be the perceived reputational remediation behaviour of the CEO during the restatement resolution period.

#### Hypotheses Analyst Competence and Awareness

We expect that analyst judgment of CEO behaviour in restatement situations will be influenced by an analyst's competence in accounting matters, financial analysis and probing skills. It seems likely that analysts who are more competent are better able to recognize earnings management pressures on the CEO before a restatement occurs, because they are less prone to herding behaviour (Graham, 1999). Therefore, they can be expected to be more critical of the CEO's behaviour before the restatement occurs. On the other hand, after the announcement of the restatement, more competent analysts are likely to be more objective in evaluating the consequences of the restatement, and less likely to be influenced by informational cascading and possibly panic (Kuran & Sunstein, 1999). Therefore, we formulate the following hypotheses:

H7a: The more competent the analyst sees him/herself, the less positive will be the perceived behaviour of the CEO before the restatement.

H7b: The more competent the analyst sees him/herself, the more positive will be the perceived behaviour of the CEO during the restatement resolution period.

#### Hypotheses Pressures for Governance and Openness

On the flip side of pressures to manage earnings, stakeholders can put pressures on a CEO to engage in 'proper' governance and reporting behaviour. Our findings in Chapter 2 suggested that if analysts would be more probing in their discussions with management during conference calls, then they could enhance their role as gatekeepers.

When a restatement has been announced, gatekeepers can also put pressure on the CEO to disclose information on the consequences of the restatement, and to conduct appropriate remedial actions. In addition, firms, and particularly their independent boards, are under significant pressures arising from legislation to take prompt and robust remedial actions, which often include dismissing senior executives. In 1999, the Department of Justice (DOJ) issued an unpublished memorandum to United States Attorneys' Offices, the so-called Holder Memo, which outlined factors federal prosecutors should consider in deciding whether to pursue criminal charges against a corporation. Following the corporate scandals in January 2003, the DOJ promulgated a revised version of this memorandum. The Thompson Memo, while similar to the Holder memo, directs prosecutors to place 'increased emphasis on and scrutiny of the authenticity of a corporation's cooperation,' while simultaneously placing greater importance on firms' compliance programs. In the Thompson Memo, nine factors are outlined that a prosecutor should consider in deciding whether or not to charge a corporation. A few of these factors are very important in the context of our research:

- The pervasiveness of wrongdoing within the corporation, including the complicity in, or condoning of, the wrongdoing by corporate management;
- The corporation's timely and voluntary disclosure of wrongdoing and its willingness to cooperate in the investigation of its agents, including, if necessary, the waiver of corporate attorney-client and work product protection; and,

- The corporation's remedial actions, including any efforts to implement an effective compliance program or to improve an existing one, to replace responsible management, to discipline or terminate wrongdoers, to pay restitution, and to cooperate with the relevant government agencies.

In particular, the second and third points above sometimes created undue pressures on boards to take action, warranted or not. These pressures could lead to unfair and/or unjust treatment of executives, notably waiving rights to attorney-client privilege. In many cases, decisions on the dismissals of CEOs and or CFOs were taken well before a final and fact-based assessment of the root cause of a restatement was (or could be) available. Boards were facing dilemmas – either cooperate with the DOJ and avoid the risks of being penalized at the corporate level (including damage to their own reputations), or give up executive positions in order to gain the advantage of 'cooperation.' To analysts and investors, these deliberations of boards, executives and gatekeepers (such as legal counsel and auditors), were often kept in-house, the exact opposite behaviours of the Sarbanes-Oxley Act's stated goals of promoting transparency. Therefore, interpretation by analysts of reputation remedial actions is difficult to evaluate or analyse; mechanisms such as framing in press releases (by the corporation), reputation cascading and/or herding behaviour of analysts, and firms trying to start with a clean slate, can cause irrationality in markets.

Arthaud-Day et al. (2006) studied the removal of firms' top executives following a restatement from the perspective of corporate protection, looking for a loss of legitimacy that was defined as risks of losing support from key stakeholders. In examining the relationship between a firm's material financial restatement and changes in key officer and director turnover, the researchers suggest that as mentioned above, restatement firms will seek to remove senior executives as a preemptive measure to protect against negative legitimacy and reputational effects at the corporate level. They also include in their analyses the effects of the severity of the restatement, defined on the basis of who prompted the restatement, and conclude by suggesting that restatements prompted by external parties represent even more serious threats to legitimacy.

Based on these considerations, we expect analysts to rate the behaviour of the CEO, both before and during the restatement crisis, more positively when they perceive a

high degree of pressure on the CEO for proper governance and openness. Therefore, we formulate the following hypotheses:

H8a: The higher the perceived pressures on the CEO for positive reputation management behaviour before the restatement, the more positive will be the perceived behaviour of the CEO before the restatement.

H8b: The higher the perceived pressures on the CEO for positive reputation management behaviour before the restatement, the more positive will be the perceived reputational remediation behaviour of the CEO during the restatement resolution period.

H8c: The higher the perceived pressures on the CEO for positive reputation management behaviour during the restatement resolution period, the more positive will be the perceived reputational remediation behaviour of the CEO during the restatement resolution period.

#### Hypotheses CEO Competence

Research on the financial expertise of executives mainly focuses on that of the CFO. Following the implementation of the Sarbanes-Oxley Act, attention also concentrated on the qualifications of audit committee members (Abbott et al., 2004; Agrawal & Chadha, 2005). Somewhat ironically, there is little to no literature covering financial expertise requirements for a CEO. Interestingly, Aier, Comprix, Gunlock and Lee (2005) quote Baruch Lev of New York University as placing the blame of restatements not upon the executives 'managing' the earnings, but rather on the complexity of GAAP.

With the enactment of the Sarbanes-Oxley Act in 2002, the financial literacy (or expertise) of CEOs has received more attention, both by internal boards and audit committees, along with outside gatekeepers. This follows from the new mandatory requirement that both the CFO and the CEO sign off on the quarterly financial reports to be filed with the Securities and Exchange Commission.

Therefore, we can expect analysts to perceive the behaviour of the CEO, both before and after the restatement, more favourably when they perceive the financial expertise of the CEO to be high. This leads to the following hypotheses:

H9a: The higher the perceived competence of the CEO in accounting matters, the more positive will be the perceived reputation management behaviour of the CEO before the restatement.

H9b: The higher the perceived competence of the CEO in accounting matters, the more positive will be the perceived reputational remediation behaviour of the CEO during the restatement resolution period.

#### Hypotheses Previous CEO Behaviour

In addition to the factors described in the previous sections, the way in which the CEO dealt with corporate governance before the restatement is likely to colour to a significant degree how analysts perceive the behaviour of the CEO during the restatement crisis. Empirical studies consistently confirm that firms with poor internal controls tend to (a) restate earnings more often; (b) be the subject of more SEC accounting and auditing enforcement releases (AAERs); (c) face more frequent SEC enforcement actions; and, (d) be worse financial performers and systematically riskier than comparable firms (Agrawal & Chadha, 2005; Xie, Davidson & DaDalt, 2003).

Agrawal and Chadha (2005) find that the probability of a company restating earnings is substantially lower in companies whose independent boards or audit committees have a member who has financial expertise. Previous studies have examined the relationship between corporate governance mechanisms and earnings management (Dechow et al., 1996; Xie et al., 2003). Agrawal and Chadha conclude their paper finding that firms manipulating earnings are: (a) more likely to have boards of directors dominated by management; (b) more likely to have a chief executive officer who simultaneously serves as chairman of the board; (c) more likely to have a chief executive officer who is also the firm's founder; (d) less likely to have an audit committee; and, (e) less likely to have an outside block holder.

Similarly, Dunn (2004) has studied how power arises over top management teams (TMT), observing how team members represented in the board exercise control over both the TMT and the board of directors, and how this concentration of power in the hands of insiders contributes to illegal corporate behaviour and fraudulent financial

reporting. Their research extends the concept of CEO duality to include TMT duality. TMT duality occurs when members of the top management team also sit on the firm's board of directors. The findings are consistent with Beasley et al. (2000) and Dechow et al. (1996), who found that fraudulent firms have a large percentage of insiders on their boards and that these insiders tend to have a large ownership interest in their firms relative to outside directors on the board. Overall, the results indicate that issuing false financial statements is more likely to occur when a small group of insiders have structural power over both the TMT and the board. The studies on bankruptcy and the pre-crisis removal of executives reveal that boards with greater structural independence are more willing to remove non-performing executives. However, Hambrick and D'Aveni (1992) note that in some instances, executives are replaced so quickly that the change only serves to exacerbate a company's downward spiral and increase the crisis situation.

Of interest is a 2008 study by Akhigbe and Martin on the valuation impacts of the Sarbanes-Oxley Act in the financial services industry, particularly considering the current financial crisis situation. They find that financial services firms benefited significantly from adopting the enhanced corporate disclosures and governance practices. Akhigbe and Martin (2008) found favourable effects post-Sarbanes-Oxley for financial services firms with a greater degree of independence of the board and the board committees, a greater motivation and ability of board members to monitor the firm, and a greater degree of institutional ownership. They also found that financial services firms (particularly smaller firms), experienced less favourable effects with a less independent audit committee, without a financial expert on the audit committee, with less financial statement footnote disclosures, and with less involved CEOs.

There exist further studies associating Sarbanes-Oxley's internal control provisions with a firm's market performance. For example, De Franco, Guan and Lu (2005) found that the market reacted negatively to corporate reports of internal control deficiencies, and that investors who previously did not have access to internal control information deemed the information economically significant. Prentice (2007b) provides a rundown of the pros and cons of the Sarbanes-Oxley Act, concluding that the act has restored trust in the U.S. capital markets after the avalanche of corporate scandals in 2002.

Based on the considerations above, we expect that analysts will rate the behaviour of the CEO after the announcement of the restatement more positively when they have a favourable opinion on the CEO's governance actions *before* the restatement. This translates into the following hypothesis:

H10: The more positive the perceived reputation management behaviour of the CEO before the restatement, the more positive will be the perceived reputational remediation behaviour of the CEO during the restatement resolution period.

### **3.4 Analysts' Survey Design and Methods**

#### **3.4.1 INTRODUCTION**

To test our hypotheses, we conducted a survey among financial analysts. Most research regarding analysts' judgment and decision making are based on large archival data sources such as I/B/E/S and/or the Thomson Financial databases, which contain a large collection of analysts' earnings estimates, recommendations and their reports. The Ramnath et al. (2008) overview study of the existing financial analyst forecasting literature, confirms that archival data research and content coding are the most frequently used methods of research. However, as Graham, Harvey and Rajgopal (2005) point out, such data sources are less suitable for testing the reasons why events occur. In our case, we aim to provide insight into the way analysts perceive the behaviour of the CEO before and during a restatement crisis as a reason why some restatements are much more damaging to the company and the CEO's perceived behaviour than others. It would be hard to provide direct insight into analysts' perceptions of CEO behaviour from archival data. Analysts' recommendations and reports, as well as their conversations with the CEO through conference calls, generally deal with the prospects of the firm, rather than with the behaviour of the CEO.

To get firsthand data from analysts, we developed a survey instrument requiring analysts who followed 200 of the largest and more severe (as measured by share price movement), restatement companies in the period between 2004 and 2006, to assess the way they perceived the behaviour of the CEOs of the company they were following. We asked analysts about their perceptions before the restatement occurred, and during the restatement resolution period. We focused on the CEO, rather than on another top manager (such as the CFO), because the CEO acts as the 'figurehead' of the company, and carries ultimate responsibility for the company's financial situation and its reputation.

#### **3.4.2 SAMPLE OF RESTATEMENTS**

In deciding which restatements to focus on, we looked at two aspects: (1) the degree of management intent in financial misreporting; and, (2) the size of the company involved. Previous research has shown that restatements that are related

to fraudulent activity cause the greatest stock price declines (Palmrose et al., 2004; Wu, 2004; Anderson & Yohn, 2002). On average, larger companies are followed by more analysts, as relevance of these companies to the asset management industry (the buy side) is greater; also, stock market interest in performance of these 'larger' companies is evidently greater. Various reports (Scholz, 2008) show that larger restating companies tend to have higher incidences of management intent and/or fraud. The U.S. Treasury study (Scholz, 2008), shows that average revenues for restating companies have been around US \$ 1.65 billion during the 1997-2006 period (median revenues are around US \$127 million); average assets for restating companies in the same period are US \$5.25 billion (median assets are around US \$ 177 million). Therefore, we target our research on analysts who follow larger restating companies and on restatements where there is a greater probability of management intent. Conforming to earlier studies, we use the significance of stock price decline following the restatement announcement as a proxy for management intent and/or fraud.

Initially, we based our sample of restatement companies on searching Factiva for restatements from public/listed companies with revenues larger than US \$1 billion for the years 2004, 2005 and 2006 (using the search term 'restat\*'). We excluded from our sample restatements which were due to the following 'regular' corporate accounting and/or structuring events: mergers and/or acquisitions; changes in business segment definitions; changes in accounting principles; discontinued operations; stock splits; and changes in stock incentive plans. These types of restatements do not involve errors, but are merely updates as a result of fundamental changes in the business itself, and therefore are less relevant for this study. For 2004 and 2005, we also used a database compiled by PricewaterhouseCoopers on the basis of publicly available information, listing companies with revenue restatements. When we started our preliminary company selection efforts, no comprehensive publically available restatement databases existed. The database supporting the GAO report, which was released in July 2006, was used to check and complete our list of 2004-05 restatement companies. In addition, we used the U.S. Presidential Task Force Reports on Corporate Fraud (covering some 120 companies with regulatory/legal actions), as a check on completeness and relevance of our preliminary list of the more significant restatement companies which involved fraud. In May 2007, Glass, Lewis & Co. (GLC) provided us with their electronic databases of 2005 and 2006 restatement companies. This enabled us to complete and check our sample

of significant restatement companies in terms of revenue size. The GLC databases contained the following numbers of restatements with revenues larger than US \$1 billion: 266 out of 1,359 cases for 2005, and 218 out of 1539 cases for 2006, yielding a total of 484 cases.

Next, we used [finance.google.com](http://finance.google.com) and [finance.yahoo.com](http://finance.yahoo.com) to view the company stock price charts and stock price data to determine the stock price effects for two days around (plus/minus) the date on which the restatement was announced. In the past, this announcement date was not very reliable, because some companies would issue a press release saying that they anticipated issuing a restatement without being specific as to the extent of the restatement. This lack of precision made picking a date for measuring the effects of a restatement announcement more difficult. However, effective August 2004, under new SEC requirements, companies need to file a so-called 'Item 4.02: Non-Reliance on Previously Issued Financial Statements or a Related Audit Report or Completed Interim Review,' which effectively formalized procedures around the restatement announcement date.<sup>7</sup> If a company concludes that its previously issued financial statements should no longer be relied upon due to an error in the financial statements, it must disclose the period in question, the facts underlying this conclusion, and whether the company has discussed the issue with its independent auditors. Similar disclosure is required if the company's independent auditors advise the company to take action to prevent continued reliance on previously issued financial statements.

No analysis of the impact of the error is required to be disclosed at the date an Item 4.02 filing is made. Disclosure with Item 4.02 is only required due to an error in the financial statements, not as a result of every other restatement (see above for restatements excluded from this research, which are non-error restatements). For restatements that occurred in 2005 and 2006, where possible and necessary, we have used the Item 4.02 forms as definitive measures of the restatement announcement date. However, GLC, in its February 2007 report on restatements, reports that application of Item 4.02 is far from perfect. The company reports that in 2006, 600 out of 1,420 restatements (42 per cent) were so-called 'Stealth Restatements' – these restatements were either corrected in the next regular company filings, or the

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<sup>7</sup> SEC Release Nos. 33-8400; 34-49424. Additional Form 8-K Disclosure Requirements and Acceleration of Filing Date.

Item 4.02 filing did not take place (for 2005, this figure was 413 out of 1255). These stealth restatements, GLC argues, either arise from the 'four-day loophole'<sup>8</sup> (however erroneously applied), or from the immateriality argument as applied to the prior periods which need to be corrected. However, none of the restatements included in our sample could be categorized as 'stealth restatements'.

### 3.4.3 SELECTION OF ANALYSTS FOLLOWING RESTATEMENTS

For each of the 215 companies that were selected on the basis of the above two criteria (company revenues and the severity of the stock price movement), we used Thomson One Analytics to identify the analysts following the company (worldwide). We also added the 14 companies which were part of the content-coding exercise (see Chapter 2) which had restatement dates in 2002 and 2003. For non-U.S. companies (which were included on the U.S. stock markets as ADR's) we identified the analysts following the company's ADR and the analysts of the other countries where the company is listed. Through the 'Contacts Directory' of Thomson One Analytics, the contact information of each analyst was found. As the Thomson Contacts Directory contains data only for current analysts following the company, we had to carry out a check on whether the analysts found were actually following the restatement company at the time of the restatement announcement (including some time before, and some months thereafter). This exercise was carried out by contacting the Investor Relations Departments of the restatement companies by e-mail, and/or by checking the companies' websites for listings of current/past analysts' followings. For the 215 companies we identified 2,993 analysts. However, this number includes analysts following more than one restatement company at the same time (ranging from on average 3.7 to 35), and hence, the list of analysts needed to be 'un-doubled' (each analyst could only be asked to complete one questionnaire). After the 'un-doubling' exercise, 1,517 analysts remained.

Job turnover and job rotation (changing to other accounts and/or more senior positions), among financial analysts is typically very high, particularly on the sell-side.

<sup>8</sup> Three months after the SEC issued the new Form 8-K requirements, the commission released a list of 30 frequently asked questions pertaining to the amendments of Form 8-K. Question 1 on this list specifically addressed whether a company could report a triggering event in a periodic report filed within four days, rather than in a separate Form 8-K. The SEC staff said disclosure of a triggering event can be limited to a periodic filing if the event occurs within four days of the filing, except if the events fall under Item 4.01 (auditor changes) or Item 4.02 (non-reliance announcements). Therefore, even if a company files a Form 10-Q or a Form 10-K within four days of deciding to warn investors that its previous reports are unreliable, the SEC staff clearly indicated the company has to file a separate Form 8-K Item 4.02.

Therefore, it was to be expected that not all analysts who were following a company at the time it experienced a restatement were still doing so at the time this study was conducted. Through a trial e-mail with an initial invitation that was sent to check the existence of e-mail addresses, we found that some 450 analysts' e-mail addresses produced delivery failures. This problem could have been exacerbated by current fire-wall protection systems, in particular of financial services companies. An additional 350 analysts returned an 'Out of Office' response, creating potential availability issues surrounding the time window in which the questionnaire would be made available to the analysts. Further, some 85 analysts indicated upfront that they would not participate in the research survey, either because of company policy, lack of time, disinterest or otherwise. Nevertheless, beginning in September 2007, an official invitation letter was sent to the postal addresses of the original 1,517 analysts; the letter was accompanied by a short DVD (Gertsen JF, 2007: [www.beam2.nl/fgertsen](http://www.beam2.nl/fgertsen)), introducing the research project and the structure of the questionnaire to be made available to analysts by e-mail (Interactive Dialogues) towards the end of September 2007. The letter also contained the restatement company and the (approximate) date of the restatement announcement for which the analysts was requested to complete the questionnaire. Some 80 letters were 'Undeliverable,' either due to the company having moved, or due to the analyst no longer working at the postal address.

At the end of September 2007, the first wave of e-mails was sent using the Interactive Dialogues web-based survey support system. This system allows for regular feedback reporting on which analysts have completed, or started working on the questionnaire. In October 2007, at intervals of some two weeks, reminders were sent to analysts to encourage their participation. In addition, as for most analysts we had telephone data available, five professionals with backgrounds in finance/accounting were asked to carry out follow-up calls, again trying to convince analysts to participate. A calling protocol was developed and made available to these professionals. The first wave of the ID mail resulted in 60 ID questionnaires completed, with an additional 40 analysts having started the questionnaire, but not completing it fully.

In January 2008, a second wave of emails were sent, now also including some older (2004 and 2005) restatements. Again, reminders were sent using the Interactive Dialogues feedback system and also using the same calling protocol as for the first wave. The Interactive Dialogues system, consistent with the first email efforts to verify

existing email addresses (see above) returned some 480 messages as undeliverable. In addition, taking into account the 'Out of Office' reply mentioned earlier, and the evidence of physical address moves, we estimate that the total population of analysts having had access to the ID questionnaire amounts to the following:

|                       |       |
|-----------------------|-------|
| Sent out:             | 1,517 |
| Address move          | - 120 |
| Non-participants      | - 55  |
| Non-deliverable       | - 480 |
| Out of Office         | - 350 |
| Incomplete ID (total) | - 50  |
| Net yield base        | 462   |

The final sample consisted of 155 analysts (33 per cent) of which 98 were fully completed, yielding a response rate of 22 per cent. In order to assess whether response bias is likely to affect our findings, we followed the recommendation by Rogelberg and Stanton (2007) to use a combination of techniques. First, we checked whether respondents differed from non-respondents in terms of archival data. Specifically, we looked at the analysts' nationality and the firm for which they worked. U.S. analysts represented 75 per cent of total and 60 per cent of responses; UK analysts totalled 10 per cent and 7 per cent of responses; Canadian analysts totalled 3 per cent and 4 per cent of responses. Where analysts worked was divided as ranked into Top 10 brokerage firms, second next-best league (largest 25), and the rest, with respondents breaking down as follows – Top 10 total 30 per cent with responses accounting for 22 per cent; second next-best league total 40 per cent with responses accounting for 32 per cent. Second, we tested whether the responses by analysts who responded before the initial deadline differed from responses by analysts who responded after the deadline, or after being reminded. There were no significant differences noted in the ratings of the constructs of our model when comparing the first (non-reminded) ratings, with the remainder of the population.

#### 3.4.4 PROCEDURES

A questionnaire was designed which was sent to analysts using Interactive Dialogues, which is a web-hosting questionnaire system enabling the intermediate reporting of responses. The questionnaire consisted of the following six categories/sections, each

covering a part of the model as follows:

- Perceived restatement causes, comprising measures of the constructs Earnings Management Pressures, Stakeholder Latitude, and Pressures for Proper Behaviour;
- Bounded rationality of the CEO, comprising measures of Task Challenges, Overall Job Demands, CEO Competence, and Gatekeeper Competence;
- Bounded rationality of the analyst, comprising measures of Analyst Regret and Analyst Competence; and,
- CEO Behaviour, comprising measures of CEO behaviour to manage and/or remedy the company's reputation, both before the restatement and during the restatement recovery period.

The questionnaire was tested with a number of analysts in New York and Amsterdam, who had experience with restatement situations. In addition, a pilot study of the questionnaire was carried out with help of 12 accounting professionals, who were asked to take a well known restatement case as example for them filling out the questionnaire. Thereafter, a risk management partner and corporate governance expert reviewed the questionnaire from the perspective of financial reporting fraud cases. Comments by these professionals and practitioners were used to amend the questionnaire and were used as input for final editing of the questionnaire. Final editing of the questionnaire with the purpose of avoiding potential ambiguity, unclear language, suggestivity, and/or jargon, was carried out with help of a retired, English native speaking partner of a major accounting firm. Finally, experts of Learning and Development, with expertise and hands-on experience in carrying out web-based surveys were involved in the final editing procedures. In order to reduce the length of the questionnaire, the section on bounded rationality of the CEO was presented to one half of the sample (randomly chosen – version A), while the section on bounded rationality of the analyst was presented to the other half (version B). The complete questionnaire consisted of 114 sub-questions for version A, and 122 questions for version B. The time analysts spent on completing the questionnaire (based on the ID start/completed time indications) is estimated to be in a range of 30 to 45 minutes. The complete version of the Analysts' Survey can be found in Appendix 3.1.

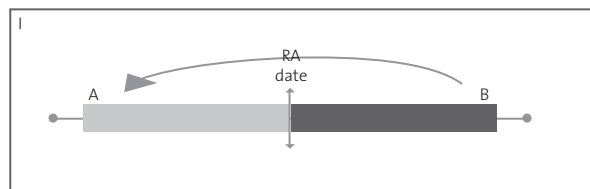
At the end of the questionnaire, analysts were also asked to provide some data on their

personal background that might be of relevance to the restatement, namely their level of education, their country of residence, the ranking of their level as analysts, their work experience and the number of years they followed the restatement company. Some 75 per cent of the analysts rated themselves as senior analyst, 18 per cent as intermediate and the remainder of 7 per cent as junior analyst. Expressed in years of analyst experience, the population that responded had the following characteristics – 60 per cent had more than eight years working experience, 30 per cent had three to eight years experience, and some 10 per cent had less than three years experience.

### 3.4.5 MEASURES AND MEASUREMENT VALIDATION

Our research addresses both perceived causes of restatements and perceptions of CEO behaviour after the restatement announcement date. The perceived causes are mostly relevant for the period leading up to the restatement announcement (which we label Period A). However, in this study we looked at two types of perceptions of causes: (1) the perception that the analysts actually had before the restatement occurred; and, (2) the perception of the analysts with hindsight, i.e., how they now perceive the situation before the restatement. To be able to measure these two types of perceptions, we have formatted a number of ‘cause’ questions both on the basis of: without any use of hindsight and with use of hindsight. For the former, the analyst is instructed to ignore what they currently know, and is asked to recollect their assessment of the company and its CEO both during the restatement, and in the period before the restatement announcement took place. Typically, sell-side analysts issue analysts’ reports and buy/sell recommendations which document their historical views. Thereafter, the analyst is requested to respond to the same question, now with the benefit of hindsight. To facilitate understanding, the instruction for these questions was accompanied by the diagram shown in Figure 3.3.

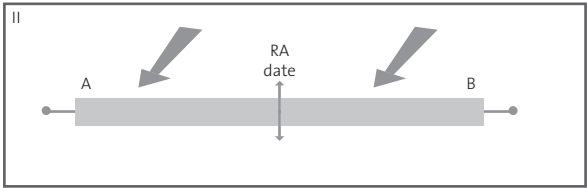
FIGURE 3.3 PERCEPTION OF THE ANALYST: PERIOD A WITH AND WITHOUT HINDSIGHT



Perceived CEO behaviour is mainly relevant for the restatement recovery period

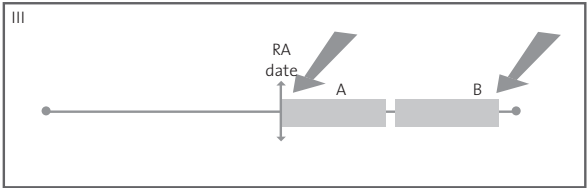
(which we label Period B). However, the more general behaviours, such as openness, governance and integrity, were also measured for Period A. For example, attention to governance measures plays a role in the period leading up to the restatement as well as in the restatement recovery period. Both questions needed to be answered without any use of hindsight, so that the original historical views during those two periods would be measured. The instruction for this type of questions was accompanied by the diagram shown in Figure 3.4.

**FIGURE 3.4 PERCEPTION OF THE ANALYST: PERIOD A AND B WITHOUT USE OF HINDSIGHT**



Finally, constructs which specifically deal with the restatement situation, or with the way the CEO dealt with the situation, were measured both for the period immediately following the restatement announcement (the beginning of Period B), as well as for the end of the restatement recovery period (the end of Period B). Again, both questions needed to be answered without any use of hindsight. The instruction for this type of questions was accompanied by the diagram shown in Figure 3.5.

**FIGURE 3.5 PERCEPTION OF THE ANALYST: PERIOD B (BEGINNING AND END) WITHOUT USE OF HINDSIGHT**



Instructing respondents to report what their perceptions were at the time before the restatement occurred might be complicated by the existence of hindsight bias. That is, respondents' answers about the way they perceived the company and its CEO in the past may be coloured by the knowledge they obtained afterwards (see e.g. Christensen-Szalanski & Willham, 1991). However, because sell-side analysts regularly publish reports and recommendations regarding the company, we think

that this bias will be less of a problem for them. First, they can use these reports and recommendations as a reminder of their own opinion during the period before the restatement. Second, because the reports and recommendations are public, the respondents might expect that we would check the degree to which some of their answers in the questionnaire correspond to the opinions that they published in the past.

Some evidence that hindsight bias might not be a serious problem for our study lays in the fact that there is a significant positive correlation ( $r = 0.41$ ,  $p = 0.04$ ) between the degree to which analysts reported in the questionnaire that, before the restatement, they felt misled by the CEO on financial statement issues (an item which is part of the General Reputation Management Behaviour construct), and their actual ratings of the company before the restatement. That is, on average, the more the analysts said they thought they were misled, the less positive their actual ratings were. This suggests that those analysts who reported that they had some suspicion before the restatement actually did have some suspicion at that time.

In addition, there are quite substantial positive correlations between the analysts' answers to the questions about how they perceived the degree of distortion and malicious intent involved at the time of the restatement announcement, and the actual ratings the analysts issued at the day of the announcement ( $r = 0.346$ ,  $p = 0.098$  for distortion; and  $r = 0.305$ ,  $p = 0.148$  for malicious intent). These correlations are only borderline significant, but this is probably due to the small sample size for this analysis ( $n = 24$ ). In addition, there are quite substantial positive correlations between the perceptions of distortion and intent at the time of the restatement announcement and the actual drop in the company's share price on the day following the restatement announcement ( $r = 0.238$ ,  $p = 0.041$  for distortion; and  $r = 0.351$ ,  $p = 0.002$  for malicious intent, on a sample of  $n=74$ ). Assuming that in most restatement cases, the actual degrees of distortion and malicious intent are not known yet on the announcement date (and therefore would not yet be reflected in the company's stock price and the analyst ratings), these correlations suggest that the analysts' answers regarding their perceptions of distortion and intent at the time of the announcement are not coloured by the information that they later received regarding the degree of distortion and intent.

A six-point Likert-type scale was used for all questions. We used a scale with an even number of response categories to force respondents to express their true opinion. We also included a 'don't know' category in each scale. Both of these practices can reduce the risk that respondents choose the midpoint of the scale when they have no clear idea about some of the aspects they are questioned about (Graeff, 2002). All measures are displayed in Table 3.1, ordered by the construct that they are intended to measure as well as by the time frames that they refer to (i.e. Format I, II, or III).

The measures refer to perceptions of specific characteristics and behaviours of the CEO, rather than overall, abstract perceptions such as trustworthiness or attitude. While such overall measures are commonly used in measures of reputation (see Chapter 1.4), perceptions by audiences with higher levels of involvement and expertise generally are more detailed and complex (Van Riel & Fombrun, 2007). Because analysts can be expected to have a relatively high degree of involvement with, and expertise in, the companies that they are following, we measured perceptions of specific attributes.

TABLE 3.1 RELIABILITY MEASURES OF CONSTRUCTS – ANALYSTS' SURVEY

| Construct                           | Item name                     | Item content   | Format | Reliability<br>Cronbach<br>alpha | Construct<br>reliability<br>(PLS) * |
|-------------------------------------|-------------------------------|--|--------|----------------------------------|-------------------------------------|
| Earnings<br>Management<br>Pressures |                               | ... the CEO was under the following degree of pressure to exceed financial performance expectations:   |        |                                  |                                     |
|                                     | EM Pressures Board            | • From the Independent Board, to improve financial results   | I      |                                  |                                     |
|                                     | EM Pressures Analysts         | • From the analysts following the company  | I      |                                  |                                     |
|                                     | EM Pressures Shareholders     | • From the shareholders  | I      | 0.869                            | 0.921                               |
|                                     | EM Pressures Media            | • From the media   | I      |                                  |                                     |
| CEO Job<br>Demands                  | Rewards                       | ... the company's reward/bonus system was instrumental in the CEO using accounting policies to his/her own financial advantage to the following extent:<br>... I believed that the following assertions regarding the CEO were applicable: | I      |                                  |                                     |
|                                     | Lack of resources             | Had to work too hard because of lack of resources:   | II     |                                  |                                     |
|                                     | Company politics              | Had to work too hard because of internal company politics:   | II     | 0.903                            | -                                   |
|                                     | Workaholic                    | Had to work too hard because he was a workaholic:  | II     |                                  |                                     |
|                                     | Time pressure                 | Had to work under too high a time pressure:  | II     |                                  |                                     |
| Task/<br>Performance<br>Challenges  | Industry complex              | ... the industry the company operated in was particularly complex and/or dynamic   | I      |                                  |                                     |
|                                     | Potential for sales growth    | ... there was not enough potential to meet the sales growth expectations   | I      |                                  |                                     |
|                                     | Potential for earnings growth | ... there was not enough potential to meet the earnings growth expectations  | I      | 0.889                            | -                                   |
|                                     | Resources                     | ... the company's organizational resources were insufficient   | I      |                                  |                                     |
|                                     | Demanding strategy            | ... the company's strategy was unnecessarily demanding   | I      |                                  |                                     |
|                                     | Complex structure             | ... the company's organizational structure was unnecessarily complex   | I      |                                  |                                     |

\* The composite reliability is derived from the results of the Partial Least Squares (PLS) structural equation model that we used to test the hypotheses (see the Results section). It is a more valid measure of reliability than Cronbach's alpha (Chin, 1998, p. 860). In addition, for the higher-order constructs (Pressure Before Restatement, Pressure During Restatement Crisis, and CEO Behaviour), the composite reliability from PLS takes into account this higher-order structure whereas Cronbach's alpha does not. Because the influence of some constructs was not tested through PLS (see p. 198), not all constructs have a coefficient here.

CONTINUATION TABLE 3.1 RELIABILITY MEASURES OF CONSTRUCTS – ANALYSTS' SURVEY

| Construct                          | Item name                      | Item content  | Format | Reliability<br>Cronbach<br>alpha | Construct<br>reliability<br>(PLS) |
|------------------------------------|--------------------------------|---|--------|----------------------------------|-----------------------------------|
| Analyst regret<br>CEO<br>Dominance | Regret                         | ... I regretted the recommendations I had issued on the stock to that date, to the following degree:  | III    | 0.835                            | -                                 |
|                                    | Dominant behaviour             | ... the CEO's level of dominant behaviour was as follows:   | I      |                                  |                                   |
|                                    | Using manoeuvring space        | ... the CEO's use of accounting manoeuvring space to improve the company's financial position was aggressive                                | I      | 0.779                            | 0.864                             |
| Gatekeeper<br>Latitude             | Auditor conflicts of interest  | ... conflicts of interest reduced the external auditors' objectivity and/or independence  | I      |                                  |                                   |
|                                    | Complexity of accounting rules | ... for the company in question, complexity of accounting rules hindered the company from staying 'in compliance'                           | I      | 0.622                            | 0.699                             |
|                                    | Scope for manoeuvring          | ... the accounting principles used by the company for reporting earnings did allow scope for manoeuvring                                    | I      |                                  |                                   |
| Gatekeeper<br>Competence           |                                | ... the accounting and financial reporting skill level of the following internal gatekeepers was as follows:                                | I      |                                  |                                   |
|                                    | CFO competence                 | • CFO:  | I      | 0.840                            | -                                 |
|                                    | Audit committee competence     | • Audit Committee:  | I      |                                  |                                   |
| Analyst<br>Competence              | Probing skills                 | ... when discussing accounting issues with management, I would rate my probing skills (ability to get to the truth of a matter) as follows: | II     |                                  |                                   |
|                                    | Knowledge                      | ... when discussing accounting issues with management, I would rate my knowledge of the subject matter as follows:                          | II     |                                  |                                   |
|                                    |                                | ... the following factors reduced my ability to fully anticipate this restatement/to fully understand this restatement:                     |        |                                  |                                   |
|                                    | Misled                         | I was misled by management  | II     | 0.796                            | -                                 |
|                                    | Analysis caused no suspicion   | My financial analysis did not cause any suspicion   | II     |                                  |                                   |
|                                    | Analysis not probing enough    | My analysis could have been more probing  | II     |                                  |                                   |
|                                    | Herdling                       | I relied too much on other analysts and simply followed the market:   | II     |                                  |                                   |

\*\* Because two of the items in this construct turned out to have opposite loadings to the rest of the items (see below), these two items were reverse coded in calculating the reliability coefficient

| Construct                          | Item name                       | Item content  | Format     | Reliability    |                             |
|------------------------------------|---------------------------------|---|------------|----------------|-----------------------------|
|                                    |                                 |   |            | Cronbach alpha | Construct reliability (PLS) |
| Pressure Before Restatement        |                                 | ... the degree of pressure on the CEO to comply with state-of-the-art corporate governance practices was as follows:                  |            |                |                             |
|                                    | Auditor governance pressure     | From the external auditors:   | II         |                |                             |
|                                    | Shareholder governance Pressure | From the shareholders:  | II         | 0.849          | 0.900                       |
|                                    | Analyst governance Pressure     | From the analysts:  | II         |                |                             |
| Pressure During Restatement Crisis |                                 | ... the degree of pressure on the CEO to comply with state-of-the-art corporate governance practices was as follows:                  |            |                |                             |
|                                    | Auditor governance Pressure     | From the external auditors:   | II         |                |                             |
|                                    | Shareholder governance Pressure | From the shareholders:  | II         |                |                             |
|                                    | Analyst governance Pressure     | From the analysts:  | II         |                |                             |
|                                    | Pressure to dismiss CEO         | ... I believed that the degree of pressure on the Independent Board to dismiss the CEO was as follows:                                | III        | 0.865          | 0.866                       |
|                                    |                                 | ... I believed that the degree of pressure on the CEO to disclose more detailed information regarding the restatement was as follows: |            |                |                             |
|                                    | Analyst openness pressure       | The analysts:   | III        |                |                             |
| CEO Competence                     | Regulator openness pressure     | Regulators:   | III        |                |                             |
|                                    | Shareholder openness pressure   | Shareholders:   | III        |                |                             |
|                                    |                                 | ... I rated the following aspects of the CEO as follows:  |            |                |                             |
|                                    | Knowledge                       | Demonstrated knowledge of accounting and financial reporting matters:   | II         |                |                             |
| Severity                           | Communication skills            | Communicative skill level on accounting and financial reporting matters:  | II         | 0.822          | 0.867                       |
|                                    | Commitment to compliance        | Commitment to compliance with accounting principles:  | II         |                |                             |
|                                    | Distortion Intent               | The significance of the restatement adjustment was as follows:<br>The malicious intent leading to the restatement was as follows:     | III<br>III | 0.920          | 0.921                       |

CONTINUATION TABLE 3.1 RELIABILITY MEASURES OF CONSTRUCTS – ANALYSTS' SURVEY

| Construct                        | Item name                        | Item content  | Format | Reliability    |                             |
|----------------------------------|----------------------------------|---|--------|----------------|-----------------------------|
|                                  |                                  |   |        | Cronbach alpha | Construct reliability (PLS) |
| CEO Behaviour Before Restatement | Managing fraud risk              | ... the CEO managed the risks of financial reporting fraud with the following level of effectiveness                      | I      |                |                             |
|                                  | Overall governance effectiveness | ... I believed that the effectiveness of the company's overall governance and control measures was as follows:            | II     |                |                             |
|                                  |                                  | ... I rated the following aspects of the CEO as follows:  |        |                |                             |
|                                  | Commitment to governance         | Commitment to proper corporate governance:  |        |                |                             |
|                                  | Fair decisions                   | ... The CEO made fair and balanced decisions:   | II     |                |                             |
|                                  | Trustworthy                      | ... The CEO could be trusted:   | II     |                |                             |
|                                  | Example                          | ... The CEO set a good example in terms of ethics:  | II     |                |                             |
|                                  | Tone at the top                  | ... The CEO demonstrated an ethical 'tone at the top' to the following extent:  | II     |                |                             |
|                                  |                                  | ... I believed that the CEO put pressure on the following groups to the following extent:                                 |        |                |                             |
|                                  | Pressure on auditors             | On the external auditors to concur with management's position on financial reporting matters:                             | II     |                |                             |
|                                  | Pressure on Audit Committee      | On the Audit Committee to concur with management's accounting positions:  | II     | 0.746          | 0.849                       |
|                                  | Pressure on analysts             | On the analysts to comment positively on the company:   | II     |                |                             |
|                                  | Complex language                 | ... I believed that the CEO, when explaining financial results, used language with the following degree of complexity:    | II     |                |                             |
|                                  | Misleading                       | ... I believed that the CEO misled analysts on the essence of financial statement issues to the following extent:         | II     |                |                             |
|                                  |                                  | ... I believed that the degree of openness demonstrated by the CEO to the analysts in the following areas was as follows: |        |                |                             |
|                                  | Information on materiality       | Information on what was material to the financial position:   | II     |                |                             |
|                                  | Discussion of manoeuvring space  | Discussion of accounting manoeuvring space:   | II     |                |                             |
|                                  | Discussion of accounting policy  | Discussion of significant accounting policy choices:  | II     |                |                             |

| Construct                               | Item name                        | Item content  | Format | Reliability    |                             |
|---|----------------------------------|---|--------|----------------|-----------------------------|
|   |                                  |   |        | Cronbach alpha | Construct reliability (PLS) |
| CEO Behaviour During Restatement Crisis |                                  | ... I believed that the degree of openness demonstrated by the CEO to the analysts in the following areas was as follows: |        |                | 0.767                       |
|   | Information on materiality       | Information on what was material to the financial position:   | II     |                |                             |
|   | Discussion of manoeuvring space  | Discussion of accounting manoeuvring space:   | II     |                |                             |
|   | Discussion of accounting policy  | Discussion of significant accounting policy choices:  | II     |                |                             |
|   | Adequacy of information          | ... I believed that the adequacy of the information provided by the CEO was as follows:                                   | III    |                |                             |
|   | Overall governance effectiveness | ... I believed that the effectiveness of the company's overall governance and control measures was as follows:            | II     |                |                             |
|   | Initial governance effectiveness | ... I believed that the adequacy of the initial corporate governance measures taken by the CEO was as follows:            | III    |                |                             |
|   | Fair decisions                   | ... The CEO made fair and balanced decisions:   | II     | 0.835          |                             |
|   | Trustworthy                      | ... The CEO could be trusted:   | II     |                |                             |
|   | Example                          | ... The CEO set a good example in terms of ethics:  | II     |                |                             |
|   | Tone at the top                  | ... The CEO demonstrated an ethical 'tone at the top' to the following extent:  | II     |                |                             |
|   |                                  | ... I believed that the CEO put pressure on the following groups to the following extent:                                 |        |                |                             |
|   | Pressure on auditors             | On the external auditors to concur with management's position on financial reporting matters:                             | II     |                |                             |
|   | Pressure on Audit Committee      | On the Audit Committee to concur with management's accounting positions:  | II     |                |                             |
|   | Pressure on analysts             | On the analysts to comment positively on the company:   | II     |                |                             |
|   | Complex language                 | ... I believed that the CEO, when explaining financial results, used language with the following degree of complexity:    | II     |                |                             |
|   | Misleading                       | ... I believed that the CEO misled analysts on the essence of financial statement issues to the following extent:         | II     |                |                             |

CONTINUATION TABLE 3.1 RELIABILITY MEASURES OF CONSTRUCTS – ANALYSTS’ SURVEY

| Construct    | Item name                | Item content  | Format | Reliability<br>Cronbach<br>alpha | Construct<br>reliability<br>(PLS) |
|--------------|--------------------------|---|--------|----------------------------------|-----------------------------------|
|              |                          |   |        |                                  |                                   |
| Blame Taking |                          | I believed that the CEO immediately allocated blame as follows: |        |                                  |                                   |
|              | Blame Taking             | ... He/she blamed him/herself:                                  | III    |                                  | 0.952 <sup>***</sup>              |
|              | Blaming CFO              | ... He/she blamed the CFO:                                      | III    |                                  |                                   |
|              | Blaming lower managers   | ... He/she blamed lower management echelons:                    | III    | 0.695                            | 0.867                             |
|              | Blaming auditors         | ... He/she blamed the external auditors:                        | III    |                                  |                                   |
|              | Blaming accounting rules | ... He/she blamed the complexity of accounting rules:           | III    |                                  |                                   |

\*\*\* In the Partial Least Squares model which we used to test our hypotheses, blame taking was split into two constructs: blame taking and blame giving (see p.199).

### **Perceived restatement causes**

*Perceived pressures for proper reputation management behaviour.* To measure the degree to which analysts thought that CEOs were under pressure to behave in an 'appropriate' way in accounting and reporting matters, we asked questions regarding the degree to which different gatekeepers pressured the CEO (1) to be open regarding the company's financial situation; and, (2) to implement appropriate governance measures.

The questions about pressures to be transparent concerned both the restatement announcement date and the end of the restatement resolution period (i.e. Format III in Figure 3.5). Respondents were asked to rate the degree of pressure by several gatekeepers on the CEO to disclose details regarding the restatement. These questions were adapted from the content analysis reported in Chapter 2, and among the addressed gatekeepers were analysts, regulators, and shareholders. In addition, to gain more detailed insight into the degree to which analysts themselves pressured the CEO for information, we asked them to rate the importance they attached to three different types of information regarding the restatement: (1) the nature of the restatement; (2) the number of years affected; and, (3) the total number of quarterly results affected. These are important factors determining the severity of a restatement (Palmrose & Scholz, 2003; Palmrose et al., 2004).

The questions about pressures for proper governance measures concerned governance in general, as well as specific governance measures as a result of the restatement. The reason for this is that the latter are more often of a drastic nature than governance measures in regular situations, particularly involving dismissal of the CEO (Arthaud-Day et al., 2006). We posed the questions about the general governance measures both concerning the period before the announcement of the restatement, and concerning the period after the restatement (i.e., Format II in Figure 3.4). These questions concerned the degree of pressure for appropriate governance measures from gatekeepers including external auditors, shareholders, and analysts. We regard these gatekeepers as the most important external ones for ensuring proper governance (Rezaee, 2005). We did not ask for respondents' perceptions of the degree to which internal gatekeepers (such as the independent board) pressured the CEO, because analysts normally do not know exactly what the CEO discusses with the board. The questions about the governance measures specific to the restatement

were posed for the restatement announcement date and for the end of the resolution period (i.e. Format III). These questions concerned pressure on the independent board to dismiss the CEO as a result of the restatement.

As a result, we have two measures of perceived pressures for proper reputation management behaviour: (1) a measure of perceived pressure for proper governance before the restatement; and, (2) a measure of perceived pressure for both proper governance and openness during the restatement crisis.

*Perceived latitude of external gatekeepers regarding earnings management.* The concept of stakeholder latitude deals with opportunities for earnings fraud. Therefore, in contrast to pressures for positive reputation management behaviour, which is relevant both in the period before the restatement and in the restatement resolution period; latitude, is mainly relevant for the period before the restatement. Therefore, we used Format I (describing the situation before the restatement, with and without hindsight) for this concept. The questions relate to the degree to which respondents thought that (1) the external auditors had conflicts of interest that reduced their independence; and, (2) accounting regulations were too complex to comply with completely. We focused on these two gatekeepers to measure the construct of latitude, because other external gatekeepers (analysts and shareholders), do not have the power to impose a certain course of behaviour upon a company.

*Perceived competence of internal gatekeepers.* Like external gatekeeper latitude, the competence of internal gatekeepers is also related to opportunities for fraudulent reporting (Rezaee, 2005). This is reflected in regulations, such as Section 101 of the Sarbanes-Oxley Act, which requires the members of the independent board (from whose members the audit committee is formed) to have sufficient knowledge of financial reporting. Therefore, the competence of internal gatekeepers is mainly relevant in the period before the restatement occurred. We asked respondents to rate the accounting and financial reporting skills of the CFO and the audit committee before the restatement, both with and without hindsight (i.e. Format I).

*Perceived pressures regarding earnings management.* Similar to the concepts of stakeholder latitude and internal gatekeeper competence, the concept of earnings management pressures concerns management fraud. Where latitude

and gatekeeper competence refer to the opportunity to commit fraud, earnings management pressures concern the incentives or pressures for fraud. Therefore, this concept is also mainly relevant for the pre-restatement period. We used Format I for the questions regarding this concept. These questions related to (1) the degree to which the company was under pressure to achieve financial results from analysts, shareholders, the media, and the independent board; and, (2) the degree to which the company's reward/bonus system stimulated earnings management. These two factors are identified by the AICPA (2007) as pressures on management to engage in fraudulent financial reporting. In addition, the academic literature on earnings management has identified executive compensation as one of the most important incentives to engage in such practices (Rezaee, 2005; Paredes, 2005).

*Perceived CEO dominance.* CEO domineering behaviour also deals with the probability of earnings fraud, and is therefore mainly relevant in the period leading up to the restatement. The questions, which again used Format I, asked respondents to rate the degree to which the CEO's behaviour before the restatement was dominant (with and without hindsight). The professional accounting literature has identified such behaviour as one of the attitude-related causes of fraudulent reporting behaviour (AICPA, 2007).

*Perceived bounded rationality of the CEO and perceived task and performance challenges.* Task and performance challenges are mainly relevant in the period before the restatement, because they relate to the difficulty of the CEO's task to maintain adequate financial performance. Specifically, the questions on task challenges concerned the degree to which (1) the industry in which the company operated was complex and/or dynamic; (2) organizational resources were sufficient; and, (3) the organization's structure was complex. The questions on performance challenges concerned (1) the potential for the company to meet sales growth expectations; (2) the potential for the company to meet earnings growth expectations; and, (3) the degree to which the organisation's strategy was demanding. Hambrick et al. (2005a) identified these six aspects as the main task and performance challenges which increase CEO job demands.

*Perceived CEO job demands.* Unlike the task and performance challenges confronting the CEO, the CEO's overall job demands are also relevant in the restatement

resolution period. Therefore, we used Format II for this construct. Janssen (2001) reports an eight-item scale to measure psycho-social job demands. We only used the items relating to the degree to which a person had to work hard, and the degree of time pressure under which a person had to work, because these aspects are likely to be most visible to analysts.

*Perceived CEO competence.* The competence of the CEO in accounting and reporting matters is relevant both in the period before the restatement and in the restatement resolution period. Consistent with our findings in the content analysis reported in Chapter 2, the questions concerned both the CEO's knowledge on accounting and reporting matters, and his/her skills in communicating about these matters (using Format II).

#### **Bounded rationality of the analyst**

*Analyst regret.* To measure the degree to which analysts felt disappointed by the restatement, we asked respondents to rate the degree to which they regretted the recommendations they made about the company before the restatement. This item is adapted from a multi-item scale measuring regret developed by Tsiros and Mittal (2000). We only used one item because of space constraints and we asked this question both for the restatement announcement date, and for the end of the restatement period (Format III).

*Analyst competence.* Like the competence of the CEO, the competence of the analysts themselves is relevant both in the period before the restatement and in the restatement resolution period. Therefore, we used Format II for this construct. Similar to our measure of the perceived competence of the CEO, we asked respondents to rate both their knowledge of financial matters, and their communicative skills (i.e. skills in asking probing questions).

#### **Reputation management behaviour**

*General reputation management behaviour.* Because our model includes the behaviour of the CEO both before and after the announcement of the restatement, we used Format II for the items measuring general reputation management behaviour, except where indicated. We argued in Chapter 2 that five types of CEO behaviour are relevant in a restatement crisis, namely: (1) confirming the problem,

(2) communicating openly, (3) taking governance measures, (4) acting in compliance with norms and regulations, and (5) blame taking. In addition, at the beginning of this chapter we argued that integrity would be another important type of behaviour to examine when looking at analyst perceptions. Because the distinctions between confirming and openness, and between governance and compliance, are relatively subtle, we aggregate these constructs for the purpose of this study. Therefore, in this chapter we examine perceptions of four types of CEO behaviour – (1) integrity, (2) openness, (3) governance, and (4) blame taking.

Brown and Trevino wrote extensively on how ethicality is connected with leadership styles (2006). To measure perceived integrity, we adapted the ethical leadership scale developed by Brown et al. (2005). Because of number of questions and space constraints, we used three of the 10 items in the original scale, which consistently had high factor loadings in the studies reported by Brown et al. These items ask respondents to rate the degree to which the CEO made fair and balanced decisions, could be trusted, and set an example in terms of ethics. We also included a question about the degree to which the CEO set an ethical ‘tone at the top.’ This question was derived from the SEC’s frequent usage of the term ‘tone at the top’ in reference to the ethical climate within a company (Barasch, 2005). In addition, we included some items which specifically dealt with integrity in accounting and reporting matters. These items asked the respondent to rate the degree to which the CEO pressed external auditors, the audit committee, and analysts to concur with his/her decisions. They concern what the AICPA (2007) labels as ‘domineering management behaviour.’ We also asked respondents to rate the complexity of the language used by the CEO to explain financial results to analysts. We included this item because research has shown that many financial statements use language that is unnecessarily complex, hindering a proper information transfer (Courtis 1998; Rutherford, 2003). Finally, we asked respondents to rate the degree to which management had attempted to mislead them regarding the company’s financial situation.

The questions about openness concerned the degree to which the CEO provided information to analysts regarding three main accounting areas, (1) issues that are material to the company’s financial position; (2) accounting manoeuvring space; and, (3) accounting policy choices. Because openness regarding the restatement itself can be regarded as a separate construct, we also asked respondents to rate the degree

to which the CEO provided adequate information on the restatement, both at the beginning at the restatement resolution period, and at the end (i.e. Format III). This item was based on the content analysis reported in Chapter 2.

The questions about governance in general related to (1) the overall effectiveness of the company's governance and control systems, and (2) the degree to which the CEO was committed to ensuring proper governance. In addition, we also asked respondents to rate the adequacy of the governance measures undertaken to remedy the reputation damage suffered as a result of the restatement, both at the restatement announcement date and at the end of the restatement resolution period (Format III). The latter item was adapted from the content analysis reported in Chapter 2.

We measured the blaming behaviour of the CEO both for the restatement announcement date, and for the end of the restatement resolution period (Format III). The questions ask respondents to rate the degree to which the CEO assigned blame for the restatement to (1) him/herself; (2) the CFO, (3) lower-level managers, (4) the external auditors, and (5) the complexity of accounting rules. These items were adapted from the content analysis reported in Chapter 2.

### **Additional measures**

We also include additional measures used to verify some of the measures within the model.

*Reasons for analyst's lack of anticipation.* To gain additional insight into the degree to which the analyst felt regret as a result of the restatement, we asked respondents to rate their reasons for not seeing the restatement coming. The following potential reasons were (1) being misled by management, (2) the respondent's analysis not giving reason for suspicion, (3) a lack of probing depth in the respondent's analysis, and (4) relying too much on other analysts. We reasoned that the first two causes are outside of the analyst's control and therefore would give rise to less regret than the second two causes, which clearly put the blame partly on the analyst.

*Perceived restatement severity.* As we argued in Chapter 2, an important overall driver of analyst reactions to a restatement is the degree to which they perceive

the restatement as severe in terms of (1) distortion of the company's financial situation, and (2) malicious intent. Because these dimensions are only relevant in the restatement resolution period, we used Format III for this construct. We asked respondents to rate the significance of the restatement adjustment and the degree of malicious intent, both at the restatement announcement date and at the end of the crisis period. These questions provide an additional check on the validity of the survey responses, because the answers to these questions should be reflected in the ratings the respondents issued during the restatement crisis. Contrary to the other scales in the study, we used a 5-point Likert scale (instead of a 6-point scale), to measure this construct. The measures of perceived intent and distortion were calculated as the average of the perception at the beginning of the restatement period, and the perception at the end of the period. To be able to categorize the restatements in the four different types of restatements that we distinguished in Chapter 2, we split both the measure of perceived intent and the measure of perceived distortion at the median, taking values lower than the median as 'low,' and values at, or higher than, the median as 'high.'

### Measurement Validation

To provide an indication of the construct validity of the scales measuring the different constructs (i.e. of the degree to which the scales are related to underlying constructs that correspond to constructs identified from theory), we used exploratory factor analysis for each cluster of constructs that can be regarded as conceptually closely related. If the factor analysis suggests that the number and composition of the factors corresponds to the way we have assigned items to constructs, this provides support for the construct validity of the scales. Principal component analysis was used to extract the factors, and the number of factors was determined by examining the scree plot of Eigen values. We used pair-wise deletion of missing values, because using list-wise deletion would reduce the sample size too much, especially for the constructs related to bounded rationality (which we measured for only half the sample). After extracting the factors, they were rotated by the Oblimin procedure, which allows the factors to be correlated.<sup>9</sup>

<sup>9</sup> Although we use structural equation modelling to test our hypotheses, it was not possible to validate out measures using confirmatory factor analysis. The reason is that we use Partial Least Squares, rather than a Maximum Likelihood-based SEM approach. Traditional goodness-of-fit measures, which are necessary for confirmatory factor analysis, are not appropriate for this technique. (See also Section 3.4.5)

### *Earnings Management Pressures*

The factor analysis of the two constructs that are related to earnings management (Earnings Management Pressures and CEO Dominance) suggested that two factors underlie the data. After rotation, these three factors could be interpreted as Earnings Management Pressures and CEO Dominance, respectively (see Table 3.2). There were some items which deviated from this structure – two items that we had assigned to the Earnings Management Pressures construct loaded on the factor representing Dominance.

**TABLE 3.2 FACTOR LOADINGS EARNINGS MANAGEMENT PRESSURES AND CEO DOMINANCE**

| Item number     | Item name                             | Component |      |
|-----------------|---------------------------------------|-----------|------|
|                 |                                       | 1         | 2    |
| EM Pressures 1  | EM Pressures Board                    | .756      |      |
| EM Pressures 2  | EM Pressures Board (Hindsight)        | .749      |      |
| EM Pressures 3  | Rewards                               |           | .566 |
| EM Pressures 4  | Rewards (Hindsight)                   |           | .629 |
| EM Pressures 5  | EM Pressures Analysts                 | .684      |      |
| EM Pressures 6  | EM Pressures Shareholders             | .812      |      |
| EM Pressures 7  | EM Pressures Media                    | .702      |      |
| EM Pressures 8  | EM Pressures Analysts (Hindsight)     | .768      |      |
| EM Pressures 9  | EM Pressures Shareholders (Hindsight) | .805      |      |
| EM Pressures 10 | EM Pressures Media (Hindsight)        | .734      |      |
| Dominance 1     | Dominant behaviour                    |           | .674 |
| Dominance 2     | Dominant behaviour (Hindsight)        |           | .697 |
| Dominance 3     | Using manoeuvring space               |           | .778 |
| Dominance 4     | Using manoeuvring space (Hindsight)   |           | .840 |

### *Pressures for Proper Behaviour and Latitude*

The perceived pressures on the CEO for ‘proper’ accounting and reporting behaviour are also conceptualized as a higher-order factor consisting of openness pressures and governance pressures. To verify this higher-order structure we first conducted an exploratory factor analysis on the two Pressures scales together with the Latitude scale. We included the Latitude scale because it can be regarded as the mirror image of pressures for proper behaviour, and because including only two factors would make it impossible to do a second-order exploratory factor analysis. The exploratory factor

analysis showed three underlying factors which, after rotation, could be interpreted as openness pressures, governance pressures, and latitude (see Table 3.3).

**TABLE 3.3 FACTOR LOADINGS OPENNESS/GOVERNANCE PRESSURES AND LATITUDE**

| Item number           | Item name                                  | Component |        |         |
|-----------------------|--|-----------|--------|---------|
|                       |  | 1         | 2      | 3       |
| Openness Pressure 1   | Analyst openness Pressure (Beginning)      | 0.712     |        |         |
| Openness Pressure 2   | Regulator openness Pressure (Beginning)    | 0.688     |        |         |
| Openness Pressure 3   | Shareholder openness Pressure (beginning)  | 0.694     |        |         |
| Openness Pressure 4   | Analyst openness Pressure (End)            | 0.702     |        |         |
| Openness Pressure 5   | Regulator openness Pressure (End)          | 0.744     |        |         |
| Openness Pressure 6   | Shareholder openness Pressure (End)        | 0.788     |        |         |
| Governance Pressure 1 | Auditor governance Pressure (Before)       |           | -0.632 |         |
| Governance Pressure 2 | Shareholder governance Pressure (Before)   |           | -0.781 |         |
| Governance Pressure 3 | Analyst governance Pressure (Before)       |           | -0.791 |         |
| Governance Pressure 4 | Auditor governance pressure (During)       |           | -0.641 |         |
| Governance Pressure 5 | Shareholder governance Pressure (During)   |           | -0.793 |         |
| Governance Pressure 6 | Analyst governance Pressure (During)       |           | -0.727 |         |
| Governance Pressure 7 | Pressure to dismiss CEO (Beginning)        | 0.588     |        |         |
| Governance Pressure 8 | Pressure to dismiss CEO (End)              | 0.666     |        |         |
| Latitude 1            | Auditor conflicts of interest              | 0.291     |        |         |
| Latitude 2            | Auditor conflicts of interest (Hindsight)  | 0.438     |        |         |
| Latitude 3            | Complexity of accounting rules             |           |        | 0.664   |
| Latitude 4            | Complexity of accounting rules (Hindsight) |           |        | 0.729   |
| Latitude 5            | Scope for manoeuvring                      |           |        | -0.445* |
| Latitude 6            | Scope for manoeuvring (Hindsight)          |           |        | -0.588  |

Again, there were some items which deviated from our predetermined structure, in that two of the items which belong to the Governance Pressures construct loaded highly on the factor representing Openness Pressure. In addition, the items measuring Governance Pressure before the restatement announcement loaded on the same factor as the items measuring Governance Pressure *after* the restatement

\* The loadings of the items Latitude 5 and Latitude 6 are opposite to those of the other indicators of this construct. When looking at the content of these two items, they seem to be related to the propensity of the CEO to conduct earnings management fraud, while the indicators having positive loadings relate more to the susceptibility for errors. Because of this, the construct of latitude should be interpreted as relating to the latitude for errors versus irregularities, with higher values implying a higher latitude for errors and a lower latitude for irregularities. We also tested our hypotheses while omitting these two reversed items. This did not change the significance of the effect of latitude.

announcement. Nevertheless, we believe that overall, the factor structure corresponds reasonably with the way we had assigned the items to the constructs.

A second-order factor analysis showed that two factors seemed to underlie the three first-order factors, with the two Pressures factors loading on the first higher-order factor and the factor representing Latitude loading on the second higher-order factor.

**TABLE 3.4 FACTOR LOADINGS BOUNDED RATIONALITY CEO**

| Item number        | Item name                                 | Component |       |
|--------------------|---|-----------|-------|
|                    |   | 1         | 2     |
| Task Challenges 1  | Complex Industry                          | .509      |       |
| Task Challenges 2  | Potential for sales growth                | .796      |       |
| Task Challenges 3  | Potential for earnings growth             | .828      |       |
| Task Challenges 4  | Resources                                 | .498      |       |
| Task Challenges 5  | Demanding strategy                        | .742      |       |
| Task Challenges 6  | Complex structure                         | .617      |       |
| Task Challenges 7  | Complex Industry (Hindsight)              | .623      |       |
| Task Challenges 8  | Potential for sales growth (Hindsight)    | .835      |       |
| Task Challenges 9  | Potential for earnings growth (Hindsight) | .862      |       |
| Task Challenges 10 | Resources (Hindsight)                     |           | -.192 |
| Task Challenges 11 | Demanding strategy (Hindsight)            | .856      |       |
| Task Challenges 12 | Complex structure (Hindsight)             | .519      |       |
| Job Demands 1      | Lack of resources (Before)                |           | .828  |
| Job Demands 2      | Company politics (Before)                 |           | .844  |
| Job Demands 3      | Workaholic (Before)                       |           | .738  |
| Job Demands 4      | Time pressure (Before)                    |           | .827  |
| Job Demands 5      | Lack of resources (During)                |           | .742  |
| Job Demands 6      | Company politics (During)                 |           | .803  |
| Job Demands 7      | Workaholic (During)                       |           | .776  |
| Job Demands 8      | Time pressure (During)                    |           | .768  |

#### *Bounded Rationality CEO*

Factor analysis of the items related to the three constructs related to CEO bounded rationality (Task Challenges, Overall Job Demands, and CEO Competence), could not be performed because the correlation matrix was not positively definite.

This was likely caused by the application of pair-wise deletion of missing values. Because CEO competence was measured for the complete sample, but the other two constructs for only about half of the sample, this would lead to large differences in sample size between individual correlations. Therefore, we decided to conduct the factor analysis only for the constructs that were measured for half the sample (Task Challenges and Overall Job Demands). The scree plot showed that two factors underlie the data, and after rotation, these factors could be interpreted as Task Challenges and Overall Job Demands, respectively (see Table 3.4). There were no cross-loadings of items. The only deviation from the pre-determined structure was one item from the Task Challenges construct that did not load significantly on either factor. This item is related to the sufficiency of the organization's resources.

#### *Bounded Rationality Analyst*

The factor analysis of the two constructs related to bounded rationality of the analyst (Analyst Regret and Analyst Competence) showed that three factors, rather than two, seem to underlie the data. After rotation, these three factors could be interpreted as 'Analyst Regret', 'General Analyst Competence' and 'Analyst Competence in Foreseeing the Restatement' (see Table 3.5).

To provide an additional validation of the scale measuring analyst regret, we correlated it to the items asking respondents for the reasons why they did not see the restatement coming. The construct had strong and significant positive correlations both with the item about being misled by management ( $r = 0.59, p < 0.01$ ), and with the item about relying too much on other analysts ( $r = 0.44, p < 0.01$ ). It had lower correlations with the items about an analyst's own analysis not causing any suspicion ( $r = 0.39, p = 0.01$ ), and about an analyst's own analysis not being probing enough ( $r = 0.26, p = 0.08$ ).

#### *CEO Behaviour*

*Before the restatement crisis.* The perceived behaviours of the CEO before the announcement of the restatement were also conceptualized as a higher-order construct. To test whether such treatment is justified, we first conducted an exploratory factor analysis.

TABLE 3.5 FACTOR LOADINGS BOUNDED RATIONALITY ANALYST

| Item number           | Item name                             | Component |      |       |
|-----------------------|---------------------------------------|-----------|------|-------|
|                       |                                       | 1         | 2    | 3     |
| Regret 1              | Regret (Beginning)                    |           |      | .896  |
| Regret 2              | Regret (End)                          |           |      | .627  |
| Analyst Competence 1  | Probing skills (Before)               |           | .878 |       |
| Analyst Competence 2  | Probing skills (During)               |           | .863 |       |
| Analyst Competence 3  | Knowledge (Before)                    |           | .862 |       |
| Analyst Competence 4  | Knowledge (During)                    |           | .862 |       |
| Analyst Competence 5  | Misled (Before)                       |           |      | -.904 |
| Analyst Competence 6  | Misled (During)                       |           |      | -.634 |
| Analyst Competence 7  | Analysis caused no suspicion (Before) | .855      |      |       |
| Analyst Competence 8  | Analysis caused no suspicion (During) | .790      |      |       |
| Analyst Competence 9  | Analysis not probing enough (Before)  |           |      | -.746 |
| Analyst Competence 10 | Analysis not probing enough (During)  | .608      |      |       |
| Analyst Competence 11 | Herding (Before)                      | .865      |      |       |
| Analyst Competence 12 | Herding (During)                      | .804      |      |       |

This analysis showed that three factors appeared to underlie the data. After rotation, these three factors could be interpreted as perceived Openness precedent, perceived Governance precedent, and perceived Integrity precedent (see Table 3.6). Again, some deviations were present. Particularly, some of the items of the Governance precedent construct loaded on the factor representing Integrity precedent. Overall however, the factor structure reasonably corresponds to our categorization of the items. A factor analysis on these three factors showed that one factor underlies them, on which all three factors loaded highly.

*During the restatement crisis.* The factor analysis for the items measuring the different types of reputational remediation behaviour suggested that four factors underlie the variables. After rotating these four factors, they could be interpreted as Openness, Governance, Integrity, Blame Taking, Blame Giving to Internal Gatekeepers, and Blame Giving to External Gatekeepers (see Table 3.7). There were some cross-loadings of individual items. Particularly, some items from the Openness and Integrity constructs loaded on the factor representing Governance. Overall, however, the factor structure corresponds reasonably with the way we originally assigned the items to the constructs.

**TABLE 3.6 FACTOR LOADINGS CEO BEHAVIOUR BEFORE THE RESTATEMENT**

| Item number         | Item name                        | Component |                   |      |
|---------------------|----------------------------------|-----------|-------------------|------|
|                     |                                  | 1         | 2                 | 3    |
| Integrity Before 1  | Fair decisions                   | .833      |                   |      |
| Integrity Before 2  | Trustworthy                      | .850      |                   |      |
| Integrity Before 3  | Example                          | .852      |                   |      |
| Integrity Before 4  | Tone at the top                  | .844      |                   |      |
| Integrity Before 5  | Pressure on auditors             |           | .930              |      |
| Integrity Before 6  | Pressure on Audit Committee      |           | .895              |      |
| Integrity Before 7  | Pressure on analysts             |           | .583              |      |
| Integrity Before 8  | Complex language                 |           | .343 <sup>*</sup> |      |
| Integrity Before 9  | Misleading                       |           | .569              |      |
| Openness Before 1   | Information on materiality       |           |                   | .673 |
| Openness Before 2   | Discussion of manoeuvring space  |           |                   | .934 |
| Openness Before 3   | Discussion of accounting policy  |           |                   | .941 |
| Governance Before 1 | Managing fraud risk              | .715      |                   |      |
| Governance Before 2 | Managing fraud risk (Hindsight)  | .410      |                   |      |
| Governance Before 3 | Overall governance effectiveness | .810      |                   |      |
| Governance Before 4 | Commitment to governance         | .735      |                   |      |

Next, we assessed whether the three factors related to Openness, Governance, and Integrity could in turn be represented by one second-order factor, and the factors related to blaming by another second-order factor. To do this we conducted a second factor analysis on the matrix of correlations between the factors obtained in the first analysis (Kim & Mueller, 1978). The scree plot obtained from this analysis showed that two factors appeared to underlie the data, with the factors representing Openness, Governance, and Integrity loading highly on the first factor, and the factors representing the different types of blaming behaviour loading highly on the second factor. There were no significant cross-loadings.

### *Conclusion on Construct Measurement Validation*

Overall, the results of the measurement validation process show that the measurement scales that we used have satisfactory construct validity. Most of the

<sup>\*</sup> The items Integrity Before 5 through 9 load on a different factor than the other indicators of the Integrity construct. These two factors are negatively correlated with each other ( $r = -0.091$ ). However, as can be seen in Table 3.6, the meaning of these items is opposite to that of the other items, with higher scores indicating lower integrity.

items loaded on the factors representing the constructs that they were intended to measure, rather than on factors representing closely related but distinct constructs.

**TABLE 3.7 FACTOR LOADINGS CEO BEHAVIOUR DURING THE RESTATEMENT CRISIS**

| Item number         | Item name                                    | Component |       |      |       |      |      |
|---------------------|--|-----------|-------|------|-------|------|------|
|                     |  | 1         | 2     | 3    | 4     | 5    | 6    |
| Openness During 1   | Information on materiality                   |           |       |      |       |      | .830 |
| Openness During 2   | Discussion of manoeuvring space              |           |       |      |       |      | .977 |
| Openness During 3   | Discussion of accounting policy              |           |       |      |       |      | .971 |
| Openness During 4   | Adequacy of information (Beginning)          | .686      |       |      |       |      |      |
| Openness During 5   | Adequacy of information (End)                | .668      |       |      |       |      |      |
| Governance During 1 | Overall governance effectiveness             | .743      |       |      |       |      |      |
| Governance During 2 | Commitment to governance                     | .541      |       |      |       |      |      |
| Governance During 3 | Initial governance effectiveness (Beginning) | .373      |       |      |       |      |      |
| Governance During 4 | Initial governance effectiveness (End)       | .607      |       |      |       |      |      |
| Integrity During 1  | Fair decisions                               | .515      |       |      |       |      |      |
| Integrity During 2  | Trustworthy                                  | .401      |       |      | -.434 |      |      |
| Integrity During 3  | Example                                      | .402      |       |      | -.407 |      |      |
| Integrity During 4  | Tone at the top                              |           |       |      | -.406 |      |      |
| Integrity During 5  | Pressure on auditors                         |           |       |      | .851  |      |      |
| Integrity During 6  | Pressure on Audit Committee                  |           |       |      | .918  |      |      |
| Integrity During 7  | Pressure on analysts                         |           |       |      | .581  |      |      |
| Integrity During 8  | Complex language                             | .419      |       |      | .479* |      |      |
| Integrity During 9  | Misleading                                   |           |       |      | .506  |      |      |
| Blame Taking 1      | Blame Taking (Beginning)                     |           | -.942 |      |       |      |      |
| Blame Taking 2      | Blame Taking (End)                           |           | -.896 |      |       |      |      |
| Blame Giving 1      | Blaming CFO (Beginning)                      |           | .704  |      |       | .456 |      |
| Blame Giving 2      | Blaming lower managers (Beginning)           |           |       |      |       | .878 |      |
| Blame Giving 3      | Blaming auditors (Beginning)                 |           |       | .568 |       |      |      |
| Blame Giving 4      | Blaming accounting rules (Beginning)         |           |       | .910 |       |      |      |
| Blame Giving 5      | Blaming CFO (Beginning)                      |           | .697  |      |       | .444 |      |
| Blame Giving 6      | Blaming lower managers (End)                 |           |       |      |       | .841 |      |
| Blame Giving 7      | Blaming auditors (End)                       |           |       | .681 |       |      |      |
| Blame Giving 8      | Blaming accounting rules (End)               |           |       | .890 |       |      |      |

\* The loadings of the items Integrity During 5 through 9 are opposite to the loadings of the other indicators of the Integrity construct. However, as can be seen in Table 3.7, the meaning of these items is also opposite to that of the other items, with higher scores indicating lower integrity.

However, it should be noted that all these factor analyses were exploratory, because of the lack of established measures for most of the constructs, and because using confirmatory factor analysis was not feasible due to a restricted sample size. In order to provide some confirmation of these exploratory analyses, we examined the Average Variance Extracted (AVE) for each construct, as obtained from the Partial Least Squares structural equation modeling analysis. AVE provides an indication of the percentage of the variance in each of the items that is explained by the corresponding construct (Chin, 1998; Fornell & Larcker, 1981). The AVEs for each of the constructs that were included in the PLS model are shown in Table 3.8. Fornell and Larcker (1981) recommend that AVE should be at least 0.50 to conclude that the validity of the construct is sufficient. It can be seen that the AVE is above 0.50 for most, but not all of our constructs. Particularly, for perceived CEO behaviour before and during the crisis, stakeholder latitude, and pressure during the crisis, only between 30 and 40% of the variance in the items is explained by the construct. This suggests that some of our measures will need to be validated in further research. Given that the estimated composite reliabilities were sufficient for all measures, and that AVE is relatively conservative (Fornell & Larcker, 1981), we think it is justified that our measures are sufficiently valid for our current purpose.

**TABLE 3.8 AVERAGE VARIANCE EXTRACTED FOR CONSTRUCTS INCLUDED IN THE PLS MODEL**

| <b>Construct</b>                        | <b>AVE</b> |
|---|------------|
| EM Pressures                            | 0.543      |
| CEO Dominance                           | 0.617      |
| Latitude                                | 0.378      |
| Pressure Before Restatement             | 0.752      |
| Pressure During Restatement Crisis      | 0.379      |
| CEO Competence                          | 0.524      |
| Severity                                | 0.853      |
| CEO Behaviour Before Restatement        | 0.368      |
| CEO Behaviour During Restatement Crisis | 0.363      |
| Blame taking                            | 0.909      |
| Blame giving                            | 0.454      |

### 3.5 Analysis of Survey Results

We tested our model through a Partial Least Squares (PLS) structural equation model. We used PLS, rather than maximum likelihood-based structural equation modelling (e.g. LISREL), because research has shown that such approaches often lead to identification problems when applied to samples smaller than 200 (Boomsma & Hoogland, 2001). In contrast, PLS requires less large samples for model identification (Chin, Marcolin, & Newsted, 2003). We separately tested the models for the influence of severity on the other constructs, for the antecedents of perceived Reputational Remediation Behaviour, and for the antecedents of Blame Giving. We used list-wise deletion of missing values at the construct level to test the relationships between the constructs. Research has shown that list-wise deletion is more accurate when data are not missing at random, i.e. when the reason why a value is missing is correlated with the true value of the variables under consideration (Kromrey & Hines, 1994). This holds for our study because the only missing values are the 'don't know' answers, which likely are related to the true value of the variables we want to measure (for example, some people who answer 'don't know' might in reality have an opinion, which might be more favourable than that of those who do give an answer). For the item level, i.e. the measurement model which links each item to one of the constructs, we used pair-wise deletion, as using list-wise deletion here would reduce the sample size too much. This is also the standard algorithm used in PLS (Tenenhaus, Vinzi, Chatelin, & Lauro, 2005).

To incorporate the higher-order constructs, we followed standard practice in PLS path modelling by estimating the higher-order factors as factors containing all the items of the lower-order factors (Tenenhaus et al., 2005). In the case of blame taking behaviour, both blame taking behaviour and blame giving behaviour had positive loadings on the higher-order factor. For this reason, this higher-order factor could not be interpreted as the degree to which the CEO assigned blame to himself as opposed to other gatekeepers. Therefore, we decided to treat blame taking and blame giving as separate factors in testing the PLS model. Following Tenenhaus et al. (2005), we computed the significance of the paths by importing the latent variable score estimated in PLS into SPSS and running ordinary least squares regressions.

Because the questions about task challenges, job demands, and analyst disappointment were only posed to about half of the sample, using PLS structural equation modelling for these constructs yielded not enough statistical power. According to Chin et al. (2003), a good rule of thumb for PLS using reflective indicators is to have at least 10 times as many observations as the largest number of paths leading to any of the constructs. In our models involving factors related to bounded rationality, we have at least six paths leading to the reputational remediation construct, and only about 40 to 45 observations. Therefore, we tested our hypotheses related to bounded rationality (H2-4) using ordinary least squares regression and with the averaged items corresponding to each construct as the variables. To examine the effects of the 'bounding factors' on blaming behaviour, we first aggregated perceived blame taking and perceived blame giving behaviour. Blame giving behaviour was reverse coded, implying that the resulting construct can be interpreted as the degree to which the CEO blamed himself, rather than one of the gatekeepers.

Because some analysts in our sample rated the same restatement case, this creates a multi-level structure in our data. To check whether it would be necessary to take this structure into account in our analyses, we calculated the intra-class correlation coefficients for those firms that were rated by more than one analyst.<sup>10</sup> The coefficient was negative 0.049 for perceived CEO behaviour before the restatement and negative 0.169 for perceived CEO behaviour after the restatement crisis. These correlations are sufficiently small to warrant not taking the multi-level nature into account in the analyses (cf. Raudenbush and Bryk, 2002).

### 3.5.1 DESCRIPTIVE STATISTICS

Tables 3.9-3.11 display means and standard deviations for each of our items in the two different time frames for which question was posed. These provide an indication of the degree to which changes occurred in analysts' perceptions with hindsight compared to their perceptions without hindsight (Format I); and in their perceptions during the restatement crisis compared to their perceptions before the restatement (Format II); and in their perceptions at the end of the restatement crisis compared to their perceptions at the beginning of the crisis (Format III). Table 3.12 displays the correlations of the overall constructs as estimated through PLS.

<sup>10</sup> These coefficients were calculated from ANOVAs using the firm as the independent variable and perceived CEO behaviour before the restatement and during the restatement crisis as the dependent variables (cf. Shrout & Fleiss, 1979).

In Table 3.9, it can be seen that the means for all 'positive' perceptions (gatekeeper competence and CEO pre-restatement behaviour), decrease when comparing perceptions with hindsight to perceptions without hindsight. In contrast, the means for all 'negative' perceptions (Earnings Management Pressures, CEO Dominance, Gatekeeper Latitude, and Task/Performance Challenges) increase. In addition, all standard deviations become larger when comparing perceptions with hindsight to those without hindsight. This pattern is consistent with the idea that (1) analysts generally do not see restatements coming (hence the decrease in the favourability of perceptions with hindsight); and, (2) restatements vary considerably in terms of their severity (hence the increase in the standard deviations of perceptions with hindsight).

TABLE 3.9 COMPARISON OF MEANS FOR PERCEPTIONS WITHOUT HINDSIGHT VERSUS PERCEPTIONS WITH HINDSIGHT (FORMAT I)

| Construct                     | Item name                      | Item content   | Without hindsight |      | With hindsight |      |
|-------------------------------|--------------------------------|--|-------------------|------|----------------|------|
|                               |                                |  | Mean              | S.D. | Mean           | S.D. |
| Earnings Management Pressures |                                | ... the CEO was under the following degree of pressure to exceed financial performance expectations:   |                   |      |                |      |
|                               | EM Pressures Board             | • From the Independent Board, to improve financial results   | 3.74              | 1.30 | 4.08           | 1.42 |
|                               | EM Pressures Analysts          | • From the analysts following the company  | 4.42              | 1.20 | 4.54           | 1.24 |
|                               | EM Pressures Shareholders      | • From the shareholders  | 4.78              | 1.13 | 4.90           | 1.24 |
|                               | EM Pressures Media             | • From the media   | 3.75              | 1.42 | 3.82           | 1.59 |
| CEO Dominance                 | Rewards                        | ... the company's reward/bonus system was instrumental in the CEO using accounting policies to his/her own financial advantage to the following extent | 3.75              | 1.39 | 4.21           | 1.50 |
|                               | Dominant behaviour             | ... the CEO's level of dominant behaviour was as follows   | 4.81              | 0.87 | 4.88           | 1.07 |
|                               | Using manoeuvring space        | ... the CEO's use of accounting manoeuvring space to improve the company's financial position was aggressive   | 3.43              | 1.31 | 4.21           | 1.58 |
|                               | Auditor conflicts of interest  | ... conflicts of interest reduced the external auditors' objectivity and/or independence   | 3.23              | 1.35 | 3.76           | 1.49 |
|                               | Complexity of accounting rules | ... for the company in question, complexity of accounting rules hindered the company from staying 'in compliance'                                      | 3.48              | 1.23 | 3.74           | 1.40 |
| Gatekeeper Latitude           | Scope for manoeuvring          | ... the accounting principles used by the company for reporting earnings did allow scope for manoeuvring   | 4.13              | 0.98 | 4.74           | 0.90 |
|                               |                                | ... the accounting and financial reporting skill level of the following internal gatekeepers was as follows:   |                   |      |                |      |
|                               | CFO competence                 | • CFO:   | 4.81              | 0.91 | 4.14           | 1.29 |
|                               | Audit committee competence     | • Audit Committee:   | 4.39              | 1.08 | 3.61           | 1.16 |
|                               | Complex industry               | ... the industry the company operated in was particularly complex and/or dynamic   | 4.00              | 1.25 | 4.02           | 1.45 |
| Task/Performance Challenges   | Potential for sales growth     | ... there was not enough potential to meet the sales growth expectations   | 3.71              | 1.29 | 4.02           | 1.46 |
|                               | Potential for earnings growth  | ... there was not enough potential to meet the earnings growth expectations  | 3.69              | 1.22 | 4.14           | 1.41 |
|                               | Resources                      | ... the company's organizational resources were insufficient   | 3.38              | 1.29 | 4.29           | 1.29 |
|                               | Demanding strategy             | ... the company's strategy was unnecessarily demanding   | 3.60              | 1.17 | 3.96           | 1.34 |
|                               | Complex structure              | ... the company's organizational structure was unnecessarily complex   | 3.26              | 1.28 | 3.69           | 1.40 |
| CEO Behaviour Pre-Restatement | Managing fraud risk            | ... the CEO managed the risks of financial reporting fraud with the following level of effectiveness   | 4.10              | 0.87 | 3.33           | 1.19 |

**TABLE 3.10 COMPARISON OF MEANS FOR PERCEPTIONS BEFORE THE RESTATEMENT VERSUS PERCEPTIONS DURING THE RESTATEMENT CRISIS (FORMAT I)**

| Construct          | Item name                       | Item content  | Before |      | During |      |
|--------------------|---------------------------------|---|--------|------|--------|------|
|                    |                                 |   | Mean   | S.D. | Mean   | S.D. |
| Pressure           |                                 | ... the degree of pressure on the CEO to comply with state-of-the-art corporate governance practices was as follows:                        |        |      |        |      |
|                    | Auditor governance Pressure     | From the external auditors:   | 4.17   | 1.01 | 4.82   | 1.08 |
|                    | Shareholder governance Pressure | From the shareholders:  | 4.01   | 1.06 | 4.68   | 1.20 |
|                    | Analyst governance Pressure     | From the analysts:  | 3.80   | 1.12 | 4.65   | 1.24 |
| Analyst Competence | Probing skills                  | ... when discussing accounting issues with management, I would rate my probing skills (ability to get to the truth of a matter) as follows: | 3.92   | 1.04 | 4.30   | 0.93 |
|                    | Knowledge                       | ... when discussing accounting issues with management, I would rate my knowledge of the subject matter as follows:                          | 4.13   | 0.79 | 4.46   | 0.87 |
|                    | Misled                          | ... the following factors reduced my ability to fully anticipate this restatement/to fully understand this restatement:                     |        |      |        |      |
|                    | Analysis caused no suspicion    | I was misled by management  | 3.87   | 1.53 | 3.62   | 1.61 |
|                    | Analysis not probing enough     | My financial analysis did not cause any suspicion   | 3.58   | 1.32 | 3.21   | 1.30 |
|                    | Herding                         | My analysis could have been more probing  | 3.44   | 1.29 | 3.27   | 1.48 |
| CEO Job Demands    | Probing skills                  | I relied too much on other analysts and simply followed the market:   | 2.48   | 1.61 | 2.48   | 1.73 |
|                    |                                 | ... I believed that the following assertions regarding the CEO were applicable:   |        |      |        |      |
|                    | Lack of resources               | Had to work too hard because of lack of resources:  | 2.74   | 1.14 | 3.15   | 1.40 |
|                    | Company politics                | Had to work too hard because of internal company politics:  | 2.53   | 1.06 | 2.80   | 1.23 |
|                    | Workaholic                      | Had to work too hard because he was a workaholic:   | 2.95   | 1.46 | 2.91   | 1.41 |
|                    | Time pressure                   | Had to work under too high a time pressure:   | 2.93   | 1.26 | 3.34   | 1.52 |
| CEO Competence     |                                 | ... I rated the following aspects of the CEO as follows:  |        |      |        |      |
|                    | Knowledge                       | Demonstrated knowledge of accounting and financial reporting matters:   | 4.21   | 0.87 | 3.84   | 1.03 |
|                    | Communication skills            | Communicative skill level on accounting and financial reporting matters:  | 4.03   | 0.97 | 3.71   | 1.07 |
|                    | Commitment to compliance        | Commitment to compliance with accounting principles:  | 4.16   | 0.91 | 3.81   | 1.18 |

|                                  |                                  |   |      |      |      |      |
|----------------------------------|----------------------------------|---|------|------|------|------|
| CEO Behaviour<br>(Before/During) | Overall governance effectiveness | ... I believed that the effectiveness of the company's overall governance and control measures was as follows:            | 3.97 | 1.03 | 3.25 | 1.31 |
|                                  |                                  | ... I rated the following aspects of the CEO as follows:  |      |      |      |      |
|                                  | Commitment to governance         | Commitment to proper corporate governance:  | 4.08 | 1.10 | 3.70 | 1.17 |
|                                  | Fair decisions                   | ... The CEO made fair and balanced decisions:   | 4.32 | 0.94 | 3.79 | 1.10 |
|                                  | Trustworthy                      | ... The CEO could be trusted:   | 4.29 | 1.05 | 3.55 | 1.16 |
|                                  | Example                          | ... The CEO set a good example in terms of ethics:  | 4.15 | 0.99 | 3.57 | 1.27 |
|                                  | Tone at the top                  | ... The CEO demonstrated an ethical 'tone at the top' to the following extent:  | 4.11 | 1.08 | 3.61 | 1.25 |
|                                  |                                  | ... I believed that the CEO put pressure on the following groups to the following extent:                                 |      |      |      |      |
|                                  | Pressure on auditors             | On the external auditors to concur with management's position on financial reporting matters:                             | 3.69 | 1.14 | 3.86 | 1.40 |
|                                  | Pressure on Audit Committee      | On the Audit Committee to concur with management's accounting positions:  | 3.74 | 1.24 | 3.82 | 1.40 |
|                                  | Pressure on analysts             | On the analysts to comment positively on the company:   | 3.67 | 1.29 | 3.49 | 1.36 |
|                                  | Complex language                 | ... I believed that the CEO, when explaining financial results, used language with the following degree of complexity:    | 3.50 | 0.81 | 3.79 | 1.03 |
|                                  | Misleading                       | ... I believed that the CEO misled analysts on the essence of financial statement issues to the following extent:         | 3.25 | 1.49 | 3.55 | 1.58 |
|                                  |                                  | ... I believed that the degree of openness demonstrated by the CEO to the analysts in the following areas was as follows: |      |      |      |      |
|                                  | Information on materiality       | Information on what was material to the financial position:   | 3.78 | 0.87 | 3.84 | 1.03 |
|                                  | Discussion of manoeuvring space  | Discussion of accounting manoeuvring space:   | 3.16 | 0.95 | 3.29 | 1.01 |
|                                  | Discussion of accounting policy  | Discussion of significant accounting policy choices:  | 3.30 | 0.93 | 3.41 | 1.01 |

**TABLE 3.11 COMPARISON OF MEANS FOR PERCEPTIONS AT THE BEGINNING OF THE RESTATEMENT CRISIS VERSUS PERCEPTIONS AT THE END OF THE RESTATEMENT CRISIS (FORMAT III)**

| Construct                     | Item name                        | Item content  | Beginning |      | End  |      |
|-------------------------------|----------------------------------|---|-----------|------|------|------|
|                               |                                  |   | Mean      | S.D. | Mean | S.D. |
| Pressure                      | Pressure to dismiss CEO          | ... I believed that the degree of pressure on the Independent Board to dismiss the CEO was as follows:                                | 3.89      | 1.40 | 4.13 | 1.49 |
|                               |                                  | ... I believed that the degree of pressure on the CEO to disclose more detailed information regarding the restatement was as follows: |           |      |      |      |
|                               | Analyst openness pressure        | The analysts:   | 4.98      | 1.10 | 4.88 | 1.07 |
|                               | Regulator openness pressure      | Regulators:   | 4.86      | 1.11 | 4.94 | 1.08 |
|                               | Shareholder openness pressure    | Shareholders:   | 4.90      | 1.14 | 4.77 | 1.11 |
| Severity                      | Distortion                       | The significance of the restatement adjustment was as follows:  | 2.89      | 1.05 | 2.98 | 1.23 |
|                               | Intent                           | The malicious intent leading to the restatement was as follows:   | 2.45      | 1.39 | 2.64 | 1.45 |
| Analyst regret                | Regret                           | ... I regretted the recommendations I had issued on the stock to that date, to the following degree:                                  | 2.84      | 1.64 | 2.52 | 1.53 |
| CEO Behaviour (Beginning/End) | Adequacy of information          | ... I believed that the adequacy of the information provided by the CEO was as follows:   | 3.61      | 0.94 | 3.58 | 1.04 |
|                               | Initial governance effectiveness | ... I believed that the adequacy of the initial corporate governance measures taken by the CEO was as follows:                        | 3.64      | 0.92 | 3.80 | 1.06 |
|                               |                                  | I believed that the CEO immediately allocated blame as follows:   |           |      |      |      |
|                               | Blame Taking                     | ... He/she blamed him/herself:  | 2.59      | 1.39 | 2.66 | 1.37 |
|                               | Blaming CFO                      | ... He/she blamed the CFO:  | 3.10      | 1.45 | 3.24 | 1.55 |
|                               | Blaming lower managers           | ... He/she blamed lower management echelons:  | 3.23      | 1.63 | 3.28 | 1.72 |
|                               | Blaming auditors                 | ... He/she blamed the external auditors:  | 3.18      | 1.43 | 3.31 | 1.63 |
|                               | Blaming accounting rules         | ... He/she blamed the complexity of accounting rules:   | 4.26      | 1.46 | 4.28 | 1.55 |

**TABLE 3.12 CORRELATIONS OF CONSTRUCTS (AS ESTIMATED THROUGH PARTIAL LEAST SQUARES)**

|                     | 1.    | 2.    | 3.   | 4.    | 5.   | 6.   | 7.    | 8.   |
|---------------------|-------|-------|------|-------|------|------|-------|------|
| 1. EM Pressures     |       |       |      |       |      |      |       |      |
| 2. CEO Dominance    | 0.60  |       |      |       |      |      |       |      |
| 3. Pressure         | 0.50  | 0.24  |      |       |      |      |       |      |
| 4. Latitude         | 0.33  | 0.34  | 0.03 |       |      |      |       |      |
| 5. CEO Competence   | -0.13 | -0.22 | 0.14 | -0.08 |      |      |       |      |
| 6. Behaviour Before | -0.01 | -0.31 | 0.22 | -0.01 | 0.57 |      |       |      |
| 7. Behaviour After  | -0.23 | -0.44 | 0.05 | -0.13 | 0.68 | 0.56 |       |      |
| 8. Blame Taking     | 0.07  | -0.08 | 0.23 | 0.01  | 0.16 | 0.18 | 0.11  |      |
| 9. Blame Giving     | 0.38  | 0.28  | 0.26 | 0.00  | 0.00 | 0.09 | -0.08 | 0.34 |

In Table 3.10, we can see that the pressures for positive reputation management behaviour on the CEO basically increased in the restatement period when compared to the period before. This is not surprising, assuming that stakeholders demand a resolution for the crisis caused by the restatement. Perceptions of CEO competence and behaviour deteriorated when comparing the pre-restatement period to the restatement period. Likewise, analyst assessments of the CEO's overall job demands increased. Surprisingly, analyst perceptions of their own competence increased in the restatement period when compared to the period before. Apparently analysts saw their skills and knowledge regarding accounting issues in the crisis situation as better than in the situation before the crisis. This could be an indication of a desire by analysts to obtain detailed knowledge as to the causes of the restatement.

When comparing analyst perceptions at the beginning of the restatement crisis to their perceptions at the end of the crisis (Table 3.11), we do not see many substantial changes. The only exception is the perceived malicious intent involved in the restatement, which on average increased during the restatement crisis. This seems to be a reflection of the fact that fraud is often only clear after extensive investigations.

### 3.5.2 CORRELATIONS OF PRESSURES ON AND BEHAVIOUR OF CEOS

The correlations between the constructs (as estimated through PLS) in Table 3.12, show that all hypothesized antecedents of perceived CEO behaviour, except latitude, have quite substantial correlations with at least one type of behaviour (either overall behaviour before the restatement, overall behaviour during the restatement crisis,

blame taking behaviour, or blame giving behaviour). Furthermore, there are no extreme correlations between the antecedents, so multico-linearity is unlikely to be a problem.

*Influence of 'pressures' on perceived CEO behaviour before the restatement*

Our results (Figure 3.6 and Table 3.13) show that there is a significant direct relationship between the degree of perceived pressure on the CEO to manage earnings and the degree to which the CEO is perceived as demonstrating positive reputation management behaviour prior to the restatement. However, contrary to our predictions (H1a), this relationship is positive, rather than negative. That is, the more the CEO is perceived as being under pressure to manage earnings, the more positive his pre-restatement behaviour is seen. On the other hand, in addition to this direct effect, the degree of perceived pressure on the CEO to manage earnings is also indirectly related to perceived reputation management behaviour, through its effect on the degree to which the CEO engaged in domineering behaviour. This indirect effect is negative. This suggests that, on the one hand, perceived earnings management pressures by themselves are perceived positively by analysts before a restatement has occurred, but on the other hand, these indirect pressures also negatively affect analyst perceptions because they lead to more aggressive CEO behaviour, which is perceived negatively by analysts. The CEO's overall job demands do not have a significant effect on pre-restatement behaviour (contrary to H2a). The influence of task challenges is also opposite to what we expected (H3a) – the more demanding the task environment of the CEO appears, the more positive his pre-restatement behaviour appears. These findings could be an indication that before the restatement occurred, the analysts did not see pressure on the CEO to manage earnings as something negative in itself.

The degree to which the CEO was perceived as domineering has a strong negative effect on the way the CEO's behaviour was perceived (confirming H5a). The perceived latitude of gatekeepers does not have a positive effect on pre-restatement behaviour (contrary to H6a), while their perceived competence does (consistent with H6c). On the other hand, the analysts' own perceived competence, both in general, and regarding the restatement (contrary to H7a), does not have a significant effect. The perceived pressures by gatekeepers for proper governance behaviour do have a significant positive effect (consistent with H8a), just like the perceived competence of the CEO (consistent with H9a).

TABLE 3.13 ANTECEDENTS OF REPUTATION MANAGEMENT BEHAVIOUR BEFORE THE RESTATEMENT

|   | Basic Model |               | With Task Challenges |               | With Job Demands |               | With Analyst Competence |               | With Gatekeeper Competence |               |
|---|-------------|---------------|----------------------|---------------|------------------|---------------|-------------------------|---------------|----------------------------|---------------|
|   | B           | Partial corr. | B                    | Partial corr. | B                | Partial corr. | B                       | Partial corr. | B                          | Partial corr. |
| Earnings Management Pressures           | 0.16†       | 0.19          | 0.05                 | 0.09          | 0.09             | 0.14          | 0.05                    | 0.08          | 0.07                       | 0.12          |
| Job Demands Before                      |             |               |                      |               | -0.05            | -0.12         |                         |               |                            |               |
| Task challenges                         |             |               | 0.19†                | 0.29          |                  |               |                         |               |                            |               |
| CEO Dominance                           | -0.47**     | -0.48         | -0.26*               | -0.46         | -0.23*           | -0.41         | -0.23*                  | -0.38         | -0.21**                    | -0.37         |
| Latitude                                | 0.003       | 0.004         | -0.08                | -0.13         | -0.001           | -0.001        | -0.001                  | -0.001        | 0.04                       | 0.08          |
| Analyst Competence (General)            |             |               |                      |               |                  |               | 0.14                    | 0.23          |                            |               |
| Analyst Competence (Restatement)        |             |               |                      |               |                  |               | -0.01                   | -0.02         |                            |               |
| Governance Pressures before restatement | 0.17†       | 0.23          | 0.13                 | 0.25          | 0.13             | 0.25          | 0.11                    | 0.21          |                            |               |
| CEO Competence                          | 0.53**      | 0.60          | 0.35**               | 0.50          | 0.36**           | 0.49          | 0.34**                  | 0.47          | 0.21*                      | 0.31          |
| Gatekeeper Competence                   |             |               |                      |               |                  |               |                         |               | 0.26**                     | 0.43          |

#### *Influence of 'pressures' on perceived CEO behaviour during the restatement crisis*

The perceived pressure on the CEO to manage earnings does not have a significant direct effect on perceived behaviour during the restatement crisis (contrary to H1b), but it does have a strong positive influence on the perceived aggressive behaviour of the CEO, which in turn has a strong negative influence on perceived behaviour (see Appendix 3.3). Therefore, perceived pressure on the CEO to manage earnings has a strong negative indirect effect on perceived reputational remediation behaviour. We also see that the challenges posed upon the CEO by the task environment have a negative effect on perceived remedial behaviour after the restatement announcement (confirming H3b). The more challenging analysts believed the task environment of the CEO to be before the restatement, the less positive they were about the CEO's remedial behaviour after the restatement announcement.

This negative effect contrasts with the positive effect of task challenges on the perceived reputation management behaviour of the CEO before the restatement was announced (see H3a). On the other hand, the overall perceived job demands of

the CEO do not have a significant relationship with remediation behaviour (contrary to H2b). In addition, the more disappointed analysts were by the restatement, the less positive they were about the reputational remediation behaviours after the restatement, confirming H4.

As expected, the degree to which analysts perceived the CEO as behaving aggressively to manage earnings before the restatement (CEO Dominance) (H5b), has a negative relationship with analyst opinion on the CEO's reputational remediation behaviour after the announcement of the restatement (see Appendix 3.3 and Table 3.16).

**TABLE 3.14 ANTECEDENTS OF REPUTATION MANAGEMENT BEHAVIOUR DURING THE RESTATEMENT CRISIS**

|   | Basic Model |               | With Task Challenges |               | With Job Demands |               | With Analyst Regret/Competence |               | With Gatekeeper Competence |               |
|---|-------------|---------------|----------------------|---------------|------------------|---------------|--------------------------------|---------------|----------------------------|---------------|
|   | B           | Partial corr. | B                    | Partial corr. | B                | Partial corr. | B                              | Partial corr. | B                          | Partial corr. |
| (Constant)                                      | N/A         |               | 1.99†                |               | 1.67             |               | 1.59                           |               | 1.86                       |               |
| Earnings Management Pressures                   | -0.05       | -0.06         | 0.04                 | 0.05          | 0.01             | 0.01          | -0.02                          | -0.04         | -0.01                      | -0.01         |
| Job Demands                                     |             |               |                      |               | 0.08             | 0.18          |                                |               |                            |               |
| Task challenges                                 |             |               | -0.17†               | -0.23         |                  |               |                                |               |                            |               |
| Analyst Regret                                  |             |               |                      |               |                  |               | -0.11†                         | -0.31         |                            |               |
| CEO Dominance                                   | -0.32**     | -0.33         | -0.16                | -0.24         | -0.19†           | -0.30         | –#                             |               | -0.22                      | -0.34         |
| Latitude  | -0.05       | -0.08         | 0.04                 | 0.061         | -0.02            | -0.03         | -0.01                          | -0.01         |                            |               |
| Analyst Competence (General) ##                 |             |               |                      |               |                  |               | -0.23*                         | -0.33         |                            |               |
| Governance Pressure before restatement          | -0.02       | -0.02         | 0.03                 | 0.048         | 0.03             | 0.05          | 0.02                           | 0.04          | 0.01                       | 0.02          |
| Governance/openness pressure during restatement | -0.004      | -0.01         | -0.04                | -0.049        | -0.03            | -0.03         | 0.05                           | 0.07          | 0.04                       | 0.05          |
| CEO Competence                                  | 0.43**      | 0.47          | 0.39**               | 0.45          | 0.41**           | 0.46          | 0.36**                         | 0.43          | 0.38**                     | 0.42          |
| Behaviour before restatement                    | 0.23†       | 0.24          | 0.30*                | 0.26          | 0.23*            | 0.22          | 0.43*                          | 0.41          | 0.15                       | 0.12          |
| Gatekeeper Competence                           |             |               |                      |               |                  |               |                                |               | 0.10                       | 0.12          |

Contrary to our expectations, the perceived latitude of gatekeepers for earnings management, the perceived competence of these gatekeepers, and the perceived pressures that these gatekeepers put on the CEO for proper reputation management behaviour (H6b, H6d, and H8b), do not have a positive effect on perceived reputational remediation behaviour. The degree to which the analysts perceived themselves as competent is negatively related to their perception of the CEO's remedial behaviour, contrary to our expectation (H7b). The perceived competence of the CEO in accounting matters has a positive influence on perceived remedial behaviour (in accordance with H9b), and the degree to which the CEO is perceived as demonstrating adequate reputation management behaviour before the restatement has a positive effect (confirming H10).

The degree to which the CEO was perceived as aggressive does not have a significant impact on the degree to which analysts perceived the CEO as blaming himself instead of others (contrary to H5b). Positive behaviour before the restatement is positively related to blame taking behaviour, but also to blame giving behaviour (partially confirming H10). Pressures on the CEO for proper governance before the restatement has a negative effect on blame giving behaviour (consistent with H8b).

**TABLE 3.15 ANTECEDENTS OF PERCEIVED BLAME TAKING AND BLAME-GIVING BEHAVIOUR DURING THE RESTATEMENT CRISIS**

|  | Blame taking |                     | Blame giving |                     |
|--|--------------|---------------------|--------------|---------------------|
|  | B            | Partial correlation | B            | Partial correlation |
| Earnings Management Pressures          | 0.168        | 0.134               | 0.345*       | 0.280               |
| CEO Dominance                          | -0.029       | -0.021              | 0.140        | 0.114               |
| Governance Pressure before restatement | -0.113       | -0.106              | -0.175†      | -0.175              |
| Behaviour before restatement           | 0.263*       | 0.220               | 0.221†       | 0.198               |

# When CEO Dominance was included in the model, the effect of Analyst Regret was no longer significant ( $b = -0.079$ ,  $p = 0.221$ ). A likely reason is that this variable is relatively highly correlated with CEO Dominance ( $r = 0.45$ ). Given our relatively small sample and modest effect sizes, multicollinearity problems could be expected with correlations of this magnitude (Mason & Perreault, 1991). In addition, the effect of CEO Dominance was insignificant ( $b = -0.146$ ,  $p = 0.177$ ). Therefore, we omitted CEO Dominance in this model.

## When we also included Analyst Competence (Restatement), the coefficient for Analyst Regret became non-significant. This seemed to be because of the high correlation between Analyst Competence (Restatement) and Analyst Regret ( $-0.61$ ). Given our relatively small sample size and modest effect sizes in this analysis, a correlation of this magnitude is likely to lead to multicollinearity problems (Mason & Perreault, 1991). Because the coefficient for Analyst Competence (Restatement) was also insignificant ( $b = 0.112$ ,  $p = 0.337$ ), we think it is safe to exclude it from the model.

### *Influence of restatement severity*

In addition to testing our hypotheses, we also tested to what degree the perceived severity of the restatement (in terms of both distortion and malicious intent), affects the constructs in our model. We did this through a second PLS structural equation model. The results of this model (Figure 3.6) show that the perceived severity of the restatement is significantly related to all variables in our model. A higher perceived severity is related to higher perceived latitude, a higher perceived pressure to manage earnings, and a lower perceived CEO competence.

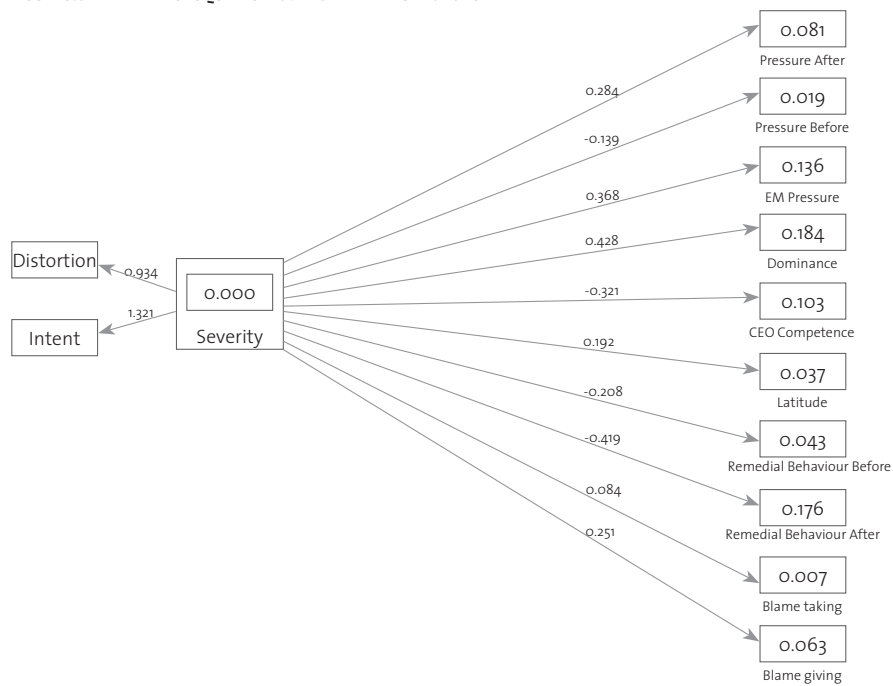
**TABLE 3.16 INFLUENCE OF 'BOUNDING FACTORS' ON PERCEIVED BLAMING BEHAVIOUR**

|  | Task Challenges |                     | Job Demands |                     | Analyst Disappointment/<br>Competence |                     |
|--|-----------------|---------------------|-------------|---------------------|---------------------------------------|---------------------|
|  | B               | Partial correlation | B           | Partial correlation | B                                     | Partial correlation |
| (Constant)                             | 5.142**         |                     | 6.342**     |                     | 3.717**                               |                     |
| Earnings Management Pressures          | -0.369*         | -0.372              | -0.277†     | -0.309              | -0.094                                | -0.0813             |
| Task Challenges                        | 0.300*          | 0.309               |             |                     |                                       |                     |
| Job Demands                            |                 |                     | -0.269*     | -0.395              |                                       |                     |
| Analyst Regret                         |                 |                     |             |                     | -0.303**                              | -0.483              |
| CEO Dominance                          | -0.190          | -0.213              | -0.174      | -0.206              | 0.157                                 | 0.193               |
| Analyst Competence (General)           |                 |                     |             |                     | -0.102                                | -0.127              |
| Analyst Competence (Restatement)       |                 |                     |             |                     | 0.189                                 | 0.237               |
| Governance Pressure before restatement | 0.120           | 0.144               | 0.110       | 0.138               |                                       |                     |
| Behaviour before restatement           | -0.287          | -0.203              | -0.203      | -0.156              |                                       |                     |

Similarly, it is related to a less favourable perception of reputation management behaviour, both before and after the restatement. The positive relationship with perceived behaviour before the restatement might suggest that hindsight bias is at work here. However, an alternative explanation can be that for more severe restatements, analysts already lowered their assessments of the company before the restatement. Some support for this explanation is provided by the fact that the items measuring severity are all positively correlated with the analysts' ratings three months before the restatement, indicating that analysts who described the restatement as more severe tended to give lower ratings before the restatement was announced. On the other hand, none of these correlations were significant, with only one approaching significance using a one-tailed alpha of 10 per cent ( $r = 0.26$ ,  $p = 0.23$ ). Finally, a higher perceived severity is related to a higher perceived

pressure for appropriate reputation management behaviour after the restatement announcement, but to a lower perceived pressure for appropriate behaviour before the restatement announcement. This seems logical, as too-low pressure for appropriate governance would be more likely to lead to a more severe restatement, whereas a more severe restatement would lead to more pressure for appropriate behaviour to remedy the restatement.

FIGURE 3.6 PARTIAL LEAST SQUARES MODEL OF THE INFLUENCE OF SEVERITY



To determine how the constructs in our model differ across the categories in which we classified each restatement according to its severity, we calculated the means of all constructs for each of the categories, which are shown in Table 3.17. Here we also include the means for the constructs related to bounded rationality of the CEO and the analysts (which were omitted from the PLS model). In this table we can see that most of the ‘negative’ antecedents (like latitude and earnings management pressures) move up as the restatement is in a more ‘serious’ quadrant, while the ‘positive antecedents’ (like CEO competence), and the perceived reputation management behaviours move down.

TABLE 3.17 MEANS OF CONSTRUCTS SORTED PER SEVERITY CATEGORY

|        |      | 'Purple Delusion'                               |      | 'Black Magic'                                   |      |
|--------|------|---|------|---|------|
|        |      |   |      |   |      |
| Intent | High | Latitude  | 3.93 | Latitude  | 3.78 |
|        |      | Governance Pressure before restatement          | 4.26 | Governance Pressure before restatement          | 4.03 |
|        |      | Governance/openness Pressure during restatement | 4.75 | Governance/openness Pressure during restatement | 4.89 |
|        |      | Earnings Management Pressure                    | 4.48 | Earnings Management Pressure                    | 4.46 |
|        |      | CEO Competence                                  | 4.17 | CEO Competence                                  | 3.79 |
|        |      | Analyst Disappointment                          | 1.67 | Analyst Disappointment                          | 3.38 |
|        |      | Analyst Competence General                      | 3.75 | Analyst Competence General                      | 4.21 |
|        |      | Analyst Competence Restatement                  | 4.96 | Analyst Competence Restatement                  | 3.26 |
|        |      | Task Challenges                                 | 3.94 | Task Challenges                                 | 4.02 |
|        |      | Job Demands                                     | 2.58 | Job Demands                                     | 3.18 |
|        |      | Reputation Management Behaviour (Before)        | 3.72 | Reputation Management Behaviour (Before)        | 3.53 |
|        |      | Reputational Remediation Behaviour              | 3.65 | Reputational Remediation Behaviour              | 3.33 |
|        |      | Blame Taking                                    | 3.63 | Blame Taking                                    | 3.18 |
|        | Low  | 'White Lies'                                    |      | 'Grey Accounting Hocus Pocus'                   |      |
|        |      | Latitude  | 3.63 | Latitude  | 3.74 |
|        |      | Governance Pressure before restatement          | 4.07 | Governance Pressure before restatement          | 3.33 |
|        |      | Governance/openness Pressure during restatement | 4.33 | Governance/openness Pressure during restatement | 4.58 |
|        |      | Earnings Management Pressure                    | 3.71 | Earnings Management Pressure                    | 3.45 |
|        |      | CEO Competence                                  | 4.10 | CEO Competence                                  | 4.03 |
|        |      | Analyst Disappointment                          | 1.65 | Analyst Disappointment                          | 1.75 |
|        |      | Analyst Competence General                      | 4.38 | Analyst Competence General                      | 3.83 |
|        |      | Analyst Competence Restatement                  | 4.42 | Analyst Competence Restatement                  | 3.86 |
|        |      | Task Challenges                                 | 3.53 | Task Challenges                                 | 3.30 |
|        |      | Job Demands                                     | 2.36 | Job Demands                                     | 3.42 |
|        |      | Reputation Management Behaviour (Before)        | 3.81 | Reputation Management Behaviour (Before)        | 3.59 |
|        |      | Reputational Remediation Behaviour              | 3.82 | Reputational Remediation Behaviour              | 3.77 |
|        |      | Blame Taking                                    | 3.64 | Blame Taking                                    | 3.15 |
|        |      | <b>Distortion</b>                               |      |   |      |
|        |      | Low   |      | High  |      |

### 3.6 Conclusions and Discussion

Our results provide detailed insights into the factors that influence analysts' evaluations of CEO behaviour, of a company they follow, both before and during a restatement crisis occurs. An overview of our findings is provided in Table 3.18. First, the results show that earnings management pressures, job demands, and task challenges - factors which we hypothesized would negatively influence analyst judgments of CEO behaviour - did not significantly negatively affect such judgments before a restatement occurred. On the contrary, perceived pressures to manage earnings and perceived task challenges actually had a positive effect on perceived CEO behaviour before the restatement crisis. After a restatement was announced, perceived task challenges did negatively affect perceived behaviour, and perceived job demands negatively affected the degree to which the CEO was seen as taking the blame for the restatement. In addition, after the restatement was announced, the degree to which analysts regretted the recommendations they made before the restatement negatively influenced their perception of the CEO's behaviour during the restatement crisis.

Overall, our findings show that perceived pressures on the CEO to manage earnings, as well as the degree of task challenges posed to him, and contrary to our hypotheses, seem not to be regarded as negative by analysts before a restatement. However, once the restatement crisis hits, analysts do regard these pressures as having a negative effect on CEO behaviour. This pattern is illustrated in Figures 3.7 and 3.8, which show the effects of earnings management pressures and task challenges on the different types of CEO behaviour. Furthermore, when analysts are strongly disappointed by the restatement and regret their own previous recommendations, their perceptions of the CEO's attempts to remedy a company's situation after a restatement is announced suffers, even when other factors are kept constant, such as the degree of pressure on the CEO. Both these effects suggest some influence of a certain degree of irrationality (or bias) on the part of the analysts. Such an 'irrational' situation is more likely when the analysts perceive more distortion and malicious intent to be present in the restatement crisis. This is because analyst disappointment, perceived earnings management pressures and perceived task challenges all increase when the restatement moves to the upper right-hand quadrant of the intent/distortion matrix.

TABLE 3.18 OVERVIEW OF HYPOTHESES – RESULTS SUMMARY

| HYPOTHESIS | RELATIONSHIP  | PREDICTED | OBSERVED  |              | HYPOTHESIS CONFIRMED? |              |
|------------|---|-----------|-----------|--------------|-----------------------|--------------|
|            |   |           | Behaviour | Blame taking | Behaviour             | Blame taking |
| 1a         | EM Pressures → Behaviour Before                           | –         | +         | n/a          | Opposite              | n/a          |
| 1b         | EM Pressures → Behaviour During                           | –         | n.s.*     | +            | No                    | Opposite     |
| 2a         | Job Demands → Behaviour Before                            | –         | n.s.      | n/a          | No                    | n/a          |
| 2b         | Job Demands → Behaviour During                            | –         | n.s.      | –            | No                    | Yes          |
| 3a         | Task Challenges → Behaviour Before                        | –         | +         | n/a          | Opposite              | n/a          |
| 3b         | Task Challenges → Behaviour During                        | –         | –         | +            | Yes                   | Opposite     |
| 4          | Analyst Regret → Behaviour During                         | –         | –         | –            | Yes                   | Yes          |
| 5a         | CEO Dominance → Behaviour Before                          | –         | –         | n/a          | Yes                   | n/a          |
| 5b         | CEO Dominance → Behaviour During                          | –         | –         | n.s.         | Yes                   | No           |
| 6a         | Gatekeeper Latitude → Behaviour Before                    | –         | n.s.      | n/a          | No                    | n/a          |
| 6b         | Gatekeeper Latitude → Behaviour During                    | –         | n.s.      | n/a          | No                    | n/a          |
| 6c         | Gatekeeper Competence → Behaviour Before                  | +         | +         | n/a          | Yes                   | n/a          |
| 6d         | Gatekeeper Competence → Behaviour During                  | +         | n.s.      | n/a          | No                    | n/a          |
| 7a         | Analyst Competence → Behaviour Before                     | –         | n.s.      | n/a          | No                    | n/a          |
| 7b         | Analyst Competence → Behaviour During                     | +         | –         | n.s.         | Opposite              | No           |
| 8a         | Pressure for Positive Behaviour Before → Behaviour Before | +         | +         | n/a          | Yes                   | n/a          |
| 8b         | Pressure for Positive Behaviour Before → Behaviour During | +         | –         | n.s.         | Opposite              | No           |
| 8c         | Pressure for Positive Behaviour During → Behaviour During | +         | –         | n/a          | Opposite              | n/a          |
| 9a         | CEO Competence → Behaviour Before                         | +         | +         | n/a          | Yes                   | n/a          |
| 9b         | CEO Competence → Behaviour During                         | +         | +         | n/a          | Yes                   | n/a          |
| 10         | Behaviour Before → Behaviour During                       | +         | +         | n.s.         | Yes                   | No           |

\* However, there was a strong indirect effect of EM Pressure on Behaviour During, due to the influence of on EM Pressure on CE Dominance.

FIGURE 3.7 INFLUENCE OF EARNINGS MANAGEMENT PRESSURES FOR DIFFERENT CEO BEHAVIOURS

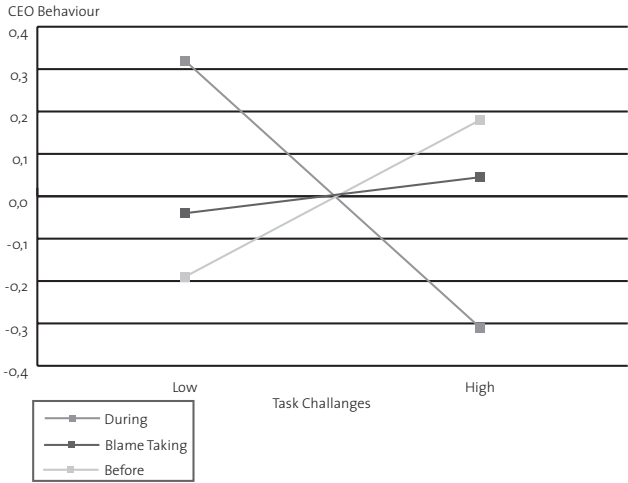
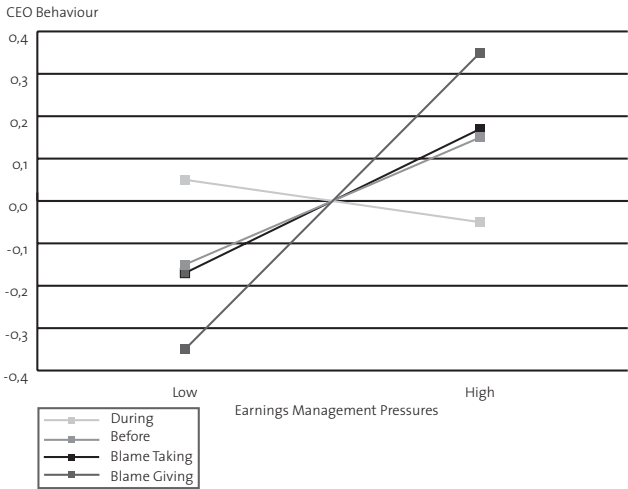


FIGURE 3.8 INFLUENCE OF TASK CHALLENGES FOR DIFFERENT CEO BEHAVIOURS



Regarding the other factors that we proposed would affect perceived CEO behaviour, we see that the perceived dominance of the CEO has a negative effect on CEO behaviour before the restatement crisis, and that gatekeeper competence, CEO competence, and pressure for positive behaviour have a positive effect on perceived CEO behaviour before the restatement. Perceived dominance also has a significant negative impact on perceived behaviour during the restatement crisis, while CEO competence and perceived behaviour before the restatement have a significant positive impact on perceived behaviour during the restatement crisis.

In sum, most of the other factors that we identified in our hypotheses development section as likely influencing the perceived behaviour of the CEO did indeed have such an influence, with a few exceptions. First, there was no significant influence of the latitude given by gatekeepers regarding earnings management on the perceived behaviour of the CEO, either before or during the restatement crisis. One explanation might lie in our measure for this construct, which seemed to contain items with divergent meanings. However, after deleting the problematic items, the effects of the construct were still not significant. Perhaps analysts do not see the degree to which gatekeepers passively leave room for earnings management as relevant, looking only at active encouragement or discouragement.

Second, the influence of the analysts' own perceived competence on perceived CEO behaviour during the restatement crisis was negative, rather than positive. We had expected that analysts who are more competent would be less susceptible to 'panic' during a restatement crisis and would therefore perceive the CEO's behaviour more favourably than less-competent analysts. However, this reasoning assumes that analysts who perceive themselves as more competent are, in fact, more competent. If this assumption is not justified (which seems conceivable), this could provide an explanation for our finding. For example, it could be that less-competent analysts would actually think of themselves as more competent than the analysts who actually are more competent (Moore, Tetlock, Tanlu & Bazerman, 2006). In that case, one could expect these analysts to be more susceptible to panic and provide lower evaluations of the CEO's behaviour.

Third, effects of perceived pressures by stakeholders for positive CEO behaviour (both before and during the restatement crisis) on the CEO's perceived behaviour

during the crisis were not significant, though these perceived pressures did have a significant positive effect on the CEO's perceived behaviour before the restatement. One reason for this lack of significance may in fact be that our questions about the CEO's behaviour during the restatement period mainly dealt with the CEO who was in charge when the restatement was announced, while some of the questions in the Pressures construct dealt with pressure to remove the CEO. It seems natural that, when pressures to remove the CEO are higher, the perceptions of the behaviour of the CEO in charge at the time of the restatement would be more negative. However, when we removed these items from the scale, the results for Pressures remained non-significant. It might be that respondents also interpreted the other questions regarding this construct in a negative light. For example, the statement, 'I believed that the degree of pressure on the CEO to disclose more detailed information regarding the restatement was as follows....,' might be interpreted as meaning that the CEO did not do enough to inform analysts about the restatement, and hence was put under pressure to do more.

As is clear from the discussion above, this study has some limitations (see also Chapter 5). First, our method does not allow us to distinguish perceptions from objective facts. In future research this could be solved to some degree by using objective indicators of, for example, analyst expertise to validate the perceptions reported in the questionnaire. Second, several of our measures involved asking analysts about their perceptions of past events without using hindsight. However, hindsight bias might be difficult, if not impossible, for respondents to completely eliminate from their answers. As noted above, we have some indication that hindsight bias might not be that much of a problem from the correlation between the degree to which analysts reported in the questionnaire that they felt – before the restatement – that they were misled by management, and the actual ratings they issued before the restatement. Nevertheless, the size of this correlation (0.40) was not such that it could remove any doubts about hindsight bias, and it only provides information on this particular question. A third limitation is that the statistical relationships between the different perceptions that we observed could be partially due to the fact that these perceptions were measured in the same questionnaire. This might have led respondents to fill out the questions based on an implicit theory about why these different perceptions should be related, or based on a general positive or negative feeling about the CEO or the company. Such artificial relationships due to

measurement by the same instrument are known as common method bias (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). One way to deal with common method bias is to validate the model through a method which is less susceptible to this type of bias, e.g. an archival study or field interviews (Krishnan, Martin & Noorderhaven, 2006). For this reason, we decided to conduct a number of in-depth interviews with analysts to see if these would corroborate our findings in the current study. These interviews are described in detail in the next chapter on Study 3.



# Chapter 4

## Study 3: Interviews with Analysts

Financial Analysts' Assessments of CEO Pressures and Qualities: Endogenous Factors, Exogenous Pressures, and Countervailing Powers – a Qualitative Study Corroborating Findings of Study 1 and 2.

### **4.1 Introduction and Sub-Research Question**

Where Study 2 focused on analysts' perceptions surrounding CEO pressures to manage earnings before a restatement, and their reputation remedial actions thereafter, we will now look at analysts' perceptions in more depth through qualitative interviewing. We are interested in both validating the results from the analyst survey in Study 2, as well as deepening our understanding of how analyst perceptions and biases affect their judgment of CEO behaviour in restatement situations.

In-depth interviews with prior respondents to the survey and other analysts who followed companies in our restatement sample are designed to solicit detailed information about analysts' perceptions to complement and enrich the results from the analysts' survey. The results and conclusions from these interviews should be considered as an extension and corroboration of the findings of our previous studies, and should not be considered as a fully independent third study, standing on its own. The results are presented as a separate Chapter, mainly for presentation and formatting purposes.

We aim to answer the following research questions:

1. Do analysts assess CEO endogenous factors (Integrity, Dominance, Confidence etc.) in restatement situations and does it impact their assessment of the role of the CEO before and after the restatement?
2. Do analysts recognize and assess exogenous factors (Earnings Management Pressures and Executive Job Demands) in restatement situations, and do these factors impact analysts judgment and decision making of CEO behaviour both before and after the restatement?
3. Do analysts consider which constituents failed in their gatekeeper role?
4. Do the interviews corroborate or contradict findings of Study 2 (other than the above)?

The endogenous factors we aim to discuss are typical characteristics of CEOs which we expect to be assessed by analysts in their analysis of companies' value drivers, regardless of whether a restatement situation exists. Research shows that analysts tend to focus on arithmetical data which helps them to predict and assess a company's short-term financial performance – the next quarterly results. Our interest lies in discovering whether these more intangible factors influence analyst assessments of CEO's roles prior and after restatements. In fact, we want to answer the question whether typical CEO characteristics and behaviours are valued by analysts positively or negatively, and whether these characteristics prejudice analysts in their assessments of CEO behaviour in restatements.

Similarly, we test for exogenous factors and whether analysts consider these in their assessment of CEO behaviour. These factors are more related to the executive

functioning of a CEO. We will consider earnings management pressures and executive job demands which we studied and modelled quantitatively in Study 2.

Next, we were interested in other corporate players and their roles in restatement situations as perceived by analysts. We interviewed analysts who acted as countervailing power to the CEO and/or failed in their gatekeeper role. In addition, we queried analysts on whether the company and the CEO took appropriate and timely reputation remediation actions, including governance measures, internal control improvements, and compliance actions. Analysts were also questioned as to whom they believe should be blamed for the restatement.

After content analysis of the interview transcripts, we paired the main findings to the quantitative study in an attempt to see whether they corroborated or contradicted those findings.

## 4.2 Theoretical Framework

In Study 2, we assessed ‘analyst’ perceptions regarding CEO pressures and behaviours and related factors in restatement situations. We assessed a range of pressures on pre-restatement behaviour of CEOs, including earnings management pressures, governance pressures, and perceived task challenges. Further, we looked at analysts’ perceptions of CEO behaviour (dominance), and the latitude of gatekeepers. We hypothesized that these pressures would have an impact on the perceived reputation management behaviour of the CEO before the restatement. All were hypothesized to have a negative effect other than the pressures for proper governance, which was expected to have a positive effect on perceived reputation management behaviour. These pressures were also thought to influence the perceived reputational remediation behaviour of the CEO during the restatement resolution period.

Study 2 findings show that perceived pressures on the CEO to manage earnings, as well as the degree of task challenges posed to him, resulted in positive CEO behaviour perceptions by analysts before the restatement, while such pressures were regarded as negative after a restatement was announced. This significant – and surprising – finding will be put to the test in the in-depth analyst interviews.

A primary purpose of the structured interviews is to corroborate the quantitative findings of Study 2 with respect to earnings management pressures and executive job demands. In addition, we will try to obtain a preliminary explanation as to what causes analysts to flip-flop their views of these two important CEO restatement drivers. Academic literature on CEO characteristics suggests some interesting links between CEO characteristics, such as over-confidence, integrity, dominance and charisma, and the likelihood of CEOs committing earnings management and reporting fraud. Therefore, we interviewed analysts on perceived endogenous CEO characteristics to obtain information that may explain the judgment shift on CEO behaviour as noted above.

We split the factors for this in-depth qualitative study into endogenous and exogenous factors. As endogenous factors, we take the following eight CEO characteristics:

- Integrity;
- Openness;
- Charisma;
- Ambition;
- Dominance;
- Social responsibility;
- Industry knowledge;
- Financial accounting and reporting skills; and,
- Confidence level.

We believe that analysts rate these (and other) CEO attributes in their work either directly or indirectly as part of their evaluation, and that their perceptions of these characteristics will change during a restatement situation.

The exogenous characteristics we make subject of the interviews and test are:

- Pressure to exceed financial expectations;
- A highly demanding strategy aimed at increasing market share;
- External developments implying the necessity to improve corporate reputation;
- Lack of resources; and,
- Negative developments in the industry.

In addition to gathering analyst perceptions surrounding these endogenous and exogenous factors, we will also explore gatekeepers and their roles in restatement situations. Next, we will test the general analyst perceptions of the CEO's role as a control variable to the other factors.

We will be looking for consensus on these issues across all the analysts interviewed, while isolating deviations. The interviews are designed to uncover other related issues that may be of interest and were not on our radar screen during the analysts' survey design. Because we have not discussed the concept of CEO confidence in detail in

the previous chapters, we will also provide an overview of available literature on the topic.

In a recent *Administrative Science Quarterly* article, Chatterjee and Hambrick (2006) provide more background on the characteristics of narcissistic CEOs and the resulting implications on firm financial strategy. Similarly, a *Strategic Management Journal* article by Hayward et al., (2004), places CEO celebrity in the context of media interaction and adulation, exploring the interaction of top executives with journalists – an approach that can also be taken with respect to interaction between analysts and charismatic CEOs. Another study strongly considers CEO celebrity in connection with analysts' ratings and/or assessment (Fanelli & Misangyi, 2006), raising the question of whether such interaction between analysts and CEOs can have the effect of blinding analysts to a company's bottom-line problems. Fanelli and Misangyi ask whether analysts lack the ability to draw the parallels between over-confidence and over-optimism with possibly aggressive accounting practices. The researchers conclude:

As the results of the study show, analysts who attend to the charismatic language of the CEO to craft their recommendations do not derive from it an increased earnings forecast accuracy. Thus, paying attention to CEO charisma might be a less than desirable strategy for analysts. For investors, a charismatic CEO might not necessarily correspond to a 'proven talent' (Fanelli et al. 2004: 6).

Similarly, Davis, Piger and Segor (2008), find that optimistic or pessimistic words in earnings press releases are positively or negatively, respectively, associated with future firm performance. In their view, this suggests that press releases contain credible information about future firm performance. Evidently, this reasoning falls apart when a restatement hits, and analysts are disappointed that they were misled by management. In another study, Sedor (2002), finds that when information to analysts is framed or structured in a manner which creates a plausible future scenario, analysts tend to issue more optimistic earnings forecasts, compared to when the same information is just listed plainly. These findings were also reported earlier by Barton and Mercer (2005) – in an experiment with analysts, they established that a plausible explanation of poor financial performance was treated more favourably by analysts, compared to an explanation based on incoherent external factors. Hong

and Kubik (2003) find that job separation for analysts covering stocks underwritten by their firm depends less on forecast accuracy, and more on optimism expressed in their earnings estimates and recommendations.

Taking a step back to look at the bigger picture, DeBondt and Thaler (1994) have noted that, 'Perhaps the most robust finding in the psychology of judgment and decision making is that people are overconfident.' In particular, for CEOs who have been able to fight themselves to the top of the corporate ladder and deal with high job demands as a matter of course, it might be a natural result that on average, they are more overconfident and believe strongly that they are in control (Moore & Healy, 2008). Accordingly, this concentration of control in the hands of a CEO leads to humble submission and respect by gatekeepers, which in turn only serves to further bolster CEO overconfidence (Paredes 2005). The higher the executive job demands, the greater this respect – and the less countervailing power that exists.

In a working paper titled 'Executive Overconfidence and the Slippery Slope to Fraud,' Schrand and Zechman (2008) find that companies with higher executive job demands attract and/or employ more overconfident managers. They write, 'The sample demonstrates industry clustering in risky, dynamic, high-growth industries that face significant idiosyncratic risk. Such industries are attractive to overconfident executives according to locus of control theories.' From this literature, it becomes further evident that CEO (over)confidence can be an important red flag for analysts in their assessment of whether firms, and/or their CEOs, will engage in financial reporting fraud. It is the quantifying of such overconfidence that remains the key. Langevoort (2004: 286), in 'Resetting the Corporate Thermostat,' recalls a directorial observation from the 2003 documentary about the downfall of Enron, *The Smartest Guys in the Room*:

McLean and Elkind's observation about Enron's corporate culture hints that there was an intense psychological dynamic at work in which ego, hubris, narcissism, rationalization and self-deception were strong forces at both the individual and organizational levels. While that may just be journalistic imagination, an important bit of supporting evidence is the palpable weakness of efforts within Enron to hide the machinations from scrutiny. In fact, most all the general features of what are now assumed to be manipulations were left in plain view – only the details and precise strategies were obscured.

This possibly hints at the concept of 'bounded awareness,' which has been discussed earlier in Chapter 3. The over-confidence of celebrity CEOs appears to have a blinding effect on gatekeepers, including analysts. Paredes (2005: 711) states that:

CEO overconfidence exacerbates the expectations game and the distortions and inefficiencies it can lead to. Overconfident CEOs have unrealistic expectations for the business, which in turn become the standard by which the market judges the company's performance. Management, then, is under even greater pressure to meet the overly optimistic expectations it shapes.

Paredes argues that CEO overconfidence is a result of common corporate governance practices, and of the power the CEO is bound to extract from those structures.

## 4.3 Methods

The 23 in-depth interviews were held by telephone using a pre-designed questionnaire and script. On average, they took 17 minutes to conduct. Output was transcribed and results collated in a spreadsheet for content analysis. Those analysts that agreed to participate offered useful insights, and were interested in the project itself.

### 4.3.1 ANALYSTS' SAMPLING

We aimed to complete 20 analyst interviews for this part of the study with a 50/50 split between European and North American respondents. Initially, e-mails were sent to the 61 analysts in Europe and North America who had completed the online survey, asking them whether they would be willing to be interviewed in more depth. Five days after sending this e-mail 11 refusals and 12 bounced e-mails were received. The remaining 48 analysts were contacted by telephone to attempt to set up or conduct interviews. This process resulted in only five completed interviews. Many phone numbers were wrong, or analysts were not available. Therefore, we decided to widen the target population to include 204 analysts in Europe and 601 in the United States who had not completed the online survey. An e-mail shot was sent to these analysts. After filtering out bounced e-mails, calls were initiated to secure at least 10 European and 10 American interviews. Calls were made at strategic times, such as during lunch hours or right after market closure. This process resulted in 23 completed interviews.

It should be noted that approximately 50 per cent of the American and 35 per cent of the European secondary contact data was deemed obsolete due to bounced e-mails and telephone calls uncovered further obsolete details. Due to the emerging credit crunch and ensuing financial crisis, during the research period there had been significant analyst layoffs. This no doubt influenced the difficulty in securing interviewees. A total of 94 phone calls were made to potential American analysts, and 65 to Europeans, in order to reach the target sample size. In some cases, the analyst requested to set up a time for a call-back to conduct the survey. In others, the questions were requested by e-mail in advance of a conversation.

The decision to include analysts who did not complete the online survey will allow for a mixed representative data set. We will be able to directly compare results with the

online survey as well as work from a wider respondent base for the in-depth results. The table below shows the breakdown of the 23 respondents by the company they follow. Bolded results in the table denote analysts who completed the online survey (9).

**TABLE 4.1 OVERVIEW OF INTERVIEW RESTATEMENT COMPANIES**

| COMPANY                  | RESTATEMENT TIME FRAME | REGION               | COUNTRY        |
|--------------------------|------------------------|----------------------|----------------|
| Friends Provident        | Nov-07                 | Europe               | UK             |
| Tomkins                  | May-06                 | Europe               | UK             |
| Reuters                  | Feb-06                 | Europe               | UK             |
| <b>Siemens</b>           | <b>Q2 2007</b>         | <b>Europe</b>        | <b>UK</b>      |
| Mediaset                 | Jan-07                 | Europe               | UK             |
| Altran                   | 2003-4 Fiscal Year     | Europe               | France         |
| Ahold                    | Feb-03                 | Europe               | UK             |
| Delhaize                 | Apr-07                 | Europe               | France         |
| <b>CIBA Chemicals</b>    | <b>Q1/Q2 2004</b>      | <b>Europe</b>        | <b>Germany</b> |
| Reuters                  | Feb-06                 | Europe               | UK             |
| Fairfax                  | Aug-06                 | North America        | USA            |
| <b>Patterson UTI</b>     | <b>Dec-05</b>          | <b>North America</b> | <b>USA</b>     |
| <b>Patterson UTI</b>     | <b>Dec-05</b>          | <b>North America</b> | <b>USA</b>     |
| CIE Entertainment        | Q1 2007                | North America        | Mexico         |
| <b>Key Energy</b>        | <b>Q1 2004</b>         | <b>North America</b> | <b>USA</b>     |
| <b>BP</b>                | <b>Jun-06</b>          | <b>North America</b> | <b>USA</b>     |
| <b>BearingPoint</b>      | <b>Jan-06</b>          | <b>North America</b> | <b>USA</b>     |
| Cablevision Systems Corp | Apr-06                 | North America        | USA            |
| Coherent Incorporated    | Apr-05                 | North America        | USA            |
| Cadence Design Systems   | Nov-08                 | North America        | USA            |
| First Data Corp          | Sep-06                 | North America        | USA            |
| <b>Flowserve</b>         | <b>Feb-06</b>          | <b>North America</b> | <b>USA</b>     |
| Nortel                   | Nov-07                 | North America        | USA            |

In three cases, the analyst claimed not to have followed the company we had on file for them based on the database sourcing (see Chapter 3). In these cases, the analysts were able to recall another restatement case for a company they followed and we conducted the interview on that case.

#### 4.3.2 PROCEDURES AND INTERVIEW PROTOCOL

Although it was difficult to secure participation amongst the analysts targeted, once in the process of being interviewed, all were very helpful and open. There was a clear interest in the topic and a desire to elaborate on their responses. The respondents took part with the understanding that their response would not be attributable to them, and that this was a part of academic research. In some cases, they expressed an interest in the final results of the research project. For those participants we will send a summary of the results. All respondents were sent a thank-you note following their interview.

Also of note is that for every successful interview, the paper's author made a donation to a micro-credit fund (similar to an enticement used to complete the survey in Study 2), which helped to secure analysts' willingness to participate. We reserved the explicit mention of this on the phone to those cases requiring a slight 'nudge' to participate. The main reason for not participating was lack of time. Many e-mails were received citing the market instability, and ensuing lack of time as a reason to not participate in the interview. It took continual phone calls over two weeks to secure the desired response set.

Based on the theoretical framework described above, an interview guide was designed to solicit the analyst perceptions. This was designed to function as a script from which the interviewer could veer slightly to keep up a lively conversation. On the whole, all the respondents were happy to answer all the questions. Two 'ice breaker,' or introductory questions, were asked referring to the analyst's views about the main cause of the restatement and the general importance of the CEO in trying to exceed expectations. This last question would lead to discussion of one of the exogenous restatement factors which we hoped to uncover.

To further map analyst perceptions regarding the CEO's role, we asked them how they evaluated this role both before and after the restatement. Most importantly in this regard, we devised a list of CEO characteristics that we thought might impact the analyst evaluations of the CEO's role both before and after the restatement, namely (as mentioned previously) integrity, openness, charisma, ambition, dominance, social responsibility, industry knowledge, financial accounting and reporting skills and confidence level.

Also as previously noted, in terms of the exogenous factors, we tested analyst perceptions regarding the following pressures and whether they impacted the CEO before the restatement:

- Pressure to exceed financial expectations
- A highly demanding strategy aimed at increasing market share
- External developments implying the necessity to improve corporate reputation
- Lack of resources
- Negative developments in the industry

Further questions were set to gain deeper insight into these areas as well as to assess the influence of 'countervailing powers,' such as gatekeepers and their failure. In particular, we are interested in how analysts perceive the role of various gatekeepers and their responsibilities in mitigating risk. We also discussed the effectiveness of CEO communications surrounding the restatement, and ended with a general question about how to minimize restatements – what do analysts believe can be done to avoid the restatement phenomena in the future?

The online survey used in Study 2 was designed with Likert scale questions and a few other closed-answer questions. This in-depth interview questionnaire was meant to look further into those results and to see whether the analysts could elaborate on this topic. The questionnaire was designed to serve as a checklist of essential topics that were meant to be covered – further elaboration was attempted where time allowed. This yielded some interesting conversations and results. One memorable respondent explained at length his view about the problems surrounding the credit crunch, and elaborated on who was to blame for much of the current financial malaise. His personal view was that CEOs often simply play the part carved out for them, and are rarely to blame directly for restatement issues. At times there are cases of fraud, but on the whole senior executives run businesses to the best of their ability within given constraints. This and other results are discussed in-depth in the next section. The questionnaire script is reproduced below:

You were involved with the (Company X – see database) case. We would like to ask you some questions about your assessment of that company, and its CEO BEFORE and AFTER the announcement of the restatement (date – see database).

|     |   |
|-----|---|
| 1)  | What was the main cause of the restatement in your opinion?   |
| 2)  | In general, how important did you consider the contributions of the CEO in trying to exceed (financial) performance expectations before the restatement? How did you evaluate the role of the CEO in general at the company? (without and with hindsight) |
| 3)  | How did you evaluate the role of the CEO BEFORE the restatement?  |
| 4)  | How did you evaluate the role of the CEO AFTER the announcement of the restatement?   |
| 5)  | How did the following qualities (or lack of qualities) of the CEO impact your evaluation of his role? (before and after the restatement)  |
| a.  | Integrity   |
| b.  | Openness  |
| c.  | Charisma  |
| d.  | Ambition  |
| e.  | Dominance   |
| f.  | Social responsibility   |
| g.  | Industry knowledge  |
| h.  | Financial Accounting & Reporting skills   |
| i.  | Confidence level  |
| 6)  | In your opinion, how did the following pressures impact the CEO of the company BEFORE the restatement (low---high impact, why? – both without and with hindsight)   |
| a.  | Pressure to exceed financial expectations   |
| b.  | A highly demanding strategy aimed at increasing market share  |
| c.  | External developments implying the necessity to improve corporate reputation  |
| d.  | Lack of resources   |
| e.  | Negative developments in the industry   |
| 7)  | Which constituents failed in their gatekeeping role, and why?   |
| a.  | Independent Board   |
| b.  | Audit Committee   |
| c.  | Legal counsel   |
| d.  | CFO   |
| e.  | Regulators  |
| f.  | Independent auditors  |
| g.  | Financial analysts  |
| 8)  | Were you surprised about this restatement? Why?   |
| 9)  | How did this surprise affect your assessments of the Company and the CEO after the restatement?   |
| 10) | Did the CEO take adequate governance initiatives to remediate the crisis situation? If yes – how? Which governance initiatives were most effective? If not, what should he have done?   |

|     |   |
|-----|---|
| 11) | Did the CEO communicate open and honestly on the problem? Please elaborate.   |
| 12) | To what degree did the CEO put the blame for the crisis situation on others? In your opinion, can the CEO's blaming be justified?   |
| 13) | In hindsight, why didn't you report 'red flags' before the statement?   |
| a.  | Insufficient information  |
| b.  | Assessed growth targets as realistic at that moment (not critical enough)   |
| c.  | I completely relied on the trustworthiness of the CEO   |
| 14) | In general, what should be done to avoid the restatement phenomenon in the future? (Make financial reporting easier; reduce complexity of GAAP; have stricter regulation; invent a new super gatekeeper? etc) |

During and after each interview, the interviewer transcribed all the comments verbatim under each relevant section. Once the data was transcribed and collated in a database, it was subjected to content analysis. This was performed by two data analysts. One analyst was the interviewer of all the interviews, and the other was an independent analyst with no prior exposure to the project. This double-content analysis was designed to minimize the subjectivity of the coding procedure and analysis of themes. The independent analyst was asked to go through each subject area across all responses, and to code the content by grouping the most relevant themes before tallying the frequency of mention of each theme. The output from the independent analyst was then compared to the interviewer's analysis to arrive at a final result. In some cases, minor tweaks and nuances were necessary based on this two-pronged approach, but no radical differences emerged between the two analyses due to the straightforward nature of the results. For each theme or coded answer type, a descriptive quote was selected from the verbatim transcripts to demonstrate that answer category. The results can thus be viewed on an answer-by-answer basis, with frequencies of mentions and relevant quotes. In the next section we will describe the results in detail.

## 4.4 Data Analysis and Empirical Findings

For each question, we coded the commentary into prevalent themes or topics. The frequency of mention of each response category gave some indication of the importance of certain themes for the analysts and allowed for the results of the other sub-studies to be validated. The use of two independent analysts in coding the analysts' commentaries allowed for non-biased objective results.

### 4.4.1 ENDOGENOUS FACTORS

Just over 39 per cent of respondents cited fraudulent behaviour as the main cause of the restatements under consideration. This is the highest ranking cause amongst interviewees. The second most often mentioned cause of restatements in the eyes of analysts was internal error, such as accounting and control issues (21.7 per cent). The rest of the reasons were attributed to changes in strategy, procedure or structure (21.7 per cent), and external conditions (17.4 per cent). This shows the relative importance of factors endogenous to senior executive behaviour and the way companies are run. However, CEOs are rarely mentioned as part of the main cause of the restatements. More often the fraud involves a CFO, other executives or employees, but, according to analysts, the CEO is not directly implicated. Indirectly of course, analysts recognize that the CEO has final responsibility for the corporate activities, and by allowing a certain culture to flourish (high pressure to deliver, corner-cutting, etcetera), the 'tone-at-the-top' can often play a key role in making corporate misbehaviour socially acceptable within firms.

The interviews showed that analysts' overall evaluation of the CEOs under consideration dropped significantly after restatements. Interviewees mostly held favourable assessments of the CEOs prior to the restatement; and these dropped significantly even though CEOs were not directly implicated. This again points to the fact that CEOs directly, or indirectly, are seen as playing a role in restatement situations. Analyst evaluations of their behaviour are assessed, and largely become more negative, as a result of the restatement. There were just a few cases where analysts' positive perceptions about the CEO were reinforced due to the positive way in which a restatement was handled, but these are less prevalent (out of the six that remained positive about the CEO, only two can be ascribed directly to the CEO's handling of the restatement).

On the other hand, almost all the analysts interviewed recognized that positive steps were taken (not necessarily by the outgoing CEO), such as governance overhaul and enhanced internal controls and compliance measures as a result of the restatement. Any clear findings of CEO's self-blaming behaviour in Study 2 are absent; in the interviews the analysts provide credit to the CEO for shouldering their share of the blame and not pointing fingers. Furthermore, the CEO in more than half the cases was seen as a good communicator throughout the restatement episode.

In order to further test for the relevance of endogenous factors, interviewees were asked whether a certain set of qualities was used to evaluate the CEO's role before and after the restatement. Integrity, ambition, industry knowledge and CEO confidence were the three highest-scoring evaluation criteria used by the analysts prior to the restatement. CEO confidence showed the largest drop in analysts' assessment in the post-restatement period.

#### 4.4.2 EXOGENOUS FACTORS

When asked directly how important the analyst considered pressures on the CEO to exceed (financial) performance expectations before the restatement, 57.1 per cent thought that such pressures were important or very important. Therefore, this particular exogenous factor is indeed important. This was ranked as the most important pressure on the CEO. Other high pressures included 'negative developments in the industry,' and, 'a highly demanding strategy aimed at increasing market share.' This confirms findings from Study 2. Earnings management pressures are also recognized by analysts in the pre-restatement period.

#### Gatekeepers

CFOs are seen, by far, as the key constituent who failed in their gatekeeper role in relation to the restatements. Regulators, on the other hand, are not seen as having failed in their role. Implementing regulation changes is not expected by analysts to have any impact on decreasing the occurrence of restatements. Better standards and rules, and simpler, more transparent financial reporting would all work better towards preventing restatements, according to the interviewees.

#### 4.4.3 INTERVIEW RESULTS AND TABLES – ILLUSTRATIVE COMMENTS

**TABLE 4.2 INTERVIEW RESULTS AND ILLUSTRATIVE COMMENTS**

**Main causes of restatements**

(Q1 What was the main cause of the restatement in your opinion?)

| Rank | Theme  | Freq. | Sample comments  |
|------|--|-------|--|
| 1    | Fraudulent behaviour                                 | 9     | <ul style="list-style-type: none"> <li>• 'The CFO embezzled \$70 million. from the company'</li> <li>• 'They were advancing booking expenses, because they were running ahead of plans. The head of the business unit was attempting to get a head start on the following year's budget. Had been doing it for a number of years in a row. Triggered FCC investigation into the company.'</li> </ul> |
| 2    | Accounting / control error or other internal failure | 5     | <ul style="list-style-type: none"> <li>• 'Poor internal controls had a disaster on fixed assets and pretty much everything needed to be revised. Failure across the company.'</li> </ul>   |
| 3    | Change in strategy, procedure or structure           | 5     | <ul style="list-style-type: none"> <li>• 'The main cause was a change in strategy away from rapid growth; they then ran out of money to sustain this and thus focused upon reshaping the business.'</li> <li>• 'Change in accountancy procedures, fairly routine change.'</li> </ul>   |
| 4    | External conditions                                  | 4     | <ul style="list-style-type: none"> <li>• 'A change in the law of their business, in the gaming sector, a new tax law was introduced by the government.'</li> </ul>   |

**Importance of CEO's role**

(Q2a In general, how important did you consider the contributions of the CEO in trying to exceed (financial) performance expectations before the restatement?

| Rank | Theme                  | Freq. | Sample comments   |
|------|------------------------|-------|---|
| 1    | Very important         | 10    | <ul style="list-style-type: none"> <li>• 'Extremely important, CEO trying exceed targets, this restatement helped them to do that.'</li> <li>• 'He was key to a micro-credit fund; it was his decision to rapidly to grow the business.'</li> </ul> |
| 2    | Not a relevant factor  | 7     | <ul style="list-style-type: none"> <li>• 'Simply a function of the company going through changes, rather than an oversight on their part.'</li> </ul>   |
| 3    | Important              | 2     |   |
| 4    | Indirectly some impact | 2     |   |

### General evaluation of CEO

(Q2b How did you evaluate the role of the CEO in general at the company?)

| Theme    | Freq. | Sample comments  |
|----------|-------|--|
| Positive | 3     | <ul style="list-style-type: none"> <li>• 'Pretty good, he inherited a basket-case. Tried to turn it around. Simply a function of the company going through changes, rather than an oversight on their part.'</li> </ul>  |
| Neutral  | 2     | <ul style="list-style-type: none"> <li>• 'My initial impressions of the CEO was that he was very good and very good for the company, when you hit the middle of 2007 opinion changed and I felt that he had done all he could do and he was beginning to be detrimental.'</li> </ul> |
| Negative | 7     | <ul style="list-style-type: none"> <li>• 'The CEO guaranteed growth and he had a tremendous pressure on his organisation everyone from top to bottom was advancing revenue to try and make an extra week.'</li> </ul>  |

### Evaluation of CEO before the restatement

(Q3 How did you evaluate the role of the CEO BEFORE the restatement?)

| Theme             | Freq. | Sample comments   |
|-------------------|-------|---|
| Positive          | 7     | <ul style="list-style-type: none"> <li>• 'Very positive, he is a man with a lot of pragmatism, culturally right for this company.'</li> </ul>   |
| Quite positive    | 1     | <ul style="list-style-type: none"> <li>• 'Fairly positively, faced a difficult challenge.'</li> </ul>   |
| Neutral           | 5     | <ul style="list-style-type: none"> <li>• 'Fairly positive opinion as an overall manager and a leader, perception weaker from an accounting standpoint.'</li> </ul>  |
| Slightly negative | 4     | <ul style="list-style-type: none"> <li>• 'Concern, with the CEO, very charismatic, got impression numbers were not properly audited. Weaker on auditing, organisation decentralised with relatively light infrastructure. Easier for local manager to improve performance without being detected.'</li> </ul> |
| Negative          | 5     | <ul style="list-style-type: none"> <li>• 'Arrogant and complacent, strategy in terms of group structure was wrong.'</li> </ul>  |

### Evaluation of CEO after the restatement

(Q4 How did you evaluate the role of the CEO AFTER the restatement?)

| Theme                   | Freq. | Sample comments   |
|-------------------------|-------|---|
| Negative                | 12    | <ul style="list-style-type: none"> <li>• 'Continued to feel strengths were still the same, but had weakened my perception of his accounting and underwriting perspective.'</li> <li>• 'At the time news broke, he and four other execs were removed. My view has plummeted as it looked suspicious.'</li> </ul> |
| No change in perception | 8     | <ul style="list-style-type: none"> <li>• 'Reinforced positive perception of him, although it was mainly the CFO who organised this move.'</li> <li>• 'Didn't change very much, some obvious disappointment with the fact they didn't have internal controls to catch something like this sooner.'</li> </ul>    |

### CEO Qualities

(Q5 How did the following qualities (or lack of qualities) of the CEO impact your evaluation of his role? (before and after the restatement))

Key: 5 - Very High; 4 - High; 3 - Moderate; 2 - Low; 1 - Very Low; 0 - None

| Attribute                                 | Mean before | Mean after | Change | Change Rank | Sample comments   |
|---|-------------|------------|--------|-------------|---|
| Confidence                                | 3.35        | 2.50       | -0.85  | 1           | <ul style="list-style-type: none"> <li>• 'CEO's confidence, probably weakened after the restatement somewhat. My perception certainly weakened. I remember thinking afterwards that it was partly his confidence had led to too much recklessness.'</li> <li>• 'They had a lot of confidence going into the restatement, post that you could see the confidence being shattered. You could see he was losing control. His overconfidence led to detrimental oversights.'</li> <li>• 'This [restatement] made me reconsider whether the top executives' high levels of confidence were really such a good thing.'</li> </ul> |
| Openness                                  | 3.33        | 2.81       | -0.52  | 2           | <ul style="list-style-type: none"> <li>• 'Definitely good, restatement reinforced this area.'</li> <li>• 'Initially very open, but became clear he was a liar.'</li> </ul>  |
| Integrity                                 | 3.71        | 3.33       | -0.38  | 3           | <ul style="list-style-type: none"> <li>• 'This is one of the top 3 indicators of CEO success. The perception of Nortel's CEO on this score rapidly declined during restatement.'</li> </ul>   |
| Financial Accounting and Reporting Skills | 2.86        | 2.48       | -0.38  | 4           | <ul style="list-style-type: none"> <li>• 'Suffered directly from restatement, perception of being average declined to below average skills.'</li> <li>• 'More industry-based, rather than finance based, medium. Post the restatement has attempted to focus more on this area.'</li> </ul>   |
| Charisma                                  | 3.25        | 2.90       | -0.35  | 5           | <ul style="list-style-type: none"> <li>• 'Mixed view, there were investors that liked him and those that disliked him. Bar bell on the charisma. Afterwards, there was a migration towards not liking him. I was more on negative side from the very beginning.'</li> </ul>   |
| Ambition                                  | 3.71        | 3.38       | -0.33  | 6           | <ul style="list-style-type: none"> <li>• 'Dented. Although reality check from restatement perversely made the subsequent strategy stronger.'</li> <li>• 'His over-ambition fuelled by the earnings management culture led to this situation. Initially I thought it was a good thing that he was extremely driven, but afterwards I realised he went way too far.'</li> </ul>   |
| Dominance                                 | 3.28        | 3.00       | -0.28  | 7           | <ul style="list-style-type: none"> <li>• 'At the beginning he was a dominating figure, almost intimidating. After restatement as he started to lose grace and he declined. I didn't mind his dominance before, because it led to good results.'</li> <li>• 'Has suffered, before very dominant, afterwards more average in his running of the business.'</li> </ul>   |
| Social Responsibility                     | 3.00        | 2.84       | -0.16  | 8           | <ul style="list-style-type: none"> <li>• 'High to low, socially irresponsible actions.'</li> </ul>  |
| Industry Knowledge                        | 3.61        | 3.47       | -0.14  | 9           | <ul style="list-style-type: none"> <li>• 'Has suffered: Before it was normal, afterwards it was perceived to be below average.'</li> </ul>  |

### Pressures on CEO

(Q 6 In your opinion, how did the following pressures impact the CEO of the company before the restatement)

Key: 5 - Very High; 4 - High; 3 - Moderate; 2 - Low; 1 - Very Low; 0 - None

| Pressure   | Mean | Key Remarks  |
|--|------|--|
| Pressure to exceed financial expectations                                    | 3.30 | <ul style="list-style-type: none"> <li>• 'High, under pressure to get the company back to where it was; big demand to raise cash flow.'</li> <li>• 'High. In the summer of 2007 there was a Wall Street article that the company was likely to be sold to a private equity firm. The deal then fell apart. Subsequently stock collapsed leading to pretty high pressure on the CEO to right the ship to recapture huge lost opportunity.'</li> </ul> |
| Negative developments in the industry  | 3.04 | <ul style="list-style-type: none"> <li>• 'Industry was weakening from a position of strength, somewhat important but not as important as pressure to exceed financial expectations.'</li> <li>• 'Yes, the advertising market was under pressure, the restatement demonstrated that the pressures were even more acute.'</li> </ul>   |
| A highly demanding strategy aimed at increasing market share                 | 2.70 | <ul style="list-style-type: none"> <li>• 'Yes, high. Essentially all out to seize the top line, happy to turn a blind eye to most things.'</li> </ul>  |
| External developments implying the necessity to improve corporate reputation | 1.33 |  |
| Lack of resources  | 1.20 | <ul style="list-style-type: none"> <li>• 'Not perceived to be a problem prior to the restatement. However, after the restatement it became clear that there was a problem in the accounting department.'</li> </ul>  |

### Failure of gatekeepers

(Q 7 Which constituents failed in their gatekeeping role, and why?)

Key: 5 – Definitely failed; 4 -Failed; 3 –May have failed; 2 – Did not necessarily fail; 1 – Did not fail

| Gatekeeper           | Mean | Key Remarks  |
|----------------------|------|--|
| CFO                  | 3.71 | <ul style="list-style-type: none"> <li>• 'Key responsibility outside of CEO. The CFO knew a lot of information and chose either to hold it back or held it back because the CEO said no.'</li> <li>• 'He had an active role and was for sure the gatekeeper. Key responsibility.'</li> </ul> |
| Audit Committee      | 2.75 | <ul style="list-style-type: none"> <li>• 'Failed completely, internal checks were inadequate.'</li> <li>• 'Yes, revenue recognition is a complex issue but you've got three fail-safes, one of which is this.'</li> </ul>  |
| Independent Board    | 2.62 | <ul style="list-style-type: none"> <li>• 'Failed. They did not execute their responsibilities. Their job is to be an outside monitor.'</li> <li>• 'Independent for a reason, meant to apply an impartial viewpoint. Failed.'</li> </ul>  |
| Independent Auditors | 2.55 | <ul style="list-style-type: none"> <li>• 'They failed to detect this when they could have done far earlier.'</li> </ul>  |
| Legal Counsel        | 1.70 | <ul style="list-style-type: none"> <li>• 'Came too late to prevent crisis.'</li> <li>• 'Invisible, but didn't necessarily fail. Did their job and were ignored, raised internal warning flags.'</li> </ul>   |
| Financial Analysts   | 1.53 | <ul style="list-style-type: none"> <li>• 'The company was very aggressive in making claims of how well they were doing, analysts were suspicious.'</li> <li>• 'Little chance, the numbers had been audited through proper procedures as far as could be seen.'</li> </ul>                    |
| Regulators           | 1.45 | <ul style="list-style-type: none"> <li>• 'Before it became public, difficult to say whether they should have stepped in.'</li> </ul>   |

### Surprised about restatement

(Q 8 Were you surprised about this restatement? Why?)

|     | Why                                    | Freq. | Key Remarks  |
|-----|--|-------|--|
| Yes | Insufficient or inaccurate information | 9     | <ul style="list-style-type: none"> <li>• 'I was surprised, it was a complex transaction, but I guess I had always understand it to have been accounted for correctly and in the various analyses that I had done of it I had reached the conclusion that it was probably done correctly. Somewhat surprised that it wasn't.'</li> <li>• 'Yes, completely taken off kilter by this. Shocked. Although the risk was growing prior to the restatement it was simply impossible to foresee this.'</li> </ul> |
|     | Scale of restatement                   | 4     | <ul style="list-style-type: none"> <li>• 'Yes, surprised by the size. Something more or less unavoidable given the economic climate, but the scale was enormous.'</li> </ul>   |
|     | Timing                                 | 3     | <ul style="list-style-type: none"> <li>• 'I had expected something to happen in terms of refinancing, but rather a positive surprise, since they chose to refinance sooner rather than later. Few analysts anticipated that they would take such a long term view largely with 2011 in mind.'</li> <li>• 'Surprised at the timing, in the sense of only six weeks before restatement was issued, which marked such a sharp contrast.'</li> </ul>   |
|     | Lack of experience                     | 1     | <ul style="list-style-type: none"> <li>• 'Yes, I was new to the industry; I was lacking the necessary experience in hindsight.'</li> </ul>   |
|     | Other                                  | 1     |  |
| No  | Widely Anticipated                     | 4     | <ul style="list-style-type: none"> <li>• 'No, it was widely anticipated. Change in make-up of business after they sold the business unit in question. Not uncommon for a company to dispose of a business then change reporting structure.'</li> </ul>   |
|     | Issued Alerts                          | 1     | <ul style="list-style-type: none"> <li>• 'No, issued alert. Surprised they got so quickly where they were, although outcome was expected in the end.'</li> </ul>   |

### Effect on assessments

(Q How did this surprise affect your assessments of the Company and the CEO after the restatement?)

| Effect              | Freq. | Key Remarks  |
|---------------------|-------|--|
| very negative       | 4     | <ul style="list-style-type: none"> <li>• 'Significantly reduced the book value of the company, my valuation of it from there on was proportionally lower.'</li> <li>• 'Tarnished views on the company, people still raise it today. Reputation very damaged across the market as a result.'</li> </ul> |
| negative            | 12    | <ul style="list-style-type: none"> <li>• 'Because they got it wrong, it undermined their credibility, simply due to the conflicting information given before and after the restatement.'</li> </ul>  |
| unchanged / neutral | 3     | <ul style="list-style-type: none"> <li>• 'Since it wasn't a surprise, it did not substantially affect my assessments of the company and CEO.'</li> </ul>   |
| positive            | 1     | <ul style="list-style-type: none"> <li>• 'Positive and reinforced good perceptions.'</li> </ul>  |

### CEO governance initiatives

(Q 10 Did the CEO take adequate governance initiatives to remediate the crisis situation? If yes – how? Which governance initiatives were most effective? If not, what should he have done?)

|     | Initiatives   | Freq. | Key Remarks  |
|-----|---|-------|--|
| Yes | Overhauled internal procedures and controls                   | 12    | <ul style="list-style-type: none"> <li>• 'Internal controls were beefed up and internal accounting improved. They hired outside consultants and accounting personnel, went through and re-scrubbed a lot of the data.'</li> <li>• 'Internal procedures were completely overhauled, new internal procedures and risk management were implemented.'</li> </ul> |
|     | CEO Replaced - New CEO took correct steps                     | 5     | <ul style="list-style-type: none"> <li>• 'Yes. Replacement CEO was brought into preside over the restatement that became more or less driving force of the company.'</li> </ul>  |
|     | Entire Executive Board Replaced - New team took correct steps | 2     | <ul style="list-style-type: none"> <li>• 'Yes, changed whole board, changed other people too.'</li> </ul>  |
|     | Reduced Costs   | 1     | <ul style="list-style-type: none"> <li>• 'They issued a lot of redundancy in an effort to control expenditures. This was relatively effective as they brought costs to heel.'</li> </ul>   |
|     | CEO refused to quit   | 1     | <ul style="list-style-type: none"> <li>• 'Under extreme pressure eventually chose to leave the company, which happened later than it should have done.'</li> </ul>   |
| No  | Insufficient internal reforms                                 | 1     | <ul style="list-style-type: none"> <li>• 'He implemented a strategic review, but has failed to sell any of the businesses.'</li> </ul>   |

### CEO communication

(Q 11 Did the CEO communicate open and honestly on the problem? Please elaborate.)

| Quality of communication | Freq. | Key Remarks   |
|--------------------------|-------|---|
| Well                     | 13    | <ul style="list-style-type: none"> <li>• 'Yes, very clear on being triggered by rationalisation. Briefings of analysts, phone conversations. They very much lead the way in communicating the changes in an open and honest fashion.'</li> </ul>  |
| Eventually well          | 4     | <ul style="list-style-type: none"> <li>• 'Not immediately, but became impossible to hide given the scale of the company. Afterwards relatively clear communication.'</li> </ul>   |
| Neutral                  | 1     | <ul style="list-style-type: none"> <li>• 'Fired shortly prior to its announcement. The company did communicate honestly, but not necessarily that openly. They were protective in terms of the amount of the information they were willing to divulge.'</li> </ul>  |
| Poor                     | 2     | <ul style="list-style-type: none"> <li>• 'They were vague and showed them with a very specific agenda, portrayed change in necessary light which wasn't accurate. Never fully clarified.'</li> <li>• 'Originally it broke through the press, not via CEO. Once the story was out there, the communication was poor throughout the initial period because they didn't know themselves. Afterwards it improved.'</li> </ul> |

### Blame

(Q 12 To what degree did the CEO put the blame for the crisis situation on others? In your opinion, can the CEO's blaming be justified?)

| Blame taking / sharing | Freq. | Key Remarks   |
|------------------------|-------|---|
| Took brunt of blame    | 9     | <ul style="list-style-type: none"> <li>• 'Not very much, took the blame himself. Correct call.'</li> </ul>  |
| Shared blame           | 1     | <ul style="list-style-type: none"> <li>• 'He blamed 20 per cent of it on himself and 80 per cent on others. He has not blamed himself enough, and worsened my perception of him directly as a result.'</li> </ul> |
| Took no blame          | 5     | <ul style="list-style-type: none"> <li>• 'Didn't [blame others], but he also denies any personal responsibility.'</li> </ul>  |

### Red flags

(Q 13 In hindsight, why didn't you report 'red flags' before the statement happened?)

| Rank | Reason  | Mean | Key Remarks  |
|------|---|------|--|
| 1    | Insufficient Information  | 3.65 | <ul style="list-style-type: none"> <li>• 'We depend on the company to report reasonably accurate statements and depend on auditors to catch them if they don't – in this case people missed.'</li> <li>• 'It was impossible to see the level of corruption.'</li> </ul>  |
| 2    | Assessed growth targets as realistic at that moment (not critical enough) | 2.29 | <ul style="list-style-type: none"> <li>• 'Secondary factor. Under the belief they were realistic, because the growth targets were not excessive targets. Growth targets were probably somewhere around 15 per cent earnings growth, probably in reality it should have been closer to 12 per cent.'</li> </ul> |
| 3    | Over-reliance on the trustworthiness of the CEO                           | 2.06 | <ul style="list-style-type: none"> <li>• 'Also over relied on trustworthiness of CEO, and hoped he would have at least sent us signals prior to making the change. However, this was a lesser factor.'</li> </ul>  |

### Preventing restatements

(Q14 In general, what should be done to avoid the restatement phenomenon in the future?)

| Rank | Reason   | Freq. | Key Remarks   |
|------|--|-------|---|
| 1    | Simpler and more transparent financial reporting | 6     | <ul style="list-style-type: none"> <li>• 'Would like to see companies providing greater information, more granularities, some of the broader impacts into how they are arriving into numbers. The more information available the more people are able to pick up on things.'</li> </ul>   |
| 1    | Accounting standards and rules                   | 6     | <ul style="list-style-type: none"> <li>• 'Moving to more of a fair value approach, then you would be dealing with things being updated more regularly. Everything gets marked to market at some point during the year, test of that on every asset effectively in the business regularly would be beneficial.'</li> </ul>   |
| 2    | Auditor independence / Audit process             | 4     | <ul style="list-style-type: none"> <li>• 'Things should be tougher from an independent standpoint; independent auditors and boards should be fully independent. Independent auditors should have better incentive to look at the books fully.'</li> </ul>   |
| 3    | Governance                                       | 3     | <ul style="list-style-type: none"> <li>• 'Financial Accounting Standards Boards: need to make them more motivated, instil continuous improvement and more checks. Make more resources available, make them a valid cop.'</li> </ul>   |
| 4    | Internal culture                                 | 2     | <ul style="list-style-type: none"> <li>• 'Internal cultural issue, people put such a pressure on themselves or their subordinates so people will go to great lengths to hide the bad news. If you are in this kind of culture you should have a very strong internal audit.'</li> <li>• 'Internal thing companies which just have to cope with, no real need for greater external regulation.'</li> </ul> |

## 4.5 Results summary

The results of this study show that analysts do assess a range of endogenous factors, such as CEO behaviour and character traits, in their assessments of companies. In the context of restatement situations it seems that analysts pay extra attention to the qualities of the CEO and other senior executives regardless of whether they are directly implicated in fraudulent actions. The characteristics of confidence and openness show the steepest declines in analyst evaluations of CEOs as a result of the restatement.

In addition, the study shows that analysts do recognize and assess a range of exogenous factors in restatement situations. According to the analysts, Earnings Management Pressures have the most impact on CEO behaviour before the restatement. This high score is followed by relatively high pressure scores for: 'Negative developments in the industry,' and, 'a highly demanding strategy aimed at increasing market share.'

Analysts also confirm that they do consider various constituents' roles and cite CFOs as the main culprit – the CFO is considered primarily responsible for financial reporting irregularities. Overall, the results of the quantitative study are supported by those of the interviews.

## 4.6 Conclusions and Discussion

The interview results confirm that CEO behaviour and characteristics clearly play a role in analysts' perceptions related to financial restatements. Although, according to the analysts, the main causes of the restatements under consideration rarely involved the CEO directly, analysts' perceptions of CEOs radically declined after the restatement announcement. The most prevalent cause of restatements in which the CEO was blamed involved some sort of fraudulent behaviour. In these cases, the CEO is always under intense scrutiny for allowing such activities to take place, even if no direct blame lies with the CEO. The CEO is still considered by respondents to be responsible, even if indirectly, for fostering a culture, strategy and structure in which malicious or error-prone behaviour can take place. Indeed, the CEO's pressures to exceed financial expectations were deemed by more than 60 per cent of respondents to play a role in the financial restatement (50 per cent found it to be a very important cause).

CEO qualities such as integrity, dominance, charisma, confidence and ambition were perceived in a different light by respondents after the restatements, than those qualities were before restatements. This was particularly the case for CEO confidence. This attribute suffered the largest decline in perception rating amongst respondents – while it was considered a positive characteristic, and one necessary to be a successful CEO before a restatement; after the restatement, the ratings of confidence, ambition etcetera usually declined. A minority of respondents even used words such as 'over-ambitious' and 'arrogant' to describe the CEO in light of the restatement.

Despite the changing perceptions, many CEOs were seen as handling the restatement situation well, both in terms of communications and structural changes. Those companies that initiated structural changes in governance and internal controls were seen as handling the situation well. However, often a lag-time existed before adequate action was undertaken.

Most respondents felt that sharpening regulation would not be the answer to minimizing the occurrence of restatements. Rather, they mentioned simpler and more transparent financial reporting, and simplifying accounting standards and rules as the main two ways to avoid restatements. Particularly, mark-to-market accounting was mentioned as an accounting practice that will lead to restatements taking place. There is also a large role for the CEO to play in ceasing to submit to the

pressures pushing them to play the earnings game. The so-called 'number's game' has resulted in a culture of just meeting or beating the analysts earnings estimates, and has perpetrated a short-term view amongst capital market participants.

# Chapter 5

## Overall Conclusions and Discussions

### 5.1 Introduction

The central research question of this thesis focuses on whether ‘blindness’ in restatement situations affect gatekeeper perceptions and potentially tarnish corporate reputation. More specifically, we formulated the following questions:

- Which factors obscure communication on restatements, thereby affecting perceived severity of the restatement and corporate reputation?
- Which factors blur analysts’ views (as gatekeepers) of CEO behaviour, before and after a restatement?
- Do these ‘blindness’ explain gatekeeper failure and why restatements often come as ‘predictable surprises’?

A secondary and derivative research objective is to understand how gatekeeper perceptions and biases influence some of the monitoring functions of the firm, in particular those of the independent board. Next, to what extent do these biases affect the executives in utilizing monitoring functions to increase firm value and reputation? If gatekeepers, like all humans, have weak spots in 'complying' with the rational choice model (Kahneman & Tversky, 2003); (Simon, 1997) and (Marnet, 2007), can we make suggestions for improving monitoring effectiveness of independent boards in crisis situations – to the benefit of both the firm and its executives? As Coffee writes, 'All boards of directors are prisoners of their gatekeepers!' (Coffee Jr., 2006, p1).

Central is the question whether we can use our research findings to recommend how firms and gatekeepers should cooperate to 'release' directors from this confinement, thereby enhancing the value of their monitoring function to the firm. Interest in this secondary research question has been heightened recently, due to the on-going global credit crisis and a variety of other high-profile financial scandals in numerous industries, alongside the alleged repeated failure of gatekeepers, including regulators (Marnet, 2007; Stracca, 2004).

Before we enter into more detailed conclusions and discussions, we will first summarize the three central studies, explore how they connect with one another, and provide answers to the above overall research questions.

#### 5.1.1 OVERVIEW OF THREE STUDIES

Following a grounded-theory approach, our first study provides a conceptual framework for classifying the severity of restatements, and discusses factors clouding a clear view around the causes and consequences of financial misreporting. The study aims to identify forces (in particular observable pressures on the company and its CEO) which could potentially obscure the perceptions of capital market participants. Awareness of these forces at both executive level and gatekeeper level is relevant, as this can lead to more effective crisis remediation and improved governance. These forces include perceived non-alignment of management and gatekeepers, discrediting of management, paralysis in communication, the 'tip-of-the-iceberg' effect, and comprehension gaps. A final part of Study 1 is to make recommendations on how to improve corporate communications in restatement situations and

avoid reputation damage, both at the firm level as well as at the executive level. We concluded that communication should focus on confirming the nature of the problem, taking the blame for it, providing openness, demonstrating compliance with rules and regulations, and showing that appropriate governance measures are taken.

Having peeled away some of the blinders that affect the public's, and more in particular, analysts' perception of restatements in Study 1, our efforts in Study 2 focused on how analysts, following companies with significant restatements, develop their judgment and decision making with respect to behaviour of the CEO, both before and after a restatement. We developed a model for analysts' perceptions that associated perceived pressures and characteristics of the CEO with analysts' perceptions of CEO reputation behaviour. Perceived pressures mainly consist of earnings management pressures, executive job demands and task challenges, and CEO dominance, which were all expected to play a role in inducing financial misreporting by the CEO. We also include measures of the extent of countervailing powers on the CEO, such as governance measures, competence levels of other gatekeepers and pressures meant to result in positive CEO behaviour. The question asked was whether it could be confirmed that analysts clearly view earnings management pressures and high executive job demands as 'red flags' for restatements. Next, we asked whether analysts exhibit biases in their judgment of CEO behaviour, and whether regret and disappointment influence analyst decision making, particularly during the restatement remediation period.

In Study 3, we attempted to corroborate findings from our first two studies as summarized above. At the same time, we solicited opinions from the analysts that could help in interpreting and seeking explanations for the findings of the other studies. In particular, we found that some endogenous CEO characteristics, such as integrity, dominance and confidence, affected analysts' judgements. We also found that exogenous pressures on the CEO, including earnings management pressures and executive job demands, indeed influenced analyst judgements.

#### 5.1.2 ANSWERS ON PRINCIPAL RESEARCH QUESTIONS

Our research confirms that 'blinders' in restatement situations cloud the perceptions of executives, market participants, and gatekeepers. Corporate reputation

proves to be clearly at risk if communication on the restatement lacks timeliness, comprehensiveness, and accuracy. Firms who pursue a strategy of silencing and denial – whether out of governance necessity, or otherwise – are more exposed to negativity bias, caused by the informational uncertainties left in the market. Common human biases, such as commitment bias, confirmation bias, and overconfidence, negatively affect gatekeepers in their monitoring roles. In particular we find that executives who understand how these blinders affect gatekeepers, and take ‘positive’ communication actions, are more successful in regaining trust and also succeed in shortening the restatement recovery period. Their reputation remediation actions (governance, compliance and control measures) are perceived to be more effective, as illustrated in Study 1, by faster recovery of share prices. Our studies show that once a restatement is announced, executives who confirm the nature of the problem, take blame for the crisis (by explaining what caused the reporting failure), and prove to be open and supply comprehensive information to the markets, achieve much better results in repairing tarnished corporate reputation.

- A. The studies confirm that analysts have a bounded awareness of pressures on the CEO to exceed financial performance expectations. In particular, and contrary to our expectations, both earnings management pressures and high executive job demands seem to be welcomed by analysts before a restatement occurs, blurring analysts’ views of the financial misreporting ‘riskiness’ of a firm, and its often disastrous reputational consequences.
- B. Our research confirms that the pressures on CEOs to exceed firm performance expectations, combined with certain character traits of CEOs (most notably, overconfidence), play a significant role in forming analysts’ judgments. Blinders –which we identified as having an impact on analysts – could well affect other gatekeepers’ monitoring effectiveness (or rather, lack of monitoring effectiveness). However, further research will be necessary to confirm this. We propose that a combination of gatekeepers’ bounded awareness of misstatement pressures, and the apparent existence of gatekeeper ‘capture’ by the CEO, in a variety of designs, causes acquiescence and silence on the part of gatekeepers – and thereby the potential for failure in their assigned role of analyst and monitor. Again, confirmation that these biases exist for gatekeepers beyond analysts requires more detailed research.

This chapter will continue as follows. First, we will discuss our key findings and conclusions from the three studies in greater detail. Our focus will be on more generic conclusions as to why analysts have flaws when ‘exercising diligence and thoroughness’ (as per Standard V of the CFA Institute), in their role as gatekeepers in restatement situations. Three dimensions will be addressed in particular – probing depth, disclosure transparency, and biases and boundedness. Our studies confirm that these three dimensions play a key role in gatekeepers’ monitoring effectiveness. We will also consider how these three dimensions could provide further insights as to how the analyst ‘lens’ can focus on reportable corporate matters, and thereby assist in identifying the factors important to their investment analyses and recommendations (again, we refer to the CFA Institute’s Standard V). We will also try to explain why this lens can become blurred and out-of-focus at times.

We note that our second and third study mainly consider restatement situations and the behaviour of the CEO from the perspective of the analysts. However, we also recognize that the analysts’ primary goal is not to detect financial reporting fraud – rather, their goal is to analyze a company’s performance potential and make investment recommendations. There are other monitors who, based on their functions as defined by laws or regulations, may have a greater and more specific responsibility in the detection and prevention of financial reporting fraud. To put our research findings in perspective, wherever useful we shall make reference to other academic research that addresses similar flaws found in the behaviour of other gatekeepers.

Next, we will extrapolate this combination of our findings centred on analysts’ judgment and decision-making weaknesses (our primary research findings), and where of interest, apply research on other gatekeepers to a slightly higher level of abstraction. In these discussions, we will challenge the current adage in corporate governance of ‘comply or disclose,’ and propose that – based on our findings and other current insights from academic research – the primary and underlying principle of firms’ ‘monitors’ should be: ‘Probe (deeper) and disclose (more transparently)’! We will also argue that the ever-increasing set of rules and regulations in the area of securities and corporate law, accounting and auditing, and corporate governance, requires some changes to the current paradigm. Gatekeepers and regulators must recognize that the quality and effectiveness of monitoring and oversight largely

depends on the behavioural traits and biases embedded in human decision makers.

FIGURE 5.1 EXTRAPOLATION OF FINDINGS AND OTHER RESEARCH



The definition, according to the Oxford Dictionary, of ‘to monitor’ is, ‘To observe and check over a period of time’. However, a monitor is also a screen used to display an image – the true and fair reflection of a company’s position. While we recognize that monitoring has some subtle downside risks, continuous ‘second-guessing’ can demotivate those being monitored and can lead to a risk-averse culture. We propose that deeper probing (and possible verification) by gatekeepers, along with engaging in the transparent act of sharing findings through enhanced disclosures, could contribute greatly to improved quality of judgment and decision-making by gatekeepers, both individually and as a collective.<sup>1</sup>

Finally, we will discuss some of the limitations in our studies, and make suggestions for future research in the domain of behavioural accounting and governance with respect to gatekeepers.

<sup>1</sup> Note the following definition in the Oxford Dictionary: ‘Monitor Lizard: a large tropical Old World lizard with a long neck and short body, believed to warn of the approach of crocodiles!’

## 5.2 Key Findings from Our Studies

### Lack of deeper probing by analysts on restatement causes and effects

Study 1 confirms that once a restatement crisis hits, investors and analysts are able to distinguish between companies that take positive reputation remediation actions, and companies which fail to react to the crisis in a timely and open manner. Open and timely communication as to the scope and effects of the restatement, combined with governance and compliance measures, is clearly appreciated by investors and analysts, as it reassures to external audiences that management remains in control. However, our second study also confirms that analysts underutilize their probing potential, and sometimes show signs of lacking in-depth knowledge or interest of accounting rules.

### Lack of probing amongst other gatekeepers

Gibbins, McCracken and Salterio (2005, 2007) find that audit committee members, representing the independent board, are frequently not informed of new accounting policy choices. As a consequence, only rarely do they engage in in-depth investigations of the rationale behind accounting decisions and the business prudence thereof. Beasley, Carcello, Hermanson and Neal (2007) find that even in cases where audit committee members can challenge significant accounting decisions, their ability to ask challenging questions can be limited by the quality of information provided by auditors and management. Pomeroy (2008), Bonner (1990), Bonner and Lewis (1990) and Libby and Luft (1993) all find that financially-experienced audit committee members have a much greater ability to effectively question and evaluate accounting decisions than do members without financial expertise. Recent corporate governance changes now require that boards, and in particular the audit committee, should include financial experts. However, as our literature studies reveal, board capture often prevents board members from probing deep enough to uncover accounting irregularities.

Lee and Welker (2004, 2007) have studied the deception detection abilities of auditors. Their findings that auditors, like other gatekeepers, are not skilled at detecting deception led the duo to suggest additional forensic-skills training for those working in the profession. Coffee (2006) also makes mention that at both WorldCom and

Enron, the attorneys responsible for securities offerings carried out hardly any due-diligence work. The recent credit crisis, and subsequent analysis of the credit rating agencies, provides abundant evidence of a failure to probe beneath the surface of a business model (Coffee Jr., 2009).

#### Lack of timely information on restatements exacerbates uncertainty and increases perceived severity

Our first study also found that non-alignment of management with gatekeepers – those directly involved in remediating the restatement situation (e.g. the independent board of directors, regulators and/or auditors) – caused investors and external gatekeepers, such as ratings agencies and analysts, to overestimate the restatement severity in terms of management intent. Lack of timely information on the causes and financial consequences of the restatement leads analysts to speculate on its implications, enhancing uncertainty and thereby resulting in negativity bias. Only if appropriate governance and compliance measures were taken did analysts soften their reactions to the restatement. Similarly, comprehension gaps on what caused the restatement typically led to analysts' overestimation (negative distortion), in assessing the materiality of the misstatement. Analysts would only adjust their future earnings estimates and company ratings if company communications provided details on the precise nature, extent and causes of the restatement.

#### *Other gatekeeper reactions to restatement uncertainties*

As independent boards are largely dependent on information provided by executives, Langevoort (2004) suggests that boards may be reluctant to expose a company's financial reporting improprieties to the outside world without having a comprehensive and full understanding of the situation and its implications. This fear of opening Pandora's Box and exposing the company to unfathomed depths of reputational risks provides yet another ingredient for board capture. Therefore, while a lack of information might lead to more negative reactions among analysts after a restatement is announced, it seems to lead to more inaction among board members before a restatement is announced.

#### The inability to properly comprehend a restatement crisis and its reputational consequences

Our first study showed that when a company announces a restatement, executives

and gatekeepers (including analysts), must face up to massive trust issues. Analysts need to assess uncertainties, not only with respect to the company's future financial performance and sustainability, but more specifically, they need to judge whether executives (particularly the CEO), are left with sufficient powers to lead the company out of the crisis. When a restatement happens, the market demands that analysts become explicit on their assessment of the CEO's ability and credibility – the market will not merely accept executive excuses of plausible deniability (Walton, 1996: 'I could and did not know'). However, as analysts are unaccustomed to formally and explicitly assessing CEO traits (e.g. integrity, confidence, power), as indicators of CEO resistance against earnings management pressures, analysts are in limbo when it comes time to assess the causes and consequences of a restatement. These uncertainties around CEO reputation/trust will lead to potential flaws and biases in analysts' judgements. Our second study provides further insights into these potential biases.

#### Analysts' failure to recognize and 'read' the restatement warning signs

The descriptive statistics within Study 2 reveal that the 'negative' perceived pressures on CEOs to engage in financial misreporting increase when considered by analysts with hindsight (as compared to without hindsight). The reverse is true for 'positive' factors, such as CEO competence and CEO pre-restatement behaviour. In addition, all standard deviations become larger when comparing perceptions with hindsight to those without hindsight. This pattern of findings is consistent with the idea that: (1) Analysts do not see a restatement coming; and, (2) Analysts' perceptions vary considerably depending on their assessment of the severity of the case at hand (hence the increase in standard deviations of perceptions with hindsight). These findings are consistent with earlier reports by regulators (GAO, 2004) and academics (Dyck et al., 2007), who argued that analysts are 'weak' gatekeepers. Note however, analysts cannot help but be 'weak' gatekeepers in their current incarnation, without greater unfiltered access to company records, without better job training, and without the empowerment to question polished answers offered to them on conference calls. Our findings appear to support the notion made by Roonen and Yaari, who, based on a number of studies (Lim, 2001; Abarbanell & Lehavy, 2003), documented that analysts seem to succumb to pressure by executives. Such pressures on analysts exist in chiefly two forms. First, there is concern that the executives may potentially be providers of investment banking business, as summarized by Gilson and Kraakman (2003: 36):

Finally, we were naïve about the role of security analysts, and particularly those employed by the investment banks on the sell-side of the market. These analysts, it appears, often acted as selling agents for the client-issuers of the institutions that employ them. Or, put differently, an investment bank's reputation among issuers is likely to matter more to it than its reputation among the lay investors who rely on its analysts' reports.

Alternatively, pressures on analysts are based on rendering favours out of reciprocity (Westphal & Clement, 2008). Our studies seem to support earlier research and the notion that analysts do under-react to abstract, but highly relevant information, and conversely, they overreact to salient, anecdotal and less relevant information (Odean 1998). Analysts seem to have an arithmetical focus which favours the filling out of their 'spreadsheet' models, rather than attempting to obtain a more complete picture of the long-term strengths and weaknesses of a company. This arithmetical focus prevents them from questioning, probing, and comprehensively assessing the more intangible value drivers of a company, such as CEO integrity, strength of corporate governance and internal controls, and – last but not least – actively assessing whether a well-balanced executive rewards and bonus system exists. Whether this fault lies with the analyst, or rather, with the job demands and pressures placed on the analyst by their own risk-averse, model-driven employer, is deserving of its own study.

Following Chugh and Bazerman (2007), these findings could suggest that analysts have a bounded awareness of the pressures which cause CEOs to commit financial reporting manipulation, often leading to misstatements. Analysts seem to ignore long-term drivers of firm value and to have succumbed to a state of 'arithmetical capture' at the hands of their spreadsheet models.

#### *Other gatekeepers' failure to read warning signs*

The academic studies and in-depth reports on the demise of Enron and WorldCom, and more recently, the banking failures, have revealed that independent boards and their audit committees, as well as corporate legal counsel and internal audit departments, failed to recognize numerous red flags when it came to financial reporting irregularities (on ABN AMRO (Smit, 2008) on Freddie Mac (OFHEO, 2003), on ENRON (Arnold & De Lange, 2004 and Coffee Jr., 2001, 2002 & 2004). Also, the Committee on Governmental Affairs United States Senate (Permanent Subcommittee

of Investigations, 2002) and Powers et al. (2002) on Enron, as well as Palepu and Healy (2009) on WorldCom, confirm that boards took their monitoring jobs too lightly. Langevoort (2004) notes that the limited amount of time board members spend on their monitoring job, coupled with the complexities of financial reporting, make it extremely difficult for members to recognize data patterns in data which hint at red flags and the need for deeper probing.

Dyck et al., in their study on 'Who Blows the Whistle on Corporate Fraud' (2007), found that those with the weakest incentive to blow the whistle, and the easiest access to information (e.g. employees), are the most likely to take action. Those with stronger incentives, and lacking verifiable information, appear to trigger fewer investigations (e.g. short sellers account for 1 per cent). Dyck et al. also find that gatekeepers who are paid and have a professional responsibility in detecting fraud, including auditors, regulators and audit committees, only account for identifying some 35 per cent of the fraud cases, while the remainder of fraud (65 per cent) is spotted through external parties and/or mechanisms that have no direct responsibility for detection. What should be noted is that Dyck et al.'s sample is based on published and prosecuted frauds. Many potential financial misreporting instances never enter the public domain – instead, they are prevented through regular company audit processes (internal and external), or through company 'internal' (non-public) whistle-blowing. This implies that Dyck et al.'s picture needs to be completed with these 'missing' cases in order to arrive at a more realistic and valid discovery rate of frauds.

#### Analysts' judgment on earnings management pressures and executive job demands reverses radically after a restatement announcement

Analysts not only fail to recognize the 'red flags' hinting at a forthcoming restatement; according to our study, in their assessments of a CEO's job pressures and behaviours, they actually seem to prefer executives who are under pressure to exceed financial performance expectations, and are being pushed to maximize their strategic and organizational goals. In the period leading up to the restatement, we found that the greater these pressures, the more favourable an analysts' assessment of CEO behaviour is. This seems to be at odds with rational decision making, as research has shown that the likelihood of restatements actually increases when executives face higher earnings management pressures and/or higher job demands. Further, analysts who follow a company in a particular industry will most likely follow other

competing companies operating within that same industry. And colleague analysts, both at the analyst's own firm as well as with other analyst firms, routinely write so-called 'industry reports.' This accumulation of information – readily available to analysts and a critical gatekeepers' function – should provide analysts with a sound basis for making judgments on what the typical benchmark and/or financial performance space is for the company they follow. In other words, analysts should very well know, within a given industry, whether a company's financial performance targets are aggressive or defensive – the extremes are documented. Therefore, the root cause for analysts' failure to not recognize the misstatement red flags is not to be found in the lack of available data. It is in the twisting of such data to their own advantage – staying aboard the bandwagon and forecasting often untenable earnings forecasts and recommendations – which seem to be driving their reports. In the next paragraphs, we will review some of the more intangible factors that we believe analysts are exposed to.

As discussed earlier in Study 3, overconfident CEOs are more prone to engage in earnings management (Hribar & Yang, 2006). The interview study and theory on CEO confidence suggest a possible explanation for the above behaviour. CEO confidence levels and the taking of an optimistic tone in conference calls have previously been identified as explanation for an unintentional optimism underlying analysts' earnings forecasts (Sedor, 2002). Our first and second studies provide supporting evidence for this (over)confidence contagion effect – analysts do have restatement triggering data available; however, they seem to be blinded and/or 'captured' by both the rhetoric and apparent high confidence levels of the same CEOs who aggressively try to meet unrealistic earnings targets. Put differently, the question is whether we can truly label restatements as 'predictable surprises'? We believe this to be appropriate, because to analysts as well as the market, most restatements come as a surprise, even though, objectively speaking, abundant information was available that provided a strong collective of evidence that a restatement was forthcoming.

Recently, behavioural scientists have written extensively on the phenomenon of predictable surprises. Bazerman and Watkins (2004: 1) define a predictable surprise as:

An event or set of events that take an individual or group by surprise, despite

prior awareness of all of the information necessary to anticipate the events and their consequences.

Interesting in the context of our research is that the collapse of Enron and the apparent failure of auditor independence are considered by Bazerman and Watkins to be a primary example of a predictable surprise. We would argue that a primary role of all gatekeepers is to prevent predictable surprises. But before we address possible solutions to timely recognizing (or prevention), of a forthcoming restatement, let us consider some of the common traits of predictable surprises to see whether restatements would qualify.

First, there is acknowledgement that a problem exists and that it could not solve itself. Our studies confirm that analysts do recognize high earnings management pressures and high job demands. They also know, both from earlier restatements and from market knowledge, that such pressures make CEOs prone to placing themselves in a situation where their 'success' leads them to resort to engaging in accounting irregularities (thus creating the need for eventual restatement). However, as our second study shows, before a restatement occurs, analysts seem to perceive these pressures as positive – routinely forecasting that the company and its CEO are expected to outperform the market and/or its competitors.

Second, analysts also know that such pressures, if they exist for a longer period of time, will only exacerbate the earnings management pressure. Here, the theory of embarking down the 'slippery slope' provides some possible explanation for analysts' behaviour – relatively small (or larger), but consistently incremental steps create a 'lock-in.' Step-by-step (reporting period-after-reporting period), analysts have shown commitment to playing the so-called 'number's game' – effectively allowing CEOs to beat analysts' earnings forecasts by extending the 'financial reporting threshold,' or integrity benchmark.

A third feature Bazerman and Watkins mention is that of discounting the future. Why would analysts spend time and effort shunning the herd mentality of their colleague analysts who also follow the same company/industry and have bought into a CEO's hype? By lowering their recommendations and/or earnings forecasts, analysts are incurring a significant reputational risk, and one that often has an associated cost,

be it job security or business opportunity. If changing their recommendation has an immediate and direct cost, and if the future benefit is highly uncertain and difficult to project, then what professional incentive do analysts truly have to go against the grain?

Commitment bias, discussed earlier in our theory for Study 2, is a fourth generic ingredient for predictable surprises. People tend to maintain status quo. Analysts who have taken a position on a company's future performance are reluctant to change their views, in particular when management is able to deliver above-average market performance (so far).

*The importance of the concept of predictable surprise to gatekeeper failures*

The stock market crash of 1987 proved that the unexpected can indeed happen. Thereafter, the financial world has been hit by a range of scandals that stronger business acumen may have foreseen: the Dot-Com Crash of 2000; the avalanche of accounting irregularities from 2001 onwards (the subject of our research); the securities analyst conflict of interest; the rampant stock-option backdating exposed in 2006; the global credit crisis that began to be deeply felt in 2007; and finally, the large Ponzi-schemes and other more recent discoveries of record-breaking deceit and fraud. The history of financial frauds and scandals over the past 50 years alone reveals that the 'innovative' powers of those with no qualms over engaging in deceit in pursuit of the almighty dollar, has increased exponentially alongside advances embedded in the complexities of financial products, the markets and the inherent associated risks therein.

Many studies in behavioural finance and economics (Gilson & Kraakman, 2003; Chugh, Bazerman & Banaji, 2005) have made it abundantly clear that human decision-making is 'rationally bounded' – constrained by bounded awareness and bounded ethicality, and also influenced by biases. These flaws in decision-making should be recognized by all parties involved in corporate monitoring functions – the executives, their gatekeepers, and the regulators. In order to improve the effectiveness of corporate monitoring, we need to obtain a deeper understanding of how biases and boundedness play a role in these multilateral relationships, and why legislators and regulators need to be placed on the front lines and forthright into owning the responsibilities each of those functions are burdened with.

Legislators and regulators have vigorously reacted to these crises, scandals and irregularities. Recent examples include replacing self-regulation of the U.S. auditing profession with public oversight through the creation of the PCAOB; the Global Settlement by the major investment banks to ascertain independence and integrity by analysts; the Credit Rating Agency Reform Act of 2006; and the Sarbanes-Oxley legislation, impacting gatekeeper practices of corporate legal counsel, the independent board and audit committees. However, irrespective of all these regulatory attempts to improve gatekeeper functioning, new crises still arose, as recent history clearly evidences. As a consequence, this has led some observers and academics (Tillman, 2008), to assert that gatekeepers formed networks of reputational intermediaries' who colluded with corporate executives to add legitimacy to illegal schemes rather than prevent their occurrence. Bazerman and his colleagues (Moore et al., 2006; Bazerman et al. 2006) wrote extensively on auditors' failures, which stemmed mainly from impaired independence caused by conflicts of interests. Even approaching the gatekeeper topic mainly from a legalistic point of view, Coffee (Coffee Jr., 2004) also identified that conflicts of interest and associated biases cause auditors, analysts and rating agencies to fail in their role as gatekeepers.

Academics have provided the financial world with ample evidence that gatekeepers are both actors and/or victims of predictable surprises. Caused by common human biases they fail to recognize upcoming crisis situations and hence fail to deliver on their role of gatekeepers. In the discussion section, we shall suggest possible improvements to the analysts' gatekeeper role, but more generally, we shall make collective recommendations on the current 'institutionalized' role of gatekeepers.

#### *Other gatekeepers' failure to recognize corporate predictable surprises*

Bazerman and Watkins (2004), who also gave Congressional testimony on the topic (26 September 2006 and 10 July 2002), document extensively how conflicts of interest have caused auditor independence failures:

Auditors, who believe they are honest, despite being biased, are likely to view criminal prosecution as a distant and unlikely possibility. The unconscious nature of biases that lead to predictable surprises makes them particularly difficult to address and correct.

In a more recent *BusinessWeek* article, Michael Watkins (2007), co-author with Bazerman of the book *Predictable Surprises*, provides substantial support for the notion that the subprime crisis (which ignited the credit crisis), could also clearly be classified as a predictable surprise. Though regulators, risk managers, corporate executives and their boards, and the markets generally did not see it coming – nevertheless, the information was there. As former U.S. Securities and Exchange Chairman William Donaldson mentioned in his presentation to the CFA society of Washington (Donaldson, 2008, p.21):

So, if the Fed didn't blow the whistle, analysts should have taken their analytics and documentation to other regulators or legislative committees. I don't mean to sound naïve about the way the markets work, but it is hard to imagine looking at what was going on in the United States before 2007 and not seeing the subprime problem that was building.

Similar to the question of why analysts go along with the overly-optimistic predictions of CEOs when it comes to earnings growth, Langevoort (2004) argues) that directors, in their role as monitors, will be highly reluctant to interfere with firm and/or CEO strategies that they suspect might have a positive pay-off for the firm. Again, as long as the CEO is successful, they will increase their powers to control the board through various capture mechanisms and, as a consequence, the board will more often than not relax and submissively rest in its acquiescence.

#### Analysts do not blame themselves for not anticipating restatements

The descriptive statistics in Study 2 show that analysts rate their knowledge on accounting matters as well as their probing skills during the restatement crisis to be between 'sufficient' and 'high.' In their own view, analysts' failure to recognize restatements is not due to weak analysis or probing on their part – mean scores are ranked between 'little' and 'some' for the degree to which they saw these factors as reducing their ability to anticipate the restatement. These scores indicate that analysts have a self-serving attitude when it comes to admitting failure. This view is supported by the analysts' scores in the extent to which they rely on other analysts to arrive at their judgments – the mean score was between 'very low' and 'a little.' Further, their reported regret about having issued a recommendation, again, was on the 'very slight,' to 'slight' level. This behaviour can be explained by the self-serving attribution bias in which people tend to assign positive events to their personal involvement,

while negative events are attributed to events outside their influence (e.g., Jones & Nisbett, 1971). We also found that analysts who rated themselves as competent were more negative in their ratings of CEO behaviour during the restatement crisis. This could indicate that the 'smarter' analysts were more aware of the fraud risks of the company and CEO, and therefore, were also more critical of the CEO during the restatement resolution. However, as we did not measure analysts' competence ourselves (we only obtained their own perceptions), it is difficult to conclude whether these self-assessments also indicate self-serving attitudes.

*Other gatekeepers are also avoiding self blaming and/or apologies*

Blame taking and apologies in the corporate world are fraught with legal liability considerations. Patel and Healy (2003) note that corporate attorneys routinely recommend against executives apologizing in public. However, in his review of 'black letters,' Patel concludes that in court these apologies hardly result in evidence of guilt. The current upheaval and the refusal of bank executives and regulators to apologize for the credit crisis once more proves that public apology and blame taking remain taboo.

Analysts overreact to restatement announcements and show signs of irrationality in their judgment/assessments

Our findings in Study 2 show that the more disappointed analysts were by the restatement, the less positive they were about the reputation remediation behaviour of the CEO after the restatement. Westphal and Clement (2008) examine how social influence and reciprocity shape relations between top executives and securities analysts. They argue that in repeated interactions, as is the case in the analyst-executive relationship, social exchange and reciprocity of favours is more pervasive. Westphal and Clement also note that in opposite cases (cases in which injurious acts are committed), the motivation to punish harmful actions (a downgrade of a company by analysts), may even be stronger and more reliable than the motivation to reward helpful behaviour. Westphal and Clement's research implies that in cases where ethicality is in question and 'downgrades' are issued by analysts as a result of a CEO's involvement with a restatement, retaliation by executives can be expected. A 'tit-for-tat' approach by analysts could then lead to a downward spiral, piling onto the already-harmed relationship, and perhaps leading analysts to issue pre-emptive

negative statements on the CEO's ethicality and suggest that malicious intent was applicable.

#### *Other gatekeepers' overreaction to crisis announcements*

Theories on herding behaviour (Hirshleifer & Teoh, 2001) provide evidence that investors also show over-reactions. They arise because uncertainties in publicly-available information result in information cascading. Theories of counterfactual thinking (Roese & Olson, 1996 & 1997) and on regret (Lin, Huang & Zeelenberg 2006), also contribute to explanations for the overreactions of investors and the media to corporate financial crisis announcements.

#### Analysts primarily focus on short-term quantitative financial performance factors, ignoring longer-term, qualitative drivers of company value such as quality and integrity of leadership team

Our first study not only found that analysts can improve on their probing skills when it comes to uncovering the truth and seem to ignore 'red flags,' but it also made clear that discourse between analysts and executives primarily focuses on short-term results and quarterly estimates. A report issued in March 2007 (Commission on the Regulation of U.S. Capital Markets in the 21st Century, 2007) by the U.S. Chamber of Commerce quotes research (Graham et al., 2005) that found that executives admit that pressures from investors can lead companies to focus too much on short-term earnings, at the detriment of long-term growth. Based on a series of survey studies with executives and on archival data, the commission proposed an elimination of the practice of the issuance of quarterly earnings guidance. Major considerations were the earlier mentioned short-term focus, the considerable cost of quarterly guidance, and the often-irrational behaviour of markets following a company's failure to achieve quarterly-earnings expectations. Members of the CFA (Chartered Financial Analysts Institute) substantially support these recommendations and also proposed that companies should provide additional information on the long-term drivers of business performance (CFA Institute, 2006).

Recommendations by the CFA Institute on Communications and Transparency included:

1. Encourage companies to provide more meaningful, and potentially more frequent, communications about strategy and long-term vision, including more transparent financial reporting that reflects a company's operations.
2. Encourage greater use of plain language communications instead of the current communications dominated by accounting and legal language.
3. Endorse the use of corporate long-term investment statements to shareowners that will clearly explain – beyond the requirements that are now an accepted practice – the company's operating model.
4. Improve the integration of the investor relations and legal functions for all corporate disclosure processes in order to alleviate the current bifurcated communications that confuse, rather than inform, investors and analysts.
5. Encourage institutional investors to make long-term investment statements to their beneficiaries similar to the statement the Panel is asking companies to make to their shareowners.

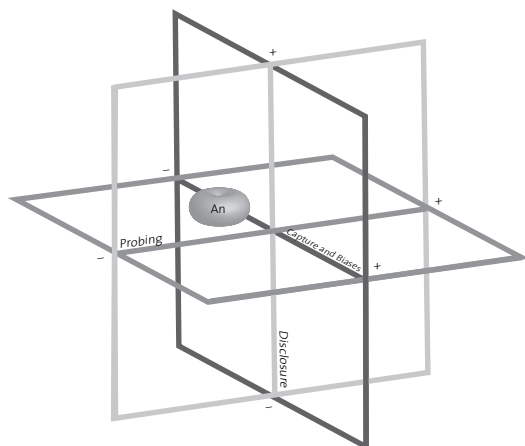
We also refer to earlier work on developing a framework for value-reporting developed by Eccles in cooperation with PricewaterhouseCoopers (Eccles, Herz, Keegan & Phillis, 2001). He develops a framework for voluntary corporate disclosures focusing the longer-term value drivers of a business. Healy and Palepu (2001), in their comprehensive review of the corporate disclosure literature, also provide a number of motives for firms and their executives to employ voluntary disclosures to improve the firm's position in the eyes of capital market participants; additional disclosures diminish information asymmetry further and improve transparency.

### 5.3 Summary of Findings

Our research finds that corporate executives underestimate the reputational consequences of restatements. Often, they fail to act timely in supplying comprehensive information as to the causes and consequences of the reporting failure. Executives, who are proactive in taking governance and reputation remediation actions, clearly outperform executives who are passive in their communication efforts. Further, the above research findings strongly suggest that analysts in restatement crises are not performing as well as they could as gatekeepers. Their probing activities, both in the period before the restatement and in the period following the announcement, do not focus enough on the warning signs caused by earnings management pressures and/or high executive job demands – they mainly attend to routine questions on financial position developments. Next, their disclosures on company performance and of a company's CEO before a restatement, mainly follow the information that their professional 'dominant logic' requires them to report on – analysts do not address or communicate on the more intangible drivers, or destructors, of company value, such as (1) corporate governance, control strengths, top team power distribution, and (2) perceived levels of CEO integrity, aggressiveness, dominance and/or narcissism. Our findings also support earlier research findings that analysts, both before and after a restatement, are biased in their views and decision making (e.g. overly optimistic before, overly pessimistic during a restatement crisis; under reacting to good news, overreacting to bad news). We also find, however, that other gatekeepers, including independent board members, exhibit the same behavioural 'weaknesses,' and are exposed to similar biases and boundedness.

In our view, particularly in crisis situations, probing depth and straightforward, comprehensive disclosure are two key dimensions on which we could 'measure' or model, gatekeeper performance and ability. A third dimension consists of the degree to which biases and/or boundedness influence analysts' perceptions, and hence their ratings, of corporate performance indicators. If we would apply these dimensions to the overall findings of our studies on how analysts perform as gatekeepers both before and after a restatement crisis, the following pictures arise:

FIGURE 5.2 ANALYSTS ONLY: NORMAL DISCLOSURE – NO RESTATEMENT - VISUALIZATION



This is a conceptual picture showing a three-dimensional positioning space on the axes of: probing depth (x-axis), public disclosure (y-axis), and (estimated) capture and biases (z-axis). It shows that analysts, relative to other gatekeepers (see figures 5.4 and 5.5) use lower than expected probing, disclose more than other gatekeepers and have some bias.<sup>2</sup>

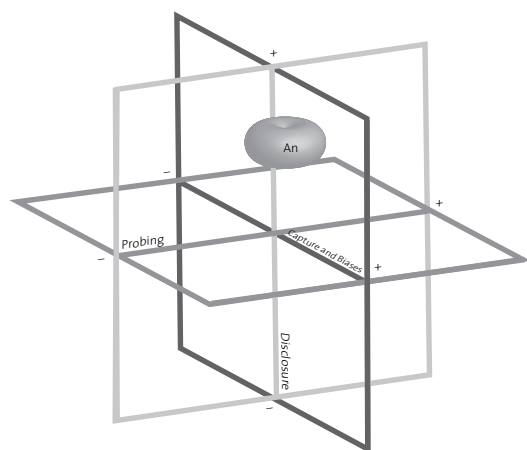
Figure 5.3 shows the relative and conceptual visualization of the Analyst as gatekeeper. Our investigations in this study show that analysts' probing activities improve (from -3 to -1), however, shallow answers are still accepted (see Study 1); disclosures on non-financial data relevant to assessing the company increase (from +2 to +4); capture and bias also increase, as is supported to an extent by our findings in Study 2 (and 3). The analysts' relevance in the 'disclosure' process increases from 2 to 3 (relatively to other gatekeepers)

If we would extend this three-dimensional model of primary gatekeeper functions to other gatekeepers in the current governance paradigm – what does it reveal about these individual gatekeepers as professionals in restatement (and/or crisis) situations,

<sup>2</sup> We used 'relative' scales for all three dimensions from -5 to +5. In addition the relevance of a particular gatekeeper group in a company's 'disclosure verification' process was conceptually represented by the relative size of the gatekeeper 'sphere' (from 1 (unimportant), to 5 (very important)). In the No restatement Graph for Analysts:  $x = -3$ ,  $y = +2$ ,  $z = -3$ ; Sphere relevance = 2). Note: these are conceptualizations and are based on the authors' estimates and not on exact data from this study.

and can we suggest improvements both at the individual gatekeeper level, and on the current, collective ‘system’ of gatekeepers? This question will be addressed in the discussion section which follows.

FIGURE 5.3 ANALYSTS ONLY: RESTATEMENT HITS – CAPTURE AND BIASES - VISUALIZATION



## 5.4 Discussion Themes

### 5.4.1 WHAT BLINDS GATEKEEPERS DURING RESTATEMENTS?

In the general context of corporate governance, the core function of gatekeepers is reducing the undesirable effects of informational asymmetries caused by the segregation of owners and managers of firms, and simultaneously reducing agency costs of management arising from this split. More specifically, and in the context of financial reporting fraud, corporate gatekeepers should act as independent third-party monitors capable of interdicting in the wrongdoing of corporate executives by withholding their necessary cooperation. This cooperation mainly concerns attesting to the reliability and appropriateness (quality) of corporate information or actions. Examples include auditor opinions on financial statements, downgrades of bonds by credit rating agencies, fairness opinions of investment banks, securities analysts' earnings estimates and recommendations, and attorneys acting as securities transaction reviewers.

Current academic research on corporate gatekeepers (including their failures) is mainly derived from the framework developed earlier in 1984 by Gilson and Kraakman (2003). In a series of articles, they conceptualized corporate gatekeepers as third-party corporate monitors with the capacity to intervene in wrongdoing by withholding their required cooperation. The collapse of Enron and the subsequent avalanche of financial restatements, corporate scandals, and also the recent credit crisis, have resulted in substantial criticism of the role that gatekeeper institutions played. Most of these criticisms are either directed at a specific gatekeeper institution, or are composed from a single discipline point of view (legalistic, auditing, governance and/or regulatory). Since Enron's failure, academics and regulators have abundantly and exuberantly addressed failures in the system design and operations of individual gatekeeper institutions – expressed clearly by Katsoris and quoted by Gilson and Kraakman (2003: 6) as follows:

The amount of culpability may be exceeded only by the volume of related scholarship, simply illustrated by the number of symposia on corporate fraud and misreporting since Enron's bankruptcy.

In our view, however, the causes of individual gatekeeper failures should not be

addressed from a single discipline perspective, but rather, based on the findings of our three studies, corporate governance system overhauls should concentrate on two overarching questions fundamental to the problem:

1. How can gatekeepers avoid being blinded and captured by the dominant logic of their profession in gatekeeper situations? We think this can be achieved by probing deeper and by recognizing gatekeeper biases and boundedness.
2. How can inter-gatekeeper cooperation be improved? How can the walls of professional (protective) immune systems be torn down? We think this can be achieved by cooperative disclosures, which need to be coordinated by the firm's audit committee.

#### 5.4.2 HOW CAN GATEKEEPERS AVOID BEING BLINDED AND CAPTURED BY THE DOMINANT LOGIC OF THEIR PROFESSION?

Dominant logic can be defined as:

...Embedded in standard operating procedures, shaping not only how the members of the organisation act but also how they think ... becomes the lens through which managers see all emerging opportunities ... If the competitive environment is subject to rapid changes, however, the blinders of dominant logic will make it hard to recognise new threats and opportunities (Prahalad, 2004: 2).

Prahalad and Bettis (1986) mainly wrote on dominant logic from the perspective of corporate strategy, however, their research findings have been used to explain other corporate processes as well, such as the effects of diversity on firm performance. Cyert & March (1963) wrote on the concept of the dominant coalition as those members of an organization who effectively determine and guard the strategic and operational preferences. Both concepts can also be applied to the functioning of gatekeepers. Almost by definition, today all gatekeepers are functioning in a professional system, which includes requirements on education and qualification, accreditation and public responsibility, professional rules and regulations, and rules of ethics.

Next to these individual professional requirements, as institutions, gatekeeper professions have become the subject of demanding laws and regulations covering

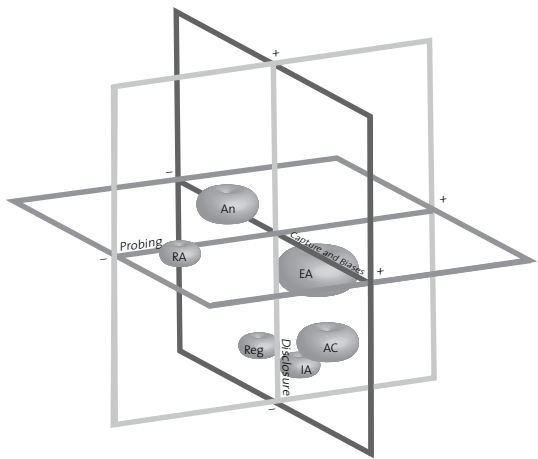
profession management aspects, which include quality control systems, review by regulators, independence requirements, insurance coverage, compliance with rules and regulations, and an ever-increasing administrative burden. The combination of these individual gatekeeper demands and compliance with 'institutional' requirements can lead to professionals being blinded by the avalanche of rules and regulations. The individual efforts to stay 'in-line' and adhere to an absolute no-exceptions basis within these rules, puts a weighty burden on the shoulders of individual gatekeepers. Compliance competes with, and eats away at, not-insignificant components of available intellectual energy and professional appreciation.

The agency problem of keeping managers aligned with the goals of the corporation also applies to gatekeeper firms and the relationship they have with their agents, the individual gatekeepers. Professionalism and identification with the gatekeeper firm (whether its brand or reputation), are two factors identified by Fox (2008), which can be seriously affected in a negative sense by the notions of increased compliance and administrative demands referred to previously. As professionals, individual gatekeepers – be it analysts, auditors or rating agents – are expected to identify themselves with the 'larger' public purpose of their professions. However, increased compliance demands, and the consequential overload of administrative requirements, could potentially blind professionals by hindering intellectual inquisitiveness, impair sound professional scepticism, and limit probing efforts. Identification by gatekeeper-agents with their gatekeeper firm has been potentially damaged by the demise of Andersen in 2002, more recent failures (or closing) of some of the renowned investment banks, and also the inability of rating agencies, investment bankers, and central bankers (acting as regulators and supervisors) to warn about the looming credit crisis.

Also, the increasing size and corporate culture prevalent in most gatekeeper firms can be considered as twin forces, which together seriously weaken a gatekeepers' identification with the firm they are working for. This could result in gatekeeper agents' underperformance in their higher-level social role connected with their professions. These threats to function and alignment of individual gatekeepers have been noted to an extent by management of gatekeeper firms. Typical reactions have been to develop training programs on the importance of compliance. However, both gatekeepers' senior management and regulators have underestimated the

behavioural consequences of the current compliance culture. Some new initiatives need to be developed.

FIGURE 5.4 GATEKEEPERS: NORMAL DISCLOSURE - NO RESTATEMENT SITUATION - VISUALIZATION



The relative positions of the various gatekeepers in a ‘business as usual’ setting can be estimated (on average) for conceptual visualization based on the table shown below. Of interest is that those with the greatest probing abilities (External Auditors (EA) and Audit Committee (AC), disclose the least; while Analysts and Rating Agencies (RA), probe low and disclose relatively more.

TABLE 5.1 GATEKEEPERS RELATIVE POSITIONING AND ASSIGNED VALUES – NORMAL DISCLOSURE, NO RESTATEMENT SITUATION

| Axes | (An) Analysts | (AC) Audit Committee | (EA) External Auditors | (IA) Internal Audit | (RA) Rating Agents | (Reg) Regulators |
|------|---------------|----------------------|------------------------|---------------------|--------------------|------------------|
| X    | - 3           | + 1                  | + 4                    | + 2                 | - 5                | + 2              |
| Y    | + 2           | - 3                  | - 3                    | - 5                 | + 1                | - 5              |
| Z    | + 2           | + 3                  | - 4                    | - 2                 | + 3                | - 4              |

5.4.3 HOW TO IMPROVE INTER-GATEKEEPER COOPERATION?

In his book *Gatekeepers*, Coffee (2006) writes how auditors, attorneys, securities analysts, credit-rating agencies and investment bankers, as professions, have evolved, performed, and changed their behaviour over the last century. He assigns gatekeepers the functionality of standing outside, and acting as an independent watchdog or monitor. Gatekeepers screen out flaws or defects, or verify compliance

with standards or procedures. And on the basis of their professional and/or legal standards, gatekeepers can withhold consent or necessary cooperation.

An essential ingredient of gatekeepers in the corporate world is that they are 'repeat' players – they act therefore as so-called 'reputational intermediaries,' adding some sort of assurance value to the information signals sent by corporations and their executives. Gatekeepers can function only when they have sufficient reputational capital at risk. This, however, leads precisely to our argument that gatekeepers, in order to protect their capital, will throw up barriers of professional rules to augment their immunity from attacks on their reputational capital. Gatekeepers function as reputational intermediaries, and according to Coffee (2006) they can only operate effectively if their reputational capital is both considerable, and surrounded by strong, reliable defences. However, as noted earlier, these protective devices also result in an overly inward-looking attitude, which can easily lead to 'groupthink,' and irrational behaviour (Janis, 1982).

Consequently, the chances of contagion from within-group predispositions and/or biases increase, as is also evidenced by this study. Changes in rules and regulations, particularly those dealing with updating corporate governance systems after a corporate scandal has emerged, only contributed to this inward and group-focused protection. For example, the Sarbanes-Oxley Act led to increasing demands for all gatekeeper groups (auditors, independent board members, legal counsel, and analysts), around technical competencies, objectivity, and independence and professional standards. These enhanced 'professional' requirements, while indeed leading to higher-quality gatekeepers, at the same time lead to thicker protective immune-system layers, impenetrable by most non-professionals and lay-persons. Herding and informational cascading within these gatekeeper groups only serves to further exacerbate the situation.

#### Proposed solutions to gatekeeper failures:

After considerable deliberations, Coffee (2006) suggests the appointment of an attorney, or an investment banking firm, as a firm's disclosure counsel, reporting directly to the audit committee – ultimately preferring an attorney to take on this new gatekeeper function. He also suggests additional rules for the existing gatekeepers, mainly to resolve possible hidden conflicts of interests and independence issues,

and proposes additional liabilities when these rules are violated. Fox (2008) chooses the investment banker as the primary 'new' gatekeeper. The argument Fox uses is that the investment bank already has in-depth experience with reviewing corporate disclosures in public offerings. However, the demise of many of the most-respected and most-venerable investment banks during the current credit crisis has had severe implications to their 'reputational capital' – not even considering their monetary capital, which in some cases, no longer exists. Some recommendations on resolving the above findings and/or discrepancies have been addressed in section 5.6 Managerial Implications.

#### 5.4.4 CEO POWER IN RESTATEMENT SITUATIONS AND INDEPENDENT BOARD 'CAPTURE'

How do CEOs get away with financial reporting fraud? What causes gatekeeper failure by independent boards? Financial reporting fraud, in many cases, is not only perpetrated by the CEO, but other gatekeepers (including independent board members, legal counsel, and/or the CFO and lower management echelons), who act as partners in crime, or succumb to pressures by the CEO. Many academic studies, reports by regulators, and litigation following restatements, confirm this fact (GAO reports; PwC Securities Litigation Survey; Hall, 2006; Tillman, 2008; Tourigny, Dougan, Washbush & Clements, 2003: 5). These last authors write:

Often, boards do not include outsiders who are likely to play the role of the devil's advocate in the decision-making processes. Unchallenged agreement is more likely to occur when a majority of directors have significant friendship or business relationships with other board members. Boards of Directors may thus ignore important warnings, hold negative, stereotypical views of stakeholder groups who present strong opposition to their prescribed courses of action, and exercise pressure on one another to conform to group norms. Such behaviors would reflect the presence of groupthink (Janis, 1972), a phenomenon that can lead to spectacularly defective decisions.

On the Enron case, McLean and Elkind, in *The Smartest Guys in the Room* wrote:

Enron's corporate culture hints that there was an intense psychological dynamic at work in which ego, hubris, narcissism, rationalization and self-deception were strong forces at both the individual and organizational levels.

Corporate dishonesty has also been studied from a psychological angle. Hall (2006) and Langevoort (2004) link corporate dishonesty to specific cognitive biases, including: self-attribution bias (pre-occupation with self-image), confirmation bias (deflecting negative information) and to commitment bias (adhering to positions already taken).

**FIGURE 5.5 GATEKEEPER: RESTATEMENT HITS - RELATIVE POSITIONING - VISUALIZATION**

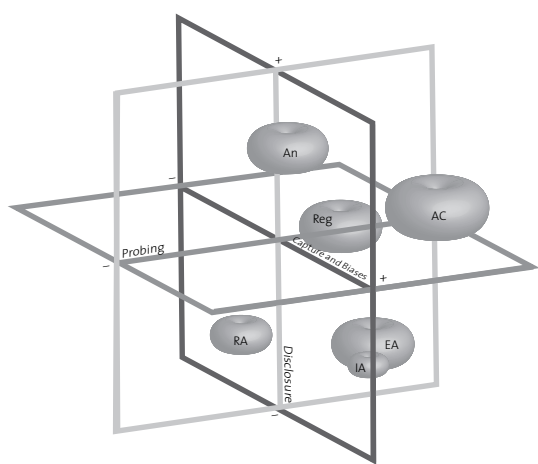


Figure 5.5 shows, again, based on a subjective assessment and relative positioning, that those with the greatest probing abilities (and possibilities) in restatement situations, are either relatively more ‘captured’ by the board (and are hence biased), such as the Audit Committee; or, are less biased, like the Internal Auditors (IA) and External Auditors (EA), but are unable, under current regulations, to disclose great detail on their findings and probing. The ‘ideal’ space in this conceptualization (high probing, high disclosure, and low capture/bias, is not ‘occupied’ by any of the gatekeepers. The above conceptual picture is based on the following subjective assignment of values:

**TABLE 5.2 GATEKEEPER RELATIVE POSITIONING AND ASSIGNED VALUES: RESTATEMENT HITS:**

| Axes | (An)<br>Analysts | (AC) Audit<br>Committee | (EA) External<br>Auditors | (IA) Internal<br>Audit | (RA) Rating<br>Agents | (Reg)<br>Regulators |
|------|------------------|-------------------------|---------------------------|------------------------|-----------------------|---------------------|
| X    | - 1              | + 3                     | + 5                       | + 3                    | - 2                   | + 5                 |
| Y    | + 4              | + 2                     | - 4                       | - 5                    | - 3                   | - 1                 |
| Z    | + 4              | + 4                     | - 2                       | - 1                    | + 1                   | - 2                 |

Please also note the subjective assignment of relevance of the various gatekeepers (i.e. size of ‘sphere’) based on the table below.

TABLE 5.3 GATEKEEPER RELATIVE IMPORTANCE

| Axes       | (An) Analysts | (AC) Audit Committee | (EA) External Auditors | (IA) Internal Audit | (RA) Rating Agents | (Reg) Regulators |
|------------|---------------|----------------------|------------------------|---------------------|--------------------|------------------|
| No Restat  | 2             | 2                    | 3                      | 1                   | 1                  | 1                |
| Yes Restat | 3             | 4                    | 3                      | 1                   | 2                  | 3                |

As Langevoort notes, many of these biases are also applicable to gatekeepers, such as independent board members, auditors, and analysts. Such self-deception, combined with a lack of awareness of other cognitive biases (see Chugh & Bazerman’s (2007) concept of bounded awareness), can lead persons astray in ethical judgments of both themselves and of those whom they should monitor. Conversely, there are well-known examples that, irrespective of companies’ and their boards’ compliance with state-of-the-art governance practices, have still seen corporate scandals occur below their noses. Langevoort (2004: 289) writes:

The recent financial reporting scandals have cast ample doubt on the efficacy of corporate boards as monitors. Many of the boards in question, including Enron’s, exceeded common best-practices standards for independence and committee structure, yet there were still dramatic failures.

In his essay, ‘Resetting the Corporate Thermostat...’, Langevoort (2004) develops logic that as long as the CEO uses his or her executive powers to a degree that it might embarrass independent directors in their networks, directors tend to go along with the CEO. However, it is when the CEO faces incurring damage to their own ‘reputational capital,’ that they object and take action. The next argument which Langevoort develops, as to why boards fail to stop misreporting (or other irregularities), is that boards need to act collectively. If an individual board member protests, he or she could easily lose the support of other board members, and hence, damage their own prestige and position. Recent corporate disasters in the credit crisis again confirm this phenomenon (ABN Amro (Smit, 2008), Fortis, RBS). Next, board members spend a limited amount of time in their monitoring role, and mainly act with an external view as a reality-check for management’s development and execution of corporate strategy. Seldom will board members use the investigative and probing powers given to them under corporate statutes. Finally, board members are dependent on the

information they receive from executives, which – considering the complexities of the data – can easily be manipulated.

For board members to judge management's credibility and integrity, they can rely on only a limited number of 'objective' resources made available to them, including an independent auditor's report, reports on internal controls, internal audit reports, and reports and/or investigation by legal counsel. In conclusion, independent board members are therefore 'captured' by the executives, are under pressure to stick to the status-quo, and they tend not to probe sufficiently, as that could risk opening a Pandora's Box of unwanted and uncontrollable events.

Finally, an individual firm's misreporting activities may have negative spill over to related firms, governments, and investors. For example, Sidak (2003) argues that fraudulent disclosures and financial reports can send false signals to industry players about new investment opportunities, lead governments to pursue incorrect regulatory policies, and cause capital rationing in the industry.

## 5.5 Theoretical Relevance

This dissertation makes several contributions to the existing literature on behavioural accounting, corporate governance and reputation management.

First, we developed a simplified model of restatement severity and linked the two dimensions of this model with theories as to what constitutes effective corporate communication. To date, studies on the severity of restatements (Palmrose et al., 2004; Hirschey, Palmrose & Scholz, 2003; Anderson & Yohn, 2002), are mainly based on archival data, associating characteristics of restatements (typology, fraud, financial impact, governance structures) with the movement of stock prices. Our first study builds on this knowledge through the identification and analysis of forces that exacerbate perceived restatement severity. Through the extension of our model of restatement severity, with perception components on the axes of intent and information distortion, this dissertation deepens prior studies on perception management that have examined identity signalling to stakeholders and subsequent behavioural reactions (Berens, Van Riel, & Van Bruggen, 2005; Brown, 1998; Fombrun & Shanley, 1990). However, those prior studies did not provide insight into the role of organizational power games and governance breakdowns and the corresponding threats they signal for both corporate and CEO reputation. Our first study also contributes to the crisis management literature, extending studies on the role of corporate executives in crisis remediation (Coombs, 2007; Kim et al., 2006) with an analysis of CEO reputation threats arising from forensic investigations following a restatement. Next, as our first study used corporate communication discourse (between executives and analysts), we contributed to the literature studying the relationship between communication tone and investor perceptions (Craig & Amernic, 2004; Davis et al., 2008).

Second, our studies contribute to literature on earnings management. The wave of accounting scandals and restatements between 2001 and 2007 strongly increased the demand for Earnings Management research – for a recent overview see Ronen & Yaari (2008). Earnings management consists of a collection of acts by executives that influences reported accounting earnings or affects their qualitative interpretation. These acts include production and investment decisions, construction of legal formats

and contractual parameters of transactions, choosing accounting frameworks, and often include the application of judgment in accounting estimates. However, many instances of earnings management involve the aggressive application of accounting principles, enabling management to 'control' reported short-term earnings. Following the accounting scandals, some studies focused on suggesting measures to avoid earnings management (Healy & Wahlen, 1999; Healy & Palepu, 2001; Coffee Jr., 2004b, 2006); other studies attempted to find explanation as to why the earnings management phenomenon exists (Dechow et al., 1996; Skinner & Dechow, 2000; Bergstresser & Philippon, 2006; Hunton, Libby & Mazza, 2006; Van der Tas, 1996); while still others investigate the consequences for long-term financial performance (Roosenboom, Van der Goot & Mertens, 2003; Teoh, Welch & Wong, 1998).

Many studies on earnings management use archival data to model causes and consequences of earnings management, concentrating on providers of earnings management (mostly senior executives), or focusing on the receivers of earnings information – either plain users (investors, regulators, creditors or consumers), or gatekeepers. Our study contributes to the earnings management literature as we analyse the interaction between the providers (senior executives), and primary users of earnings information, the analysts. Rather than using archival data we have polled analysts directly on their perceptions as to whether earnings management pressures on CEOs exist and have also asked analysts for their assessment of CEO behaviour, both before and after a restatement. Therefore, by directly addressing analyst perceptions of CEO behaviour, we believe our research provides a unique contribution to existing earnings management literature. Our study also confirms and extends earlier findings that earnings management is not always considered a capital crime. Graham finds that both CFOs and CEOs prefer to smooth earnings, rather than have large volatility in reported earnings (Graham et al., 2005). Our study confirms that analysts too prefer companies (and executives), that can 'reliably' produce steady earnings more so than companies with surprising 'un-managed' earnings. However, this seems to conflict with a recent (unpublished) analysts' survey study (De Jong, Mertens, Van der Poel & Van Dijk, 2008) which finds that only some 13 per cent of analysts prefer companies to carry out earnings management at the sacrifice of longer-term performance. This could be explained by the 'bargaining' format of questioning used in De Jong et al.'s study; however, this area requires further research.

In developing the concept of executive job demands and its consequences for strategy (Hambrick et al. 2005a; Hambrick et al. 2005b; Chatterjee & Hambrick, 2006), Hambrick and his colleagues suggested that excessive job demands could be (part of) an explanation for why executives, facing severe pressure, commit reporting fraud. To our knowledge, our research is the first contribution to this theory that actually measures the constructs underlying executive job demands and how they are perceived by one gatekeeper group. Through the lens of analysts, we have measured perceptions of executive aspiration levels, job demands and task demands. Through our subsequent interviews and the combination of our measurements centred on perceived CEO dominance, CEO accounting aggressiveness, and CEO communication skills in restatement situations, we also provide additional insights into narcissistic attributes of CEOs, as developed by (Chatterjee & Hambrick 2006) and (Kets de Vries, 2003).

Third, we contribute to the literature on analyst forecasting. In particular, our study contributes to a number of dimensions that Ramnath et al. (2008) distinguish based on a review of some 250 papers on analysts which have appeared in 11 major research journals since 1991. First, we contribute to the literature on analysts' decision processes by extending earlier work (Previts et al. 1994; Lang & Lundholm 1996; Rogers & Grant 1997) on which information sources and considerations analysts utilize in making their assessments. We confirm earlier findings that analysts are mainly focused on information related to short-term earnings. In addition, we provide evidence that analysts seem to be less interested in more intangible information, indicative of longer-term value, such as CEO competence and integrity, governance structures, and qualifications of countervailing powers (those of the CFO, Board and Audit Committee). Next, we extend earlier findings on the nature of analyst expertise, which studies are mainly based on archival data analyses (Clement et al., 2007; Bouwman, Frishkoff & Frishkoff, 1987; Hunton, McEwan & Bhattacharjee, 2001). Our findings confirm that analysts have strong beliefs in their own capacities and typically deny that they are influenced by reports and/or the assessments of other analysts. This contradicts pertinent findings of herding behaviour (Graham, 1999; Bernhardt et al., 2006; Hirshleifer & Teoh, 2001) amongst analysts and proves that they are boundedly aware of their own behaviour. This self-knowledge or rather, the impediments therein, are part of the dimension Ramnath et al. (2008) categorize as: 'Analysts' incentives and behavioural biases.' Some authors find that analysts suffer

from overconfidence (Daniel et al., 1997; Lin et al., 2006), which leads them to biased judgments, although others (Abarbanell & Lehavy, 2003; Amir & Ganzach, 1998) assert that the literature on analysts biases have produced conflicting evidence.

Through our direct measurement of bounding factors as perceived by the analysts themselves, we add important insights to the literature on analyst bias which, to date, is mainly based on archival data research (Friesen & Weller, 2006). Consistent with theories of counterfactual thinking (Roose & Olson, 1996, 1997; Sanna & Turley, 1996) and with theories on investor regret (Lin et al., 2006), we find that analysts overreact to restatement announcements and blame others for their incorrect assessments. We also find that analysts are blinded by overconfident CEOs, which is consistent with research on how other gatekeepers seem to be ‘captured’ (Langevoort, 2004; Moore & Healy, 2008; Paredes, 2005). Our study extends findings around the so-called ‘slippery slope to fraud,’ which may possibly be applicable to analysts and other gatekeepers as well. In a state of ‘bounded awareness’ combined with mechanisms of capture and other biases, gatekeepers all seem to lose their ability to break away from the herd, and offer their own clear-eyed assessment of a company – they miss out on ‘long necks’ and a 20/20 vision.

We used a combination of content analyses, a comprehensive survey, and structured interviews to focus on the phenomenon of how ‘blindness’ in restatement situations arise, and how far the implications of those blindnesses may extend. This multiple format research enabled us to achieve an integrated perspective, and design and test a model on how financial misreporting affects analysts and the companies they follow. Our comprehensive survey, which consisted of 136 questions (Likert-scaled) and subsequent interviews, allowed us to create a number of new measurement constructs, which we then used in our model as to how analysts perceive CEOs in financial reporting crisis situations. The survey and interview methods also provided us with explanations about why analysts have favourable views, with respect to earnings management pressures and executive job demands, before a restatement is announced.

Finally, we contribute to literature on reputation management by showing how a group of stakeholders with a very high degree of expertise and involvement in the companies they evaluate (financial analysts) form perceptions of companies

in a crisis situation. While some previous studies have investigated reputation management in crisis situations (e.g. Benoit, 1997; Benoit & Czerwinski, 1997; Klein & Dawar, 2004; Arpan & Pompper, 2003), they have generally focused on stakeholders with a relatively low involvement and expertise regarding the companies concerned (e.g. consumers, the general public). Similarly, while some studies have examined reputation management among audiences with a higher expertise and involvement, such as investors and employees (e.g. Smidts, Pruyn & Van Riel, 2001; Roberts & Dowling, 2002), these studies have generally not looked at crisis situations. Our studies show that perceptions of companies and their managers by highly involved and expert audiences in crisis situations are still subject to both biases and bounded rationality.

## 5.6 Managerial Implications

We can discuss managerial implications of our research at several levels. First, there is the matter of preparers and users of firms' financial statements, and the implications of the necessity to restate. In particular, we discuss some of the implications for the firm's executives who are primarily responsible for 'misreporting' the true and fair view of these statements. Next, we will discuss some implications for analysts following companies. Finally, and in addition to the recommendations already made in the previous sections, we will discuss how independent boards, and more specifically, the audit committee, can improve their monitoring roles.

The implementation of the Sarbanes-Oxley Act, including its severe penalties for engaging in financial reporting fraud (and the similar tightening of governance laws and regulations in other countries) has almost made financial misreporting a capital crime. Clearly, malicious intent in restatements is something only those, who Kets de Vries calls 'Fools and Impostors' (Kets de Vries, 2003) will engage in. However, managers need to be aware that the psychology of getting into corporate misreporting (Hall, 2006; Feng, Ge, Luo & Shevlin, 2008) often is taken in small, incremental steps over time, known as the 'slippery slope' (Schrand & Zechman, 2008). This 'sliding off' can be better illustrated by quoting remarks from a letter dated, 7 January 2009, by the (now) infamous ex-chairman of a global IT company Satyam, which found itself in the midst of a reporting scandal recently (Raju, 2009):

What started as a marginal gap between actual operating profit and the one reflected in the books of accounts continued to grow over the years. It has attained unmanageable proportions as the size of company operations grew.

It was like riding a tiger, not knowing how to get off without being eaten.

The restatements we studied reveal that once a restatement is required, all earlier use of accounting discretion, interpretation, and decision-making by executives is judged with the unavoidable benefit of hindsight. Therefore, executives as well as their immediate gatekeepers need to take account of this and should openly and frequently discuss and record their accounting decision-making. Further, if misreporting has occurred, our findings suggest that managers should be aware of the

acute information needs of analysts on both the causes and consequences of the required adjustments. Transparent and comprehensive reporting can be further stimulated by improved disclosures of how accounting discretion was used, providing the details necessary to properly assess the situation and addressing questions upfront, such as detailing past considerations and whether the restatement is a 'true' attack on net equity, or merely due to income-timing issues. The current upheaval around fair value accounting will put earnings volatility management in a different perspective for years to come – managers need to voice their concerns in this respect on a more coordinated and cohesive basis.

Our research further suggests that the focus on short-term earnings, both by executives and analysts, needs serious reconsideration as it proves to be the culprit in the current company performance reporting paradigm. We find that even in misreporting crisis situations the focus of managers and analysts continues to be on short-term value drivers. Consistent with the recommendations made by the American Chamber of Commerce, our findings would strongly support measures to abandon the expensive circus around quarterly earnings guidance. Rather, our findings indicate that if managers would pay greater attention to longer-term value drivers, again consistent with abundant studies, a company's reputational endurance (staying-power) could greatly be enhanced as protection to short-term attacks caused by accounting errors.

For analysts, our findings suggest a need for more extensive education and training on accounting judgments and decision-making. A deeper understanding of how and where managers can properly utilize accounting discretion will sharpen the discussions in corporate conference calls. This would also imply that they have to upgrade their probing skills and ask more in-depth questions. Irrespective of reciprocity threats, if analysts individually and collectively pursued sharper and more probing questions, a more transparent information-sharing level would result. This benefits firms, their executives, and the analysts in their gatekeeper roles.

#### **R 1: Recommendations based on our findings:**

- Corporate Governance regulators and law-makers should consider assigning 'super-gatekeeper' powers to the audit committee of the independent board. The following powers need to be considered:

- Convening bilateral and/or multilateral information exchange sessions with all other gatekeepers – internal and external legal counsel, internal audit, investor relations, external audit, and regulatory and/or supervisory representatives.
- Passive participation from audit committees in conference calls with analysts.
- Establishment of an inter-gatekeeper information-sharing/discussion platform. The open-access platform could also include an electronic repository of corporate ‘probing’ activities based on XBRL technologies. Probing activities would include audits, regulatory examinations, analysts’ industry reports, and rating considerations.

## **R 2: Recommendations based on our findings:**

- ‘Board capture’ needs to be elicited with the help of a dedicated ‘capture’ diagnostic tool. The capture diagnosis should be carried out at the individual (independent) board member level, and should be reported to the chair of the audit committee. Based on the diagnostic tool, a capture report should be prepared to be shared with internal and external gatekeepers. Similar to reporting under the Sarbanes-Oxley Act, significant capture situations should be considered for public disclosure. The three dimensions of our probe and disclose model – probe/verify, disclose relevant and comprehensible information, and assess impact of bias – should be an integral component of the ‘board-capture’ diagnosis model. We recognize that concentrating more powers with the chair of the audit committee leads to power concentration, and potentially to an ‘inverse’ capture exposure – the CEO being captured by the audit committee. However, we believe that transparency on this topic and sharing information on it with other gatekeepers mitigates those risks.
- The Remuneration Committee of the independent board needs to make regular and explicit assessments of executive job demands and connect this assessment with risk management (risk appetite) policies, and the reward systems of executives. This triangulation of information, which could detect primary causes of misreporting and other corporate scandals, should include benchmarking with peer-group data. Again, the report must be shared with gatekeepers.
- Considering the repetitive nature of corporate scandals, alongside the failure of

gatekeepers in the current credit crisis, law-makers and regulators should act now to develop an appropriate academic research agenda:

- Study how the apparently structural presence of biases in gatekeepers affects their individual and collective monitoring effectiveness – what biases are structural, how do those spread throughout similar gatekeeper groups; which interactions and catalysts exist between these biases; and how are gatekeeper groups exposed to information through cascading and herding behaviour?
- Through regulation (or other means), ensure that academics can access sufficient numbers of primary gatekeepers, allowing them to conduct statistically powerful research on gatekeeper effectiveness.
- Universities should include behavioural accounting curricula in their gatekeeper education programs. They should consider at a minimum education centred on auditing and accounting, finance and risk management, investor relations and corporate communication, and a reward system design. Awareness programs on the causes and effects of common biases in crisis situations should be embedded in all corporate governance (training) programs.

## 5.7 Limitations of This Study

Findings, conclusions and also the discussion section of this dissertation should be considered bearing some limitations in mind. In our first study, we developed a simplified model of restatement severity and used the two axes of the model to measure analyst's severity ratings for the second study. We recognize that restatement severity is dependent on the viewpoint and function of the person gauging it. Disadvantaged shareholders, creditors facing insolvency, employees who lost their jobs, regulators who did not identify loopholes in laws and legislation, prosecuting lawyers, each may have a different view on the dimensions of severity, which is obviously dependant on the extent of damage incurred by victims. Also, the forces identified as having a potentially negative impact on restatement situations were limited to those readily observable in the case studies we conducted. If our sample of cases would have been extended, other relevant forces could have been identified. Similarly, our identification of reputational remediation actions (open, comprehensive and positive communication), was based on the same sample. The coding scheme we developed for the first study followed a grounded-theory approach. In working with the case study materials and developing the coding scheme, we may have developed views which were not representative of the total population of restatements at that time.

Finally, our first study could only use restatement documentation available in the public domain. We realize, and know from practice, that restatement situations lead to extensive debate and power struggles amongst internal gatekeepers – legal counsel, independent board members, the audit committee, internal audit, investor relations and corporate communication executives all playing a role. We have not been in a position to compare the publicly available material with internally available evidence, thus limiting the conclusions drawn and recommendations made.

As mentioned in Chapter 3, the survey methodology suffers from several potential limitations. Our survey measures analysts' perceptions, which may not always coincide with their actual judgments and decision-making on the companies they follow. In addition, analysts can potentially parrot explanations and reasoning that they learned in their professional education, or make mental references to standards

of work as promulgated by their profession (the CFA Institute). Also, of note, if we polled analysts on a subject which potentially damaged their career, their views could be tainted, or they may have provided socially – and/or politically – preferred responses.

In our analyses of survey data we did not distinguish between certain analyst categories, such as experience, professional training background and/or country residence. The majority of analysts polled have an Anglo-Saxon background which could have tainted their views due to being closer to the bigger corporate scandals. They could be biased by their media exposure and/or association with some of the larger stock broker (analyst) firms. Further, analysts provide large collections of data on their assessments, including earnings estimates and company ratings. Our research concentrated on modelling analysts' perceptions of CEO behaviour in restatement situations; we used analysts' external data sources only for validating our construct of analysts' severity assessments. Other constructs in our model, such as CEO competence and CEO integrity, were not compared to outside data to corroborate their validity. We believe that corroborating our findings with external data sources could further contribute to the depth of our analysis and should be done in future research.

Perhaps some of the survey questions were misunderstood, irrespective of our efforts in the introductory DVD (sent together with the survey invitation letter), to explain the background and formats of the questions. It is also possible that the respondents are not representative of the underlying total analyst population. Our sample of larger companies with a restatement which had a significant restatement share price effect after the restatement was announced, could also taint the analyst population and cause our sample not to be representative.

The survey tool we used consisted of a large number of questions, which had the advantage of allowing us to gain a 'complete' picture. However, the danger is that after some time, the concentration of analysts may falter, and the questionnaire could be completed in a rush. Answers therefore, may be less reliable. Further, we measured that the average time analysts spent on the questionnaire was some 40 minutes. This is slightly longer than we expected, perhaps indicating that analysts found the questions difficult to comprehend, or that they had to dig deeper into their memory.

This brings us to the next limitation. We used various formats for questioning, which included questions with the instruction to either not use hindsight, or alternatively, to indeed use the benefits of hindsight. So, for some questions, analysts had to go back in their memory (and/or documentation) and elicit thoughts and assessments they had a few years ago when the restatement they were queried on had actually occurred (or even further back, in the time leading up to when the financial misstatements occurred, or were announced).

We have some indication as to the validity of these hindsight judgments by the fact that there was a significant positive correlation between the degree to which analysts reported in the questionnaire that before the restatement, they felt that they were misled by management, and the actual ratings they issued before the restatement (with 'higher' ratings being less positive). Nevertheless, the size of this correlation (0.40) was not such that it could remove any doubts about hindsight bias, and it only provides information on this particular question. The explicit request not to use hindsight creates potential weaknesses in the validity of the information received – we cannot know, nor does the analyst, whether he/she can properly recollect the thoughts he/she had earlier. In addition, hindsight also affects foresight. Therefore, answers from analysts concerning our questions about the restatement remediation period can be biased by the prior questions they just answered.

## 5.8 Agenda for Future Research

Based on the studies we conducted we can suggest a number of areas which warrant deeper analysis, or which indicate that some boundary-spanning research efforts should be undertaken. In our research, and in formulating our objectives and hypotheses, we combined knowledge derived from a variety of academic fields, including: behavioural accounting, corporate communication, crisis and corporate reputation management, organizational behaviour and corporate governance. Recently, many authors have suggested that combinations of behavioural sciences with research into the more 'traditional' fields of economics, finance, and accounting deliver useful insights into, and complement, our understanding of real world economic and/or financial market's phenomena. In 2003, Gilson and Kraakman reviewed lessons learned from 20 years of behavioural finance research efforts. The authors conclude that in addition to understanding how human biases influence decision making, we also need to get a deeper understanding of the mechanisms for communicating corporate valuation information – a quote from their study illustrates this as follows:

We will not fully understand the import of psychological distortions on the functioning of the capital market until we first understand the institutional limitations on the production and distribution of valuation information. The well-documented list of cognitive biases that motivates much of behavioural finance allows so many degrees of freedom that the framing of testable predictions about real world financial markets is difficult.

That is, future studies could further investigate the degree to which cognitive biases actually play a role in the communication efforts of gatekeepers who are tasked to monitor accounting and financial reporting. While our studies provide some insights into this issue, more research is needed. Particularly, future studies could use research methods that avoid the problems of hindsight bias and common method bias, such as experiments and archival studies.

Jolls, Sunstein and Thaler (1998) have extensively written on how our understanding of human behavioural limitations (boundedly rational, boundedly self-interested and bounded ethicality and will power) has implications for the design and implementation of laws and regulations. More recently, in connection with the credit

crisis they have suggested how public policy determination should take account of those well studied human biases. These authors conclude that many laws are based on the simple neoclassical economic model of maximizing utility. They point out that researchers should study, how the legal system can be improved by taking account of common human biases, including bounded will-power and bounded self-interest.

Behavioural accounting professor Bonner (2008) writes that the environment in which accounting-related judgment and decisions are made is extraordinarily complex. This complexity of the 'accounting environment', which can be well illustrated by the recent turmoil on fair value accounting and its alleged contributions to causing the credit crisis, prove that behavioural studies in general, and behavioural accounting more specifically can provide significant contributions to preventing and managing financial crisis situations.

The complexities of the accounting environment, combined with the proliferation of the financial media and the involvement of regulators, provide interesting opportunities for future research (Leuz & Wysocki, 2008). The finance literature indicates that media coverage of firms influences stock prices (Barber & Odean, 2008). Similarly, Yu (2008) finds that firms followed by more analysts manage their earnings less. These findings can be complemented with the notion that also during the current credit crisis, the media apparently contributed to information cascading (Sunstein & Kuran, 2007) which also lead to herding by capital market participants and the media. If the media, through attention-grabbing news, have such an extensive influence on behaviour of investors, politicians and regulators, then future research should measure whether and how judgment by these constituents is influenced. Does the power of the media, as measured by coverage, air-time, reputation etc, influence their judgments on otherwise technical issues? For example, how does a media-invented, or at least promoted phrase, such as 'toxic assets' influence professionals' views on how to technically address the 'true' nature of the underlying instruments – does it affect their otherwise rational approach of the subject matter?. The literature on stigmatization can perhaps show some directions for future research. In this context academic researchers could seek cooperation with media analysis companies, enabling them to get access to underlying data. In study 1, we carried out such an analysis by engaging Factiva (a Dow Jones company) into our comparative discussions of Freddie Mac and Nortel.

Also within the context of the ‘board capture’ phenomenon (Langevoort, 2004; Hall, 2006) researchers should investigate how gatekeepers, and board members more particularly, are influenced in their judgment on CEO performance and remuneration by the celebrity status of many CEOs in the media. Ranft, Ferris, Zinko and Buckley (2006) describe the benefits and costs of CEO reputation, both for the firm and for the individual CEO. They also describe some of the risks involved and note that high reputations can also push CEOs into less desired behaviour or decisions – he needs to meet market expectations which are based on perceptions, which could lead to delimiting his set of choices. Researchers should investigate to what extent those monitoring the CEO are able to dissect which decision taken by the CEO are less desirable as they do not match with rational choice behaviour.

As referred to earlier gatekeepers are heavily depending on information they receive from the individuals they are supposed to monitor (Coffee, 2004). Researchers could investigate whether probing skills of analysts, board members and other gatekeepers are dependent on skills, motivation and/or any known biases. Further, as technology makes access to company data easier - in particular the XBRL developments - researchers could investigate which information retrieval processes gatekeepers would utilize in various data availability scenarios. For example, if external audit data, which under current regulations in most territories is proprietary to the audit firm, would be accessible by other gatekeepers, which searches would they typically perform and why? Would these possibilities improve gatekeepers’ monitoring capabilities?

Bonner (2008) makes reference to the implications of so-called intuitive theories. Investors and/or the public may believe that accounting principles and auditing standards are relatively easy to apply and that auditors are to blame if financial misstatements or frauds come to light. This pre-occupation with who should be blamed in today’s media driven world, can quickly lead to negativity bias. Corporate reputation researchers and accounting scholars should work together and investigate which communication techniques can be utilized as countervailing powers, in particular for those gatekeepers, who cannot defend themselves publicly. The expectation gap in the auditing domain persists: there is a gap between what readers of financial statements expect of an audit report and the level of assurance an audit report actually provides. In that connection the discussions between the

AICPA auditing standards board (ASB), which drafts auditing standards for non-public entities in the US and the PCAOB, who looks after similar standards for listed entities, and the International Auditing and Assurance Standards Board have tried to make some progress in that area. However, as Goldwasser (2005) notes, the discussions of what constitutes 'reasonable assurance' versus what is 'a high level of assurance', is difficult to grasp for the general public. Accounting researchers again should team up with communication scholars to analyze how auditors' rhetoric, including persuasion, influences financial statement users' perceptions.

In sections 5.4.2 through 5.4.4 we discuss how gatekeepers can avoid being blinded and captured, and how they could work more closely together. Traditionally, gatekeepers are judged on two dimensions: probing depth (information gathering ability) and disclosure effects (public/private). We developed some arguments on why market participants and regulators would welcome a deeper insight into where the various gatekeepers are positioned in this two-dimensional space – and what that implies for understanding their monitoring roles. Based on our three studies we suggested to add a third dimension to this information sharing – the 'capture' dimension (how biased are gatekeepers?). A theory on what being 'captured' means needs further development and can be compared with theory development on what it means of 'being independent'. In the accountancy domain a great deal has been written on independence in fact, and independence in appearance. We propose that research efforts on the independence dimension should be extended to include the concepts of biases and capture.

We believe that many of the above suggested multidisciplinary studies will contribute to and enhance our understanding of how gatekeepers function in their assessment of restatement situations, and how this functioning could be improved.

## 5.9 Concluding Remarks

The avalanche of recent accounting scandals, coupled with the current global credit crisis, re-iterate that our knowledge of corporate governance failures needs continuous upgrading.

This dissertation contributes to understanding why the watchdogs did not bark, and also dissects how common human biases affect mechanisms of corporate monitoring roles, in particular during restatement crises. Three connecting studies were conducted. After lining up theory and regulatory reports on restatements, the first qualitative study develops a model for gauging restatement severity and provides insight into the forces blurring 20/20 perspective on restatements situations – the study clarifies how management can best communicate in those circumstances. A second quantitative study follows and is the first to comprehensively elicit perceptions of analysts on CEO pressures and behaviours during restatements. We analyse how earnings management pressures and executive job demands affect analysts' perceptions of (often) overconfident CEOs in the period leading up to the restatement. Next, we associate how these pressures and behaviours influence analysts' views of CEOs in the reputation remediation period. A third study corroborates our findings through in-depth interviews with analysts following restatement companies. We show that analysts regret in failing to recognize red flags leads to irrationality in their judgment and decision making during a financial reporting crisis.

This dissertation shows that bounded awareness and common human biases heavily influence functioning of executives, and their gatekeepers, in protecting corporate reputation during financial statement restatements.

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# Appendices

## Appendix 1.1 Materiality Considerations

Today, viewing SAB No. 99 with hindsight in Division of Enforcement cases, the SEC has noted that a danger exists in applying the staff view in a manner that is overly subjective, or inconsistent. The devil is in the details of SAB No. 99, and its application, particularly after-the-fact, is a tricky one. Among the bulletin's qualitative considerations listing are items that 'may well render material a quantitatively small misstatement of a financial item', such as:

- Whether the misstatement masks a change in earnings or other trends.
- Whether the misstatement hides a failure to meet analysts' consensus expectations for the enterprise.
- Whether the misstatement changes a loss into income or vice versa.
- Whether the misstatement affects the registrant's compliance with regulatory requirements.

As the bulletin states: 'The staff believes that a registrant and the auditors of its financial statements should not assume that even small intentional misstatements in financial statements, for example those pursuant to actions to 'manage' earnings, are immaterial.'

As a threshold matter there is the question of whether new or revised materiality guidance is necessary. While it is possible that existing authoritative documents, including FAS 154 and SAB No. 99, could be revised, that option seems far from practical in the short-term. In addition, the frameworks that set forth the evaluation of both quantitative and qualitative factors seem to meet the needs of most constituencies using financial statements. The question becomes whether these standards are being interpreted in a manner that is too restrictive when it comes to the restatement question.

A subcommittee of the SEC working on the financial reporting progress report makes the following comment on the issue of materiality:

The subcommittee believes that materiality guidance should be similar in both directions. Specifically, the subcommittee believes that there should be a 'sliding scale' for evaluating errors. On this scale, the higher the quantitative significance of an error, the stronger the qualitative factors must be to result in a judgment that the error is not material. Conversely, the lower the quantitative significance of an error, the stronger the qualitative factors must be to result in a judgment that the error is material.

The suggestion that the qualitative aspects should cut in two directions arises from the underlying concept that the primary driver of the restatement question ought to be what is helpful to current investors. By emphasizing the interests of current investors, it may be possible to avoid some restatements that do not enhance the usefulness of financial information for their purposes.

A principle difference exists between accounting irregularities, defined as, 'Intentional misstatements or omissions of amounts or disclosures', and accounting errors defined as 'unintentional misstatements or omissions'. Once detected, error or irregularity must be restated if material. The distinction between these two categories can be deemed fundamental with respect to reputation, credibility management, and (potential) restatement crisis management. In this study, we shall consider two dimensions of the restatement phenomenon – first, the significance of the information distortion, and second, the level of management intent.

## **Appendix 1.2 The Subprime Mortgage Crisis and Restatements**

In the context of the current financial credit crisis, it is interesting to note that the FBI's 2007 report that classified financial crimes, also singled out subprime mortgage lending practices. The report said such practices were receiving priority attention from the combined forces of the Department of Justice (DOJ), FBI and SEC, and that the trio of agencies was already in the process of investigating – and possibly prosecuting – lenders for accounting fraud:

As publicly traded subprime lenders have suffered financial difficulties due to rising defaults, analyses of company financials have identified instances of false accounting entries, and fraudulently inflated assets and revenues. Investigations have determined that many of these bankrupt subprime lenders manipulated their reported loan portfolio risks and used various accounting schemes to inflate their financial reports. In addition, before these sub prime lenders' stocks rapidly declined in value, executives with insider information sold their equity positions and profited illegally. The FBI is working with the US Department of Justice (DOJ), the US Securities and Exchange Commission (SEC), and other US regulatory agencies to identify possible subprime lenders engaged in corporate fraud and insider trading.

Within the playing field of subprime mortgages, publicly held firms involved in the securitizing business will have to face up to some very difficult accounting issues, such as whether gain-on-sale treatment under FAS 140 was appropriate in the first instance, whether the original complex calculations of the gains on the sales of the collateral were reasonable, and whether the residuals these firms carry on their balance sheets as assets have been impaired and, consequently, should be written down. These issues could well lead to restatements of previously issued financial statements, or charges to reduce the carrying value of residuals. If that is the case, these securitization firms may well face securities class litigation, through which shareholders of the securitizers may claim that they were taken in by misleading, or incomplete disclosures, concerning these issues. Since June 2007, the SEC has opened at least 12 investigations into potential securities fraud related to securitization and sale of subprime loans, and that number will almost certainly increase in the future.

The current credit crisis and the ensuing discussions on the effects of fair value accounting will have consequences for the accounting profession. This can also be illustrated by studies into the litigation connected with bank failures. In November 2008, a comprehensive study was published (Bethel, Ferrell & Hu, 'Legal and Economic Issues in Litigation Arising from the 2007-2008 Credit Crises', 2008). The paper summarizes the extensive litigation that is underway, including the Rule 10b-5<sup>1</sup> class-action lawsuits that have already been filed against banks, pending the Employee Retirement Income Security Act (ERISA) litigation, the causes-of-action available to Mortgage-Backed Securities (MBS) and Collateralized Debt Obligations (CDO) purchasers, and litigation against the rating agencies. The paper by Bethel et al., discusses three principles that will likely prove central in the resolution of the securities class-action litigation: (1) 'no fraud by hindsight,' (2) 'truth on the market,' and, (3) 'loss causation.' In Study 2 we note the existence of 'hindsight bias' and later refer to an important concept applied in securities litigation, that of 'no fraud by hindsight.' As mentioned earlier, the FBI is already investigating the accounting practices and pricing of securities of several major banks, and additional civil investigations are being conducted by the SEC and state attorneys general. This combination of government investigations is important not only in their own right, but also because they can potentially reveal information that may further fuel private class-action litigation and result in an additional wave of financial restatements. In the period from February 2007 through November 2008, more than 250 class-action lawsuits were filed on the basis of Rule 10b-5, or ERISA litigation was started against some 95 companies. Much of this litigation is directly related to the extensive asset write-downs taken by banks.

<sup>1</sup> Rule 10b5-1, an administrative rule enacted by the SEC which deals with the intent to defraud which is essential for proving a violation of insider trading laws. The 'manipulative and deceptive devices' prohibited by Section 10(b) of the Act and Rule 10b-5 there under include, among others, the purchase or sale of a security of any issuer, on the basis of material nonpublic information about that security or issuer, in breach of a duty of trust or confidence that is owed directly, indirectly, or derivatively, to the issuer of that security or the holders of that issuer, or to any other person who is the source of the material nonpublic information.

## Appendix 2.1 Timelines Freddie Mac and Nortel

|   |         |   |
|---|---------|---|
| 23-1-2003   Analyst Report JP Morgan              | 1-2003  | 22-1-2003   PressRel Restatement Expected                 |
| 27-1-2003   Conference Call Q4 2002               | 2-2003  | 27-1-2003   PressRel Upwards Restatement                  |
| 28-1-2003   Analyst Report Piper jaffray          | 3-2003  |   |
| 28-1-2003   Analyst Report JP Morgan              | 4-2003  | 25-3-2003   PressRel Restatement Update                   |
| 25-3-2003   Analyst Report JP Morgan              | 5-2003  | 24-4-2003   PressRel Update Restatement                   |
| 24-4-2003   Analyst Report Raymond James          | 6-2003  | 7-6-2003   PressRel New Leadership                        |
| 9-6-2003   Conference Call New Leadership         | 7-2003  | 9-6-2003   PressRel New CEO                               |
| 9-6-2003   Analyst Report Raymond James           | 8-2003  | 11-6-2003   PressRel SEC Update                           |
| 10-6-2003   Analyst Report JP Morgan              | 9-2003  | 16-6-2003   PressRel Update Provisions Retired Executives |
| 25-6-2003   Conference Call Restatement Update    | 10-2003 | 25-6-2003   PressRel Restatement Process                  |
| 25-6-2003   Analyst Report Raymond James          | 11-2003 | 23-7-2003   PressRel Board Council Report                 |
| 26-6-2003   Analyst Report JP Morgan              | 12-2003 | 24-7-2003   PressRel Q2 2003 Results                      |
| 23-7-2003   Conference Call Results Investigation |         | 22-8-2003   PressRel Replace CEO                          |
| 23-7-2003   Analyst Report Prudential             |         | 25-8-2003   PressRel CEO Stock Trades                     |
| 24-7-2003   Analyst Report JP Morgan              |         | 25-9-2003   PressRel Update Timing Restatement Results    |
| 25-9-2003   Analyst Report Piper Jaffray          |         | 29-10-2003   PressRel New Organizational Structure        |
| 21-11-2003   Analyst Report Barney                |         | 21-11-2003   Conference Call Discuss Restatement          |
| 22-11-2003   Analyst Report BearStearns           |         | 21-11-2003   PressRel Restatement Results                 |
| 31-12-2003   Analyst Report Prudential            |         | 4-12-2003   PressRel Carl joins Board of Directors        |
|   |         | 7-12-2003   PressRel Richard Syron CEO                    |

23-10-2003 | Conference Call Q3 2003  
 24-10-2003 | Analyst Report JPMorgan  
 24-10-2003 | Analyst Report Deutsche Bank  
 24-10-2003 | Analyst Report Prudential

14-11-2003 | Analyst Report Nesbitt  
 20-11-2003 | Analyst Report JPMorgan Q3 2003 10-Q  
 29-12-2003 | Analyst Report Prudential  
 29-12-2003 | Analyst Report Baird

30-1-2004 | Analyst Report JPMorgan

11-3-2004 | Analyst Report Legg Mason  
 15-3-2004 | Analyst Report JPMorgan  
 5-4-2004 | Analyst Report CIBC  
 26-4-2004 | Analyst Report Prudential  
 28-4-2004 | Conference Call Update Independent Review  
 28-4-2004 | Analyst Report CIBC

2-6-2004 | Analyst Report Prudential  
 2-6-2004 | Conference Call Status of Restatement  
 2-6-2004 | Analyst Report Baird

16-8-2004 | Analyst Report Prudential  
 19-8-2004 | Analyst Report CIBC

11-11-2004 | Analyst Report Prudential

11-1-2005 | Conference Call Restatement Results

|         |
|---------|
| 10-2003 |
| 11-2003 |
| 12-2003 |
| 1-2004  |
| 2-2004  |
| 3-2004  |
| 4-2004  |
| 5-2004  |
| 6-2004  |
| 7-2004  |
| 8-2004  |
| 9-2004  |
| 10-2004 |
| 11-2004 |
| 12-2004 |
| 1-2005  |

23-10-2003 | PressRel Expected Timing 2003 10-Q  
 23-10-2003 | PressRel Planned Restatement

19-11-2003 | PressRel Filing

23-12-2003 | PressRel Confirm Restated Financial Results

29-1-2004 | PressRel Q4 2003

10-3-2004 | PressRel Delay Filing 2003 financial statements

15-3-2004 | PressRel Announcement Interim CFO  
 29-3-2004 | PressRel Update Timing Q1 2004 Results

5-4-2004 | PressRel Update SEC Inquiry  
 13-4-2004 | PressRel Update OSC Inquiry  
 28-4-2004 | PressRel New President&CEO

2-6-2004 | PressRel Update Restatement

16-8-2004 | PressRel update RCMP Review  
 19-8-2004 | PressRel Status Update

11-11-2004 | PressRel Status Update

21-12-2004 | PressRel Status Update

3-1-2005 | PressRel NYSE Grants 3 months extension  
 6-1-2005 | PressRel Status Update  
 10-1-2005 | PressRel Nortel to file Financial statements  
 11-1-2005 | PressRel filing 2003 Financial statements

Nortel

## Appendix 2.2 Coding Scheme

|  |  |
|--|--|
| <u>OPEN (OPE)</u> <ul style="list-style-type: none"> <li>• Restat FinPos effect, precise</li> <li>• Restat Business effect, precise</li> <li>• Restat Period, precise</li> <li>• Provides explanation of (valid) causes</li> <li>• Responds with explanation</li> <li>• Data collection process explained</li> <li>• OPE-other</li> </ul>                    | <u>CLOSED (CLO)</u> <ul style="list-style-type: none"> <li>• Restat FinPos effect, not precise</li> <li>• Restat Business effect, not precise</li> <li>• Restat Period, not precise/revisions</li> <li>• Obscure cause reference</li> <li>• Incomplete response or selective</li> <li>• Tedious process/ not explained</li> <li>• CLO-other</li> </ul> |
| <u>CONFIRM in proper context of problem (CON)</u> <ul style="list-style-type: none"> <li>• Confirm accounting misinterpretation</li> <li>• Confirm accounting error</li> <li>• Confirm accounting irregularity/ fraud</li> <li>• Confirm numbers game</li> <li>• Confirm accounting system weakness</li> <li>• CON-other</li> </ul>                          | <u>DENY (DEN)</u> <ul style="list-style-type: none"> <li>• Deny accounting misinterpretation</li> <li>• Deny accounting error</li> <li>• Deny accounting irregularity/ fraud</li> <li>• Deny numbers game</li> <li>• Spinning</li> <li>• DEN-other</li> </ul>  |
| <u>BLAME TAKING (BLT)</u> <ul style="list-style-type: none"> <li>• Apology</li> <li>• No intent <u>assertion</u></li> <li>• Takes blame: Control Deficiencies</li> <li>• Takes blame: Operational Irregular</li> <li>• BLT-other</li> </ul>  | <u>BLAME GIVING (BLG)</u> <ul style="list-style-type: none"> <li>• Blaming CEO</li> <li>• Blaming CFO</li> <li>• Blaming Internal Control Deficiencies</li> <li>• Blaming Operational Irregularities</li> <li>• BLG-other</li> </ul>   |
| <u>ACT AS IF GOVERNANCE IN CONTROL – and in Power (GOV)</u> <ul style="list-style-type: none"> <li>• Governance/ remedial actions – taken</li> <li>• Forensic investigation explained</li> <li>• No fraud – <u>conclusive evidence</u></li> <li>• Reassurance on business</li> <li>• Board expertise assertion/credentials</li> <li>• GOV-other</li> </ul>   | <u>GOVERNANCE GONE – out of Power (GON)</u> <ul style="list-style-type: none"> <li>• Vague on corrective measures</li> <li>• Resist investigation</li> <li>• Conclusive evidence of fraud/ irregularities</li> <li>• Uncertainty re company survival</li> <li>• Uncertainty re Complete info</li> <li>• GON-other</li> </ul>                           |
| <u>ACT IN NORM CONFORMITY (Sarbanes-Oxley as standard) (NRM)</u> <ul style="list-style-type: none"> <li>• Code of conduct upgrade</li> <li>• Accounting policies improvement</li> <li>• Accounting operations/ systems improve</li> <li>• Regulator settlement</li> <li>• Litigation settled</li> <li>• Audit firm has helped; explicit NRM other</li> </ul> | <u>ACT NOT IN CONFORMITY (NOC)</u> <ul style="list-style-type: none"> <li>• Audit firm qualifies accounts</li> <li>• No accounting policy change</li> <li>• No system improvements</li> <li>• Regulators continue investigation</li> <li>• Justice department involved</li> <li>• Litigation against audit firm</li> <li>• NOC-other</li> </ul>        |

## Appendix 2.3 Overview of Coding Data and Results

### NUMBER OF DOCUMENTS AND QUOTATIONS

| CASE                | TOTAL NUMBER OF DOCUMENTS | INTERNAL PRESS RELEASES | TRANSCRIPTS CONFERENCE CALLS | ANALYSTS REPORTS | QUOTATIONS |
|---------------------|---------------------------|-------------------------|------------------------------|------------------|------------|
| Adecco              | 16                        | 8                       | 3                            | 5                | 188        |
| Ahold               | 58                        | 38                      | 7                            | 13               | 788        |
| Cablevision         | 22                        | 4                       | 3                            | 15               | 138        |
| Computer Associates | 27                        | 8                       | 6                            | 13               | 237        |
| ElPaso              | 23                        | 7                       | 3                            | 13               | 201        |
| FreddieMac          | 41                        | 19                      | 7                            | 15               | 963        |
| Goodyear            | 17                        | 6                       | 4                            | 7                | 120        |
| Interpublic         | 16                        | 8                       | 4                            | 4                | 210        |
| Nortel              | 41                        | 20                      | 5                            | 16               | 366        |
| Parmalat            | 12                        | 7                       | 1                            | 4                | 206        |
| Qwest               | 45                        | 12                      | 10                           | 23               | 443        |
| Shell               | 26                        | 11                      | 6                            | 9                | 531        |
| Symbol              | 29                        | 15                      | 7                            | 7                | 381        |
| Tyco                | 34                        | 14                      | 9                            | 11               | 403        |
| Total               | 407                       | 177                     | 75                           | 155              | 5175       |

### CODING SCORES AND COHEN'S KAPPA

| CASE                | AANTAL QUOTATIONS | BOARD TOTAL POS | BOARD TOTAL NEG | KAPPA BOARD | DUUR CASE IN DAGEN | START      | EINDE      |
|---------------------|-------------------|-----------------|-----------------|-------------|--------------------|------------|------------|
| Adecco              | 188               | 78,49%          | 21,51%          | 0,738485    | 239                | 12-1-2004  | 7-9-2004   |
| Ahold               | 788               | 78,13%          | 21,87%          | 0,729682    | 549                | 24-2-2003  | 26-8-2004  |
| Cablevision         | 138               | 74,42%          | 25,58%          | 0,754288    | 258                | 18-6-2003  | 2-3-2004   |
| Computer Associates | 237               | 78,79%          | 21,21%          | 0,803187    | 350                | 8-10-2003  | 22-9-2004  |
| ElPaso              | 201               | 68,00%          | 32,00%          | 0,58748     | 188                | 17-2-2004  | 23-8-2004  |
| FreddieMac          | 963               | 80,74%          | 19,26%          | 0,589919    | 574                | 22-1-2003  | 18-8-2004  |
| Goodyear            | 120               | 72,88%          | 27,12%          | 0,796959    | 381                | 21-10-2003 | 5-11-2004  |
| Interpublic         | 210               | 75,89%          | 24,11%          | 0,729425    | 226                | 5-8-2002   | 19-3-2003  |
| Nortel              | 366               | 72,25%          | 27,75%          | 0,691       | 446                | 23-10-2003 | 11-1-2005  |
| Parmalat            | 206               | 62,86%          | 37,14%          | 0,793       | 188                | 11-11-2003 | 17-5-2004  |
| Qwest               | 443               | 70,81%          | 29,19%          | 0,684393    | 619                | 11-3-2002  | 19-11-2003 |
| Shell               | 531               | 78,86%          | 21,14%          | 0,716545    | 228                | 9-1-2004   | 24-8-2004  |
| Symbol              | 381               | 72,67%          | 27,33%          | 0,749766    | 820                | 6-3-2002   | 3-6-2004   |
| Tyco                | 403               | 74,07%          | 25,93%          | 0,780124    | 610                | 3-6-2002   | 3-2-2004   |
| Gemiddeld           |                   | 74,20%          | 25,80%          | 0,72459     | 405,4286           |            |            |
| Totaal              | 5175              |                 |                 |             |                    |            |            |

CODING SCORES BY POSITIVE AND NEGATIVE SUB-CODES

| Board Coding Scheme | Open   | Confirm | Blame Taking | Governance In Control | Norm Conformity | Total Pos | Closed | Deny  | Blame Giving | Governance Gone | Not in Norm Conformity | Total Neg |
|---------------------|--------|---------|--------------|-----------------------|-----------------|-----------|--------|-------|--------------|-----------------|------------------------|-----------|
| Adeco               | 25.81% | 2.15%   | 1.08%        | 39.78%                | 9.68%           | 78.49%    | 11.83% | 1.08% | 2.15%        | 1.08%           | 5.38%                  | 21.51%    |
| Ahold               | 37.10% | 1.97%   | 1.97%        | 30.47%                | 6.63%           | 78.13%    | 13.76% | 0.49% | 0.49%        | 4.91%           | 2.21%                  | 21.87%    |
| Cablevision         | 32.56% | 9.30%   | 0.00%        | 20.93%                | 11.63%          | 74.42%    | 13.95% | 0.00% | 2.33%        | 4.65%           | 4.65%                  | 25.58%    |
| Computer Associates | 16.36% | 5.45%   | 1.82%        | 36.36%                | 18.79%          | 78.79%    | 3.03%  | 3.64% | 7.27%        | 3.03%           | 4.24%                  | 21.21%    |
| ElPaso              | 28.00% | 0.00%   | 1.33%        | 36.00%                | 2.67%           | 68.00%    | 17.33% | 4.00% | 1.33%        | 4.00%           | 5.33%                  | 32.00%    |
| FreddieMac          | 32.19% | 6.60%   | 1.58%        | 36.41%                | 3.96%           | 80.74%    | 5.01%  | 2.11% | 7.92%        | 2.90%           | 1.32%                  | 19.26%    |
| Goodyear            | 49.15% | 8.47%   | 0.00%        | 8.47%                 | 6.78%           | 72.88%    | 10.17% | 0.00% | 6.78%        | 1.69%           | 8.47%                  | 27.12%    |
| Interpublic         | 43.26% | 0.71%   | 2.84%        | 24.82%                | 4.26%           | 75.89%    | 15.60% | 4.96% | 0.71%        | 2.13%           | 0.71%                  | 24.11%    |
| Nortel              | 30.89% | 1.05%   | 0.00%        | 34.55%                | 5.76%           | 72.25%    | 14.14% | 0.52% | 3.14%        | 3.66%           | 6.28%                  | 27.75%    |
| Parimalat           | 27.14% | 0.00%   | 0.00%        | 25.71%                | 10.00%          | 62.86%    | 20.00% | 4.29% | 8.57%        | 2.86%           | 1.43%                  | 37.14%    |
| Qwest               | 27.33% | 6.21%   | 3.11%        | 33.54%                | 0.62%           | 70.81%    | 19.25% | 1.24% | 3.11%        | 3.73%           | 1.86%                  | 29.19%    |
| Shell               | 31.88% | 1.01%   | 2.35%        | 26.85%                | 16.78%          | 78.86%    | 13.76% | 1.68% | 2.68%        | 1.34%           | 1.68%                  | 21.14%    |
| Symbol              | 36.67% | 0.67%   | 0.67%        | 29.33%                | 5.33%           | 72.67%    | 13.33% | 0.67% | 0.67%        | 4.67%           | 8.00%                  | 27.33%    |
| Tyco                | 37.45% | 4.94%   | 0.00%        | 29.22%                | 2.47%           | 74.07%    | 6.58%  | 2.06% | 12.76%       | 1.65%           | 2.88%                  | 25.93%    |
| Mean                | 32.56% | 3.47%   | 1.20%        | 29.46%                | 7.52%           | 74.20%    | 12.70% | 1.91% | 4.28%        | 3.02%           | 3.89%                  | 25.80%    |



Appendix 3.1 Analysts Survey

Financial Statement Restatements - Measuring Analysts' Perceptions in/during Restatement Adjustment Period

Welcome



Welcome to the questionnaire:  
  
Financial Statement Restatements - Measuring Analysts' in/during Restatement Adjustment Period  
  
Thank you in advance for your co-operation!

Introduction



Objective of the questionnaire

This questionnaire has been developed to gain insight into analysts' perception of CEO behaviour before and during a Financial Statement Restatement. Findings of this research will help analysts to identify earlier Corporate winners/losers in the battle of regaining public trust after a Restatement!

Timing

The web-site hosting the questionnaire will be 'open' from **September 3 to September 23 2007**. This period was chosen recognizing analysts' busy season and the upcoming Q2 results in July. Therefore, please complete the questionnaire within the 21 day period in September. The survey will take approximately **20 minutes** of your time and if necessary can be saved to allow a pause in completion to fit with your schedule.

Anonymous processing of your response

Your responses will be processed anonymously and will only be used for scientific purposes. The Interactive Dialogue's system features do allow for tracking completion of the questionnaire, which may result in soft reminders being issued automatically.

## Instructions



### Instructions

The questionnaire is structured using a number of themes. You can always exit the questionnaire and return later. Please use the **"Quit"** button to make sure your answers are saved properly.

Please maximise your screen to improve readability.

On every screen, you will see the following buttons:

**"Next"** - This button will take you to the next screen.

**"Back"** - This button will take you back to the previous screen.

**"Quit"** - This button can be used to exit and save the questionnaire without sending it.

Only use the buttons at the bottom of the screen to navigate through the questionnaire. By clicking the "Quit" button you can exit the survey. Your answers will be saved and upon re-entering you will start where you left off.

Please **never** use the **"x"** button in the right corner of the page. By exiting the survey in this way your answers will **NOT** be saved.

Note: It is possible to fill out this questionnaire on every computer with an internet connection, just forward the invitation e-mail you have received and click on one of the two links, questions already answered will be saved as well.

## Overview of the questionnaire



### Categorieën

This questionnaire consists of the following categories and topics:

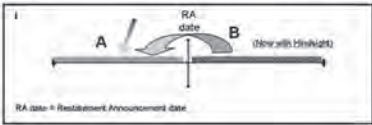
- Assessing your views of **Internal Pressures** on the CEO as well as your assessment of the CEO's **awareness** of governance and financial reporting complexities
- Assessing your views of **External Pressures** on the CEO which potentially gave rise to the Restatement
- Reflections on certain **Analysts' views** you had yourself on seeing this restatement developing once it was announced, and some views you had in the period shortly before the restatement
- Reflections on certain **Analysts' views** you had yourself on the characteristics of the Company, your assessment of the level of accounting and financial reporting skills of gatekeepers and job demands on the CEO
- Finally assessing your views on ethical **traits of the CEO** at the helm when the Restatement was announced and his "aggressiveness" on financial reporting matters
- Finally assessing your views on the **communication and governance behaviour** of the CEO shortly before the restatement and during the restatement adjustment period

# Internal factors

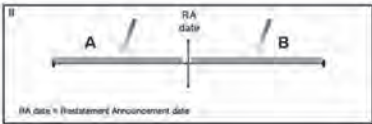


## Internal factors

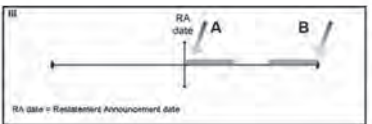
The questions are focused on 3 different formats namely:



Format I indicates the period leading up to restatement (period A) and the period during the restatement adjustment (period B). Period A is defined as the financial periods which were restated, please answer these questions without any use of hindsight. So, effectively, try to ignore what you know now and think back to your assessments of the company (and its CEO) in the period before the Restatement was announced. Period B is defined as the period after announcement of the restatement. Please answer these questions with hindsight.

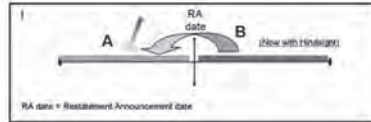


Format II also indicates the period leading up to the Restatement (period A) and the period during the restatement adjustment (period B). Please answer both types of questions without any use of hindsight.



Format III indicates the period at the beginning of the crisis recovery period (period A) and the period at the end of the restatement adjustment period (period B). Please answer both types of questions without any use of hindsight.

## Internal factors: Gatekeeper pressure



Period A

**Without any use of hindsight!**

I believed then that the CEO was under the following degree of pressure:

1a From the Independent Board, to improve financial results:

- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very high pressure
 ☐ Unknown

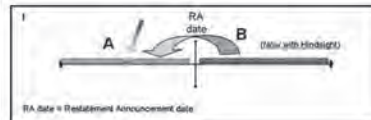
Period B

**With hindsight, I now believe** that the CEO was under the following degree of pressure:

1b From the Independent Board, to improve financial results:

- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very high pressure
 ☐ Unknown

## Internal factors: Financial incentive pressures



Period A

**Without any use of hindsight!**

2a. I believed then that the company's reward/bonus system was instrumental in the CEO using accounting policies to his/her own financial advantage to the following extent:

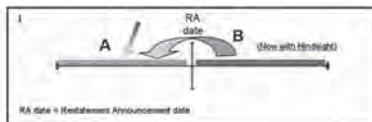
- ☐ Not at all
 ☐ Very little
 ☐ Little
 ☐ Some
 ☐ Highly
 ☐ Very highly instrumental
 ☐ Unknown

Period B

2b. **With hindsight, I now believe** that the company's reward/bonus system was instrumental in the CEO using accounting policies to his/her own financial advantage (during the period up to restatement) to the following extent:

- ☐ Not at all
 ☐ Very little
 ☐ Little
 ☐ Some
 ☐ Highly
 ☐ Very highly instrumental
 ☐ Unknown

## Internal factors: CEO characteristics



Period A

**Without any use of hindsight!**

3a. I believed then that the CEO managed the risks of financial reporting fraud with the following level of effectiveness:

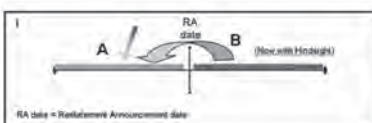
- ☐ Not
 ☐ Very low
 ☐ Low
 ☐ Sufficient
 ☐ High
 ☐ Very highly effective
 ☐ Unknown

Period B

3b. **With hindsight, I now believe** that the CEO managed the risks of financial reporting fraud (during the period up to restatement), with the following level of effectiveness:

- ☐ Not
 ☐ Very low
 ☐ Low
 ☐ Sufficient
 ☐ High
 ☐ Very highly effective
 ☐ Unknown

## Internal factors: CEO characteristics



Period A

**Without any use of hindsight!**

4a. I believed then that the CEO's level of dominant behavior was as follows:

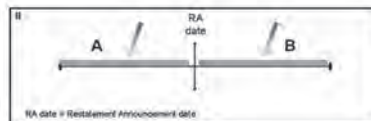
- ☐ Not
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very highly dominant
 ☐ Unknown

Period B

4b. **With hindsight, I now believe** that the CEO's level of dominant behavior (during the period up to restatement) was as follows:

- ☐ Not
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very highly dominant
 ☐ Unknown

## Internal factors: Governance and Compliance



### Period A

#### Without any use of hindsight!

5a. In the period leading up to the restatement, I believed that the effectiveness of the company's overall governance and control measures was as follows:

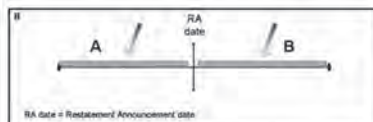
- ☐ Not effective  
 ☐ Very low  
 ☐ Low  
 ☐ Sufficient  
 ☐ High  
 ☐ Very highly effective  
 ☐ Unknown

### Period B

5b. During the restatement adjustment period, I believed that the effectiveness of the company's overall governance and control measures was as follows:

- ☐ Not effective  
 ☐ Very low  
 ☐ Low  
 ☐ Sufficient  
 ☐ High  
 ☐ Very highly effective  
 ☐ Unknown

## Internal factors: Openness and Compliance



### Period A

In the period leading up to the restatement, I rated the following aspects of the CEO as follows:

6a I. Demonstrated knowledge of accounting and financial reporting matters:

☐ None ☐ Very low knowledge level ☐ Low ☐ Sufficient ☐ High ☐ Very high knowledge level ☐ Unknown

6a II. Communicative skill level on accounting and financial reporting matters:

☐ None ☐ Very low skill level ☐ Low ☐ Sufficient ☐ High ☐ Very high skill level ☐ Unknown

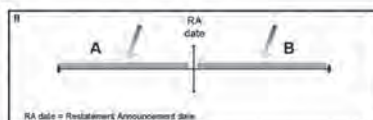
6a III. Commitment to compliance with accounting principles:

☐ Not ☐ Very low commitment ☐ Low ☐ Sufficient ☐ High ☐ Very high commitment ☐ Unknown

6a IV. Commitment to proper corporate governance:

☐ None ☐ Very low ☐ Low ☐ Sufficient ☐ High ☐ Very high commitment ☐ Unknown

## Internal factors: Openness and Compliance



### Period B

During the crisis recovery period, I rated the following aspects of the CEO as follows (NB: question should be answered solely regarding the CEO in place at the time the restatement was announced (and not any successor)).

6b I. Demonstrated knowledge of accounting and financial reporting matters:

☐ None ☐ Very low knowledge level ☐ Low ☐ Sufficient ☐ High ☐ Very high knowledge level ☐ Unknown

6b II. Communicative skill level on accounting and financial reporting matters:

☐ None ☐ Very low skill level ☐ Low ☐ Sufficient ☐ High ☐ Very high skill level ☐ Unknown

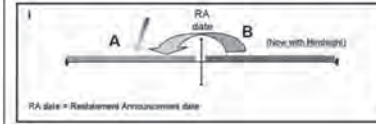
6b III. Commitment to compliance with accounting principles:

☐ Not ☐ Very low commitment ☐ Low ☐ Sufficient ☐ High ☐ Very high commitment ☐ Unknown

6b IV. Commitment to proper corporate governance:

☐ None ☐ Very low ☐ Low ☐ Sufficient ☐ High ☐ Very high commitment ☐ Unknown

## External factors: Stakeholder pressures



Period A

**Without any use of hindsight!**

I believed then that the CEO was under the following degree of pressure to exceed financial performance expectations:

7a I. From the analysts following the company:

☐ None ☐ Very low pressure ☐ Low ☐ Some ☐ High ☐ Very high pressure ☐ Unknown

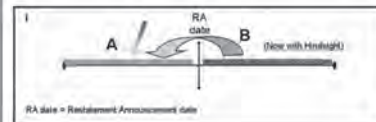
7a II. From the shareholders:

☐ None ☐ Very low pressure ☐ Low ☐ Some ☐ High ☐ Very high pressure ☐ Unknown

7a III. From the media:

☐ None ☐ Very low pressure ☐ Low ☐ Some ☐ High ☐ Very high pressure ☐ Unknown

## External factors: Stakeholder pressures



Period B

**With hindsight, I now believe** that the CEO was under the following degree of pressure to exceed financial performance expectations (during the period up to restatement):

7b I. From the analysts following the company:

☐ None ☐ Very low pressure ☐ Low ☐ Some ☐ High ☐ Very high pressure ☐ Unknown

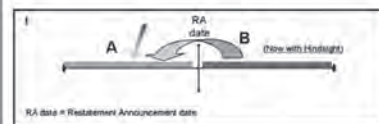
7b II. From the shareholders:

☐ None ☐ Very low pressure ☐ Low ☐ Some ☐ High ☐ Very high pressure ☐ Unknown

7b III. From the media:

☐ None ☐ Very low pressure ☐ Low ☐ Some ☐ High ☐ Very high pressure ☐ Unknown

## External factors: Stakeholder pressures



Period A

**Without any use of hindsight!**

8a. I believed then that conflicts of interest reduced the external auditors' objectivity and/or independence, to the following extent:

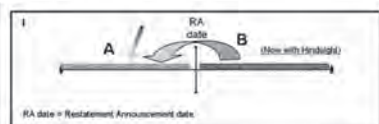
- ☐ None
 ☐ Very few
 ☐ Few
 ☐ Some
 ☐ Many
 ☐ Very many conflicts
 ☐ Unknown

Period B

8b. **With hindsight, I now believe** that conflicts of interest (during the period up to restatement) reduced the external auditors' objectivity and/or independence, to the following extent:

- ☐ None
 ☐ Very few
 ☐ Few
 ☐ Some
 ☐ Many
 ☐ Very many conflicts
 ☐ Unknown

## External factors: Accounting/regulatory complexities



Period A

**Without any use of hindsight!**

9a. I believed then that, for the company in question, complexity of accounting rules hindered the company from staying 'in compliance', to the following extent:

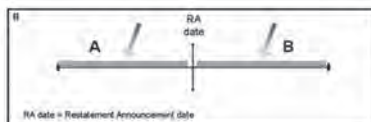
- ☐ Not
 ☐ Very little
 ☐ Little
 ☐ Some
 ☐ High
 ☐ Very highly hindering
 ☐ Unknown

Period B

9b. **With hindsight, I now believe that, for the company in question**, complexity of reporting rules (applicable during the period up to restatement) hindered the company from staying 'in compliance', to the following extent:

- ☐ Not
 ☐ Very little
 ☐ Little
 ☐ Some
 ☐ High
 ☐ Very highly hindering
 ☐ Unknown

## External factors: Governance demands



### Period A

In the period leading up to the restatement, I believed that the degree of pressure on the CEO to comply with state-of-the-art corporate governance practices was as follows:

10a I. From the external auditors:

- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very high pressure
 ☐ Unknown

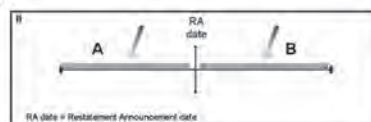
10a II. From the shareholders:

- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very high pressure
 ☐ Unknown

10a III. From the analysts:

- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very high pressure
 ☐ Unknown

## External factors: Governance demands



### Period B

During the restatement adjustment period, I believed that the degree of pressure on the CEO (and/or his/her successor) to comply with state-of-the-art corporate governance practices was as follows:

10b I. From the external auditors:

- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very high pressure
 ☐ Unknown

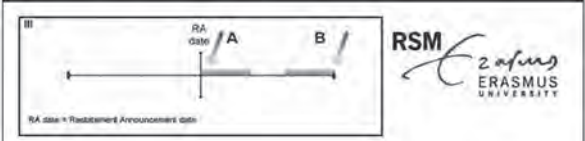
10b II. From the shareholders:

- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very high pressure
 ☐ Unknown

10b III. From the analysts:

- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very high pressure
 ☐ Unknown

**External factors: Governance demands**



## Period A

11a. At the time of the restatement announcement, I believed that the degree of pressure on the Independent Board to dismiss the CEO was as follows:

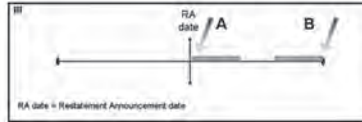
- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very high pressure
 ☐ Unknown

## Period II

11b. At the end of the restatement adjustment period, I believed that the degree of pressure on the Independent Board to dismiss the CEO (responsible for the restatement) was as follows:

- ☐ None ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very high pressure ☐ Unknown

## External factors: Information demands



### Period A

At the time of the restatement announcement, I considered the following information to be relevant in terms of determining the severity of the restatement, to the following extent:

12a I. The nature of the restatement:

- ☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly relevant ☐ Unknown

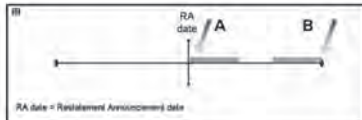
12a II. The number of years affected:

- ☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly relevant ☐ Unknown

12a III. The number of periods (including quarterlies) affected:

- ☐ None ☐ Very low ☐ Low ☐ Moderate ☐ High ☐ Very high relevance

## External factors: Information demands



### Period B

At the end of the restatement adjustment period, I considered the following information to be relevant in terms of determining the severity of the restatement, to the following extent:

12b I. The nature of the restatement:

- ☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly relevant ☐ Unknown

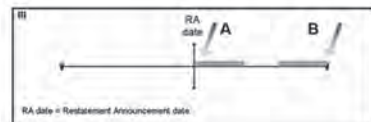
12b II. The number of years affected:

- ☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly relevant ☐ Unknown

12b III. The number of periods (including quarterlies) affected:

- ☐ None ☐ Very low ☐ Low ☐ Moderate ☐ High ☐ Very high relevance

External factors: Information demands



Period A

At the time of the restatement announcement, I believed that the degree of pressure on the CEO to disclose more detailed information regarding the restatement was as follows:

13a i. The analysts:

- ☐ None ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very high pressure ☐ Unknown

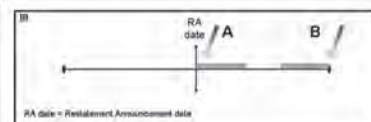
13a ii. Regulators:

- ☐ None ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very high pressure ☐ Unknown

13a iii. Shareholders:

- ☐ None ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very high pressure ☐ Unknown

External factors: Information demands



Period B

At the end of the restatement adjustment period, I believed that the degree of pressure on the CEO (and/or his/her successor) to disclose more detailed information regarding the restatement was as follows:

13b i. The analysts:

- ☐ None ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very high pressure ☐ Unknown

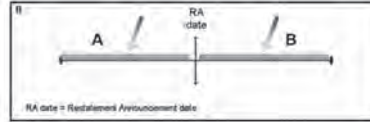
13b ii. Regulators:

- ☐ None ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very high pressure ☐ Unknown

13b iii. Shareholders:

- ☐ None ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very high pressure ☐ Unknown

## Bounding factors: Estimation of competence



### Period A

14a. In the period leading up to the restatement, when discussing accounting issues with management, I would rate my probing skills (ability to get to the truth of a matter) as follows:

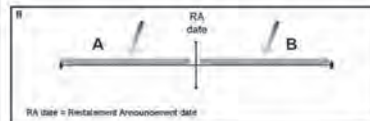
- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Sufficient
 ☐ High
 ☐ Very high skill level
 ☐ Unknown

### Period B

14b. During the restatement adjustment period, when discussing accounting issues with management, I would rate my probing skills (ability to get to the truth of a matter) as follows:

- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Sufficient
 ☐ High
 ☐ Very high skill level
 ☐ Unknown

## Bounding factors: Estimation of competence



### Period A

15a. In the period leading up to the restatement, when discussing accounting issues with management, I would rate my knowledge of the subject matter as follows:

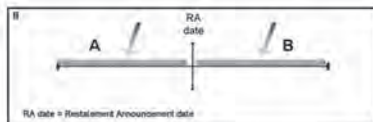
- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Sufficient
 ☐ High
 ☐ Very high knowledge level
 ☐ Unknown

### Period B

15b. During the restatement adjustment period, when discussing accounting issues with management, I would rate my knowledge of the subject matter as follows:

- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Sufficient
 ☐ High
 ☐ Very high knowledge level
 ☐ Unknown

## Bounding factors: Affecting anticipation



### Period A

In the period leading up to the restatement, I believed that the following factors reduced my ability to fully anticipate this restatement, to the extent indicated:

16a I. I was misled by management:

☐ Not ☐ Very low contribution ☐ Little ☐ Some ☐ High ☐ Very high contribution ☐ Unknown

16a II. My financial analysis did not cause any suspicion:

☐ Not ☐ Very low contribution ☐ Little ☐ Some ☐ High ☐ Very high contribution ☐ Unknown

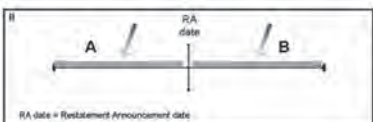
16a III. My analysis could have been more probing:

☐ Not ☐ Very low contribution ☐ Little ☐ Some ☐ High ☐ Very high contribution ☐ Unknown

16a IV. I relied too much on other analysts and simply followed the market:

☐ Not ☐ Very low contribution ☐ Little ☐ Some ☐ High ☐ Very high contribution ☐ Unknown

## Bounding factors: Affecting anticipation



### Period B

During the restatement adjustment period, I believed that the following factors reduced my ability to fully understand this restatement, to the extent indicated:

16b I. I was misled by management:

☐ Not ☐ Very low contribution ☐ Little ☐ Some ☐ High ☐ Very high contribution ☐ Unknown

16b II. My financial analysis did not cause any suspicion:

☐ Not ☐ Very low contribution ☐ Little ☐ Some ☐ High ☐ Very high contribution ☐ Unknown

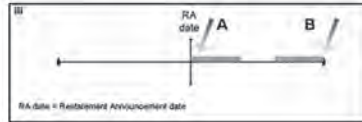
16b III. My analysis could have been more probing:

☐ Not ☐ Very low contribution ☐ Little ☐ Some ☐ High ☐ Very high contribution ☐ Unknown

16b IV. I relied too much on other analysts and simply followed the market:

☐ Not ☐ Very low contribution ☐ Little ☐ Some ☐ High ☐ Very high contribution ☐ Unknown

## Bounding factors: Boundedness, general/various



### Period A

At time of the restatement announcement, I believed that:

17a i. The significance of the restatement adjustment was as follows:

- ☐ Insignificant ☐ A little significant ☐ Significant ☐ Very significant ☐ Fundamental

17a ii. The malicious intent leading to the restatement was as follows:

- ☐ Insignificant ☐ A little significant ☐ Significant ☐ Very significant ☐ Fundamental

### Period B

At the end of the restatement adjustment period, I believed that:

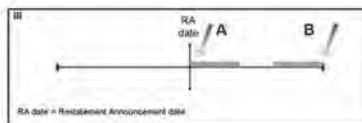
17b i. The significance of the restatement adjustment was as follows:

- ☐ Insignificant ☐ A little significant ☐ Significant ☐ Very significant ☐ Fundamental

17b ii. The malicious intent leading to the restatement was as follows:

- ☐ Insignificant ☐ A little significant ☐ Significant ☐ Very significant ☐ Fundamental

## Bounding factors: Boundedness, general/various



### Period A

18a. At the time of the restatement announcement, I believed that the damage to the company's future earnings potential was as follows:

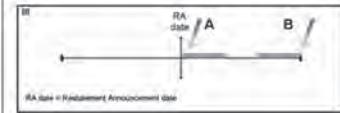
- ☐ None ☐ Very slight ☐ Slight ☐ Some ☐ Severe ☐ Very severe ☐ Unknown

### Period B

18b. At the end of the restatement adjustment period, I believed that the damage to the company's future earnings potential was as follows:

- ☐ None ☐ Very slight ☐ Slight ☐ Some ☐ Severe ☐ Very severe ☐ Unknown

## Bounding factors: Boundedness, general/variou



### Period A

19a. At time of the restatement announcement, I regretted the recommendations I had issued on the stock to that date, to the following degree:

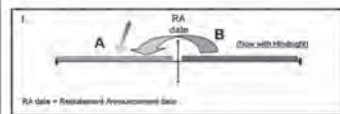
- ☐ None ☐ Very slight ☐ Slight ☐ Some ☐ Highly ☐ Very highly regretted ☐ Unknown

### Period B

19b. At the end of the restatement adjustment period, I regretted the recommendations I had issued (during the restatement adjustment period), to the following degree:

- ☐ None ☐ Very slight ☐ Slight ☐ Some ☐ Highly ☐ Very highly regretted ☐ Unknown

## Bounding factors: High job demands



### Period A

**Without any use of hindsight!**

I believed then that the following assertions were applicable to the following extent:

20a. I. The industry the company operated in was particularly complex and/or dynamic:

- ☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

20a. II. There was not enough potential to meet the sales growth expectations:

- ☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

20a. III. There was not enough potential to meet the earnings growth expectations:

- ☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

20a. IV. The company's organisational resources were insufficient:

- ☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

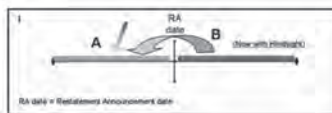
20a. V. The company's strategy was unnecessarily demanding:

- ☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

20a. VI. The company's organizational structure was unnecessarily complex:

- ☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

## Bounding factors: High job demands



Period 8

With hindsight, I now believe that the following assertions were applicable to the following extent

20i.i. The industry the company operated in was particularly complex and/or dynamic

☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

20i.ii. There was not enough potential to meet the sales growth expectations

☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

20i.iii. There was not enough potential to meet the earnings growth expectations

☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

20i.iv. The company's organisational resources were insufficient

☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

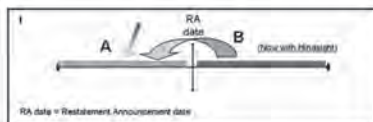
20i.v. The company's strategy was unnecessarily demanding

☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

20i.vi. The company's organisational structure was unnecessarily complex

☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

**Bounding factors: Risk assessment**



### Period A

Without any use of hindsight!

21a. I believed then that the accounting principles used by the company for reporting earnings did allow scope for manoeuvring, to the following extent:

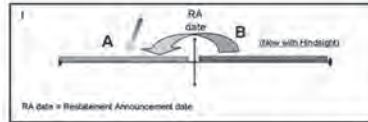
☐ None ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very high scope ☐ Unknown

Period B

21b. With hindsight, I now believe that the accounting principles used by the company for reporting earnings (during the period up to restatement) did allow scope for manoeuvring, to the following extent:

☐ None ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very high scope ☐ Unknown

## Bounding factors: Skill levels



Period A

**Without any use of hindsight!**

I believed then that the accounting and financial reporting skill level of the following internal gatekeepers was as follows:

22a i. CEO:

☐ None
 ☐ Very low
 ☐ Low
 ☐ Sufficient
 ☐ High
 ☐ Very high skill level
 ☐ Unknown

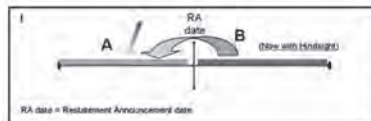
22a ii. CFO:

☐ None
 ☐ Very low
 ☐ Low
 ☐ Sufficient
 ☐ High
 ☐ Very high skill level
 ☐ Unknown

22a iii. Audit Committee:

☐ None
 ☐ Very low
 ☐ Low
 ☐ Sufficient
 ☐ High
 ☐ Very high skill level
 ☐ Unknown

## Bounding factors: Skill levels



Period B

**With hindsight, I now believe** that the accounting and financial reporting skill level of the following internal gatekeepers (during the period up to restatement) was as follows:

22b i. CEO:

☐ None
 ☐ Very low
 ☐ Low
 ☐ Sufficient
 ☐ High
 ☐ Very high skill level
 ☐ Unknown

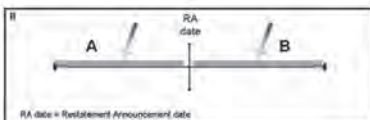
22b ii. CFO:

☐ None
 ☐ Very low
 ☐ Low
 ☐ Sufficient
 ☐ High
 ☐ Very high skill level
 ☐ Unknown

22b iii. Audit Committee:

☐ None
 ☐ Very low
 ☐ Low
 ☐ Sufficient
 ☐ High
 ☐ Very high skill level
 ☐ Unknown

## Bounding factors: High job demands



### Period A

In the period leading up to the restatement, I believed that the following assertions regarding the CEO were applicable:

23a I. Had to work too hard because of lack of resources:

- ☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

23a II. Had to work too hard because of internal company politics:

- ☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

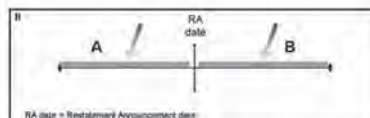
23a III. Had to work too hard because he was a workaholic:

- ☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

23a IV. Had to work under too high a time pressure:

- ☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

## Bounding factors: High job demands



### Period II

During the crisis recovery period, I believed that the following assertions regarding the CEO (and/or his/her successor) were applicable:

23b I. Had to work too hard because of lack of resources:

- ☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

23b II. Had to work too hard because of internal company politics:

- ☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

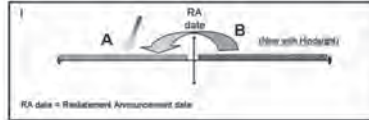
23b III. Had to work too hard because he was a workaholic:

- ☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

23b IV. Had to work under too high a time pressure:

- ☐ Not ☐ Very little ☐ Little ☐ Some ☐ High ☐ Very highly applicable ☐ Unknown

## CEO Behavior: Integrity



Period A

**Without any use of hindsight!**

24a. I believed then that the CEO's use of accounting manoeuvring space to improve the company's financial position was aggressive to the following extent.

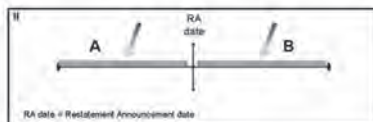
- ☐ Not
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very highly aggressive
 ☐ Unknown

Period B

24b. **With hindsight, I now believe** that the CEO's use of accounting manoeuvring space to improve the company's financial position was aggressive to the following extent.

- ☐ Not
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very highly aggressive
 ☐ Unknown

## CEO Behavior: Integrity



### Period A

In terms of the period leading up to the restatement, indicate your level of agreement to the following:

25a I. The CEO made fair and balanced decisions:

☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very high agreement ☐ Unknown

25a II. The CEO could be trusted:

☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very high agreement ☐ Unknown

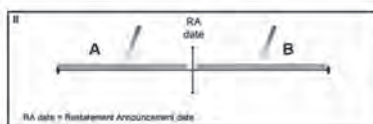
25a III. The CEO set a good example in terms of ethics:

☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very high agreement ☐ Unknown

25a IV. The CEO demonstrated an ethical tone at the top to the following extent:

☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly ethical ☐ Unknown

## CEO Behavior: Integrity



### Period B

In terms of the restatement adjustment period, indicate your level of agreement to the following (same) assertions (NB: regarding the CEO in place at the time the restatement was announced):

25b I. The CEO made fair and balanced decisions:

☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very high agreement ☐ Unknown

25b II. The CEO could be trusted:

☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very high agreement ☐ Unknown

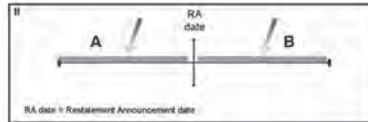
25b III. The CEO set a good example in terms of ethics:

☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very high agreement ☐ Unknown

25b IV. The CEO demonstrated an ethical tone at the top to the following extent:

☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly ethical ☐ Unknown

## CEO Behavior: Integrity



### Period A

In the period leading up to the restatement, I believed that the CEO put pressure on the following groups to the following extent.

26a i. On the external auditors to concur with management's position on financial reporting matters:

- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very high pressure
 ☐ Unknown

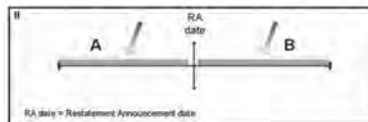
26a ii. On the Audit Committee to concur with management's accounting positions:

- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very high pressure
 ☐ Unknown

26a iii. On the analysts to comment positively on the company:

- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very high pressure
 ☐ Unknown

## CEO Behavior: Integrity



### Period B

During the restatement adjustment period, I believed that the CEO put pressure on the following groups to the following extent (NB: question should be answered solely regarding the CEO in place at the time the restatement was announced (and not any successor)).

26b i. On the external auditors to concur with management's position on financial reporting matters:

- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very high pressure
 ☐ Unknown

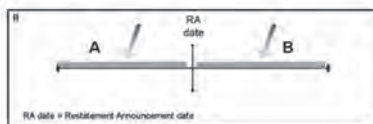
26b ii. On the Audit Committee to concur with management's accounting positions:

- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very high pressure
 ☐ Unknown

26b iii. On the analysts to comment positively on the company:

- ☐ None
 ☐ Very low
 ☐ Low
 ☐ Some
 ☐ High
 ☐ Very high pressure
 ☐ Unknown

## CEO Behavior: Open



### Period A

In the period leading up to the restatement, I believed that the degree of openness demonstrated by the CEO to the analysts in the following areas was as follows:

27a i. Information on what was material to the financial position:

- ☐ None 
 ☐ Very low 
 ☐ Low 
 ☐ Sufficient 
 ☐ High 
 ☐ Very highly open 
 ☐ Unknown

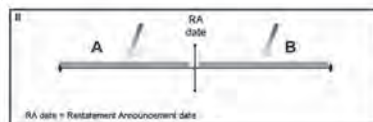
27a ii. Discussion of accounting manoeuvring space:

- ☐ None 
 ☐ Very low 
 ☐ Low 
 ☐ Sufficient 
 ☐ High 
 ☐ Very highly open 
 ☐ Unknown

27a iii. Discussion of significant accounting policy choices:

- ☐ None 
 ☐ Very low 
 ☐ Low 
 ☐ Sufficient 
 ☐ High 
 ☐ Very highly open 
 ☐ Unknown

## CEO Behavior: Open



### Period B

During the restatement adjustment period, I believed that the degree of openness demonstrated by the CEO (and/or his/her successor) to the analysts in the following areas (in terms of the restatement) was as follows:

27b i. Information on what was material to the financial position:

- ☐ None 
 ☐ Very low 
 ☐ Low 
 ☐ Sufficient 
 ☐ High 
 ☐ Very highly open 
 ☐ Unknown

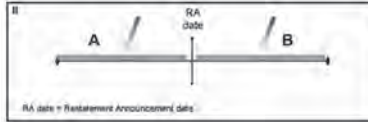
27b ii. Discussion of accounting manoeuvring space:

- ☐ None 
 ☐ Very low 
 ☐ Low 
 ☐ Sufficient 
 ☐ High 
 ☐ Very highly open 
 ☐ Unknown

27b iii. Discussion of significant accounting policy choices:

- ☐ None 
 ☐ Very low 
 ☐ Low 
 ☐ Sufficient 
 ☐ High 
 ☐ Very highly open 
 ☐ Unknown

## CEO Behavior: Open



### Period A

28a. In the period leading up to the restatement, I believed that the CEO, when explaining financial results, used language with the following degree of complexity:

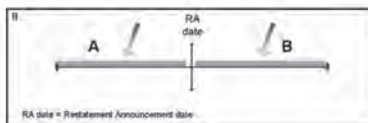
- ☐ None ☐ Very low complexity ☐ Low ☐ Some ☐ High ☐ Very highly complex ☐ Unknown

### Period B

28b. During the restatement adjustment period, I believed that the CEO, when explaining financial results, used language with the following degree of complexity (NB: question should be answered solely regarding the CEO in place at the time the restatement was announced (and not any successor)).

- ☐ None ☐ Very low complexity ☐ Low ☐ Some ☐ High ☐ Very highly complex ☐ Unknown

## CEO Behavior: Open



### Period A

29a. In the period leading up to the restatement, I believed that the CEO misled analysts on the essence of financial statement issues to the following extent:

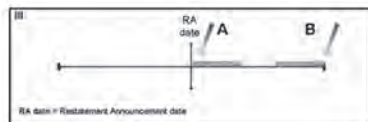
- ☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly misleading ☐ Unknown

### Period B

29b. During the restatement adjustment period, I believed that the CEO misled analysts on the essence of the restatement matters to the following extent (NB: question should be answered solely regarding the CEO in place at the time the restatement was announced (and not any successor)).

- ☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly misleading ☐ Unknown

## CEO Behavior: Confirming



### Period A

30a. At the time of the restatement announcement, I believed that the adequacy of the information provided by the CEO was as follows:

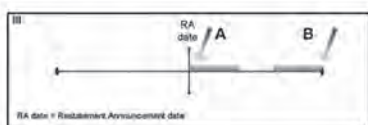
- ☐ Not  
 ☐ Very low  
 ☐ Low  
 ☐ Sufficient  
 ☐ High  
 ☐ Very highly adequate  
 ☐ Unknown

### Period B

30b. At the end of the restatement adjustment period, I believed that the adequacy of the information provided by the CEO was as follows:

- ☐ Not  
 ☐ Very low  
 ☐ Low  
 ☐ Sufficient  
 ☐ High  
 ☐ Very highly adequate  
 ☐ Unknown

## CEO Behavior: Governance



### Period A

31a. At the time of the restatement announcement, I believed that the adequacy of the initial corporate governance measures taken by the CEO was as follows:

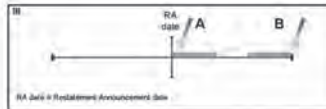
- ☐ Not  
 ☐ Very low  
 ☐ Low  
 ☐ Sufficient  
 ☐ High  
 ☐ Very highly adequate  
 ☐ Unknown

### Period B

31b. At the end of the restatement adjustment period, I believed that the adequacy of the additional corporate governance measures taken by the CEO was as follows (NB: question should be answered solely regarding the CEO in place at the time the restatement was announced (and not any successor)).

- ☐ Not  
 ☐ Very low  
 ☐ Low  
 ☐ Sufficient  
 ☐ High  
 ☐ Very highly adequate  
 ☐ Unknown

## CEO Behavior: Allocating blame



### Period A

At the time of the restatement announcement, I believed that the CEO immediately allocated blame as follows:

32a I. He/she blamed him/herself:

- ☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly blamed ☐ Unknown

32a II. He/she blamed the CFO:

- ☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly blamed ☐ Unknown

32a III. He/she blamed lower management echelons:

- ☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly blamed ☐ Unknown

32a IV. He/she blamed the external auditors:

- ☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly blamed ☐ Unknown

32a V. He/she blamed the complexity of accounting rules:

- ☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly blamed ☐ Unknown

## CEO Behavior: Allocating blame



### Period B

By the end of the restatement adjustment period, I believed that the CEO (and/or his/her successor) had allocated blame as follows:

32b I. He/she blamed him/herself:

- ☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly blamed ☐ Unknown

32b II. He/she blamed the CFO:

- ☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly blamed ☐ Unknown

32b III. He/she blamed lower management echelons:

- ☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly blamed ☐ Unknown

32b IV. He/she blamed the external auditors:

- ☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly blamed ☐ Unknown

32b V. He/she blamed the complexity of accounting rules:

- ☐ Not ☐ Very low ☐ Low ☐ Some ☐ High ☐ Very highly blamed ☐ Unknown

## General questions



### Demographics

a) Please select the Level of your Education:

Please select...  
Academic  
CFA  
Non-academic

b) Which country did you work in when you followed the Restatement?

Please select...

Please select...  
Junior analyst  
Intermediate analyst  
Senior analyst

d) I have been working as an analyst for the following number of years:

Please select...  
≤ 1 year  
1 - 3 years  
3 - 5 years  
5 - 8 years  
8 - 10 years  
> 10 years

e) At the restatement announcement date, I followed the company for the following number of years.

Please select...  
up to 1 year  
up to 2 years  
up to 3 years  
up to 4 years  
up to 5 years  
more than 5 years

## Closing



### Final instructions

You are now at the end of this questionnaire. Below you are asked to state whether you have completed the questionnaire to your satisfaction. Please note that after you submitted your results you will only be able to enter the questionnaire using the "re-run" option on your homepage. This means that you will re-start at the beginning of the questionnaire. (Your answers will still be there.)

Are you finished with this questionnaire?

- ☐ Yes  
☐ No

Please select "Yes" and click on the button "Next" when you are satisfied with all your answers and when you are sure that you want to submit the results.

Please select "No" and click on the button "Next" when you want to return to the main menu.

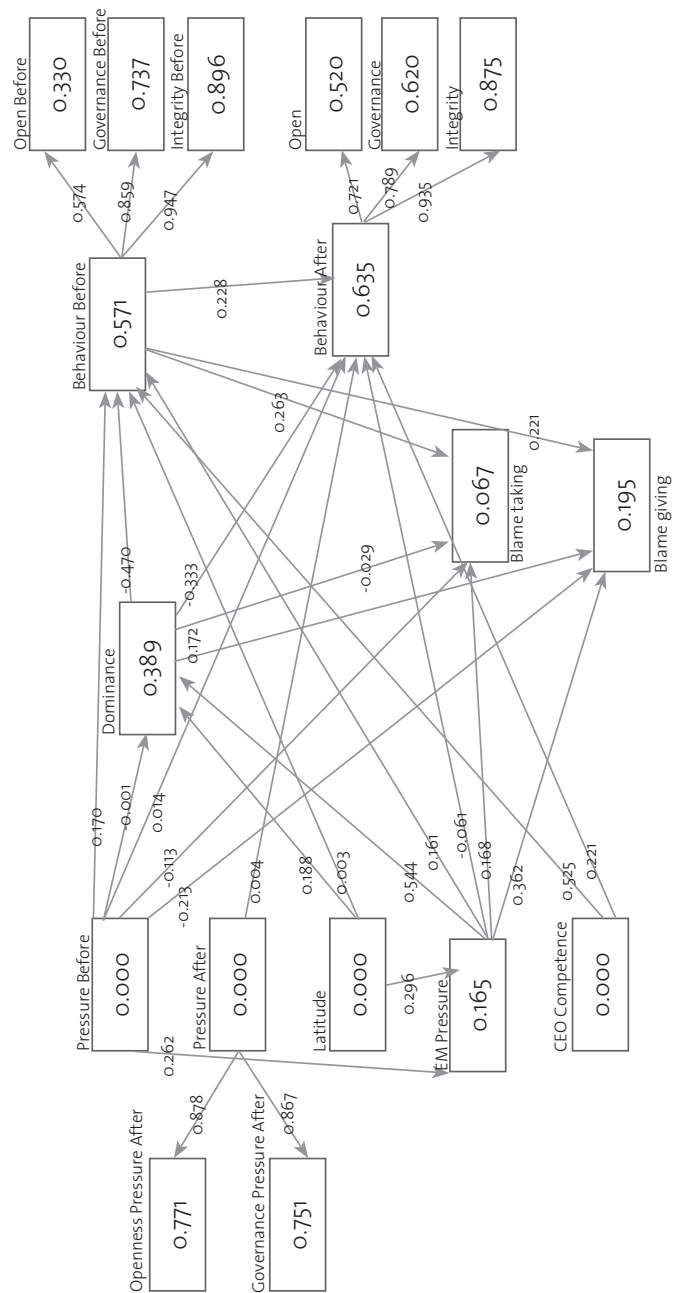
## Appendix 3.2 Analysts' Survey – Bridge to Constructs

| Construct                     | Item number               | Item name                     | Reference to Analysts Questionnaire | Question Format |
|-------------------------------|---------------------------|-------------------------------|-------------------------------------|-----------------|
| Earnings Management Pressures | EM Pressures 1/2          | EM Pressures Board            | 1a, 1b                              | I               |
|                               | EM Pressures 5/8          | EM Pressures Analysts         | 7a I, 7b I                          | I               |
|                               | EM Pressures 6/9          | EM Pressures Shareholders     | 7a II, 7b II                        | I               |
|                               | EM Pressures 7/10         | EM Pressures Media            | 7a III, 7b III                      | I               |
|                               | EM Pressures 3/4          | EM Pressure Rewards           | 2a, 2b                              | I               |
| CEO Job Demands               | Job Demands 1/5           | Lack of Resources             | 23a I, 23b I                        | II              |
|                               | Job Demands 2/6           | Company Politics              | 23a II, 23b II                      | II              |
|                               | Job Demands 3/7           | Workaholic                    | 23a III, 23b III                    | II              |
|                               | Job Demands 4/8           | Time Pressure                 | 23a IV, 23b IV                      | II              |
| Task/Performance Challenges   | Task Challenges 1/7       | Complexity Industry           | 20a I, 20b I                        | I               |
|                               | Task Challenges 2/8       | Potential for Sales Growth    | 20a II, 20b II                      | I               |
|                               | Task Challenges 3/9       | Potential for Earnings Growth | 20a III, 20b III                    | I               |
|                               | Task Challenges 4/10      | Resources available           | 20a IV, 20b IV                      | I               |
|                               | Task Challenges 5/11      | Demanding Strategy            | 20a V, 20b V                        | I               |
|                               | Task Challenges 6/12      | Complex Structure             | 20a VI, 20b VI                      | I               |
| Analyst Regret                | Regret 1/2                | Regret                        | 19a, 19b                            | III             |
| CEO Dominance                 | Dominance 1/2             | CEO Dominant Behaviour        | 4a, 4b                              | I               |
|                               | Dominance 2/4             | CEO using Manoeuvring Space   | 24a, 24b                            | I               |
| Gatekeeper Latitude           | Latitude 1/2              | Auditor Conflict of Interest  | 8a, 8b                              | I               |
|                               | Latitude 3/4              | Complexity Accounting Rules   | 9a, 9b                              | I               |
|                               | Latitude 5/6              | Scope for Manoeuvring         | 21a, 21b                            | I               |
| Gatekeeper Competence         | Gatekeeper Competence 1/3 | CFO Competence                | 22a II, 22b II                      | I               |
|                               | Gatekeeper Competence 2/4 | Audit Committee Competence    | 22a III, 22b III                    | I               |
| Analyst Competence            | Analyst Competence 1/2    | Probing Skills                | 14a, 14b                            | II              |
|                               | Analyst Competence 3/4    | Knowledge Accounting Issues   | 15a, 15b                            | II              |
|                               | Analyst Competence 5/9    | Feeling Misled                | 16a I, 16b I                        | II              |
|                               | Analyst Competence 6/10   | Analysis not Suspicious       | 16a II, 16b II                      | II              |
|                               | Analyst Competence 7/11   | Analysis not probing enough   | 16a III, 16b III                    | II              |
|                               | Analyst Competence 8/12   | Herding                       | 16a IV, 16b IV                      | II              |
| Pressure Before Restatement   | Governance Pressure 1     | Auditor Pressure Before       | 10a I                               | II              |
|                               | Governance Pressure 2     | Shareholder Pressure Before   | 10a II                              | II              |
|                               | Governance Pressure 3     | Analysts Pressure Before      | 10a III                             | II              |
|                               | Governance Pressure 7     | Pressure to Dismiss CEO Begin | 11a                                 | III             |

| Construct                          | Item number           | Item name                          | Reference to Analysts Questionnaire | Question Format |
|------------------------------------|-----------------------|------------------------------------|-------------------------------------|-----------------|
| Pressure During Restatement Crisis | Governance Pressure 4 | Auditor Pressure During            | 10b I                               | II              |
|                                    | Governance Pressure 5 | Sharholder Pressure During         | 10b II                              | II              |
|                                    | Governance Pressure 6 | Analysts Pressure During           | 10b III                             | II              |
|                                    | Governance Pressure 8 | Pressure to Dismiss CEO End        | 11b                                 | III             |
|                                    | Openness Pressure 1/4 | Analysts Pressure                  | 13a I, 13b I                        | III             |
|                                    | Openness Pressure 2/5 | Regulator Pressure                 | 13a II, 13b II                      | III             |
|                                    | Openness Pressure 3/6 | Shareholder Pressure               | 13a III, 13b III                    | III             |
| CEO Competence                     | CEO Competence 1/4    | Accounting and Financial Reporting | 6a I, 6b I                          | II              |
|                                    | CEO Competence 2/5    | Communication Skills               | 6a II, 6b II                        | II              |
|                                    | CEO Competence 3/6    | Commitment to Compliance           | 6a III, 6b III                      | II              |
| Severity                           | Severity 1/3          | Significance Adjustment            | 17a I, 17b I                        | III             |
|                                    | Severity 2/4          | Malicious Intent                   | 17a II, 17b II                      | III             |
| CEO Behaviour Before Restatement   | Governance Before 1/2 | Managing Fraud Risks               | 3a, 3b                              | I               |
|                                    | Governance Before 3   | Governance Effectiveness           | 5a                                  | II              |
|                                    | Governance Before 4   | Commitment to Governance           | 6a IV                               | II              |
|                                    | Integrity Before 1    | Fair Decisions                     | 25a I                               | II              |
|                                    | Integrity Before 2    | Trustworthy                        | 25a II                              | II              |
|                                    | Integrity Before 3    | Good Example                       | 25a III                             | II              |
|                                    | Integrity Before 4    | Tone at the Top                    | 25a IV                              | II              |
|                                    | Integrity Before 5    | Pressure on Auditors               | 26a I                               | II              |
|                                    | Integrity Before 6    | Pressure on Audit Committee        | 26a II                              | II              |
|                                    | Integrity Before 7    | Pressure on Analysts               | 26a III                             | II              |
|                                    | Integrity Before 8    | Use of Complex Language            | 28a                                 | II              |
|                                    | Integrity Before 9    | CEO Misleading                     | 29a                                 | II              |
|                                    | Openness Before 1     | Information on Materiality         | 27a I                               | II              |
|                                    | Openness Before 2     | Discussion Manoeuvring Space       | 27a II                              | II              |
|                                    | Openness Before 3     | Discussion Accounting Choices      | 27a III                             | II              |

| Construct                               | Item number           | Item name                     | Reference to Analysts Questionnaire | Question Format |
|---|-----------------------|-------------------------------|-------------------------------------|-----------------|
| CEO Behaviour During Restatement Crisis | Openness During 1     | Information on Materiality    | 27b I                               | II              |
|   | Openness During 2     | Discussion Manoeuvring Space  | 27b II                              | II              |
|   | Openness During 3     | Discussion Accounting Choices | 27b III                             | II              |
|   | Openness During 4/5   | Adequacy of Information       | 30a, 30b                            | III             |
|   | Governance During 1   | Overall Effectiveness         | 5b                                  | II              |
|   | Governance During 2   | Commitment to Governance      | 6b IV                               | II              |
|   | Governance During 3/4 | Initial Effectiveness         | 31a, 31b                            | III             |
|   | Integrity During 1    | Fair Decisions                | 25b I                               | II              |
|   | Integrity During 2    | Trustworthy                   | 25b II                              | II              |
|   | Integrity During 3    | Good Example                  | 25b III                             | II              |
|   | Integrity During 4    | Tone at the Top               | 25b IV                              | II              |
|   | Integrity During 5    | Pressure on Auditors          | 26b I                               | II              |
|   | Integrity During 6    | Pressure on Audit Committee   | 26b II                              | II              |
|   | Integrity During 7    | Pressure on Analysts          | 26b III                             | II              |
|   | Integrity During 8    | Use of Complex Language       | 28b                                 | II              |
|   | Integrity During 9    | CEO Misleading                | 29b                                 | II              |
| Blame Taking/<br>Giving                 | Blame Taking 1/2      | By CEO                        | 32a I, 32b I                        | III             |
|   | Blame Giving 1/5      | Blaming CFO                   | 32a II, 32b II                      | III             |
|   | Blame Giving 2/6      | Blaming Lower Echelons        | 32a III, 32b III                    | III             |
|   | Blame Giving 3/7      | Blaming Auditors              | 32a IV, 32b IV                      | III             |
|   | Blame Giving 4/8      | Blaming Complexity Accounting | 32a V, 32b V                        | III             |

Appendix 3.3 Partial Least Squares Path Model





## Samenvatting

‘Financial Statement Restatements’ betreft de in ondernemingen vaak zwaar beladen taak om eerder gepubliceerde jaarstukken te corrigeren omdat fundamentele fouten zijn geconstateerd. In het begin van de jaren 2000 nam de hoeveelheid restatements sterk toe: van ongeveer maximaal 200 in de jaren 90 tot meer dan 1500 in 2006. Zoals later zal blijken werd deze sterke toename gevoed door twee met elkaar samenhangende fenomenen. Enerzijds nam de druk op bedrijven sterk toe om omzet en winst verwachtingen die zij eerder in de markt hadden geventileerd, te realiseren – bestuurders en analisten speelden de zogenaamde ‘Numbers game’. Anderzijds zorgden sterk overdreven beloning pakketten van bestuurders ervoor dat de belangen van de onderneming op lange termijn werden verkwanseld aan kortzichtige winst maximalisatie. Hebzucht van bestuurders, of het nu ging om macht of om hun financiële beloning, zorgden ervoor dat het ‘agency probleem’ wederom volop in de belangstelling kwam te staan zowel academici en toezichthouders.

Dit ‘agency probleem’ betreft de mogelijke belangenconflicten die kunnen optreden tussen de eigenaren van een onderneming - de aandeelhouders - en de managers van de onderneming. De eigenaren delegeren immers de bestuurstaken aan het management van de onderneming. Omdat aandeelhouders daardoor op redelijk grote afstand staan van de dagelijkse gang van zaken en maar beperkte informatie van het management ontvangen, hebben zij weinig tot geen grip op het management om de belangen van de aandeelhouders op de juiste wijze te behartigen. Het agency probleem heeft in het verleden al veel stof doen opwaaien onder corporate governance geleerden en toezichthouders. Waarom zijn een hele batterij aan poortwachters (gatekeepers) niet in staat om bestuurders in de greep te houden en hoe komt het dat deze poortwachters toch iedere keer weer geringeloord worden door vaak dominante en zichzelf overschattende CEOs? Restatements zijn bij uitstek een bijzonder giftige representant van het agency probleem: managers, onder extreme winst maximalisatie druk, gaan boekhoudregels toepassen vergelijkbaar met zwarte magie. Zij verdraaien de zakelijke feiten en passen regels toe naar eigen inzicht. Zodra deze vaak opzettelijk verkeerde toepassing van boekhoudregels aan het licht komt, veroorzaakt zij het herstelproces van de gemaakte fouten in de financiële verantwoording – de gevolgen zijn veelal desastreus – enorme reputatieschade voor

de onderneming (en daarmee sterke koersval), maar ook een smet op het blazen van bestuurders en poortwachters.

Deze studie tracht meer inzicht te krijgen in hoe de beelden van ondernemingen die een restatement moeten uitvoeren in de markt, gevormd worden. Tevens bestuderen we de rol die analisten daarin spelen. Kort samengevat luidt de kernvraag van onze studie:

Welke factoren kunnen in restatement situaties het beeld van de betrokken poortwachters vertroebelen en daarmee tot reputatieschade leiden van de onderneming? Meer in detail stellen we de volgende vragen:

- Welke factoren vertroebelen communicatie over restatements en beïnvloeden daarmee de gepercipieerde inschatting van hoe erg ze zijn?
- Welke factoren verhinderen een klare blik van analisten in restatement situaties? Hoe worden analisten beïnvloed in hun kijk op de reputatie herstellpogingen die de onderneming en haar bestuurders initiëren?
- Vormen die verblindingfactoren een verklaringsgrond voor het falen van analisten in hun poortwachter rol? Kan daarmee ook worden verklaard waarom restatements zich toch vaak aandienen als een 'voorspelbare verrassing'?

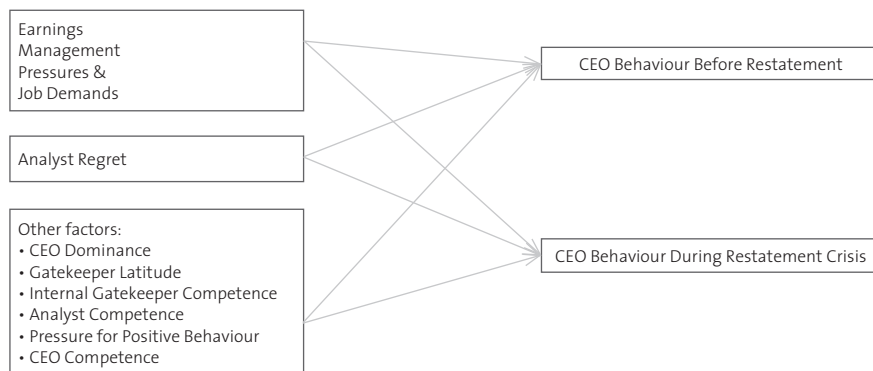
In het eerste hoofdstuk plaatsen we allereerst het restatement fenomeen in de context van keer op keer terugkerende governance problemen en verwijzen daarbij naar een belangwekkend rapport van de American Academy of Arts and Sciences. Ook de huidige kredietcrisis en nieuwe fraude schandalen kunnen in het verlengde daarvan worden begrepen. We geven een overzicht van de voornaamste rapporten welke zijn opgesteld over het restatement fenomeen. Vanzelfsprekend concentreren we ons daarbij op de situatie in de VS – door het systeem van daar geldende boekhoudregels (US GAAP) traden restatements voornamelijk in dat land op de voorgrond. Echter, ook bedrijven met een beursnotering in de VS stonden bloot aan boekhoudschandalen – we hoeven daarbij slechts te verwijzen naar Ahold, Parmalat, Nortel om dat weer paraat in het geheugen te hebben. De rekenkamer in de VS (Government Accountability Office) was in 2002 de eerste instantie met een uitgebreid overzicht van het hoe en waarom van restatement situaties. Onder wetenschappers wordt het restatement fenomeen uit meerdere oogpunten geanalyseerd. Kwantitatieve studies, die vaak zijn

gebaseerd op historische dataverzamelingen, geven inzicht in de volgende aspecten: de effecten op markt kapitalisatie, restatements als bewijs voor winstmanipulatie, de kennisattributen en de rol van poortwachters, besmettinggevaar voor andere ondernemingen en bestuurders, het fenomeen buiten de US, en de rol van de media en populaire pers bij het verslaan van financiële fraude. In het eerste hoofdstuk wordt ook een korte samenvatting over de effecten van de boekhoudschandalen op de reputatie van de onderneming gegeven. Het wordt besloten met een toelichting op de hierboven genoemde onderzoeksvragen.

In hoofdstuk twee presenteren we de resultaten van een kwalitatief onderzoek. Gestoeld op de zogenaamde 'Grounded Theory' benadering, analyseren we met behulp van een codering protocol ongeveer 5000 communicatieve expressies. Het betreft hier ondernemingen die betrokken zijn geraakt bij een boekhoudschandaal. Onze inhoudanalyse richt zich op de persberichten van die ondernemingen en analyseert ook wat analisten daarover schrijven in hun rapporten. Een derde bron van analyse zijn de transcripts van de conference calls tussen bestuurders en de analisten die de onderneming volgen. De studie stelt vast dat er een aantal krachten zijn waarmee in boekhoudschandalen rekening gehouden dient te worden om bovenmatige reputatieschade te beperken. Deze krachten bestaan uit: het in diskrediet geraken van het topmanagement; leemtes in de begripsruimten over boekhoudschandalen; het 'topje-van-de-ijsberg' effect; communicatie verlammingverschijnselen; en, het langs elkaar lopen van bestuurders en poortwachters. De studie vervolgt heel praktisch met het aanreiken van methoden en technieken om deze krachten te neutraliseren. Deze reputatie herstelpogingen moeten bestaan uit de volgende communicatie technieken en acties: het boekhoudschandaal onderkennen en toegeven, precies aangeven hoe diep en omvangrijk het probleem is, verantwoordelijkheid nemen en excuses aanbieden, en als laatste, open en oprecht de boodschap brengen. Daarnaast vraagt de markt om acties op het gebied van interne controle en corporate governance. Deze eerste studie welke uitging van case analyse van 13 ondernemingen (zowel in de VS als in Europa) eindigt met een analyse van twee, min of meer tegenovergestelde situaties. We analyseren hoe Freddie Mac en Nortel omgingen met hun boekhoudkundig falen en stellen vast dat Freddie Mac de aanbevelingen uit onze studie beter had gevolgd dan Nortel – managers kunnen hier een beter inzicht in restatement crises door krijgen.

De tweede studie gaat een niveau dieper. We willen een beter inzicht krijgen in hoe analisten, die een onderneming met een boekhoudschandaal volgen, reageren op het gedrag van de CEO. De vraag die gesteld wordt, is of analisten niet verblind zijn door teleurstelling over de financiële rapportering en misleiding daarover en daardoor verzeild raken in niet rationele besluitvorming over de financiële prestaties van het bedrijf. Daarbij moeten we ons ook afvragen of de analisten de CEO niet bovenmatig afstraffen voor zijn/haar rol in de verdoezelingsoperatie? Om onze onderzoekdoelen te bereiken is een uitgebreide vragenlijst opgesteld die aan ongeveer 1500 analisten is opgestuurd. De vragenlijst was samengesteld met behulp van aanwijzingen over boekhoudfraude die zijn beschreven in de uitgebreide standaarden voor accountants. In die aanwijzingen voor controle aanpak is helder geformuleerd in welke situaties druk ontstaat op managers om fraude te plegen. Tevens wordt in die standaarden aangereikt waarom managers ertoe over gaan om fraude te plegen – wat is hun reden om van het rechte pad af te raken? Naast de zogenaamde ‘winstmanipulatie’ drukmiddelen, die uitgebreid in onze literatuurstudies aan de orde komen, kijken we ook naar de ‘executive job demands’ zoals die zijn gemodelleerd in onderzoek door Hambrick en Finkelstein. Naast deze twee, door analisten redelijk goed in te schatten verzamelingen van drukaspecten, formuleren we ook een aantal meer endogene factoren van CEOs die van invloed kunnen zijn op hoe analisten de CEO evalueren. We willen antwoord hebben op de volgende vragen: hoe dominant is de CEO, hoe sterk zijn de interne poortwachters, wat zijn de accounting en financiële rapportering vaardigheden van de CEO, welke ethische kenmerken heeft de CEO? We vergeten daarbij niet om ook de zuiverheid van het oordeelsvermogen van analisten eens onder de loep te nemen en stellen vragen die zouden kunnen duiden op irrationaliteit in de oordeelvorming van analisten bij hun evaluatie van de CEO. Ook komen daarbij aspecten aan de orde die meten hoe ernstig de analisten de correctie van de boekhoudfouten zelf schatten.

Mede op grond van onze uitgebreide literatuur studie en bevindingen uit de eerste studie stellen we een model op van oorzaken en gevolgen betreffende de percepties van analisten over de druk op, en het gedrag van CEOs voor en na een boekhoudschandaal. Het vereenvoudigde model van onze tweede studie toont een aantal constructen dat specifiek voor onze studie is opgesteld en ziet er als volgt uit:



Met behulp van ongeveer 120 vragen in de Analisten Vragenlijst hebben we de percepties van analisten over de CEOs in kaart gebracht. Daarbij hebben we ook gebruik gemaakt van drie verschillende soorten vragen. We onderscheiden vragen die betrekking hebben op de oorzaken of aanleiding tot de restatement (periode A), en vragen die zich concentreren op de gedragingen van de CEO zowel in periode A als in periode B, die we de reputatie herstel periode noemen. De constructen hebben we opgesteld op basis van theoretische overwegingen waarbij aansluiting is gezocht met bestaande literatuur. Omdat de constructen veelal werden gevoed door data uit diverse vragen hebben we de interne consistentie vastgesteld met behulp van Cronbach's Alfa, met factor analyse en met Partial Least Square modellering. Vervolgens hebben we 20 hypothesen opgesteld welke associaties toetsen tussen de verschillende constructen in deze studie.

Bij de hypotheseontwikkeling gingen we uit van de volgende overwegingen. Veel studies over de gevolgen van excessieve druk op managers om winstverwachtingen te overtreffen laten zien dat managers uiteindelijk de verleiding niet kunnen weerstaan en zich laten verleiden tot verkeerde toepassing van de boekhoudregels – vaak met in het achterhoofd dat deze winstverwachting overtreffen ook gunstig is voor de eigen beloning. Deze studies laten ook zien dat de gevolgen voor beurskoers en reputatie van de onderneming vaak desastreus uitpakken. We veronderstellen dan ook dat ervaren analisten bekend zijn met deze gang van zaken en nemen aan dat zij bovenmatige druk op managers zullen beoordelen als een rode vlag – een signaal dat er boekhoudfraude op komst is. Hetzelfde geldt voor de te hoge 'executive job demands'; indien de strategische doelstellingen van de CEO te hoog zijn gegrepen

zouden analisten ervan uit moeten gaan dat vroeg of laat de CEO zichzelf in het boekhoud vagevuur (of soms hel) zal begeven. Ook hier zou dezelfde redenering kunnen worden opgesteld: analisten die deze signalen van CEO zelfoverschatting herkennen zullen de onderneming tijdig daarvoor afstraffen en het niet aan laten komen op een boekhoudvergrijp.

Niets is minder waar. Analisten worden meegenomen door een overmoedige en zichzelf overschattende CEO en komen terecht in 'positivity bias'. Met als gevolg dat ze een zekere mate van blindheid vertonen voor het dreigende boekhoudgevaar. Strijdig met onze verwachting beoordelen analisten CEO gedrag juist positiever in de periode voor de restatement naarmate de druk om te presteren als groter wordt gezien. Met andere woorden: hoe groter de druk om winst te manipuleren des te positiever de analisten zijn gestemd over het gedrag van de CEO. Dit druist in tegen alle theoretische redeneringen op dit terrein en kan worden bestempeld als een 'voorspelbare verrassing'. De informatie over een op komst zijnde ramp is aanwezig maar wordt (door blindheid) genegeerd. De gevolgen zijn zoals we verwachten: analisten zijn teleurgesteld, maar zeker niet in hun eigen kunnen. Krachtig zullen zij hun ratings van het bedrijf dat ze volgen naar beneden bijstellen – koersduikelingen en aanzienlijke reputatieschade zijn het onvermijdbare gevolg.

In de derde studie (het vierde hoofdstuk) gaan we de bevinding van de twee eerdere studies trachten te bevestigen aan de hand van gestructureerde interviews met een dertigtal analisten. Ook hier weer blijkt het aan de praat krijgen van analisten een redelijk intensieve inspanning vereist – zoals al eerder tijdens het uitvoeren van de analisten survey was geconstateerd. De derde studie bevestigt inderdaad de eerdere bevindingen en voorziet ons ook van een aantal verklaringsgronden voor het min of meer irrationele gedrag van analisten voor en tijdens een restatement situatie. Dit flipflop gedrag kan worden verklaard door de besmettelijkheid van bovenmatig CEO zelfvertrouwen. Daarnaast blijkt in de literatuur dat analisten ook een voorkeur hebben voor bedrijven die beter presteren dan de benchmark en die wat financiële aansturing aangaat meer voorspelbaarheid hebben en daarnaast een lagere volatiliteit in winstrapportering laten zien.

In het vijfde hoofdstuk sluiten we af met een samenvatting van de conclusies en enkele verhandelingen over wat onze bevindingen impliceren voor andere poortwachters.

Op basis van literatuur studie over hoe andere poortwachters gevangen zijn in het net van CEO invloed stellen we vast dat onze eigen waarnemingen deze 'capture' situaties onderschrijven. Om dit te begrijpen dienen we terug te vallen op cognitief psychologische studies die het gedrag beschrijven van CEO's op weg naar onoorbare ondernemingspraktijken. Studies van Hall (2006), Schrand en Zechman (2008), Langevoort (2004) en Paredes (2005) laten zien hoe deze 'capture' mechanismen werken en hoe zij resulteren in het falen van 'countervailing powers' – de poortwachters zijn te zwak en zitten vast in hun ivoren toren! We geven een aantal aanbevelingen om deze 'capture' situaties effectief het hoofd te kunnen bieden. Onze aanbevelingen zijn gericht op het in kaart brengen van bias en 'capture' situaties, met dien verstande dat de voorzitter van de audit committee belast wordt met deze taak.

We sluiten de dissertatie af met een overzicht van de bijdragen welke onze studies leveren aan zowel de academische gedachtevorming en de invloed van onze bevindingen en aanbevelingen op de management praktijk.

## About the Author

Fred H.M. Gertsen has been a partner with PricewaterhouseCoopers in The Netherlands for 20 years specializing in assurance services to the Financial Services industry. Currently, he is leading the Dutch Investment Management and Real Estate Industry practice of PwC. He is Registeraccountant at the Dutch institute NIVRA and received a Master's degree of Professional Accounting from the University of Miami. He has been seconded to London, Singapore and Miami and has worked with a variety of banks, insurance companies, investment managers and large hedge funds.

In the context of his PhD research at Erasmus University Fred Gertsen has published an article in Long Range Planning (August 2006): 'Avoiding Reputation Damage in Financial Restatements'. He has lectured on topics such as Treasury and Risk Management, Banking, Hedge Funds and complex financial instruments.

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## RIDING A TIGER WITHOUT BEING EATEN HOW COMPANIES AND ANALYSTS TAME FINANCIAL RESTATEMENTS AND INFLUENCE CORPORATE REPUTATION

The primary objective of financial statements is to provide capital market participants with information that enables them to make informed decisions. They also serve to alleviate the so-called 'agency problem' – through true and fair disclosures, financial statements contribute to keeping the interest of outsiders (shareholders) aligned with those of the insiders (executives). Material errors, however, will render these financial statements unreliable and can cause great uncertainties to investors and other stakeholders. Subsequent correction of these errors – restatements – often leads to the following question: Can management still be trusted? And subsequently: Where were the gatekeepers?

The avalanche of accounting scandals a few years ago, coupled with the current global credit crises, reiterate that our knowledge of corporate governance failures needs continuous upgrading. This dissertation contributes to understanding why the watchdogs did not bark, and also dissects how common human biases affect the mechanisms of corporate monitoring roles, in particular during restatement crises.

Three connected studies were conducted. A first qualitative study develops a model for gauging restatement severity and provides insight into the forces blurring the 20/20 vision on restatement situations. A second quantitative study is the first study to comprehensively elicit analysts' perceptions of CEO pressures and behaviours during restatements. A third study corroborates our findings through in-depth interviews with analysts. Combined the studies show that bounded awareness and common human biases heavily influence functioning of executives and gatekeepers in safeguarding corporate reputation during restatements.

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