

Boston College
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Department of Organization Studies

IMPRESSIONS OF AGENCY: AN INVESTIGATION INTO THE INFLUENCE OF
INVESTOR CAPITALISM ON EARNINGS MANAGEMENT

a dissertation

by

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submitted in partial fulfillment of the requirements
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IMPRESSIONS OF AGENCY: AN INVESTIGATION INTO THE INFLUENCE OF
INVESTOR CAPITALISM ON EARNINGS MANAGEMENT

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Abstract

The dissertation utilizes the principles of agency theory and impression management in gaining a better understanding of ownership structure and its role in earnings management as an image-enhancing activity. Driving this dissertation is the research question: How does investor capitalism influence the propensity of organizations to engage in earnings management? To answer this question an archival-based research project was conducted. Data were collected on a matched sample of 870 cases, half of which were determined to have engaged in earnings management activity. Logistical and multiple regression statistical procedures were used to analyze the data and test a series of hypotheses. The results suggest that a higher degree of institutional ownership increases the likelihood of an organization's management engaging in earnings management. Findings also indicate that prior success in earnings growth and in comparative stock returns moderate the relationship between institutional ownership and earnings management. While ownership structure contributed to the degree of reliance on CEO outcome-based contracts, there was a lack of support for the assertion that these contracts influenced the likelihood of an organization's management engaging in earnings management. These results suggest that investor capitalism contributes to an environment in which agents who are aware of principal expectations engage in earnings management in order to enhance their image.

The findings make a contribution to agency theory by pointing out that ownership structure may actually work to foster an environment conducive to earnings management. The findings further contribute to agency theory by suggesting a nonlinear relationship between the separation of ownership and control rather than the traditional view of linear variability. A contribution is made to the study of impression management by demonstrating that prior successful performance contributes to image-enhancing activities. The study contributes to corporate governance research by calling into question the effectiveness of outcome-based contracts as a governance mechanism. Earnings management benefits from an alternative methodology for isolating the activity and by adding to the limited structural level research on the topic.

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CHAPTER 1:

INTRODUCTION

Discourse in the popular press regarding the corporate scandals of the early 21st century centers on the malfeasance of managers. Andrew Fastow, Enron's CFO, pled guilty to conspiracy charges. John Rigas, founder of Adelphia, and a son were convicted for conspiracy, securities fraud and bank fraud. Dennis Kozlowski, former chairman of Tyco, and CFO Mark Swartz were convicted on 22 of 23 counts of grand larceny, conspiracy, securities fraud, and falsifying business records. WorldCom's CEO Bernard Ebbers has been convicted of fraud, conspiracy, and false regulatory filings, and WorldCom's ex CFO Scott Sullivan took a plea deal to testify against Ebbers. Global Crossing Chairman Gary Winnick cashed out stock prior to that company's demise. Former CEO of ImClone Samuel Waksal was arrested for insider trading and received a seven-year sentence. The severity of corporate scandals is further supported by recent governmental action requiring managers to certify their company's financial statements as well as instituting stiffer penalties for fraudulent acts. Financial-agency theory would explain this rash of malfeasance in corporate America as a gap between the goals of management and those of the owners with each party motivated by their own self-interest.

Over the last few decades, a shift in organizational control influencing the relationship between managers (agents) and investors (principals) has occurred. Institutional investors have gained prominence as an ownership class and have the ability to exert influence over the management of their investments. This is the essence of what Useem (1996) calls investor capitalism.

In placing our wealth in the hands of institutional investors, we have unintentionally unleashed a set of forces that is changing the face of American business. Money managers are telling companies that they must become more productive, more effective, more competitive – generally not telling them how to do it, but just to do it. (Useem, 1996: 5)

With their rise to prominence, money managers have readily endorsed a set of governing principles explained by agency theory; institutional investors have led the way in trying to align the interests and goals of shareholders and management. Management incentives are tied to shareholder wealth and CEOs have lost their jobs for not performing to expectations (Useem, 1996). A question arises: If organizations have aligned goals through outcome-based contracts to address the agency problem, then why has there been the widespread malfeasance in recent years? Perhaps the principal-agent relationship does not fully explain the nuances of the problem or maybe measures to govern managers are inadequate.

Reframing the malfeasance and earnings management as an impression management tactic sheds new light on the principal-agent relationship. Annual reports and financial statements as communication devices may be used as means for managing impressions (Rosenfeld, Giacalone, & Riordan, 2002). While principals implement governance mechanisms to monitor and control agents, such as setting outcome-based pay packages and monitoring company performance, managers may capitalize on information asymmetry by interpreting accounting rules to enhance their image. If agents are left in charge of performance measures, then the validity of the principal-agent contract is in jeopardy.

This dissertation utilizes the principles of agency theory and impression management to gain a better understanding of ownership structure and its role in earnings management as an image-enhancing activity. Driving this dissertation is the research question: How does investor capitalism influence the propensity of organizations to engage in earnings management?

Summary of the Study

The basic premise of the study is that under investor capitalism, institutional investors have larger control of voting blocks and are in a position 1) to influence governance decisions by pushing for support of control mechanisms associated with financial-agency theory and 2) to promote the edict of maximizing shareholder wealth (Useem, 1996). Outcome-based contracts, an agency theory governance mechanism meant to align the self-interest of agents with those of principals, are a legitimating device for signaling good governance (Westphal & Zajac, 1998) and are meant to reduce information asymmetries and agency cost (Eisenhardt, 1989). Impression management theory suggests that the opposite occurs by positing that when agents are aware of principal expectations and when principals have control over the tenure and rewards of the agent, there is a tendency for agents to engage in image-enhancing tactics (Ginzel, Kramer, & Sutton, 1993). When accounting numbers are viewed as information (Schipper, 1989), earnings management can be seen as an activity meant to enhance the impressions of managers and the organizations that they run. This study hypothesizes that a higher degree of institutional ownership, indicative of investor capitalism, creates pressure on managers to engage in earnings management. Additional hypotheses predict that the direct relationship also works in conjunction with the higher levels of executive

compensation related to outcome-based contracts as well as prior successful organizational performance.

An issue when studying earnings management is the socially undesirable behavior associated with the action, which makes it difficult to obtain open, honest answers to surveys or interview questions asked of top managers. A methodology using archival data was selected to avoid the possibility of gathering skewed data from an informant-based design. A sample of 870 cases, half of which were deemed to have engaged in earnings management as identified by the Center for Financial Research and Analysis (CFRA), was utilized to test the hypotheses. Results of logistic and multiple regression analysis suggest that institutional ownership directly and indirectly through moderation with prior successful performance increases the likelihood of engaging in earnings management. While ownership structure was found to influence the percentage of CEO pay attributable to outcome-based contracts, a higher degree of outcome-based pay did not significantly increase the likelihood of engaging in earnings management either directly or indirectly through mediation or moderation. The findings suggest that higher degrees of institutional ownership heighten pressures on managers ultimately increasing the likelihood of their engaging in earnings management. In an effort to align the self-interest of agents, institutional owners have accepted the premise of agency theory that executives should be compensated according to outcome-based contracts. The contracts independently and in conjunction with degree of institutional ownership do not reduce managers' ability to engage in earnings management and even slightly increase the likelihood, suggesting that, given their current form, outcome-based contracts do not enhance the controlling of agents. Higher percentages of institutional ownership coupled

with higher performance increases the likelihood of managing earnings. Pressure from institutional investors increases in the presence of higher prior performance, suggesting that it is more important for managers to maintain the position of the firm (thus protecting investor wealth) than it is to increase wealth by improving poor performance.

The findings suggest that investor capitalism creates an environment conducive to earnings management through its promotion of financial expectations and assumptions that fail to consider non-financial self-interest. Agency theory alone falls short in explaining managerial malfeasance; a model that includes impression management blends both financial and non-financial self-interest, offering a more complete picture. The finding that a contraction of ownership toward institutional ownership increased managerial malfeasance is suggestive of a nonlinear relationship between separation of ownership and control rather than agency theory's assumption of a linear association. Though not conclusive, the results suggest that outcome-based contracts may not be providing the level of governance that is intended. Finally, the findings imply that successful performance as well as failure warrants scrutiny.

This chapter has presented a summary of the research project; Chapter 2 presents a review of the relevant literature and development of a theoretical model and hypotheses. Chapter 3 outlines and explains the research methodology. Results of hypotheses testing are presented in Chapter 4. The findings and implications of the study are discussed in Chapter 5. And in Chapter 6, future research avenues are explored and concluding remarks made.

CHAPTER 2:
REVIEW OF THE LITERATURE AND DEVELOPMENT OF A THEORETICAL
MODEL

The nature of the relationship between owners and managers in corporate America evolves over time reflecting the shifting power between the parties. Through the consolidation of wealth in the hands of institutional investors, principals are able to wield more power in today's business world than under managerial capitalism (Chandler, 1977). This shift creates a sharing of power with management in what Useem (1996) calls "investor capitalism." Under investor capitalism, the relationship between institutional investors and managers is now affecting corporate strategy, performance goals, and top-management compensation packages, as well as high level personnel decisions (Useem, 1996).

With the rising influence of institutional investors and money managers comes the ability to set standards for legitimacy. The institutional perspective of legitimacy proposes that it is derived from and imposed on organizations from the outside (Suchman, 1995). These outside forces are able to impose legitimating standards because they operate from a position of power. Standards of legitimacy under investor capitalism are set by institutional investors according to a taken-for-grantedness within capitalism that owners have the right to oversee their investment. Agency theory likewise assumes this principle by seeking to align the goals of managers with those of owners indicating that the owner/principal has the authority to set standards (Eisenhardt, 1989). In overseeing their investment, owners set profitability and share-value expectations on

organizations, thus communicating to management the criteria for legitimacy. This communication of performance expectations and standard setting is an aspect of what Rubach (1999) characterizes as an investor-activist strategy of using voice.

Given the cultural authority vested in the institutional investors, organizations and managers accept these standards as the criteria on which they are judged. Profitability and share-value expectations need to be met to validate the organization's success. The criteria may be set by outside forces, but demonstration of legitimacy comes from within the organizations through agents' control of information. Agents are closer to the inner workings of the organization and are thus privy to information not readily available to principals. This information asymmetry (Eisenhardt, 1989) gives a degree of power to agents in managing the impressions of those outside the organization.

Managers respond to principals' legitimacy criteria by filtering information through symbolic communication and image management (Russ, 1991). Managers may choose to disclose information through direct revelation or indirectly through signaling (Bernhardt & LeBlanc, 1995), depending on the nature of the information and the principal-agent relationship. For instance, information released directly and completely may increase the likelihood of competition and a potential loss in revenue on an innovation, whereas signaling that a credible new product is in the pipeline may give investors enough confidence in the organization while protecting proprietary information from competitors (Bernhardt & LeBlanc, 1995). However, information asymmetry could also be exploited to promote private gain, either financially or in creditability, by controlling organizational earnings disclosure information through selective

dissemination of accounting information or through the interpretation of subjective accounting rules (Schipper, 1989).

Information asymmetries inherent in the exchange between principals and agents are at the heart of this study. Information is exchanged between principals' voicing performance expectations and agents' disclosing performance numbers. The discussion centers on this interplay of information flow and is geared toward the development of a model and hypotheses that will guide the study in answering the research question: How does investor capitalism influence the propensity of organizations to engage in earnings management?

A historical and contextual explanation of ownership structures from large family firms, to the dominance of managerial capitalism, and finally to investor capitalism prevalent in today's U.S. capital markets is presented. The discussion is focused on: 1) the separation of ownership present under each structure and the information flows between owners and managers, 2) the problems associated with principal-agent relationships and the governance mechanisms meant to surmount these problems and monitor agents' adherence to principals' legitimization standards, and 3) agents' communications that signal conformity with legitimization standards. Each of these points are explored from the perspective of impression management tactics, specifically earnings management. These concepts are used to formulate a model and hypotheses in the last section of the chapter.

Corporate Ownership and the Rise of Investor Capitalism

The industrial revolution was fueled by the entrepreneurial likes of Carnegie, Rockefeller, Morgan, Ford, and Vanderbilt. These captains of industry ruled their ships

with iron fists and maintained an intimate awareness of their operations. Separation of ownership and management was not an issue; typically the founding entrepreneurs held a majority interest in their organizations and monitored the earnings. This entwining of ownership and management persisted through the 1920s until a more diversified ownership base, derived from the passing of ownership to heirs and the subsequent selling of shares to outside investors, took hold (Nielsen, 2002).

Heirs lost interest in the day-to-day operations of the family business. Professional managers were hired to fill the void created by the absence of the founding entrepreneurs and to sustain the family firm. Over time with further dilution from additional generations and family divestures to the open market, the ties between ownership and management began to sever (Nielsen, 2002). Management ownership became minimal to nonexistent within large corporations. Concurrently, the introduction of scientific management (Fayol, 1949; Taylor, 1911) coupled with the work of Max Weber (1920) on bureaucracies fueled the movement toward making management a profession.

Scientific management solidified the professional manager's role as the overseer of the operations of firms in the gap left by the absence of the founding entrepreneurs. Managers now had revolutionary tools and techniques at their disposal to control the resources of production. Taylor's (1911) time motion studies on handling pig iron promoted efficiency. Fayol's (1949) principles of management highlighted specialization, unity of command, chain of command, and coordination of activities offered managers methods for coordinating their control. Weber's (1920) bureaucracy was espoused to be the structure best suited to the "modern" organization, thus providing

managers with a hierarchical structure to model their organizations. Business schools began opening in the early twentieth century to train those entering the new profession in these innovative techniques, further diffusing the methods across organizations.

The result of this dissemination of technical management techniques across organizations along with the movement to a more dispersed ownership helped to solidify the professional managers as technical experts who had the best knowledge of how firms should be run and enabled managers to gain control over firms (Nielsen, 2002). This management dominance has been described by some scholars as managerial capitalism (Chandler, 1977; Hawley & Williams, 2000).

The theme propounded here is that modern business enterprise took the place of market mechanisms in coordinating the activities of the economy and allocating its resources. In many sectors of the economy the visible hand of management replaced what Adam Smith referred to as the invisible hand of market forces.... The rise of modern business enterprise in the United States, therefore, brought with it managerial capitalism. (Chandler, 1977:1)

Managerial capitalism flourished until the 1970s and 1980s when a change in ownership structure began to emerge. Spawned as a byproduct of the merger mania seen during this time period, stock ownership became concentrated within the funds of institutional investors and led to an era of investor capitalism (Useem, 1996). This growth of institutional investment funds during the 1980s set the groundwork for the emergence of investor capitalism. Institutional ownership made up of public pension funds, such as Calpers and TIAA-Cref, private pension funds, mutual funds, insurance companies, and banks currently control vast amounts of capital. In 1955, this group controlled 23.00% of

total stock market investment; by 1990, that figure had increased to 53.30% (Rubach, 1999). Eight years later institutional investors had nearly \$11 trillion under their control, accounting for 57.60% of the total invested in the market (Ryan & Schneider, 2002).

Prior to the rise of the institutional investor, managers had virtually a free hand in the management of organizations. Ownership was distributed over a wide base and individual owners carried little weight in struggles with management. This changed with the growth of institutional ownership. Money managers currently control large blocks of stock and their corresponding voting rights enable institutional owners to voice their opinions and be heard. Block holders can call a CEO with their concerns.

Both the popular press and scholars have indicated that voice has increasingly replaced exit as an institutional shareholder strategy. Voice typically takes the form of shareholder activism. Institutional shareholder activism can take many forms from extremely open and public to private and behind the scenes, from aggressive and hostile to conciliatory and cooperative. (Rubach, 1999:45-47)

Active institutional investors have been successful in ousting management, revamping compensation systems, electing independent directors, and setting the agenda of organizations (Useem, 1996). Additionally there is evidence that transient institutional investors use private communication with management to make trades in the quarter prior to a downturn in earnings (Ke & Petroni, 2004).

Investor capitalism has shifted power from a management-dominated system to a partnership between management and larger block holders. With this power shift has come the battle cry of maximizing shareholder wealth, the criterion by which legitimacy is judged and to which management incentives are tied. Institutional owners expect

managers to maximize shareholder wealth and evaluate their performance based on this perspective (Useem, 1996).

This section has presented the evolution of the separation of ownership from entrepreneurs at the turn of the century, through managerial capitalism, to investor capitalism of today. Investor capitalism governance structures rely on the precepts of agency theory to monitor and control the actions of managers to coincide with the institutional investors' desire for the maximization of shareholder wealth. The concern for corporate governance in today's world is explored in the following section, focusing on agency theory and its related suggestions for governance, which is utilized in the development of a construct model and hypotheses later in the chapter.

Agency Theory, Information Asymmetry, and Control

Separation of ownership and control brings a problem to the forefront, and under managerial capitalism, these principal-agent problems are exacerbated. The lack of consolidation of ownership makes it difficult for owners to discuss their concerns and goals with management. Too often management can ignore individual shareholder voices due to the lack of shareholder power (Useem, 1996). The corporate board is supposed to be the liaison between management and owners; however, board members are often supported and endorsed by management (Hill, 1995). Stacking of the board then complicates the monitoring problem of the principal-agent relationship. The board members are supposed to represent the owners but owe their positions to management, thereby reducing the fiduciary monitoring of management. This is evidenced by the reduced incidence of CEO terminations in organizations experiencing poor performance and having a higher percentage of inside directors (Abrahamson & Park, 1994).

The power shift from the hands of management toward those of institutional investors brings about a renewed focus on governance, which agency theory seeks to explain. Approaching organizations as a nexus of contracts between principals and agents is the heart of agency theory (Jensen and Meckling, 1976). Due to a separation of owners from the daily management of organizations, principals must rely on others (agents) to accomplish the tasks necessary to operate the firm efficiently. Highlighting the principal-agent relationship is the bond between owners and managers. Agency relationships embody two basic problems: the “agency problem” and “risk sharing” (Eisenhardt, 1989). The problem of agency is rooted in separation of ownership. Principals and agents operate in regards to their individual self-interest and may be pursuing different goals. It is difficult and expensive for the principal to monitor and oversee agent actions. The expense or agency cost (Jensen & Meckling, 1976) of monitoring is rooted in agency theory’s assumption that information is a purchasable commodity (Eisenhardt, 1989). Agents are closer to the inner workings of organizational activities and thus possess more information than principals resulting in information asymmetry. Agency costs arise when principals seek to reduce unbalanced information flow (Jensen & Meckling, 1976). An example of information asymmetry might be an agent’s withholding information about the loss of a significant customer. The loss may signal management’s inability to protect the organization’s customer base.

The second basic problem associated with agency theory is one of risk sharing and is centered on the concept of risk aversion (Eisenhardt, 1989). Principals/owners hedge against risk by maintaining diversified portfolios and by sharing risk with agents

through outcome-based pay systems. Agents, on the other hand, do not possess the ability to diversify their labor, making them risk averse (Jensen, 2000).

Several governance mechanisms are geared to overcome the problems associated with agency. For instance, outcome-based contracts, independent boards of directors, budgeting systems, and reporting procedures (Eisenhardt, 1989) are all attempts toward either aligning the interest of principals and agents or monitoring agent activity. While principals have control over setting rewards and granting tenure at the broad macro level, the measurements of performance in corporations largely remain in the hands of managers, creating the problem of information asymmetry. Information asymmetry insulates the day-to-day decisions of agents from the peering eyes of principals, creating the opportunity for agents to make disclosure decisions that enhance their image. Information that may be useful for organizational evaluation may be kept secret (Pfeffer, 1981); for instance, an impending lawsuit that has yet to materialize may not be disclosed. Additionally, information that might undermine the legitimacy of the agent may be suppressed (Ashforth & Gibbs, 1990), as was the case of top managers failing to reveal that their organizations were in bankruptcy (Sutton & Callahan, 1987).

Impression Management and the Exploitation of Information Asymmetry

Information asymmetry between principals and agents opens the door to impression management (Russ, 1991), either through concealment of negative outcomes (Abrahamson & Park, 1994) or through financial information disclosure decisions (Schipper, 1989). This section examines the basics of impression management, its relevance to agency theory, and earnings management as an impression management tactic, all of which will aid in the development of the model and hypotheses.

Impression management refers to the behaviors undertaken to create or maintain a desired image (Gardner & Martinko, 1988). Elsbach, Sutton, and Principe (1998) extend the definition to the organizational level; “Organizational impression management refers to any action purposefully designed and carried out to influence an audience’s perceptions of an organization.” (68) Organizational impression management is a reciprocal process consisting of interactions between actors and audience (Ginzel, Kramer, & Sutton, 1993). Implicit in impression management is a relationship between groups with one group seeking to influence the other. For instance, among the findings of Abrahamson and Park (1994) is that managers’ limited disclosure of negative information is correlated with a greater percentage of shares held by institutional investors, suggesting that agents seek to manage the impressions of investors. The relationships in impression management are similar to those found in agency theory, fostering a complementary approach of the theories.

Agents may directly engage in impression management tactics as Gardner and Martinko (1988) point out “... many IM [impression management] behaviors are conscious and can be controlled, they represent an element of the manager’s behavioral repertoire that may be manipulated to influence both organizational and personal success.” (321)

A protective stance is one aspect of impression management (Rosenfeld, Giacalone, & Riordan, 2002) that evokes actions oriented toward reducing the effects of negative events. Through excuses and justifications, individuals and organizations seek to control the account of a given negative event either reactively - as in the case of damage control at Food Lyon, following a negative expose revealing unsanitary

conditions aired on *Prime Time Live* (Rosenfeld et al, 2002) - or proactively - as in Elsbach et al's (1998) study of hospital billing practices to avert potential problems in customer billing.

Failures or perceived failures can activate protective impression management measures. Caldwell and O'Reilly (1982), through an experimental study, found evidence to suggest that when an audience challenges a decision maker's failures, the decision maker will make attempts at justification and will manage information dissemination to repair or maintain the decision maker's image. Similarly, the concealment of negative organizational outcomes was found in presidential letters to shareholders, either through justifications or diversion of the attention to factors beyond the control of managers (Abrahamson & Park, 1994). While Caldwell and O'Reilly (1982) focus on reactive responses of justification and excuses, Elsbach et al (1998) focus their attention on anticipatory organizational impression management which they define "as tactics that organizations use to influence audiences' general perceptions or specific behaviors associated with upcoming events. Anticipatory tactics may be used to project both positive and negative images to either avert negative perceptions and behavior, or to encourage positive perceptions and behavior." (69)

Anticipatory tactics identified by Elsbach and colleagues (1998) include excuses, justifications, and obfuscation. The purpose of anticipatory excuses is to soothe negative perceptions that an organization is responsible for the negative event being monitored by others; these excuses are evoked when an organization is clearly linked to the event under scrutiny. Anticipatory justification is meant to reframe or account for an organizational event that is negative when a direct linkage between the organization and event is

apparent. Both excuses and justifications are made through special announcements and press releases. Obfuscation as an anticipatory organizational impression-management tactic is used when it is not clear if the organizational actions are negative and the issue is important to the audience (Elsbach et al 1998). Organizations anticipate conflicts with audiences and seek to divert attention away from the event and engage in routine activities. Normal business communications rather than special announcements are utilized to divert attention from the negative event.

Earnings Management as a Form of Impression Management

Schipper (1989) points out that if accounting numbers are information, then earnings management is really disclosure management. In other words, accounting numbers are a social construction. Disclosure management is defined as the “purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain (as opposed to, say merely facilitating the neutral operations of the process)” (Schipper, 1989; 92).

Healy and Wahlen (1999) in their review of the earnings management literature offer the following definition: “Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers.” (368)

Both definitions point to the image-enhancing nature of the activity in reporting to those outside the organization, implying an outward-looking focus characteristic of impression management as well as highlighting earnings management’s purpose of

influencing contractual outcomes, which are inherent in the governing mechanisms of agency theory. The definitions of earnings management and disclosure management are very similar, and both have been used to describe the same behavior. The term “earnings management” appears to be the dominant term scholars use when discussing the management of financial information; therefore, the discourse in this dissertation utilizes the term “earnings management”.

Accounting, finance, and economics are the traditional venues for earnings management research, largely due to a focus on the technical issues involved in the practice. As Healy and Wahlen (1999) point out, detecting if and when earnings management has occurred has received the primary attention of researchers. Organizational theory has been applied to accounting as a profession (Kleinman & Farrelly, 1996), change within the accounting profession (Greenwood, Suddaby, & Hinings, 2002), the ethics of accounting (Abdolmohammadi, Read, & Scarbrough, 2003), the diffusion of standards (Mezias, 1990), and in the realm of identity (Covaleski, Dirsmith, Heian & Samuel, 1998). Underrepresented (with one exception, Davidson, Jiraporn, Kim, & Nemeč, 2004) is earnings management as an organizational action and, more specifically, as a means of managing impressions.

Framing earnings management as a form of impression management helps to move the discussion of earnings management from a focus on individual financial self-interest toward a more holistic model that incorporates environmental demands for legitimacy as a motivating force behind the behavior. External pressures, brought about by investor capitalism and its reliance on agency-theory-based governing mechanisms, create an environment that leaves management in a struggle to maintain legitimacy.

Managers read these pressures and expectations as signals as to what is considered institutionally legitimate. Recognizing constituents' legitimization desires puts executives in a position of strategically managing the legitimizing mechanisms. They invoke strategies for maintaining legitimacy through protecting past accomplishments and anticipating future changes (Suchman, 1995).

One tool at management's disposal is the organization's financial statements. Accounting numbers provide a window into an organization as well as providing a legitimization force to validate management and organizational actions when those numbers reflect the expectations of principals. Although governed by generally accepted accounting standards, accounting rules leave room for interpretation (Mezias, 1990). They can be seen as largely the product of a social construction in that accounts are affected by society (Bhimani, 1993) and in turn act back on society (Covaleski, Dirsmith, & Michelman, 1993). Financial statements and accounting rules, although perceived by a lay audience to be objective, remain subject to interpretation and are malleable. The flexibility of financial statements coupled with the legitimacy provided by accounts provides managers with a tool to manage impressions. Leeway in the accounting rules creates gray areas that are subject to interpretation and management discretion (Schipper, 1989). How managers decide to interpret these rules can affect the image that they project to the outside world.

Summary of Literature Review

A recap of what has been discussed thus far in this chapter on existing theory is appropriate before developing the model and hypotheses. To review, there has been a power shift from managers to institutional owners as a result of the consolidation of

wealth in the hands of money managers, thus the advent of investor capitalism (Useem, 1996). Increased power has given institutional owners the ability to voice concerns and expectations directly to management, and these owners are embracing the adoption of agency-theory-based governance mechanisms (Useem, 1996; Rubach, 1999), such as promoting outcome-based executive pay structures, independent board members, and reporting procedures (Eisenhardt, 1989), in order to align management with the dictum of maximizing shareholder wealth (Useem, 1996). Institutional owners set criteria for judging profitability, growth, stock value, and incentives for agents (Useem, 1996). Agents interpret signals from principals and act to maintain their credibility by strategically managing legitimacy (Suchman, 1995) through impression management tactics (Gardner & Martinko, 1988). Impression management is possible because of information asymmetries inherent in the principal-agent relationship (Eisenhardt, 1989) and managers may invoke the anticipatory organizational impression management tactic of obfuscation to utilize normal business communications in diverting attention away from anticipated conflicts with principals (Elsbach et al, 1998). One normal business communication subject to impression management is the annual report and its related components: comments in the body of the report (Salancik & Meindl, 1984), the letter to shareholders (Staw, McKechnie & Puffer, 1983; Abrahamson & Park, 1994), the presentation of graphs (Godfrey, Mather, & Ramsay, 2003), and the financial numbers themselves through earnings management (Schipper, 1989).

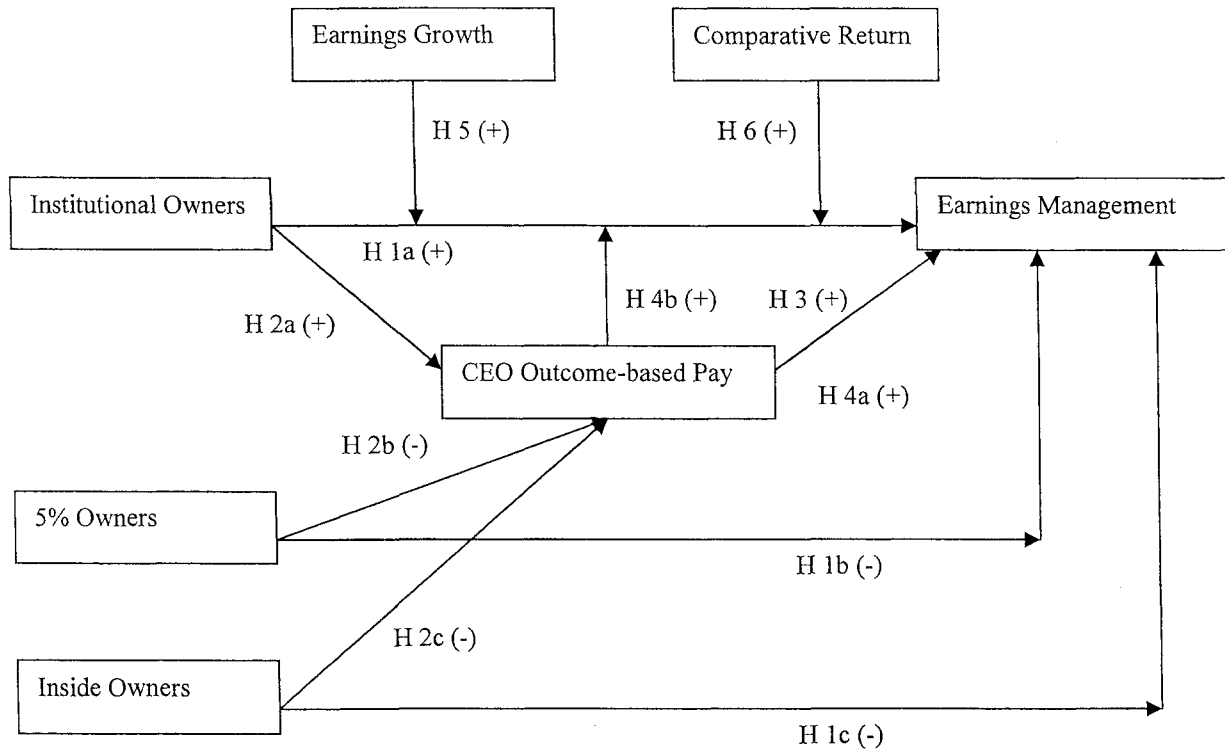
This review sets the ground work in pursuing an answer to the research question: How does investor capitalism influence the propensity of organizations to engage in earnings management? The following section presents a variable model based on the

work examined above and develops hypotheses in accordance with the model and the review.

Development of a Theoretical Model and Hypotheses

The dyadic relationship between principal and agent – or, in the case of this study, institutional investor and manager - is important with the prevalence of investor capitalism in the United States today as discussed in the review of the literature presented above. Building on our understanding of agency theory and impression management, this section presents a variable model (see Figure 1, p. 28) and develops hypotheses to gain insight into the tensions between principals' monitoring and controlling efforts, and the earnings management tactics of agents.

Figure 1: Model of Hypothesized Variable Relationships



Ownership structure’s relationship to earnings management. There are potentially three distinct ownership classes that may contribute to or impede management’s opportunistic use of earnings management: institutional owners, outside investors holding more than five percent (5% owners) of the outstanding shares, and inside owners. The consolidation of ownership amongst institutional investors has brought management under increasing scrutiny. Useem (1996) and Rubach (1999) make the case for voice as a strategy that institutional investors undertake to protect their stake in a particular

company. Through the use of voice large investors are delving into the realm of corporate governance and imposing their will on management (Useem, 1996). This outside focus on governance increases the scrutiny of managerial performance and action, making agents aware of principals' performance expectations. Awareness of others' expectations and the impression one is making is akin to what Leary and Kowalski (1990) coin "impression monitoring". Through investor voice, agents are aware of the impression they are making on principals. Motivation to manage impressions comes when others have control over the ultimate outcome of a situation (Rosenfeld et al, 2002). In the principal-agent relationship, the principal has the final say in the continuation of the relationship or, in other words, can replace management - as in the case of IBM, where the CEO was replaced for failing to react to changes in the market (Useem, 1996).

While the consolidation of ownership inherent in investor capitalism has given institutional owners a voice with management, information asymmetries remain. Management maintains control of the dissemination of information and is in a position to filter earnings information to be consistent with owner expectations. This assertion is consistent with the findings of the Abrahamson and Park (1994) study of presidential letters. Their study found a significant negative correlation between negative disclosures in the president's letter and the percentage of shares held by institutional investors or, in other words, the higher the institutional ownership the lower the amount of disclosure of negative information, indicating that managers aware of institutional owners' expectations refrain from disclosing information that has the potential to be perceived as negative.

Given institutional owners' use of voice (Useem, 1996), management is aware of shareholder performance expectations and concerns. Couple this with the information asymmetries associated with the separation of ownership inherent in the relationship, management has the opportunity to engage in earnings management. As a result, the likelihood of the occurrence of earnings management should increase with an increase in the percentage of shares held by institutional investors.

Hypothesis 1a: An organization with a greater percentage of institutional ownership will increase its management's likelihood of engaging in earnings management.

The separation of ownership and corresponding information asymmetries should be less prevalent when outside ownership is more concentrated, as is the case when more shares are held by 5% owners. An organization with outside owners of more than 5% is required to file reports with the SEC, and the disclosures of these owners are presented in the organization's proxy statement. These owners can carry significant influence within the organization. Depending on the number of shares they control, these owners may be able to place board members and have day-to-day contact with members of management. This increased contact and scrutiny of owners should work to reduce the amount of information asymmetries and the separation of ownership (Eisenhardt, 1989), and as a result, managers should have less opportunity to manage earnings.

Hypothesis 1b: An organization with more owners who control 5% or more of the organization's outstanding stock will decrease its management's likelihood of engaging in earnings management.

While investor capitalism and institutional owners are the dominant ownership class on Wall Street (Ryan & Schneider, 2002), some organizations have substantial ownership held by insiders. For instance, Michael Dell of Dell Computers and Bill Gates of Microsoft each hold significant shares of the organizations they founded. In these and similar organizations, inside owners often take an active role in the management of the company, reducing agency costs associated with the separation of ownership. Inside owners are privy to direct information that other owner classes are not; this gives inside owners the ability to closely monitor agent activities and reduce information asymmetries. Similarly, a basic problem of agency is a misalignment of the goals of principals and agents (Eisenhart, 1989). When an organization has a high degree of inside ownership, then in theory there should be an alignment of goals and therefore less of a tendency to manage earnings.

Hypothesis 1c: An organization with a greater percentage of inside ownership will decrease its management's likelihood of engaging in earnings management.

Ownership structure's relationship to outcome-based contracts. Agency theory recognizes that the self-interest of agents may be different from the interest of the principals (Eisenhardt, 1989). When the goal of owners is to maximize shareholder

wealth, the self-interested goals of management can be aligned with owners' goals by tying executive pay to desired performance levels. Increasingly, there has been a shift from salary-based pay to outcome-based pay (Useem, 1996), both in cash and stock remuneration, demonstrating the diffusion of agency theory precepts across organizations. Adding the component of stock incentives to the pay package gives management a sense of ownership in the company, aligning their interest with the other owners and theoretically reducing the tendency to act in a self-interested manner that is contrary to the interests of owners. The widespread acceptance of this mechanism of control is demonstrated by Westphal and Zajac's (1998) study comparing changes in stock price following the announcement of the adoption of long-term incentive packages.

If institutional investors have more control over the adoption of governance mechanisms than do disparate individual investors, then the outcome-based contract application of agency theory should be more prevalent in organizations that have a higher concentration of institutional investors as suggested by Useem (1996) and borne out by the finding of Hartzell and Starks (2003) that institutional ownership is positively related to executive outcome-based compensation.

Hypothesis 2a: An organization with a greater percentage of institutional ownership increases its level of CEO pay derived from outcome-based contracts.

From an agency-theory perspective, principals support outcome-based contracts as a means of aligning the goals of agents with their own given the separation of ownership present in the owner/manager relationship (Eisenhardt, 1989). When owners

are more involved and informed about management activities, they should not have to rely on outcome-based contracts as a means of controlling management behavior. This should be the case with higher percentages of 5% owners and inside owners. Each of these groups has greater access to management and information than do individual and institutional investors, allowing them to rely on direct contact rather than outcome-based contracts as a means of governing management. In these situations, outcome-based contracts represent additional agency costs, which in the case of top executives can amount to millions of dollars that may not need to be incurred. It is then in the self-interest of the 5% owners and inside owners to reduce the amount of top management pay attributable to outcomes. As the percentage of shares held by these groups increase, the direct control of agents increase and the reliance on outcome-based contracts is expected to decrease, consistent with the findings of Mehran's (1995) study of 153 manufacturing firms.

Hypothesis 2b: An organization with a greater percentage of 5% owners decreases its level of CEO pay derived from outcome-based contracts.

Hypothesis 2c: An organization with a greater percentage of inside ownership decreases its level of CEO pay derived from outcome-based contracts.

Outcome-based contracts' relationship to earnings management. Agency relationships embody two basic problems, the "agency problem" and "risk sharing" (Eisenhardt, 1989), each of which may contribute to outcome-based contracts influencing

the propensity to manage earnings. The agency problem includes problems associated with the self-interest pursuit of principals and agents as well as the agency cost of monitoring and controlling agents through the acquisition of information (Jensen & Meckling, 1976) to reduce information asymmetry. Outcome-based contracts are meant to align the self-interests of principals and agents; however, the cost of acquiring information may limit the effectiveness of these contracts to control agent behavior. In the presence of information asymmetries, outcome-based contracts may actually induce management to engage in earnings management to promote their own self-interest and personal gain. Such was the case when outgoing CEOs reduced research and development expenses to boost earnings and bonuses prior to retirement (Dechow & Sloan, 1991) or when divisional managers smoothed earnings in response to the structure of incentives to maximize their bonuses (Guidry, Leone, & Rock 1999).

Risk sharing is a second problem of principal-agent relationships (Eisenhardt, 1989). Principals seek to share risk with their agents while agents seek to avert risk. Outcome-based contracts not only seek to align goals of principal and agent, they also serve to transfer a portion of risk from principal to agent by making executive pay a variable expense. Agents being risk averse would prefer a salary-based pay package (Jensen & Meckling, 1976). One means agents may use to reduce risk when compensated in outcome-based stock options is to sell off previously owned shares when options are exercised; this works to balance their personal portfolio and reduce their personal risk (Olfek & Yermack, 2000). Alternatively, managers may turn to earnings management to reduce the risk associated with outcome-based compensation packages as evidenced by management selling off shares following earnings management activity or

by highly-equity compensated managers selling shares when analyst forecast are met and holding shares when forecast are not (Cheng & Warfield, 2005).

Information asymmetry allows agents to choose which information to disseminate to principals. Agents' selective dissemination of performance information through earnings management can essentially reduce the risk associated with outcome-based contracts by approximating a salary-based contract as well as increasing their personal wealth. Consistent with prior earnings management studies (Healy, 1985; Holthausen, Larcker, & Sloan, 1995; Guidry, Leone, & Rock 1999), self-interest and risk aversion serve as motivation for earnings management, and the greater the outcome-based pay, the greater the likelihood of earnings management.

Hypothesis 3: An organization with a greater percentage of CEO outcome-based pay increases its management's likelihood of engaging in earnings management.

Outcome-based contracts as a mediator/moderator between institutional ownership and earnings management. Useem (1996) essentially assumes that all institutional investors behave as a homogenous group. More recent studies (Rubach, 1999; Hawley & Williams, 2000; Ryan & Schneider, 2002) see institutional investors as heterogeneous groups who approach voice or activism according to their own mandates. The direct relationship of Hypothesis 1a is consistent with Useem's (1996) assumption of homogeneity; however, if greater heterogeneity is assumed, then outcome-based pay packages may contribute to the relationship between institutional ownership and earnings management either through mediation or moderation.

A mediator variable provides the “why” behind a relationship between a predictor and outcome variable. It is the mechanism that drives the relationship (Frazier, Tix, & Barron, 2004). In a mediation situation, outcome-based contracts would provide the reason for institutional ownership influencing earnings management. The logic would be that institutional owners prefer outcome-based contracts for CEOs as a means of controlling and monitoring agents through the alignment of goals. They use their influence with management to promote the adoption of outcome-based contracts (see rationale for Hypothesis 2a). An unintended consequence of implementing outcome-based contracts is that, given the information asymmetries in the separation of ownership and managers’ pursuit of self-interest and risk aversion, the contracts increase the tendency to engage in earnings management (see rationale for Hypothesis 3). So in mediation, organizations with higher institutional ownership promote a greater amount of CEO pay attributable to outcome-based contracts, increasing the likelihood of earnings management.

Hypothesis 4a: An organization with a greater institutional ownership increases its management’s likelihood of engaging in earnings management through the adoption of higher outcome-based CEO pay packages (mediation).

Moderating variables answer the questions “when” or “for whom” (Frazier, Tix, & Barron, 2004). The moderating variable interacts with the predictor to influence the outcome variable. In the relationship between institutional ownership and earnings management, moderation would occur if the likelihood of earnings management varies

with the interaction between institutional ownership and CEO outcome-based contracts. In other words, the influence of institutional ownership is amplified when a greater amount of CEO pay is attributable to outcome-based contracts. The voicing of performance expectations by institutional investors creates pressure on managers to manipulate earnings (see Hypothesis 1a), and as the amount of outcome-based pay increases, the manager comes under additional pressure driven by self-interest and risk aversion (see Hypothesis 3).

Hypothesis 4b: An organization with greater institutional ownership interacting with higher outcome-based CEO pay increases its management's likelihood of engaging in earnings management (moderation).

Performance as a moderator between institutional ownership and earnings

management. Organizational performance may be construed as an event that warrants impression-management tactics. Poor organizational performance on its own or as compared to competitor performance (Rao, 1994), like performance failures (Caldwell & O'Reilly, 1982), can reflect back on the image of the organization and onto management. Investors and analysts voice their expectations of organizational performance (Useem, 1996), allowing management to anticipate potential conflicts with audience members and to proactively take action to divert attention away from a potentially perceived shortcoming.

Elsbach et al (1998) posit that the importance of the issue to an audience that may take action against it, will also contribute to anticipatory obfuscation tactics.

Performance issues are salient to institutional investors who operate from the dictum of maximizing shareholder wealth and use outcome-based pay packages to reward organizational performance (Useem, 1996). Not only do institutional investors monitor the organizational performance of the focus company but also the performance of comparative organizations and, with the proliferation of institutional ownership, they may own a portion of the comparison company. With the importance of the performance measures to institutional investors, comes more incentive for managers to engage in anticipatory obfuscation.

Prior earnings growth is one standard by which organizations may be judged and pressure may be exerted to continue growth in accordance with the values of investor capitalism (Useem, 1996). This is consistent with Duta and Gigler (2002), who found a higher incidence of earnings management following higher forecasted earnings rather than lower forecasted earnings. Similarly, Sanders and Carpenter (2003) found high performance expectations increased the likelihood of mollifying investors through stock repurchase announcements. Pressure from institutional investors increases in the presence of higher prior performance, suggesting that it is more important for managers to maintain the position of the firm (thus protecting investor wealth) than it is to increase wealth by improving poor performance. If this is true, companies that have higher institutional ownership should feel increased pressure from owners to maintain or improve prior growth and contribute to an increased likelihood of earnings management.

Hypothesis 5: An organization with greater institutional ownership interacting with higher prior-year earnings growth increases its management's likelihood of engaging in earnings management (moderation).

Performance can also be measured by benchmarking the organization to comparative firms. If an organization's stock returns have previously outperformed the returns of their comparative peer, then there is pressure to manage earnings to maintain the appearance of success. The pressure to manage earnings should be greater when maintaining prior comparative performance interacts with institutional ownership, which is due to the focus and voice associated with investor capitalism (Useem, 1996).

Hypothesis 6: An organization with greater institutional ownership interacting with a higher ratio of prior-year indexed company-stock returns to indexed sector returns increases its management's likelihood of engaging in earnings management (moderation).

A summation of the hypotheses addressed in this dissertation is presented in Table 1 (pg. 40). The variable model and hypotheses expounded on in this section set the framework on which to study the relationship between owners and the impression management tactic of earnings management. The following chapter outlines the methodology to be used in exploring the relationship.

Table 1: Summary of Hypotheses

Ownership → Earnings Management

- H 1a: An organization with a greater percentage of institutional ownership will increase its management's likelihood of engaging in earnings management.
- H 1b: An organization with more owners who control 5% or more of the organization's outstanding stock will decrease its management's likelihood of engaging in earnings management.
- H 1c: An organization with a greater percentage of inside ownership will decrease its management's likelihood of engaging in earnings management.

Ownership → Outcome-based Pay

- H 2a: An organization with a greater percentage of institutional ownership increases its level of CEO pay derived from outcome-based contracts.
- H 2b: An organization with a greater percentage of 5% owners decreases its level of CEO pay derived from outcome-based contracts.
- H 2c: An organization with a greater percentage of inside ownership decreases its level of CEO pay derived from outcome-based contracts.

Outcome-based Pay → Earnings Management

- H 3: An organization with a greater percentage of CEO outcome-based pay increases its management's likelihood of engaging in earnings management.

Institutional Ownership/Outcome-based Pay → Earnings Management

- H 4a: An organization with greater institutional ownership increases its management's likelihood of engaging in earnings management through the adoption of higher outcome-based CEO pay packages (mediation).
- H 4b: An organization with greater institutional ownership interacting with higher outcome-based CEO pay increases its management's likelihood of engaging in earnings management (moderation).

Institutional Ownership/Performance → Earnings Management

- H 5: An organization with greater institutional ownership interacting with higher prior year earnings growth increases its management's likelihood of engaging in earnings management (moderation).
 - H 6: An organization with greater institutional ownership interacting with a higher ratio of prior year indexed company stock returns to indexed sector returns increases its management's likelihood of engaging in earnings management (moderation).
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CHAPTER 3: RESEARCH METHODOLOGY

Design

When studying earnings management at the organization level, it is difficult to obtain honest, open answers in either surveys or interviews due to the problem of social desirability. Bernard (2000) points out that respondents often give answers that they deem as socially acceptable especially in situations where the questions are construed as threatening. In light of recent corporate scandals and the certification requirement of the Sarbanes-Oxley Act of 2002, it is especially doubtful that data from surveys or qualitative interviews concerning earnings management can be relied upon. Therefore, this study investigates earnings management through secondary archival data sources and utilizes the quantitative method of logit analysis to test hypotheses.

Unit of Analysis

This study utilizes the organization as the unit of analysis. Data on ownership, company and competitor performance, CEO pay packages, and earnings management were collected and analyzed across organizations.

Pilot Study

A pilot study of 71 companies was conducted to test the feasibility of the variable measurements. The sample for the pilot was a purposive sample that yielded 36 (50.70%) organizations that engaged in earnings management and 35 (49.30%) that had not, according to the Center for Financial Analysis and Research (CFRA). The pilot study shed light on the data and provided insight into conducting the complete study by giving the researcher a chance to become familiar with the data and data sources, enabling a

better understanding of the measures and potential problem areas and allowing for the adjustment of measures used in the complete study. Additionally, the pilot study provided the opportunity to work through controls and standardization issues that were overlooked early in the project's development.

Sample

A concern in deriving a sample population on which to test hypotheses is achieving proper representation of organizations that have received an earnings management warning from the Center for Financial Research and Analysis (CFRA), the dependent variable in the study. A random sample of organizations from the general population of listed companies would not necessarily result in an adequate representation of CFRA database firms because organization selection for the database is non-random and non-inclusive of all companies. The Center utilizes several proprietary data screens of Compustat and Lexis-Nexis databases as well as qualitative and quantitative analysis of SEC filings to isolate potential organizations that may have manipulated earnings (Fairfield & Whisenant, 2000). CFRA's preliminary screening leads to selection for the further analysis and inclusion in the database.

When it is impossible to obtain a probability sample, then it is appropriate to utilize non-probability sampling techniques (Bernard, 2000). Two such non-probability techniques are quota, where sampling is conducted based on desired proportions of a population as when seeking an equally divided sample, and purposive sampling, which is appropriate when a specific population is targeted. Utilizing elements of quota and purposive non-probability sampling (Bernard, 2000), an initial sample was drawn from the CFRA database. The criteria for selection were all U.S. organizations listed on the

three major American exchanges receiving an earnings management warnings issued for the years 1999-2002 and having a modifier on the CFRA warning indicating either “an earnings boost due to non-operating activity” or “aggressive accounting actions.” CFRA began issuing warnings in 1994 and by 1997 had issued a total of 373 warnings which were the basis for the Fairfield & Whisenant (2000) study. The years 1999-2002 were chosen for two reasons; first, by 1999 CFRA’s issuance of warnings and selection of organizations had become more standardized and secondly, recent data on companies are more readily available than older information thereby reducing the possible loss of cases due to lack of data. This initial sample identified 681 cases, representing 499 different organizations that met the established CFRA warning criteria. There were 182 incidents of organizations having received warnings in multiple years. The 681 cases break down across years as follows: 97 cases for 1999, 170 cases for 2000, 204 cases for 2001, and 210 cases for 2002. The increase in the number of cases each year coincides with the expansion of CFRA’s analysis activities.

A matched sample was then selected based on two selection methods intended to compile a cumulative dataset consisting of CFRA and non-CFRA cases across organizations based on market size and primary SIC code. The first method was to select the peer organization as determined by the World Scope database. The World Scope database contains competitive data only on companies that have an international presence and have a high market value. This criterion did not provide matches for all of the CFRA selected cases so an additional method was utilized to match the remaining CFRA cases to non CFRA companies. The second method selected matched cases based on the market value and primary SIC code of the CFRA case, which approximates the

methodology in the World Scope database. Following the second step of sample selection, an additional 681 cases were identified bringing the total number of cases selected for data collection to 1362 with CFRA and non-CFRA cases equally represented. Each non-CFRA case was attached to its corresponding CFRA case within the dataset through the use of an additional tracking variable to insure that each case maintained its tie its matched case.

Data were collected for all cases from the sources outlined in the discussion on variables and summarized in Table 2 (pg. 53). Following data collection, it was noted that there were missing data for some cases. To maintain consistency of sample matching in testing hypotheses, CFRA cases with missing data and their corresponding non-CFRA cases were eliminated from the data set. In those instances that all data were available for a CFRA case, but missing data were noted for a non-CFRA case, an alternative non-CFRA case was selected using the methodology listed above. The sample was further reduced by eliminating CFRA cases which are no longer listed as an active stock on its original exchange. The corresponding non-CFRA case was deleted as well. These deletions were made to reduce potential bias in the sample created by skewed institutional ownership data resulting from the collection method for that variable. The final matched sample for hypotheses testing includes 870 cases across 627 different organizations allocated to the years as follows: 122 for 1999, 238 for 2000, 264 for 2001, and 246 for 2002. Complete descriptive statistics are given for the sample in Chapter 3.

Dependent Variable

The dependent variable for the study is earnings management. Some examples of earnings management tactics are the capitalization of expense items, timing of items,

misclassification of expenses (Merchant, 1990), recording unsubstantiated revenue, or realizing one-time gains as current revenue (Schilit, 2002). Searching for evidence of earnings management for a large sample of organizations would be overwhelming when one considers all the means to manipulate numbers and the level of work to ferret out the necessary information. As a result researchers tend to focus on one or two aspects of earnings management; for instance, Burgstahler and Dichev (1997) concentrate on change or lack of change in reported earnings over time as evidence of earnings management and Degeorge, Patel, and Zeckhauser (1999) compare current and prior earnings to determine smoothing. Jones (1991) adopts an analysis of changes in discretionary accruals for evidence of earnings management which has become one of the dominant methodologies for research in this area (see Bushee, 1998 & Matsumoto, 2002 for examples of the methodology).

Seeking an expanded dependent variable for earnings management, this study takes a different tack for evidence of manipulation. The Center for Financial Research and Analysis (CFRA), established in 1994, is an independent research firm that warns some 4,000 investors of deteriorating operations and unusual or aggressive accounting actions taken by organizations. Currently, there are analyses reports on approximately 1900 North American, European, and Asian companies (CFRA website). CFRA examines companies based on the earnings management research of Howard Schilit (2002). His research has identified thirty tactics that managers use to manage earnings; these fall into seven categories: 1) recording revenue too soon, 2) recording bogus revenue, 3) boosting income with one-time gains, 4) shifting current expenses to a later or earlier period, 5) failing to record or reducing liabilities improperly, 6) shifting current

revenue to a later period, and 7) shifting future expenses to the current period as a special charge (Schilit, 2002).

Analysts at CFRA seek out evidence of these techniques by conducting proprietary screens of publicly traded companies utilizing qualitative and quantitative aspects of fundamental analysis (Fairfield & Whisenant, 2001) and using basic financial and economic analysis rather than trend analysis to determine stock valuation. CFRA analysts screen data using broad searches largely from Compustat, Lexis/Nexis, and SEC filings to isolate companies for further in-depth scrutiny of detailed financial and disclosure information (Schilit, 2002). Additionally, CFRA offers its subscribers consulting add-ons, in which its analysts will monitor a client's portfolio for early warning signs or provide in-depth scrutiny on an *ad hoc* basis (CFRA website). In November of 2003, TA Associates, a private equity firm located in Boston, purchased a majority stake in CFRA for \$60 million. The investment is to be used to hire additional analysts, marketing professionals, and an executive management team, all in hopes of expanding its existing customer base. At the time of the purchase, CFRA provided research for over 400 clients who pay between \$36,000 and \$48,000 annually for a subscription (Grimes, 2003).

Fairfield and Whisenant (2001) conducted a test of CFRA's ability to accurately identify firms with declining "quality of earnings." They explain declining "quality of earnings" as deteriorating performance that has been masked by aggressive accounting. Their study looked at 378 firms identified by CFRA warnings over a four-year period, examining firm performance prior to and subsequent to the issuance of a warning.

Results indicated that CFRA was accurately able to predict deteriorating “quality of earnings.”

The presence of a CFRA warning, which indicates “an earnings boost due to non-operating activity” and “aggressive accounting actions,” is used as evidence that earnings management is taking place and record the presence or absence of a warning in the dichotomous dependent variable. Deteriorating performance warnings without the modifiers are excluded as this may reflect normal business events rather than earnings management activities. The utilization of this variable allows me to cover a broader incidence of earnings management than relying on one or two techniques common to previous studies.

Utilizing CFRA warnings as a proxy for earnings management has both strengths and weaknesses to the study. One advantage of using CFRA is uniformity in the dependent measure of earnings management. With the complexity and varied ways by which earnings may be managed, using CFRA warnings offers a standard methodology for identifying earnings management. The reliance upon CFRA also allows for the inclusion of a greater number of organizations as the researcher can focus attention on the collection of independent variable data rather than the time-consuming effort of the identification of earnings management on an organization by organization basis.

There are some limitations to using the CFRA database. First, the methodology utilized by CFRA is proprietary so there is no direct way to verify CFRA’s categorization. However, this is mitigated by the validation study conducted by Fairfield and Whisenant (2001), and the sale of majority ownership to TA Associates (Grimes, 2003) provides external validation of the services offered by CFRA. Another limitation

is the dichotomous nature of the variable. Had CFRA categorized their warnings by degree (e.g. high, med, low) then this study might be more informative by disclosing greater nuances in the escalation of earnings management.

Independent, Mediating and Moderating Variables

The data for the independent, mediating, and moderating variables utilized for this study were drawn from secondary data located in the Thompson Research Database. This database - which is a compilation of Securities and Exchange (SEC) filings, proxy statements, International Brokers Estimate System (I/B/E/S) and World Scope - provides a centrally located data source and a standardized format to collect data.

Ownership. Institutional ownership was measured by the percentage of outstanding shares owned by institutional investors (shares owned by mutual funds, insurance companies, and pension funds). Institutional investors are required quarterly to file form SEC 13f, which is a listing of all investments managed by the institutional investor.

Thompson Research breaks down and sorts all SEC 13fs by individual stocks and posts the most recent institutional ownership information in the database. Due to the difficulty in obtaining and compiling institutional ownership data from the multitude of individual institutional investor's filling, data analysis for this variable was deemed constant for the individual cases across the four years of data collection, as there tends not to be large turnovers of institutional shares outside of other institutional investors (Useem, 1996).

This assumption poses a limitation to the study in that following the publishing of a CFRA warning and the release of negative information may cause institutional owners to sell shares to reduce potential losses. One means of mitigating this effect is to eliminate from the sample any CFRA cases no longer traded on the exchange at the time of

issuance of the warning. The elimination of these cases will offset any bias of extreme cases. If remaining cases have experienced liquidations of institutionally held shares, the effect would be to undervalue the importance of institutional ownership in the data analysis phase, potentially risking rejection of a true hypothesis. Conversely, a positive test of a hypothesis may understate the importance of institutional ownership.

There are two additional ownership variables that have been used in prior studies (Daily & Dalton, 1994) to aid in understanding the influence of ownership structure. These variables are the cumulative percentage of shares owned by outsiders who own in excess of five percent of total shares outstanding and the percentage of shares owned by insiders. The data for these variables are disclosed in the company's annual proxy statement. The five percent shareholders may not be institutional investors, but rather venture capitalist or other large individual share owners.

CEO outcome-based pay. Moderating and mediating variables of CEO outcome-based pay consist of the ratio of bonus pay to total pay for top executives calculated from information disclosed in the company's annual proxy statement. Bonus pay is the sum of current cash bonus, long-term cash bonus, and the disclosed value of stock awards and stock options issued. Total pay reflects annual cash salary, current and long-term cash bonuses, disclosed value of stock awards and stock options, and other disclosed compensation. While all disclosed compensation is incorporated in the study, there may be undisclosed compensation in the form of perks such as country club memberships and the use of corporate airplanes. Consistent with Sanders and Carpenter's (2003) data were collected for the year preceding the warning date and used as the CEO outcome-based pay variable. Prior year outcome-based pay is used for two reasons: first, outcome-based

contracts in the year of warning could be biased by any earnings management undertaken by management and second, high outcome-based pay in the year prior to a warning agrees with the premise of Hypotheses 3 that managers, being risk averse and self-interested, prefer salary based contracts in that managers seek to continue prior levels of income. The final determination of moderation (the amplification of the relationship) or mediation (the generative mechanism of the relationship) is calculated utilizing the framework outlined by Barron and Kenny (1986) and Jaccard (2001) through a series of regression equations. A full discussion of these frameworks is presented when interpreting the results of the test in Chapter 4.

Performance. This study utilizes two alternative measures of performance: earnings growth and comparative return. While both are measures of performance, they are not necessarily related. Earnings growth is a performance measure that reflects historical profitability performance. Comparative return measures an organization's stock return relative to the sector return and reflects market performance.

Originally, the company profitability performance measure of earnings per share (EPS) was to be used in determining organizational performance, as was used in the pilot study. However, this measurement methodology proved faulty in that it fails to standardize the profitability performance variable across cases, risking erroneous results. A better measure that standardizes company performance is earnings growth for the year preceding the warning. This measure is calculated by taking the EPS for the focal year minus one, less the EPS for the focal year minus two, then dividing the amount by the absolute value of the EPS for the focal year minus two. The result of this calculation is the percentage of earnings growth for the year preceding the focal year. All EPS data

were collected from form SEC 10k. The earnings growth for the prior year is an appropriate measure to use due to its comparability across cases and in that prior year performance sets the standard to which the organization's current performance is to be compared.

Corporations disclose comparative stock return information in their annual proxy statements using indexed figures to calculate comparative return. Company stock returns, sector returns, and broad index returns for the preceding five years are indexed to returns from a point five years in the past (i.e., the base year). In other words, each year's performance is indexed to the base year. Comparing the focal company to the broad index and sector data gives the investor a means of evaluating the company's performance and competitors in a standardized manner. From a research standpoint, it allows the focal company to identify its comparative standard rather than the researcher imposing his/her standard on the data providing a more accurate picture of the situation under study. The actual variable utilized in the study is a calculated variable that is the ratio of the company's indexed stock return in the year prior to the focal year divided by the sector's indexed stock return for the same year. This calculation provides a comparison of company performance to sector performance in a single variable and maintains the consistency between mediator and moderator variables by focusing on the year preceding the focal or warning year.

Control Variables

Control variables are utilized in regressions to account for alternative explanations of the phenomenon under study. When exploring the relationship between institutional ownership and earnings management, firm size might influence the amount of

institutional ownership in a particular organization. Larger firms may garner more attention, have more liquidity, and be more attractive to institutional investors seeking to protect their investment. Firm size is controlled through a variable coinciding with the dollar value of market capitalization of the organization as reported in the most recent 10k.

Earnings management may be sector-specific based upon normal practice within a segment of the economy. To compensate for this possibility, data for primary SIC code were collected for each of the cases included in the sample. These data were then grouped according to sectors established by the U.S. Census Bureau and dummy variables were created for analysis purposes.

Another control variable is the number of CFRA warnings in a given year. The number of warnings may not be spread evenly over the four-year time period, potentially biasing the results. To compensate for this, year was controlled for in dummy variables and included in the regressions. As the dataset spans the course of four years, there are incidences of an organization having a CFRA warning in more than one year; this could skew the data in that once an organization has come under scrutiny of CFRA, it is more likely to be scrutinized in subsequent years. To account for this phenomenon, data for a prior CFRA warning are controlled for with a dichotomous variable. Table 2 below (pg. 53) summarizes the variable, measurement, source, and data location for all variables used in the study.

Table 2: Variables, Measurement and Sources

Variable	Variable Type	Measurement	Source	Located
Institutional Ownership	Independent	Percentage of outstanding shares owned by institutional investors	SEC 13f	Thompson Research Database
5% Owners	Independent	Percentage of outstanding shares owned by outsiders holding blocks larger than 5%	Proxy Statement	Thompson Research Database
Inside Owners	Independent	Percentage of outstanding shares owned by insiders	Proxy Statement	Thompson Research Database
CEO Outcome-based Pay	Mediator Moderator	Ratio of total CEO outcome-based pay to total pay in the year prior to the focal year	Calculated from Proxy Statement	Thompson Research Database
Earnings Growth	Moderator	Earnings growth for the year prior to focal year	Calculated from SEC 10k	Thompson Research Database
Comparative Return	Moderator	Ratio of company's indexed stock return to sector's indexed stock return in the year prior to the focal year	Calculated from Company's annual proxy statement	Thompson Research Database
Earnings Management	Dependent	Presence or absence of CFRA Warning	CFRA analysis reports	CFRA website
Firm Size	Control	Dollar amount of Market Capitalization	10k	Thompson Research Database
Sector SIC Code	Control	Primary SIC code grouped into sector	Calculated from 10k	Thompson Research Database
Warning Year	Control	Focal Year	Calculated from dataset	CFRA website
Prior CFRA Warning	Control	Presence of prior warning	Calculated from dataset	CFRA website

Data Analysis

The study utilizes the statistical techniques of logistic regression and ordinary least squares regression in the data analysis phase of the project. The technique of logistic regression is appropriate when the data being analyzed have a dichotomous dependent variable. Dummy dependent variables violate two assumptions of linear

regression: homoscedasticity and normality of distribution (Allison, 1999); however, logit analysis also known as logistic regression compensates for these shortcomings and provides the researcher with a maximum likelihood of probability. Cross sectional analysis assumes a steady state and is appropriate to analyze the data utilizing logit analysis. In the next chapter, logistical regression is used to test Hypotheses 1abc, 3, 4b, 5 and 6; and ordinary least squares regression is used to test Hypotheses 2 and the mediation of 4a.

This chapter has presented the research methodology including sample selection and a discussion of variables. Finally, statistical tools utilized to test the hypotheses were discussed. The following chapter presents the results of statistical tests of the hypotheses.

CHAPTER 4:

RESULTS

This chapter reviews the results of the study beginning with a description of the sample including descriptive statistics, frequencies and correlations between variables. Following the discussion of the sample is a section that diagrams a variable model which graphically depicts the hypotheses and presents the results of data analysis.

Description of the Sample and Correlations amongst Variables

The sample was selected utilizing the methodology outlined in the prior chapter resulting in a final matched sample of 870 cases, 435 cases having a CFRA warning and 435 without. The sample includes a total of 627 different organizations dispersed over a four year period, 1999-2002, as outlined in Table 3 (pg. 56). Of the 627 organizations, 121 organizations incurred warnings in multiple years. A total of 182 different SIC codes were noted in the sample. As SIC codes, although numerical, are categorical in nature, 182 categories is too large a number to provide relevant data within the sample. These SIC codes are collapsed into a variable representing sector information as outlined by the U.S. Census Bureau. Eight of the Census Bureau's 10 sectors are represented in the sample. A complete listing of sector information is presented in Table 4 (pg. 56). Market values of cases ranged from \$99 thousand to \$269.62 billion with a mean of \$10.33 billion and a median of \$1.72 billion.

Table 3: Dispersion of Cases Across Years

Year	Frequency	Percent
1999	122	14.00%
2000	238	27.40%
2001	264	30.30%
2002	246	28.30%
	870	100.00%

Table 4: Dispersion of Cases Across Sectors

Sector	Frequency	Percent
Agriculture, Forestry, & Fisheries	0	0.00%
Mineral Industries	2	0.20%
Construction Industries	2	0.20%
Manufacturing	456	52.50%
Transportation, Communications, & Utilities	54	6.20%
Wholesale Trade	42	4.80%
Retail Trade	52	6.00%
Finance, Insurance, & Real Estate	68	7.80%
Service Industries	194	22.30%
Public Administration	0	0.00%
	870	100.00%

Organizational ownership data were divided into three independent variables (percent of institutional ownership, 5% owners and insider ownership). Overall ownership percentages in the hands of institutions range from 0 to 99.99% with a mean of 67.27% and median of 71.60% of the outstanding shares. Outside owners of 5% or larger blocks of outstanding shares range from 0 to 94.30% across the cases with a mean of 17.87% and median of 15.72% of the outstanding shares. Inside ownership range from 0 to 90.40% of shares with a mean of 12.09% and median of 5.70% of outstanding shares.

CEO outcome-based pay as a percentage of total pay for the year prior to the measurement year ranges from 0 to 100.00% of pay. The mean rate of outcome-based pay is 65.70% with a median value of 74.97%. There are 58 cases, accounting for 6.70%, of cases that paid no incentives. Earnings growth for the year prior to the measurement year ranges from negative 7166.00% to positive 8859.00%. The mean earnings growth for the sample is 39.48% with a median of 8.30%. The ratio of company stock return to sector return range from .01 to 20.48 times with a mean of 1.48 times and a median of .98 times. A correlation matrix examining bivariate relationships between variables is presented in Table 5 (pg. 59).

Several independent and control variables are significantly related to earnings management. Market value is moderately positively related to earnings management with a correlation coefficient of .142 ($p < .001$) indicating that higher market values are associated with earnings management. The presence of a prior CFRA warning has a correlation coefficient of .402 ($p < .001$) showing a correlation between prior warnings and earnings management. Institutional ownership is positively related to earnings management (.197, $p < .001$). Inside ownership has a weak negative relationship between

higher inside ownership and earnings management with a correlation coefficient of $-.069$ ($p < .05$). CEO outcome-based pay is positively associated with earnings management ($.156, p < .001$) as is comparative return ($.139, p < .001$).

Apart from the relationships between independent variables and the dependent variable, there are several interesting correlations worth mentioning. One set of relationships are those between market value and the ownership variables. While 5% owners and inside owners are both negatively related to market size (respectively, $-.237$ and $-.184, p < .001$), the total percentage owned by institutional investors is not significantly related to market value. CEO outcome-based pay is significantly positively related ($.233, p < .001$) to market value, institutional ownership ($.264, p < .001$) and negatively related to inside ownership ($-.383, p < .001$).

Table 5: Correlation Matrix of Variables in the Study

	mean	SD	1	2	3	4	5	6	7	8	9	10
1 Earnings Management	0.50	0.50										
2 Warning Year	2000.73	1.02	0.000									
3 Market value	10326318.00	27467704.08	0.142 ***	0.042								
4 Sector SIC Code	5.76	2.13	0.027	-0.065	0.023							
5 Prior CFRA Warning	0.14	0.35	0.402 ***	0.155 ***	0.154 ***	0.019						
6 Institutional Owners	67.28	23.22	0.197 ***	0.016	-0.040	-0.046	0.081 *					
7 5% Owners	17.87	15.89	-0.065	0.029	-0.237 ***	0.010	-0.053	0.149 ***				
8 Inside Owners	12.09	15.71	-0.069 *	-0.087 *	-0.184 ***	0.023	-0.076 *	-0.341 ***	-0.142 ***			
9 CEO Outcome-based Pay	0.66	0.29	0.156 ***	0.093 **	0.233 ***	0.005	0.097 **	0.264 ***	-0.062	-0.383 ***		
10 Earnings Growth	0.39	6.00	0.059	-0.085 *	-0.019	-0.049	0.024	0.070 *	0.063	-0.028	0.027	
11 Comparative Return	1.48	1.94	0.139 ***	0.004	0.031	-0.001	0.007	0.090 **	-0.035	-0.018	0.141 ***	0.003

*p < .05 **p < .01 ***p < .001

Hypotheses Testing

Hypotheses are tested and results explained in order utilizing the appropriate statistical procedure, either logistical regression or multiple regression, are utilized depending on the dependent variable and hypothesis being tested.

Direct relationship between ownership structure and earnings management.

Hypotheses 1a, 1b, and 1c suggest that ownership structure influences the likelihood of engaging in earnings management. The statistical procedure of logistic regression is utilized to test these hypotheses. This procedure is appropriate when the dependent variable in a regression is dichotomous in nature (Allison, 1999; Menard, 2002). The variable earnings management is such a dichotomous variable with “no” coded as 0 and “yes” coded as 1. Earnings management is regressed on ownership structure in two steps, the results of which are presented in Table 6 (pg. 63). L1 is the equation that reflects a model with only the control variables included. The first group of control variables are for warning year; these variables are distributed across four dummy variables with the year 1999 omitted from the equation as the reference group. Next is the ratio control variable of market value. Prior CFRA warning is a dummy variable accounting for any previous warnings with no prior warning held as reference. The final group of control variables is made up of dummy variables representing SIC-code-sector data with the reference group being the service sector.

The baseline for the logistic regression with the intercept only produces a -2 Log Likelihood of 1206.076 with a hit rate of 50.00%. Subsequent regressions are compared to the baseline to note improvements in the model. Smaller -2 Log likelihoods are seen

as a better fit and the model chi-square is the amount of improvement (Pampel, 2000) which is tested for overall significance in the model. The hit rate represents the predictability of the model with the initial hit rate in the baseline of 50.00% corresponding to the matched sample of half the cases having engaged in earnings management and the other half not. A 50.00% hit rate is also deemed to be the expected outcome due to chance (Menard, 2002). Logistic regression does not produce a formal R^2 as is generated in an ordinary least squares regression; however, a pseudo R^2 can be calculated by dividing the model chi-square by the base -2 log likelihood producing the approximation of the amount of explained variance (Menard, 2002). The importance given either the model fit or the hit rate is dependent on the purpose of the model development. If the objective is to accurately predict an outcome for purposes of selection, then the hit rate will be given more importance. On the other hand, if the purpose is to test hypotheses generated from theory, as in the case of this study, then the model fit carries more influence (Menard, 2002).

The logistic regression coefficients presented in Table 6 (pg. 63) show the change in the logged odds of experiencing a change in one unit of the independent variable. For dummy variables the unit change is measured against the reference group (Pampel, 2000). An alternative interpretation to the logged odds is the odds ratio, which is calculated by taking the exponent of the logged odds. For coefficients that are significant, the odds ratio is discussed in the narrative of the interpretation. An odds ratio of 1 does not change the odds associated with a change in the variable. Ratios greater than 1 increase the odds associated with the dependent variable increasing with a change

in the independent variable. Conversely, an odds ratio less than 1 decreases the odds of the dependent variable changing with the independent (Menard, 2002).

L1, the control equation, decreases the -2 log likelihood to 1000.010 yielding a model chi-square of 206.066 ($p < .001$). The pseudo R^2 and improvement over the baseline for the control model is .171, explaining 17.10% of the variance with a hit rate of 65.52%. While the model as a whole is significant, the only variable determined to have a significant logged odds is market value with a coefficient of .000 ($p < .01$) which equates to an odds ratio of 1 indicating that, although the logged odds is significant, a one unit change (\$1000.00) in the market value does not change the odds of having a CFRA warning.

The model presented in L2 includes the focus independent variables: institutional ownership, 5% owners, and inside owners. Adding the ownership variables to the equation decreases the -2 log likelihood and produces a significant model chi-square of 237.523 ($p < .001$) and improves the hit rate to 65.29%. The pseudo R^2 improved by .026, increasing the total variance explained to 19.70%. Market value continues to be significant ($p < .01$) with an odds ratio of 1. The logistic regression determines that the coefficient associated with institutional ownership is .020 ($p < .001$) yielding an odds ratio of 1.020. For every percentage increase in institutional ownership, the odds of engaging in earnings management increase by 2.00%. Hypothesis 1a is supported. The logged odds for the other two ownership variables, 5% owners and inside owners, fail to reach significance, and the inside ownership logged odds is in the opposite direction than predicted. Hypotheses 1b and 1c are not supported.

Table 6: Logistic Regression of Earnings Management on Independent Variables and Test of Moderation

	L1	L2	L3	M2	M3	M4	M5	M6
Hypotheses Tested	Control	H1abc	H3		H4b		H5,6	Comb
Control Variables								
Warning Year 1999								
Warning Year 2000	0.437	0.431	0.482 *	0.459	0.451	0.414	0.445	0.472
Warning Year 2001	0.176	0.124	0.227	0.153	0.152	0.095	0.126	0.153
Warning Year 2002	0.087	0.050	0.109	0.061	0.064	0.043	0.017	0.024
Market Value	0.000 **	0.000 **	0.000 *	0.000 **	0.000 *	0.000 **	0.000 **	0.000
Prior CFRA	-21.515	-21.468	-21.504	-21.451	-21.442	-21.47	-21.491	-21.482 *
Service Sector								
Construction Sector	-0.050	-0.007	-0.083	-0.047	-0.024	-0.087	-0.111	-0.142
Finance Sector	0.294	-0.088	0.254	-0.143	-0.153	-0.361	-0.536	-0.577
Retail Sector	-0.435	-0.338	-0.576	-0.445	-0.436	-0.397	-0.444	-0.543
Manufacturing Sector	-0.367	-0.344	-0.355	-0.352	-0.346	-0.372	-0.385	-0.39
Mining Sector	-0.213	-0.210	-0.251	-0.243	-0.235	-0.283	-0.299	-0.326
Transportation Sector	-20.840	-20.865	-20.984	-20.927	-20.938	-20.92	-20.885	-20.937
Wholesale Sector	-0.106	-0.022	-0.183	-0.089	-0.082	-0.035	-0.001	-0.064
Constant	21.130	19.807	20.547	19.431	18.962	19.719	20.134	19.827
Institutional Owners								
5% Owners		0.020 ***		0.018 ***	0.026 **	0.019 **	0.012 *	0.01 **
Inside Owners		-0.007		-0.006	-0.006	-0.007	-0.005	-0.004
CEO Outcome-based Pay		0.005	0.938 ***	0.666 **	1.464		0.004	0.606
Interaction Institutional * CEO Pay					-0.012			
Earnings Growth						0.019	-0.043	-0.045
Comparative Return						0.153 *	-0.22	-0.249
Interaction Institutional * Earnings							0.001 *	0.001 **
Interaction Institutional * Comparative							0.006 *	0.006 *
-2 Log Likelihood #								
Model Chi-Square	1000.010	968.553	988.579	963.814	962.844	953.354	940.391	936.670
Pseudo R Square	206.066 ***	237.523 ***	217.497 ***	242.262 ***	243.232 ***	252.722 ***	265.685 ***	269.406 ***
Change in Pseudo R Square	0.171	0.197	0.180	0.201	0.202	0.210	0.220	0.223
Hit Rate (Baseline 50.0%)		0.026 ***a	0.009 ***a	0.030 ***a	0.031 ***a	0.039 ***a	0.049 ***a	0.053 ***a
	65.517	65.287	65.862	65.600	66.437	68.700	68.161	67.931

*p < .05 **p < .01 ***p < .001

n = 870

-2 Log Likelihood Baseline = 1206.076

a – Significance based on block chi-square

Relationship between ownership structure and CEO outcome-based pay. One means of aligning the goals of agents and principals in the presence of separation of ownership is through creating outcome-based contracts that reward agents for enacting the goals of owners. This principle is at the heart of Hypotheses 2a, 2b, and 2c which posit that ownership structure influences the percentage of CEO pay being based on outcomes. As CEO outcome-based pay (Pay), the dependent variable, is a continuous variable, the correct statistical procedure for testing the hypothesis is ordinary least squares multiple regression (Allison, 1999). The results of the regression are presented in Table 7 (pg. 66). R1 includes the same control variables as utilized in the logistic regression equation that tests the first group of hypotheses in the previous section. The model R2 reflects the addition of ownership variables to the equations. The coefficients presented are standardized Betas.

The control Model R1 produces a significant F value (5.838, $p < .001$) and explains 7.60% of the variance. Market value is an important variable in the control model with a positive Beta of .129 ($p < .001$). When the other variables are controlled for, a larger market value is associated with higher top executive compensation being based on outcome-based contracts. The other significant control variable in Model R1 is SIC code which represents the finance sector. Organizations in the finance sector rely on incentive pay packages more than those firms in the service sector (the reference group).

The regression equation presented as Model R2 includes the ownership variables and produces a significant F value of 16.069 ($p < .001$), increasing the explained variance by 14.50% and making the total variance explained by the equation at 22.00%. The control variables market value and finance sector retain their significance in R2 with

Betas of .145 ($p < .001$) and .078 ($p < .05$) respectively. Additionally, the independent variable, institutional ownership with a Beta of .186, proves significant at the $p < .001$ level. With the other variables held constant, an increase in the percentage of institutional ownership increases the degree of CEO pay being based on outcomes in support of Hypothesis 2a. The other ownership variables, 5% owners and inside owners, yield significant negative Betas (-.087, $p < .01$ and -.292, $p < .001$, respectively). When the effects of the other variables in the model are controlled for, the higher the percentage of shares held in the hands of outside owners owning in excess of 5% blocks, the lower the percentage of CEO pay that is attributed to outcome-based contracts. Likewise, a higher percentage of inside ownership, controlling for the other variables, negatively affects the percentage of CEO outcome-based pay. Hypotheses 2b and 2c are supported.

Table 7: Multiple Regression of CEO Outcome-based Pay on Independent Variables and Test of Mediation

Hypotheses Tested Dependent Variable	R1 Control Pay	R2 H2 Pay	R3 H4a EM	R4 H4a EM
Control Variables				
Warning Year 1999				
Warning Year 2000	-0.011	-0.007	-0.068	-0.067
Warning Year 2001	0.012	0.009	-0.088	-0.089
Warning Year 2002	0.070	0.052	-0.092 *	-0.096 *
Market Value	0.205 ***	0.145 ***	0.088 **	0.076 *
Prior CFRA	0.057	0.027	0.384 ***	0.382 ***
Service Sector				
Construction Sector	0.004	0.007	0.000	-0.001
Finance Sector	0.095 *	0.078 *	-0.032	-0.038
Retail Sector	-0.035	-0.019	-0.025	-0.023
Manufacturing Sector	0.023	-0.001	-0.035	-0.035
Mining Sector	0.020	0.011	-0.039	-0.040
Transportation Sector	0.023	0.023	0.005	0.003
Wholesale Sector	0.006	-0.015	0.000	0.001
Institutional Owners		0.186 ***	0.188 ***	0.173 *** (1)
5% Owners		-0.087 **	-0.043	-0.036
Inside Owners		-0.292 ***	0.028	0.051
CEO Outcome-based Pay				0.081 *
R Square	0.076	0.220	0.208	0.213
F	5.838 ***	16.069 ***	14.966 ***	14.452 ***
Change in R Square		0.145 ***		0.005 *

*p < .05 **p < .01 ***p < .001
n = 870
(1) test of mediation significant at p<.05 level

Relationship between CEO outcome-based pay and earnings management.

Hypothesis 3, grounded in agency theory and the assertion that agents are risk adverse and self-interested, posits that the percentage of CEO pay attributable to outcomes increases the likelihood of engaging in earnings management. The logistic regression of earnings management on CEO outcome-based pay is presented in Model L3 in Table 6 (pg. 63). Adding CEO outcome-based pay as an independent variable to the control model L1 decreases the -2 log likelihood to 988.579 and increases the model chi-square to 217.497 ($p < .001$). The explanation of variance is improved by .90% to a total of 18.00%. The hit rate increased to 65.86%.

Market value remains significant ($p < .05$), but with an odds ratio of 1, an incremental change in market value does not change the odds of engaging in earnings management. Warning Year 2000, becomes significant (.482, $p < .05$) with the addition of incentive pay to the equation. The odds ratio of managing earnings in the year 2000 increases by 1.608 over 1999, the reference year, when all other variables in the equation are controlled. The focus of this logistic regression and Hypothesis 3 is the effect of CEO outcome-based pay on earnings management. Controlling for the other variables, the logged odds associated with CEO outcome-based pay is .938 ($p < .001$), which corresponds to an odds ratio of 2.554. A percentage rise in the amount of CEO outcome-based pay increases the odds of engaging in earnings management by 155.40%, providing support for Hypothesis 3. However, the less than one percent additional variance explained with the inclusion of CEO outcome-based pay to the model only suggests marginal support in magnitude; Hypothesis 3 is weakly supported.

CEO outcome-based pay as a mediator between institutional ownership and

earnings management. Hypothesis 4a proposes that CEO outcome-based pay mediates the relationship between institutional ownership and earnings management. In testing for mediation I rely on the methodology laid out by Barron and Kenny (1986) which incorporates a series of three regression equations to determine whether mediation is present: the first equation regresses the mediator on the independent variable, the second regresses the dependent variable on the independent variable, and the third regresses the dependent variable on both the mediator and independent variable. Barron and Kenny assert that:

To establish mediation, the following conditions must hold: First, the independent variable must affect the mediator in the first equation; second, the independent variable must be shown to affect the dependent variable in the second equation; and third, the mediator must affect the dependent variable in the third equation. If these conditions all hold in the predicted direction, then the effect of the independent variable on the dependent variable must be less in the third equation than in the second. (Barron & Kenny, 1986: 1177)

To test mediation in accordance with Barron and Kenny (1986), it is necessary to create three regression equations. A problem arises in regards to this study in that the dependent variable, earnings management, is dichotomous, which is not appropriate for use in ordinary least squares regression. Allison (1999) and Menard (2002) point out that although it is not optimal to use a dichotomous dependent variable in ordinary least squares regression, it will yield a result that is approximate to one calculated by a logistic

regression. The results of the three regression equations suggested by Barron and Kenny (1986) are presented in Table 7 (pg. 66).

Equation R2 is the same equation used to test Hypotheses 2 in Table 7 (pg. 66). Institutional ownership significantly affects (.186, $p < .001$) CEO outcome-based pay, the proposed mediator, satisfying the first condition of the Barron and Kenny (1986) test. The second condition is that the independent variable, institutional ownership, must be shown to affect the dependent variable, earnings management. With a Beta of .188 ($p < .001$) institutional ownership in Equation R3 satisfies the second condition. In Equation R4, both the independent variable, institutional ownership (.173, $p < .001$), and mediator, CEO outcome-based pay (.081, $p < .05$), affect the dependent variable, satisfying the third condition. The final condition is that the relationship between the independent variable and the dependent variable must be weaker in Equation R4 than in Equation R3. The Beta for institutional ownership decreases from .188 to .173 for a reduction of .015. In perfect mediation, the effect of the independent variable would be completely eliminated. Barron and Kenny (1986) specify an approximate test of significance for determination of the significance of the reduction in Beta that takes into account the direct and indirect effect of the independent variable on the dependent variable. This test of significance showed that the .015 reduction is significant at the $p < .05$ level. All the conditions for mediation have been met, supporting Hypothesis 4a that CEO outcome-based pay mediates the relationship between institutional ownership and earnings management. However, although the reduction is significant, the magnitude of the reduction is relatively small suggesting that CEO outcome-based pay is a weak mediator.

CEO outcome-based pay as a moderator between institutional ownership and earnings management. When I developed the hypotheses utilized in this study, it was unclear as to whether CEO outcome-based pay would act as a mediator providing the mechanism through which institutional ownership affects earnings management, as was tested in the prior section, or if it would act as a moderator by interacting with institutional ownership to affect earnings management. This section tests Hypothesis 4b to determine moderating effects of CEO incentive pay.

Moderation is tested by creating an additional interaction variable, which is the product of the independent variable and the moderator variable (Jaccard, 2001). In the case of this study, institutional ownership is multiplied by CEO outcome-based pay to create the interaction variable. A well formulated model includes all lower-order terms and the higher-order term. To test for interaction, the fit of the model including all terms is compared to the fit of the model that excludes the interaction term. If the difference in fit for the two models is non-trivial, then further interpretation is necessary; however, if the difference is trivial, then the interaction term should be eliminated from further models (Jaccard, 2001).

Table 6 (pg. 64) presents the results of logistic regression equations used to test moderation. M1 is the control model that has been used in the previous logistic regressions; M2 is the model that includes the lower-order terms (institutional ownership and CEO outcome-based pay) and M3 includes the lower-order terms (institutional ownership, CEO outcome-based pay), as well as the higher-order interaction term (the product of the two lower-order terms). As previously discussed, the control model is significant (chi-sq 206.066, $p < .001$) and produces a pseudo R^2 of .171, with market

value being significant ($p < .01$), but with logged odds of .000, a unit change in market value does not alter the odds of changing CFRA warning. M2 includes the lower-order terms of institutional ownership and CEO outcome-based pay, producing a significant model with a chi-square of 242.262 ($p < .001$) and a pseudo R^2 of .201, an improvement of .030. Both lower-order terms are significant in the new model, with institutional ownership having a logged odds of .018 ($p < .001$) and CEO outcome-based pay having a logged odds .666 ($p < .01$). The odds ratio of institutional ownership is 1.019 indicating that for every percentage increase in institutional ownership the odds of engaging in earnings management increase 1.90%, whereas the conversion to the odds ratio for CEO outcome-based pay is 1.947 or for every percentage increase in CEO outcome-based pay the odds of engaging in earnings management increase 94.70%.

M3 is the logistic regression equation that includes all lower and higher-order terms and provides the information for determining the results of the hypothesis test. For the interaction to be non-trivial, the full model must be an improvement over the lower-order equation. The equation does not meet this requirement on three different accounts. First, from a magnitude position, the slight improvement in pseudo R^2 of .001 is viewed as trivial (Menard, 2002). Second, the logged odds for the interaction term are non-significant, indicating that the term does not affect earnings management. And finally, while the overall equation yields a significant chi-square (243.232, $p < .001$), the block that includes the interaction term fails the significance test. Given these findings, I have concluded that CEO outcome-based pay does not moderate the relationship between institutional ownership and earnings management. Hypothesis 4b is not supported.

Performance as a moderator between institutional ownership and earnings

management. The final hypotheses to be tested are 5 and 6, which relate to performance as a moderator of the relationship between institutional ownership and earnings management. Performance is measured by two variables, earnings growth to account for profitability performance and comparative return to account for market return. These hypotheses are grounded in the impression management literature and offers insight into pressures to manage earnings.

As in the previous section, Jaccard's (2001) conditions and model formulation are utilized to test the moderating effects of performance. The logistical equations used to test these hypotheses are presented in Table 6 (pg. 64). M4 includes the lower-order terms of institutional ownership, earnings growth, and comparative performance, and M5 includes the lower-order terms plus the two interaction terms representing the product of institutional ownership and earnings growth and the product of institutional ownership and comparative return.

M4, the model including the lower-order terms of institutional ownership, earnings growth, and competitive performance, yield a chi-square of 252.722 ($p < .001$) and a calculated pseudo R^2 of .210, explaining 3.90% of the variance in earnings management. Market value continues to be significant ($p < .01$) and does not alter the odds of engaging in earnings management. Institutional ownership with logged odds of .019 and odds ratio of 1.019 is significant at the $p < .01$ level, indicating that a percentage increase in institutional ownership increases the odds of incurring a CFRA warning by 1.90%. Comparative return with logged odds of .153 and an odds ratio of 1.165 significantly ($p < .05$) increases the odds of engaging in earnings management by 16.50%

for each unit rise in the comparative return ratio. With the other variables in the equation held constant, earnings growth does not produce a significant effect.

M5 includes the lower and higher-order terms and determines the final test for moderation. The model chi-square is 265.685 ($p < .001$) with a pseudo R^2 of .220. The improvement in pseudo R^2 from the lower-order model is .010 or 1.00% of explained variance which is above the .50% standard discussed by Menard (2002) indicating a non-trivial increase. Adding the interaction terms reduces the logged odds for institutional ownership to .012 ($p < .01$) and eliminates the significance of the logged odds for comparative return; earnings growth remains non-significant. The two interaction terms are significant at the $p < .05$ level. The interaction between institutional ownership and earnings growth has logged odds of .001 and odds ratio of 1.001, indicating that a unit increase in the interaction term increases the odds of engaging in earnings management by .10%. The interaction between institutional ownership and comparative return increases the odds of managing earnings by .60% with logged odds of 1.006 for every unit change in the interaction. The significance of the model (chi-square 265.685, $p < .001$), the improvement in the pseudo R^2 (1.00%), and the significant logged odds of the interaction terms (.001 & .006, $p < .05$) lend support to Hypotheses 5 and 6; earnings growth and comparative return moderate the relationship between institutional ownership and CFRA warning.

The overall fit of the combined model. As a final test of the presented hypotheses, a logistic regression combining the ownership structure variables, CEO outcome-based pay, and the performance variables was generated, the results of which are presented in Table 6 (pg. 64), equation M6. Adding CEO outcome-based pay to the equation does not

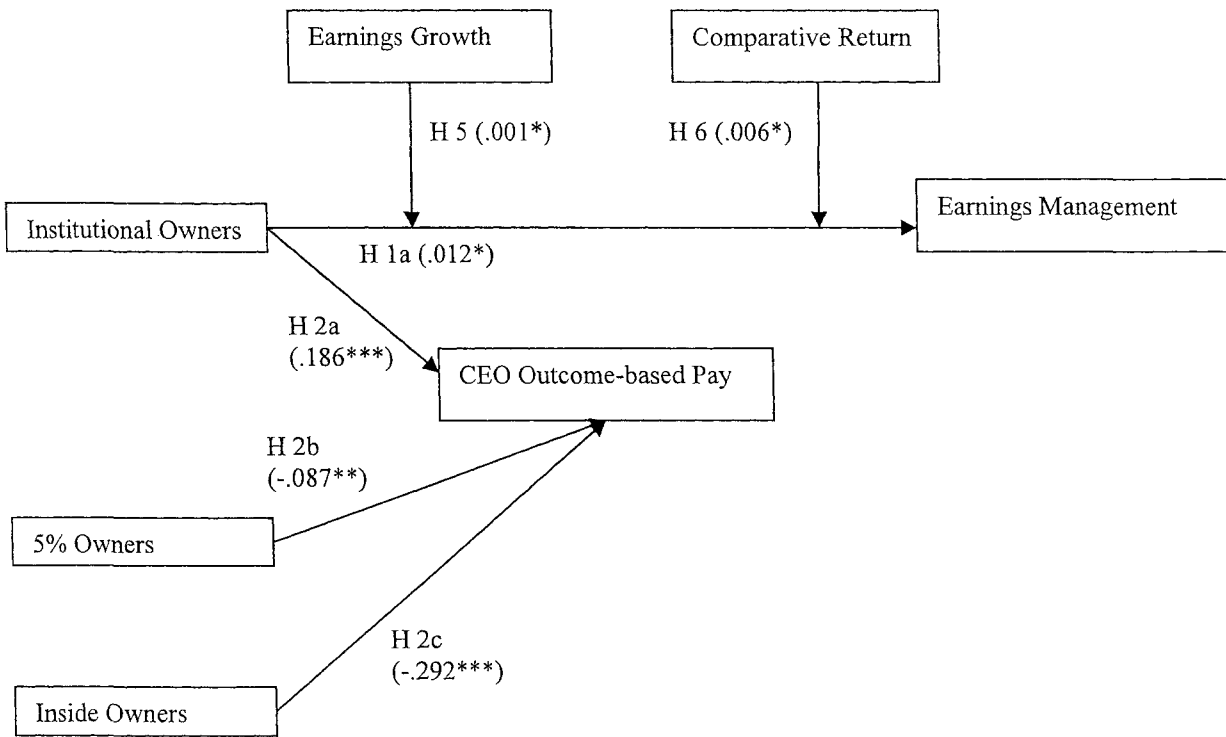
yield a significant improvement over the model, which includes the performance variables (M5). The earlier tests of hypotheses provide information on the individual paths of the variable model; however, no test has yet been presented that tests a combined model of previously supported hypotheses on the dependent variable, earnings management. A combined model also provides a format for summarizing the results of the study.

M6 is the combined model, which explains a total variance of 22.30% for a total improvement over the control model (M1) of 5.30%; however, the improvement over M5 is not significant based on the block chi-square. When CEO outcome-based pay is included in the combined model, its associated logged odds of .606 loses its significance with a p-value that approaches significance at .055 when the performance oriented variables are controlled for. This loss of significance is indicative of the variable's lack of influence or magnitude in explaining variance. When the combined model is considered, the mediation characteristics of CEO outcome-based pay in Hypothesis 4a and the direct relationship of CEO outcome-based pay on earnings management in Hypothesis 3, although weakly supported in isolated models, lose their support in a combined model; Hypotheses 3 and 4a are not supported. Regarding, hypotheses 5 and 6, the moderation effects of performance, these variables maintain their influence and support in the combined model with logged odds for the interaction of institutional ownership and earnings growth at .001 ($p < .01$), and logged odds for the interaction of institutional ownership and comparative return are .006 ($p < .05$).

This chapter has presented the statistical results of hypotheses testing for the study. It has been found that institutional ownership directly and indirectly, through

moderation with performance, influences earnings management (Hypotheses 1a, 5 and 6). Higher institutional ownership is shown to have a positive effect on a greater percentage of CEO pay being attributed to outcomes (Hypothesis 2a), while higher 5% ownership and higher inside ownership decreases the percentage of CEO pay being attributed to outcomes (Hypotheses 2b and 2c). Interestingly, when all other variables in the study are controlled for, CEO outcome-based pay does not significantly affect CFRA warning either directly (Hypothesis 3) nor indirectly through mediation (Hypothesis 4a) or moderation (Hypothesis 4b). The following chapter will discuss the findings in-depth, relating them to existing literature.

Figure 2: Model of Supported Hypothesized Variable Relationships



*p < .05, **p < .01, ***p < .001

CHAPTER 5: DISCUSSION

The research project derived from observed inconsistencies in the effectiveness of agency-theory-based governance mechanisms to maintain the alignment of the goals of principals with those of agents, namely the apparent disconnect demonstrated by the publicized malfeasance of top executives and the shareholder endorsement of outcome-based contracts. Outcome-based contracts are meant to synchronize principal and agent goals, yet corporate manipulation of earnings persists. If financial-agency theory is incomplete in explaining earnings management, then perhaps blending impression-management theory can broaden our understanding of the behavior by expanding the issue to include non-financially motivated self-interest, such as image. In today's investor capitalistic market where institutional investors are becoming more active in managing their investments (Useem, 1996), governance concerns, like earnings management are extremely relevant.

Driving this dissertation was the research question: How does investor capitalism influence the propensity of organizations to engage in earnings management? The journey to answer this question encompassed an exploration of historical corporate ownership, agency theory as a means of reducing the effects inherent in the separation of ownership and management, and the precepts of impression-management theory to explain agent motivations for managing earnings. Insights from these knowledge bases were merged into hypotheses and a variable model providing the foundation for the design of a viable research study. Data were collected and analyzed with appropriate statistical procedures, the results of which are presented in the previous chapter.

How investor capitalism influences the propensity of organizations to engage in earnings management is the focus of the current chapter. The influence can essentially be summarized as a product of financial expectations and assumptions that fail to consider affective behavioral motivation. Institutional investors in their pursuit of wealth maximization attempt to guide management behavior by setting performance expectations and tying compensation to those expectations. This governance action, grounded in rational economic thought, is explained by financial-agency theory. On its face value this process is well established and legitimized in both academic and practitioner circles as a means of curtailing self-interest or at least a financial definition of self-interest. But what about behavioral motivations not grounded in economics? Self-esteem, image, and reputation are all dependent on upon the perceptions of an external audience; impression-management theory addresses these non-financial self-interests. It is through non-financial self-interest that investor capitalism inadvertently creates an environment conducive to earnings management. The actual activity is made possible by information asymmetries present in the principal-agent relationship.

Inherent in this research study are four assertions: 1) investor capitalism influences earnings management; 2) outcome-based contracts are prevalent under investor capitalism; 3) outcome-based contracts are incomplete in explaining earnings management; and 4) an explanation of earnings management is enhanced by the introduction of an impression-management framework.

Investor capitalism influences earnings management

Ownership of large corporations has evolved from large family firms, where founders or close family members of founders maintained substantial stakes and

influence in the organization (Nielsen, 2002), to the diverse individual ownership and executive influence associated with managerial capitalism (Chandler, 1977), and finally to the rise in influence of institutional investors associated with investor capitalism (Useem, 1996). Although investor capitalism dominates current markets, some young organizations like Dell, Microsoft, and Amazon remain largely under the control of the founders and in other organizations institutional investors may collectively own small portions of the outstanding stock. The variance of ownership structures present in the sample offered insight into the influence of investor capitalism on earnings management by making it possible to compare the effects of alternative ownership structures on earnings management.

Useem (1996) and Rubach (1999) both argue that the dominance of institutional investors acts as a means to curtail management excesses. The mechanism for this assumption is that, since institutional investors maintain larger quantities of shares than individual investors, they have greater access to management, reducing information asymmetries. When information asymmetries move toward parity, there is less opportunity for agents to act contrary to the goals of principals (Jensen & Meckling, 1976) and engage in earnings management. The assumption in this argument is that high levels of institutional ownership reduce information asymmetries to a level sufficient to curtail managerial malfeasance. The current study challenges this assertion, and the findings suggest that the opposite occurs.

This study found higher degrees of institutional ownership in organizations increased the likelihood of its managers engaging in earnings management, which is contrary to the premise of investor capitalism as a governance mechanism (Useem,

1996). The findings suggest that the access granted an institutional investor is not to reduce information asymmetries to a point that managerial behavior is curtailed. The increase in the likelihood of earnings management suggests that the access to top management granted to the institutional investor acts to inform agents of principal performance expectations, enabling agents to capitalize on information asymmetries to enhance their image through engaging in earnings management and delivering expected performance levels. However, the findings do suggest that when large blocks are held by outsiders or a higher degree of ownership is held by insiders, there is a lesser degree of ownership separation and greater monitoring of management reducing information asymmetries to a level sufficient to restrain earnings management.

Outcome-based contracts are prevalent under investor capitalism

Outcome-based contracts are a cornerstone of corporate governance under the auspices of financial-agency theory (Jensen, 2000). The mere announcement of long-term incentives can positively affect stock price (Westphal & Zajac, 1998). The results of the study confirm Useem's (1996) assertion that institutional investors prefer outcome-based contracts. It was further found that the degree of inside ownership and of 5% owners negatively influences the percentage of CEO outcome-based contracts. Both these relationships point to the issue of separation of ownership, which is inherent in agency theory, suggesting that when ownership is consolidated in the hands of relatively few owners (as in the case of higher levels of inside ownership and shares held by large block holders), managers are under close scrutiny on a daily basis, reducing the need for performance-based governance. Additionally, it was anecdotally noted through a review of the proxies that in organizations with large blocks of inside ownership, shares were

typically held by founders and their families, for instance Michael Dell's, Steven Jobs', and Jeff Bezos' interests in Dell, Apple, and Amazon, respectively.

Taken as a whole, these results corroborate the precepts of agency theory, pointing to the effect of separation of ownership and information asymmetries on outcome-based contracts. Organizations with high percentages of institutional investors have a greater dispersion of ownership than companies with large holdings by insiders or 5% block holders, creating an environment of less direct involvement in the on-going management of the organization. This separation of ownership fosters information asymmetry and the need to adopt governance mechanisms. Conversely, higher inside ownership and increased percentages of shares held by large block holders contribute to reducing information asymmetries and lessening the need to rely on outcome-based contracts.

Separation of ownership was an issue under managerial capitalism (Chandler, 1977) when stocks were widely dispersed among independent individuals with only limited ability to influence the actions of management. The consolidation of ownership into the hands of professional money managers under investor capitalism (Useem, 1996) has given a larger voice to investors and lessened separation of ownership, but has not eliminated it. What it has done is give institutional investors the opportunity to influence management behavior as evidenced by the positive relationship between degree of institutional ownership and outcome-based contracts. A question remains, however: Do outcome-based contracts reduce agency cost by aligning the goals of agents with those of principals, or are they a form of window dressing meant to impress or influence outside investors? The next section offers insight into these questions.

Outcome-based contracts do not adequately explain earnings management

Outcome-based contracts are meant to align the goals of principals and agents. At issue with outcome-based contracts and agency theory is their ability to guide management behavior to satisfy the wants of principals. These wants are two-fold; first, maximize return on investment and second, control agent behavior. While this study does not directly address the influence of outcome-based contracts on performance or return, it can address the issue of controlling agent behavior.

The research project hypothesized that a high level of CEO outcome-based pay would increase the likelihood of earnings management. It was further asserted that outcome-based pay worked in conjunction with high levels of institutional ownership to influence earnings management through mediation and moderation. None of these assertions were borne out in the findings, which put the effectiveness of outcome-based contracts' ability to control agent behavior into question. While one supposition behind this study was that agents are risk averse and self-interested, predicting that earnings management would be positively related to outcome-based contracts, an argument could be made for the reverse. If outcome-based contracts are an effective means of controlling agent behavior, then higher variable-agent income should reduce the incidence of earnings management or, in other words, have a negative relationship; this was not the case. It would appear that if in fact a goal of implementing outcome-based contracts is to control agents' behavior, then the system as it is currently designed falls short and shows the "folly of rewarding A while hoping for B" (Kerr, 1975).

The assertion of institutional ownership working in conjunction with outcome-based contracts on earnings management reflects both the monitoring and alignment

component of agency theory (Dalton, Daily, Certo, & Roengpitya, 2003). The logic is that institutional investors with substantial holdings have a greater opportunity and desire to monitor agents' actions (Dalton et al, 2003; Useem, 1996). I argued that this opportunity and desire creates pressure on managers to manage earnings. Alternatively, the alignment component is built into the implementation of outcome-based contracts in that, in addition to offering cash incentives, these contracts disperse ownership shares to managers in an attempt to align their goals with those of other owners (Dalton et al, 2003). Typically, as with Dalton et al (2003), outcome-based contracts are linked to some measure of performance to promote managerial behavior's alignment with the goal of maximizing shareholder wealth. However, there was no support for the contention that institutional ownership works in conjunction with outcome-based contracts to influence earnings management.

A possible explanation for the lack of influence of outcome-based contracts on earnings management is the regulatory issues surrounding the tax deductibility of executive base salaries. In 1993, the U.S. Congress limited the tax deduction associated with executive base salaries to \$1 million; to be deductible, any additional executive income must be based on performance (Reitenga, Buchheit, Yin, & Baker, 2002). This fact may affect the reliability of the CEO outcome-based pay variable in that it might not truly represent performance based pay. For instance, it may be that some incentives are actually disguised salary rather than true incentives. Given the competitiveness associated with attracting and retaining superior executives, a guaranteed salary limited to \$1 million may be sufficient to induce top managers. To overcome this problem, outcome-based contracts may be structured to include various components and levels of

incentives of varying degrees of difficulty, in essence, circumventing the limitation on executive salary.

The lack of support for the proposed financially self-interested motivations of earnings management (e.g., to hike their paycheck) suggests an alternative explanation for managing earnings to bolster a successful impression to maintain their position may be behind earnings management. Matsumoto (2002) lends credence to this argument in that she found that disclosure management to meet analysts' earnings expectations did not boost income.

Earnings management is enhanced through an impression management framework

The prior section discussed the shortfall of financial-agency theory in explaining earnings management. In the current study financial self-interest are not seen to contribute to the practice; however, the hypotheses firmly grounded in impression management (Hypotheses 5 and 6) are supported, suggesting that non-financial self-interest indicative of impression management enhances our understanding of earnings management behavior.

The findings of the study show that both prior successful earnings growth and comparative return moderate the relationship between institutional ownership and earnings management. This finding is consistent with Duta and Gigler (2002), who found a higher incidence of earnings management following higher forecasted earnings, rather than lower forecasted earnings and Sanders and Carpenter (2003) found high performance expectations increased the likelihood of mollifying investors through stock repurchase announcements. Pressure from institutional investors increases in the presence of higher prior performance, suggesting that it is more important for managers

to maintain the position of the firm, thus protecting investor wealth, than it is to increase wealth by improving poor performance.

From an impression management perspective, pressure to conceal negative outcomes following positive outcomes can be seen as an obfuscating impression-management tactic, which is used to divert attention away from negative outcomes or situations, rather than the tactics of justification and excuses, which are meant to explain negative outcomes (Elsbach et al, 1998). The findings suggest that managers will be more inclined to conceal negative outcomes through obfuscation in the wake of positive prior performance than following poor performance. This implies that when an organization has experienced and disclosed positive performance prior to encountering negative outcomes, outside expectations are for the continuing of established performance. Prior success then becomes the criterion by which outsiders evaluate organizational and managerial legitimacy, and as impression tactics are dependent on knowing the expectations of outsiders (Ginzel et al, 1993), agents perceive pressure to maintain the status quo. Given information asymmetries that exist, managers have the opportunity to obfuscate negative performance through accounting decisions. Alternatively, when prior performance has been low, outside expectations and accompanying pressures will be less, and it may be, that under these conditions, managers are more likely to evoke excuses and justifications to explain prior and current performance, and additionally, may make accounting decisions that exacerbate the poor performance by realizing additional losses in hopes of cleaning the books for the future. An example of this behavior is found in Wells' (2002) study of earnings management

surrounding CEO changes, where it was shown that incoming CEOs manage earnings down by booking abnormal or extraordinary expenses in the first year of tenure.

Implications and Contributions

The previous sections of this chapter discussed how investor capitalism promotes an environment conducive to earnings management. Blending aspects of agency theory and impression-management theory offers a more complete picture of earnings management, one that encompasses financial and non-financial self-interest. This new picture and these insights revealed in the study make theoretical contributions to our understanding of agency theory, impression management, earnings management, corporate governance, and ethics, as well as offering practical insights.

For agency theory. The study makes two noteworthy contributions in the realm of agency theory. The first contribution is in regards to the finding that in this study, non-financial self-interest had a greater impact on managerial behavior than financial self-interest. This supports the assertion that our understanding of agency theory can be enhanced by including a non-financial self-interest component. Sanders and Carpenter (2003) point out that agency theory assumes rational actors and they call attention to the possibility of adding a behavior model. Incorporating impression management into an agency model, as in this study and in the work of Davidson and colleagues (Davidson et al, 2004), is a start in working toward a more complete model that includes behavior issues along with a pure rational economic model. The combination of behavioral and economic theory can enhance our understanding and application of governance mechanisms in order to better predict and control management action.

A second implication for agency theory concerns our understanding of separation of ownership and the alignment of self-interest. Agency theory is predicated on the issue of separation of ownership and the self-interest of principals and agents. The relationship is assumed to vary directly. Given this premise agency problems and malfeasance would be more likely in situations of greater ownership dispersion. As Useem (1996) points out, under managerial capitalism and widespread individual ownership, managers were able to pursue their self-interest unchecked. The rise of investor capitalism is a contraction of the ownership gap and a means to reduce the malfeasance of agents (Useem, 1996). The current study appears to contradict this premise by suggesting that institutional ownership, while a move toward reducing the level of ownership separation, actually increased the likelihood of engaging in earnings management. This finding suggests a nonlinear relationship between separation of ownership and self-interest, rather than the direct relationship assumed under agency theory as it is currently understood.

For impression management. This study contributes to the literature on organizational impression management by concentrating on the relationship between institutional investors and the public information put out by an organization. More specifically, taking Elsbach and colleagues' (1998) impression management concept of anticipatory obfuscation and applying it in an alternative setting, opportunities to manage impressions arise due to the information asymmetries that underlie the relationship and interactions that transpire between principals and agents. With these information asymmetries comes the ability to obfuscate the impressions that agents imparts on their principals. When encountering institutional investor pressure to continue performing comparable to

competitors, managers were found to use accounting information to obfuscate and preserve their image. This suggests that managers may choose obfuscation over justification and excuses to manage impressions in the presence of information asymmetries.

Another implication for impression-management researchers is in the demonstration of the pressure that comes from prior success and the need to maintain that state over the pressure of poor performance and lower expectations. The review of the literature exposed no studies that deal with prior successes in impression management. However, two earnings-management studies were found that take into account prior success (Duta and Gigler, 2002; Sanders and Carpenter, 2003) as a motivation for engaging in earnings management. The focus on prior success and impression management contributes to the understanding of impression management by refocusing attention on prior success as a moderator in impression management.

For corporate governance. Several studies explore how activist shareholders influence organizations in the realm of corporate social responsibility (e.g., Waddock, 2000; Henningsen, 2002; Lammers, 2003). Prior research generally approaches the topic from outside the organization or, in other words, the institutional order seeking to guide the actions of organizations. But how do organizations cope with activism? This is an unanswered question on which the current study sheds light.

A key objective of corporate governance is to maintain control over managerial action, and it is generally believed that outcome-based contracts aid in governance oversight (Useem, 1996). The study suggests that due to information asymmetries the contracts do not effectively reign in management's malfeasance. Further, in cases where

there is a higher percentage of institutional investors, the problem is exacerbated. It appears that overt or covert investor activism may actually encourage the behavior it is meant to curtail. Governance researchers should not underestimate the problem of information asymmetry and management's ability to influence outside perceptions based on impression management tactics.

For earnings management. One implication for earnings management is to broaden the discourse to include the systemic issue of investor capitalism. This study implicates ownership structure as a force in influencing earnings management adding to limited structural-level research on the topic (see Bushee, 1998, and Matsumoto, 2002, for other work on the topic). This level of analysis is important in that it expands the discussion from specific actions of self-interested managers to encompass broader environmental factors, thus creating a clearer picture of the phenomenon.

A second implication for earnings management research is in taking an alternative approach for the determination of earnings management. The Jones' (1991) methodology of analyzing discretionary accruals to determine earnings management has become the dominant method for establishing the action. When a single method becomes the paradigm, researchers are in danger of overlooking or ignoring methods that may take different perspectives, but add to the exploration of the research topic. By utilizing the CFRA database, this study offers an alternative to using the Jones' (1991) methodology in hopes of expanding the dialog.

For ethics. The findings impact the study of ethics in some notable ways, namely in concerns over the impact of investor capitalism on organizational goals and environmental pressures contributing to unethical managerial behavior. Investor

capitalism has taken root in the U.S. market (Useem, 1996). With the rise of investor capitalism comes the privilege of the institutional investor to set legitimating standards in the pursuit of shareholder wealth maximization. This concept is confirmed by the findings of the present study, which indicates that in organizations with higher levels of institutional ownership, stockholder returns over corporate earnings have a greater impact on managerial behavior. An ethical issue related to this finding is that corporate longevity and long-term benefit to multiple stakeholders is tied to profitability and sustainable earnings, not short-term stock returns (Jensen, 2002). While institutional investors as a class and transient investors as a subgroup (Bushee, 1998; Matsumoto, 2002) pursue short-term returns to enhance their self-interest, other stakeholders' interests, such as employee retention and community contribution, may be left out (Jensen, 2002).

This ethic of self-interest (Khurana, 2004) and self preservation created by investor capitalism also affects managerial behavior. The likelihood of managers engaging in earnings management increases in organizations with higher degrees of institutional ownership, suggesting that under these conditions, managers' self preservation, through impression-management tactics takes supremacy over disclosure of accurate information. This gives support to the suppositions of situational ethics put forth by Cohen and colleagues (Cohen, Holder-Webb, Pant, & Sharp, 2004) and contradicts the basic assumptions of Quinn and Jones (1995) as discussed below.

Quinn and Jones (1995) argue that agents are bound by four basic principles of morality which guide management behavior to higher priorities than profits:

... some principles constitute the minimal set that applies in all settings, presumably business settings. Among these are avoiding harm to others, respecting the autonomy of others, avoiding lying, and honoring agreements. ... The recognition of these four principles is a precondition either for the efficient working of markets or for the principal-agent model to hold. The acceptance of these four principles as norms of business is what enables an agency relationship to exist in the first place. (Quinn & Jones, 1995: 33-34)

My finding that information asymmetries allow for managerial discretion in disclosing and manipulating information earmarked for principals and other stakeholders appears to contradict the assumptions of Quinn & Jones (1995) or, at a minimum, points to inadequacies in the model. It may be that agents internally rationalize the disclosure decisions in such a way that from their perspective the basic morality principles have not been violated.

For practice. The principal-agent relationship has been widely accepted in practice (Useem, 1996) as a lens to utilize in constructing governance mechanisms. A prominent control meant to align the goals of agents with those of principals has been the outcome-based contract (Eisenhardt, 1989). The study brings to light certain concerns for practice regarding these contracts and issues associated with the underlying information asymmetries.

Key to designing and implementing outcome-based contracts is in determining effective measures of performance. Does the contract actually promote the desired agent behavior, or is it the “folly of rewarding A while hoping for B” (Kerr, 1975)? These are important questions that principals need to address. The study presented here highlights

the concern regarding CEO outcome-based contracts as to whether, in their current form, they are promoting or controlling the desired behavior, as these contracts do not reduce the incidence of earnings management and marginally promotes the obstructive behavior. This could be a design issue caused by outcome-based contracts being overly focused on short-term stockholder returns and by reliance on the personal wealth generation of CEOs through stock options (Barkema & Gomez-Mejia, 1998) to align goals. Another design concern regards the tax deductibility limitation of base salary. Perhaps the \$1 million cap camouflages a portion of base salary as outcome-based pay, making it difficult to determine the effectiveness of performance contracts by masking true outcome-based pay.

Another practical issue brought to light in the study is undesirable behavior being associated with prior positive performance rather than prior poor performance. In practice, it is easy to accept good news and to scrutinize perceived problem areas such as poor performance. This mindset actually promotes behavior that maintains the perception of continued positive performance rather than disclosing negative outcomes thus masking deteriorating performance. Principals should continue to focus attention on poor performance but should also scrutinize positive performance to verify its validity to minimize the risk of undiscovered problems or malfeasance, as in the case of Enron.

The enabler for earnings management is the amount of information asymmetry inherent in the relationship between principals and agents. Information asymmetry allows agents to control the disclosure of information that determines achievement of principals' stated goals. The study points out that there is greater information asymmetry and pressure for manipulation when a greater percentage of shares are held by

institutions. Principals need to recognize this and consider greater monitoring of managers when there is a high percentage of institutional ownership present possible by increasing their activism of communicating directly with management. An alternative solution suggested by the findings is to increase the stake in a company over the five percent threshold or to invest in organizations with a higher percentage of outstanding stock held by 5% block holders. While degree of institutional ownership, in general, impacts managerial behavior, greater consolidated ownership decreases information asymmetry as shown by lack of significance of large-block holders influencing the occurrence of earnings management and the reduced reliance on outcome-based contracts to control agents.

Information asymmetry exists in other principal-agent relationships where agents maintain control of their performance measures. For example, schools in Texas are rewarded according to standardized scores, yet the local districts retain the discretion of exempting certain students. The exemptions may act to enhance the schools' overall scores. A second example could be the implementation of job retraining programs that reclassify some unemployed as students reducing the overall unemployment rate. An agency and impression management framework can be applied to these situations as well as others to gain a better understanding of the process.

This chapter has presented a discussion and interpretation of the findings of the study. The discussion examined the findings in light of the knowledge base utilized to construct the model in the study. This was followed by a section highlighting contributions made to broader theory and suggestions for practical applications. In the

next chapter, avenues for future research are examined, limitations are discussed, and concluding remarks are made.

CHAPTER 6:

FUTURE RESEARCH, LIMITATIONS AND CONCLUSION

Future Research

The implications of this study, discussed in the previous chapter, bring to light several areas that can prove fertile ground for future exploration: 1) a potentially nonlinear relationship between separation of ownership and agent self-interest. 2) outcome-based contracts. 3) the influence of information asymmetries on choice of anticipatory impression-management tactic. 4) governance issues surrounding money managers, and 5) situational pressures that act on agents to manage performance impressions. Each of these research streams is discussed in turn.

The relationship between separation of ownership and the self-interested behavior of agents needs to be studied further because the findings suggest of a nonlinear relationship rather than the current view of a direct relationship. The current study is far from conclusive on the topic, but it does point to a potential new avenue of exploration, one that factors non-financial self-interest into a nonlinear model of the impacts of ownership separation. Based on the findings of the current study, extreme separation of ownership, as in the case of dispersed individual ownership, may not have as much negative influence on managerial behavior as when ownership is consolidated among multiple institutional investors. Once ownership is narrowed further by increasing the percentage of 5% owners and a high degrees of inside ownership negative managerial behavior is curtailed. Research into a potential nonlinear model of agency may prove fruitful in revealing a more complete picture of the principal-agent relationship one that incorporates, both financial and non-financial self-interest.

A second area of potential future research concerns outcome-based contracts. These contracts have been promoted by institutional investors as a means of aligning the goals of management with those of owners to maximize shareholder wealth. But as this study points out, there appears to be a disconnect between managerial behavior and outcome-based contracts. As highlighted in the previous chapter, tax structure may play a part in this disconnect and will provide fruitful research opportunities. One pursuit may be to determine what portion of incentive compensation is structured to overcome the tax regulation cap of \$1 million for executive base pay. If this is determined, then perhaps a more realistic outcome-based portion of income can be calculated and a more accurate understanding of the relationship between earnings management and executive pay can be attained. This disconnect also provides the opportunity to explore the environmental effect of government regulation on organizational practice. Institutional researchers (Meyer & Rowan, 1991) have posited that there is a decoupling between espoused practice and actual practice. Differences in espoused outcome-based pay and the actual amount of pay at risk could be a great possibility to examine decoupling.

Further research is also viable in the area of anticipatory impression-management tactics. The current study suggests that a manager's selection of anticipatory impression management tactics - obfuscation, excuses, or justification - may be predicated on the degree of information asymmetry inherent in the situation. When information asymmetries are high, obfuscation may be a more successful tactic, as in the case of earnings management in the current study. Obfuscation would be less detectable when the principals do not have access to the correct information. As the information asymmetry drops and the organization may be perceived to be linked to a negative event,

then excuses would be invoked. And after further information symmetry with the organization clearly linked to a negative event, then justifications would be utilized. This information asymmetry framework is consistent with the Elsbach et al (1998) typology of anticipatory impression-management tactics and could shed additional light on the topic.

This study is only the second academic endeavor to make use of the CFRA database; Fairfield & Whisenant (2001) was the first. Both studies demonstrate the effectiveness of the database in conducting academic research. This effectiveness and usefulness will grow as CFRA continues to collect data and expands the scope and depth of the information gathered. When utilizing the CFRA database for this study, I was limited to logistic regression due to the dichotomous nature of the variable as available in the database. However, CFRA has recently enriched the database by instituting concern levels on all future warnings. These warnings, on a one to five scale, offer future researchers a more dynamic database thus introducing more variance in any similar study. An ordinal variable will add richness to earnings and disclosure studies by aiding in pinpointing nuances in relationships. This is important in that this and other studies (e.g., Bushee, 1998; Matsumoto, 2002) have been limited in detail by nominal variables such as blatant fraud and adjusting uncollectible accounts both carry the same weight. Adding concern levels, will provide additional information to help differentiate the impact of given predictors.

While the current study examines antecedents to inclusion in the CFRA database, Fairfield and Whisenant (2001) compared CFRA warnings to subsequent short-term performance of the focal company. The post-facto study of CFRA organizations could offer insight into how organizations cope with the publication of negative information

from an impression-management standpoint. Several research questions could be generated from this perspective; for instance, does ownership structure affect the tactics utilized by agents to manage negative impressions? Or taking into account concern levels, does the degree of negative information affect the impression management tactics adopted? In the realm of governance, does non-legitimizing information lead to change in governance mechanisms? Or does the disclosure of non-legitimizing information increase the likelihood of CEO turnover? For finance, what are the effects of negative information on market returns? Or how do different classes of investors react following the disclosure of negative information? These are just a few of the potential research questions that could be explored utilizing the CFRA database.

A fourth area for future research is governance issues surrounding institutional investors. As this study suggests, institutional investors play a large role in influencing management compensation and behavior. The assumption has been made that institutional investors are sophisticated investors (Bushee, 1998) who pursue shareholder wealth maximization (Useem, 1996). Are the money managers making investment decisions really pursuing wealth maximization over the long-term, or do they make decisions based on their own outcome-based contracts? Recent scandals at large investment banks anecdotally suggest that there may be governance problems at the institutional-investor level. Money managers with their wide dispersion of principals (e.g., individual mutual-fund investors) are, to a great extent, operating in an environment of managerial capitalism. What governance structure is keeping the money managers in line?

Finally, this study explores the issues of agency theory and impression management with a broad brush, but researchers also need to be examine it on a micro level to better understand how and when managers capitalize on information asymmetry to manage earnings. For instance, Cohen and colleagues (2004) are exploring situational ethics in an attempt to explain why managers act in an unethical manner. Are some managers more inclined to manage impressions due to personality traits? How do traits and behaviors of principals contribute to impression management? Does culture play a role in impression management?

This section is meant to spawn thoughts on future research. It is only a starting point, not an inclusive list. Many more questions could have been brought up or expanded in regards to governance, corporate social responsibility, ethics, compensation, agency, and institutional thought, to name a few. The important point is to continue the quest.

Limitations of the Study

Any research study has limitations, and this study is no exception. This section makes explicit certain methodological limitations inherent in the research project. Limitations regarding sampling, use of the CFRA database, and the variables are explored in the following discussion.

The first limitation centers on the sample, primarily in regards to its non-randomness and in its generalizability to a broader population. Cook & Campbell (1979) point out that to achieve the most desirable sampling methodology representativeness is drawing a random sample from the entire population. However, they also point out that random sampling may not be feasible due to constraints, for instance, funding or access.

When faced with these obstacles, an alternative methodology that increases external validity is deliberate sampling for heterogeneity, as was done in the case of the current research study. The purposive sampling methodology - beginning with CFRA cases, which was then matched to comparable organizations - was necessary based on the opacity of CFRA's system. This methodology, which provides insight for organizations incurring CFRA warnings, limits the study's ability to be generalized to all public and private corporations.

Other limitations regard to the use of the CFRA database. The methodology for inclusion in the CFRA database is proprietary, which poses problems with replication of the results utilizing alternative criteria for earnings management. A possible criticism of the study's results would be that the data are skewed as a result of relying on the CFRA database as the dependent criterion; many of CFRA's customers are institutional investors and the organization may, therefore, focus more on companies being held by institutional investors. Ryan & Schneider (2002) state that 57.60% of the total invested in the market controlled by institutions; the sample from this study had a mean institutional ownership of 67.28% (see Table 5; pg. 59). CFRA's methodology may be playing a role in creating the difference. The CFRA-selection criteria yield a database that is not randomly selected from the overall population of stock traded on the exchanges and would not be representative of the market. Non-CFRA cases were selected to match the CFRA cases by sector and size, causing the sample to be even less representative of the market. Since CFRA's methodology is a black box, it can't be said for sure that CFRA focuses on companies with a higher percentage of institutional owners because of their clientele, but it is possible. One service that CFRA provides is a review of client portfolios. If in these

reviews CFRA identify companies that have been managing earnings, it is highly likely that they would be included in the database. As the clients are institutional investors, this could lead to a skewing of the database. Alternatively, the study results suggest that higher institutional ownership increases the likelihood of engaging in earnings management, possibly accounting for an over-representation of institutional ownership in the CFRA database.

The results could be under-reported as there is no way to know whether the non-CFRA cases in the study were scrutinized and given a clean bill of health by CFRA analysts or in fact should have also incurred a CFRA warning. A final limitation in regards to the use of the CFRA database is in its novelty and lack of use by the academic community. This study actually works toward reducing this limitation by helping establish the database as a credible tool to explore questions similar to those in this study.

There are some limitations associated with how the institutional ownership variable was collected in the study. The first limitation is in the assumption of constant-aggregate institutional ownership over the course of the study. The risk in this assumption is that the possibility exists for a sell-off of institutional shares following a negative announcement by CFRA. If institutional ownership declined following the announcement, then the influence of institutional ownership on incurring a CFRA warning would be under-reported by the study. To aid in reducing this risk, cases where the company subsequently lost their listing on the relevant exchange were eliminated from the study. Another limitation in regards to institutional ownership is the inherent assumption that the goals and time-horizon of all institutional investors are the same. Matsumoto's (2002) study of management's incentives for avoiding negative earning

surprises found that organizations with a higher percentage of institutional investors were more likely to take actions to avoid announcing negative earning surprises. My findings corroborate Matsumoto's (2002) study in that aggregate institutional-investor ownership contributes to managers' propensity to manage impressions through earnings management. Matsumoto (2002) and Bushee (1998) further segregate institutional ownership into transient and non-transient investors, arguing that the two differ in investment time-horizon. In both studies, transient institutional investors, deemed short-term investors, were found to drive negative managerial behavior, avoiding earning surprises (Matsumoto, 2002) and cutting research and development expenses to meet earnings expectations (Bushee, 1998). While the classification of institutional investors into time-horizon groups is insightful, it is beyond the scope of the current study, which for the most part, challenges the assumption of investor capitalism and the homogeneity of the institutional investor goal to maximize shareholder wealth (Useem, 1996).

There are also limitations of the study in regards to the CEO outcome-based pay variable. The possibility exists that the variable, as calculated, does not capture the true effects of outcome-based contracts. Congress, in 1993, limited the tax deductibility of executive salary to \$1 million (Reitenga, Buchheit, Yin, & Baker, 2002), and due to this regulation, some income classified as outcome-based may in fact be disguised salary.

Another limitation is in that the executive pay data were taken directly from the disclosure made in the company proxy statement, and individual nuances incorporated in the actual compensation agreements were not explored. There may be issues related to the calculation of the proxy numbers that could have had an impact on the results.

The other group of variables in the study includes those variables utilized for determining organizational performance. Prior-year earnings growth is used to represent internal organizational performance, and a calculated prior-year comparative indexed stock return is used as an external measure of performance. A limitation of this methodology is in my assumption (although based on prior research) that these types of performance measures are important to institutional investors. Given alternative measures of performance, the results of the study could have been different.

Other limitations are in reference to the phenomenon being studied, earnings management. The action is largely seen as a deviant behavior and the concealment of the action is important to the success of the process. It is difficult for auditors and outsiders to ferret out fraud or off-the-books accounting. This poses a problem to any work conducted on earnings management; the methodology used to determine earnings management may not in fact isolate the behavior. Concealment and undetected earnings management may lead to it being under-reported in the study. This study, like others concerning corporate governance and earnings management, explains relatively little of the over-all variance (Larcker, Richardson, & Tuna, 2004). The 4.90% explained variance in this study is within the explained range Larcker et al (2004) observed using regression (.60%-5.30%) and the Davidson et al (2004) study earnings management and duality of CEO/Chair explained less than 2.00%. Larcker et al (2004) conclude that structural corporate governance indicators have limited capacity to explain managerial behavior. While this study has similar results, it, like others, is limited in its overall explanatory ability.

Conclusion

This dissertation began by questioning the completeness of financial-agency theory in explaining recent corporate scandals. It called into question the assumptions and precepts of investor capitalism, namely the focus of governance systems based on financial self-interest. Adding concepts of impression management to the agency theory framework, the study has expanded our understanding of the principal-agent relationship by accounting for financial and non-financial self-interest. A key finding demonstrated that investor capitalism creates an environment that, through the pursuit of shareholder wealth maximization, is conducive to earnings management. The consolidation of ownership into the hands of money managers, while reducing information asymmetries from the levels experienced under managerial capitalism, actually promotes earnings management via the expectation to maintain prior levels of success. The findings point toward a nonlinear relationship between separation of ownership and managerial malfeasance. The blending of financial and non-financial self-interest offers future avenues to pursue our understanding of principals and agents.

The journey to completing this project has been long and arduous, but it has been an enlightening experience. I have learned much both in content and process. The topic continues to interest me, and the dissertation, rather than being a conclusion, has opened additional doors and presented questions for future work, which will, I believe, provide interest to me and the academic community. This research project began by highlighting today's corporate scandals and the focus on managerial blame. While I don't make the contention that managers are blameless, my study demonstrates that organizational

structure also contributes to earnings management. I hope to have played some small part in solving problems that loom large in Corporate America.

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