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EFFECTS OF FINANCIAL INFORMATION TRANSPARENCY ON INVESTOR BEHAVIOR IN TAIWAN STOCK MARKET

Dissertation

Presented in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

Lynn University

By

Hsiu-Jen Fu

February, 2006

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EFFECTS OF FINANCIAL INFORMATION TRANSPARENCY ON INVESTOR BEHAVIOR IN TAIWAN STOCK MARKET

Hsiu-Jen Fu, Ph.D.

Lynn University, 2006

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EFFECTS OF FINANCIAL INFORMATION TRANSPARENCY ON INVESTOR BEHAVIOR IN TAIWAN STOCK MARKET

By Hsiu-Jen Fu

February, 2006

Abstract

Corporate governance is not a new issue in today's world. Nevertheless, addressing the impact of financial information transparency on investor behavior in the stock market should be explored. With the large number of incidents of accounting fraud and misstatements revealed in the past five to six years, the integrity of business financial information becomes an increasingly important issue for investors and the general public. To provide greater definition of the roles and responsibilities of publicly-owned company executives and members of their boards of directors, U.S. President George W. Bush signed the Sarbanes-Oxley Act (SOX) into law on July 30, 2002. This act provides a framework for greater financial transparency for publicly-traded companies and adds increased monitoring responsibility for representatives of the accounting and legal professions, as well as adding to the responsibilities of directors and executives.

There has been little empirical research to explore this phenomenon in the Taiwan Stock Market. The purpose of this explanatory mixed study was to explore the relationship between financial information transparency and investor behavior. The study examined TSEC investor perceptions of financial information transparency dimensions, investor demographics, and investor experience as significant explanatory variables of investor behavior in the TSEC.

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This research design employed a mixed method approach, using 19 closed-ended questions, plus one open-ended question on a survey instrument. The survey questionnaire, with a closed-ended 1 to 9 Likert scale, was used to ask participants the extent to which they agree or disagree (9 = very strong agree, 5 = neither agree nordisagree, 1 = very strong disagree). Collected data was analyzed by SPSS analysis. Five different statistical analyses were used in this study; descriptive statistics, correlation analysis, independent-samples t-test analysis, ANOVA analysis, and multiple regression analysis.

In this study, investor behavior was measured by an instrument of investor behavior questionnaire. Three-hundred respondents participated in the data collection. Using systematic sampling, they were approached to complete the survey questionnaire at the entrance located outside an underwriter's office. Findings indicated that ownership structure, financial transparency, and board structure were significant explanatory variables of investor behavior. Therefore, improved financial information transparency can lead to an increase investment in the Taiwan Stock Market.

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CHAPTER I

INTRODUCTION TO THE STUDY

Chapter one introduces financial information transparency and corporate governance and its impact on investor behavior. Included are introductions to the background of the study, statement of the problem, purpose of the study, research questions, importance of the study, research design rationale, and delimitations and scope.

Background of the Study

For almost a decade the transparency of business financial information has been an important influence on investors' investment strategies. An increasing amount of research shows that the availability and quality of companies' financial information are two major factors influencing investors' investment decisions (Young, 2003). Recent cases of accounting fraud, financial misstatements and poor corporate governance have become widely publicized, including financial scandals at Enron, WorldCom, Adelphia, Tyco, Global Crossing, NiCor, Sprint, and Merck. These cases, among others, have caused many investors to lose confidence in capital markets worldwide (Kulzick, 2004; Ramirez, 2003). According to a 2002 Gallup poll, 70 percent of U.S. investors said that corporate accounting issues haunted the investment climate (Kulzick, 2004). Since the Enron scandal, poor corporate governance resulting in a lack of financial information transparency has shaken public confidence (Young, 2003).

In order to understand the potential impact of financial transparency on investor behavior, it is important to define the term transparency. Florini (1998) indicates that

transparency is the opposite of secrecy. Secrecy means deliberately hiding one's actions, while transparency means deliberately revealing them. Financial transparency is one kind of transparency, typically relevant to finance issues which include information accuracy, completeness, thoroughness, and timeliness (Vishwanath, & Kaufmann, 2001). In today's sensitive investment environment, many investors focus on the importance of information transparency in companies' strategies. Lack of information and uncertainty are inherent features of finance, because players in capital markets are engaged in the trade of investments and information (Adimati & Pfleiderer, 2000).

The Taiwan Stock Exchange was established on July 10, 1962, and became operational on December 10th of the same year. The main functions of the TSEC include: offering the facility for trading securities; making the rules of the stock exchange; accepting listing applications; arranging the listing of securities; supervising securities trading; and managing and announcing market information. The trading time is from 9 am to 1:30 pm, Monday through Friday. By the end of 2004, the stock exchange had 697 listed companies, 114 security brokers, 47 security dealers, and the total market value of the stock was 423, 912 million US dollars. The total amount of transactions was 723,495 million US dollars, and the domestic individuals completed 76 percent of securities transactions. The TSEC oversight is done by the National Treasury Department (TSEC, 2004).

Statement of the Problem

Over the past decade, global and national markets have experienced financial crises. A leading reason for these markets' crises was insufficient transparent financial

information. This has negatively impacted public confidence in capital markets (Sridharan, 2002). Against this backdrop, the U.S. Congress began hearings concerning Enron in February 2002. The hearings focused on the misleading accounting information its corporate leaders had disseminated. As the hearings progressed, they were expanded to include a broader range of independent outside agencies, such as Arthur Andersen, which was Enron's auditor.

Corporate scandals such as Enron's have inflicted heavy losses, not only in public confidence, but also to the U.S. stock market. Kulzick (2004) stated, "Although only a part of this was attributable to fraud, political momentum built rapidly to install greater controls to decrease the likelihood of future corporate fraud and to increase financial transparency in the U.S. financial markets" (p. 43).

Purpose of the Study

The impact of financial information transparency on investor confidence in the worldwide market was selected for this review because a number of high profile cases of accounting fraud and misstatements of unprecedented proportion have dominated news headlines since 2000. Problems at Enron, WorldCom, Adelphia, Tyco, and Sunbeam were daily news, as was the rapid fall of Arthur Anderson. A report issued by the General Accounting Office in October 2002 stated that one out of every 10 listed public companies had restated its earnings during the previous five years (as cited in Atkins, 1999).

The goals of the financial transparency regulations in the Sarbanes-Oxley Act are to create a governance oversight framework for the accounting profession and its

practices, which are designed to improve investor confidence in financial capital markets. The purposes of this research were to explore the relationship between financial transparency and investor behavior; to examine corporate governance theories, corporate performance, investor trading behavior, and investor decision-making which was designed to improve investor confidence in Taiwanese financial markets; and to identify areas for future scholarly inquiry.

Research Questions and Hypothesis

The aim of this study was to explore the key factors that may explain the impact of financial information transparency on investor behavior in Taiwanese high-tech companies that are listed on the Taiwan Stock Exchange. The findings of this dissertation are likely to make significant contributions to the future design of investor behavior, due to the in-depth analysis of the characteristics that are inherent in investor behavior.

This research study investigated investors' attitudes and perceptions regarding information transparency. Specifically, the researcher sought to determine how a certain set of independent variables affect a particular dependent variable. The major independent variable used in the study was financial information transparency. The dependent variable was investor behavior. The central question addressed by this study was how the level of financial transparency is able to convince an investor to invest, and repeatedly return to the stock market.

The specific research questions and hypothesis for this study are as follows:

Research Questions

- Is there a relationship between TSEC investor perceptions of dimensions of financial information transparency and investor behavior in the Taiwan Stock Market?
- 2. Are there differences in TSEC investor perceptions of each dimension of financial information transparency according to demographic variables?
- 3. Are there difference in TSEC investor behavior according to different categories of investor experience?

Hypothesis

H: TSEC investor perceptions of financial information transparency dimensions, investor demographic, and investor experience are significant explanatory variables of investor behavior in the TSEC.

Importance of the Study

It is worth exploring the significance of the role of government-imposed investor protection actions, such as the Sarbanes-Oxley Act (SOX), on the ethical behavior of corporate officers, as well as the relationship between the transparency of corporate financial information and levels of investor confidence. The U.S. Government is looking to boost international investor confidence levels as explained by Kulzick (2004): "If the U.S. continues to attract international financial capital and maintain the confidence of American investors, improving financial transparency is an important goal. Sarbanes-Oxley provides the tools, although, much of the Act remains to be implemented" (Kulzick, 2004, Conclusion section, para. 3). Investors expect controls embedded in the SOX Act to increase the ease of monitoring corporate governance thereby increasing their confidence in the stock market. Future research may reveal whether or not SOX is successful in increasing investor confidence in U.S.

This research aimed to investigate the impact of information transparency on Taiwanese investors; and open the path for further study into the effects of financial information transparency and improved corporate governance on investor confidence.

Definition of Terms

The theoretical foundation for this study was established through a literature review of pertinent research. The review included identifying relevant research in the areas of financial information transparency, transparency requirements, corporate governance, and investor behavior.

This study used a quantitative research method and survey questionnaire to further measure the behavior of those investing in the Taiwan stock market. The dependent variable is investor behavior.

In order to answer the research questions of this study, the investigation focused on eight independent variables and one dependent variable. The independent variables were each linked to two information transparency models (signaling and disclosure), and three corporate governance theories (agency, stewardship, and stakeholder). These independent variables are ownership structure and investor relations, financial transparency and information disclosure, board and management structure and process.

There are four demographic variables: gender, age, level of education, and annual income. The eighth independent variable is an investor's experience in buying

corporation shares. The dependent variable is investor behavior, which is influenced by the independent variables.

The research design was conducted using a quantitative method approach and using closed-ended questions on a survey instrument. The survey included 19 closed-ended questions, plus an open-ended question at the end. The researcher asked participants to rate the question based on a closed-ended 1 to 9 Likert scale format.

Delimitations and Scope

The main purpose of this study was to analyze the impact of financial information transparency on investor behavior in Taiwan. For that reason, inclusion factors were subjects who are familiar with the stock market; who have experience buying corporation shares from the Taiwan Stock Exchange; whose age is older than 18 years old; and who are willing to fill out a questionnaire based on investor experience. People who do not have experience buying corporation shares from the Taiwan Stock Exchange were excluded from this study.

CHAPTER II

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

Introduction

Chapter two provides a review of the literature of key concepts in this study. All pertinent literature has been reviewed for this topic in order to facilitate the theory development for this study. This scholarly review of earlier work provides an appropriate history and recognizes the priority of the work of the others. This review focused only on literature and conclusions directly relevant to the subject and the problem addressed in the dissertation.

Chapter two begins with business financial information transparency and disclosure requirements, including a relevant literature review of corporate governance, corporate social responsibility, and investor behavior.

Literature Review

Business Financial Information Transparency and Disclosure

This theoretical literature review focused on theories of financial information transparency and the impact of corporate governance on investor confidence. It began with the concepts and theories of financial information transparency and moved on to theories of corporate governance, which are both important for understanding investor confidence and their investment strategies.

Financial Information Transparency

The theoretical base for this section is Signaling Theory which was created by Spence in 1973. Spence asserted that asymmetric information exists between a company and investors. Such information asymmetry results in investors misunderstanding the real operating situation within a company. According to Modigliani and Miller (as Chen, 1999), this theory assumes that because managers often have better information than outside investors, they sell company stock when they perceive it to be overvalued, and they sell bonds if they believe the stock is undervalued. Investors understand this perspective and, as a result, they view insider stock sales as a negative signal. According to signaling theory, the information asymmetry between internal and external investors may create an unfair trading advantage for insiders in financial markets (Chen, 1999; Chiang, 2005; Spence, 1973). Information asymmetry potentially creates higher risk for non-insiders who may not clearly understand a company's performance outlook. (Leland & Pyle, 1977; Bhattacharya, 1979; Poitevin, 1990; Ravid & Saring, 1991).

Anonymous (1999) defined financial transparency as meaning clarity, clearness, and comprehensibility about what is occurring within a corporation. The definition of financial transparency provided by Anonymous was applied to corporations' annual reports, 10-Ks, quarterly reports, and other published material. After the Enron scandal, investor expectations of financial transparency in the stock market increased. Holzner & Holzner (2002) indicated that transparency is "The demand for information freedom, epitomized by the current movement toward comprehensive transparency, has a long and troubled history, often advanced by scandals" (p.152). Good management of information transparency relies on good corporate governance and good ethical behavior (Holzner, et al., 2002).

Transparency is the reverse of secrecy, and secrecy involves someone trying to hide some behavior or actions carefully to get benefit for a certain group or individual,

such as insider trading. However, the perception of the degree of information transparency is experienced by each person individually, and follows personal, specific emotions. Financial information transparency is one kind of transparency that is typically relevant to corporate finance issues (Vishwanath, & Kaufmann, 2001). According to a study by Uddin and Gillett (2002), most financial crises during the past ten years can be attributed to a lack of companies' financial transparency. According to Hanson (2003), deficiencies in financial market transparency have been due to imperfect regulations that have been established to monitor companies' corporate governance and ethical behavior.

Florini (1998) stated that financial transparency is a behavior which constitutes appropriate responsibility. A corporation's financial transparency is measured by its efforts to disclose such information (Anonymous, 1999). One symptom of a lack of financial transparency is insider trading. Insider trading has been not only an obstacle to increasing market efficiency, but it has also increased investor concerns about capital markets (Fried, 2003; Pritchard, 2003). Insider trading usually provides asymmetrical information to the public (O'Hara, 2000).

Financial Information Disclosure Requirements

Information is reported by representatives of public companies to the public and addresses SEC requirements. Such information disclosures must be monitored and overseen by internal control systems as well as third parties, which include companies' Boards of Directors and the SEC in the U.S. For example, a company's financial forecast should be approved by its Board's audit committee and public accountant. Only after such approval is it reported to the SEC and released to the general public (Admati & Pfleiderer, 2000). Examples of transparency problems in these types of information disclosures may include irrelevant, misrepresented, inaccurate, and/or untimely information (Admati, et al., 2000; Chiang, 2005; Vishwanath, & Kaufmann, 2001).

Vishwanath and Kaufmann (2001) created a model to measure financial transparency for their methodological study. They came up with the following three criteria: (a) accessibility, (b) relevance, and (c) quality and reliability. Accessibility focused on businesses' communication of financial information to the public. This concept was tested by reviewing Internet, radio, television, newspaper, and other public notices of companies' financial information. Limitations of measuring accessibility included recipients' lack of education and/or knowledge of how to utilize the facilities used to transmit financial information.

The second criterion, relevance, relates to the applicability of the financial information provided to specific investors. Because it is difficult to determine what information is appropriate, Vishwanath and Kaufmann asserted that relevance depended on the situation or condition a specific user faced. For example, banks receive and review relevant information through companies' balance sheets and income statements when analyzing loan or mortgage cases. On the other hand, dividend pay-out statements are very important and relevant financial information for shareholders surveying their portfolios (Vishwanath & Kaufmann, 2001).

The relevance of information provided by companies varies because different readers have different information requirements. Irrelevant information may confuse users or lead them to make incorrect or suboptimal investment decisions for their

personal or professional financial strategies (Vishwanath & Kaufmann, 2001). Therefore, companies have ethical responsibilities to disclose information that is appropriate to various users for their evaluation. At the same time, users must have the ability to sift through the totality of information released by companies in a manner appropriate for their own particular needs (Vishwanath et al., 2001).

The third criterion studied, quality and reliability, indicates that published financial information must be effective, clear, and simple. In general, the quality of companies' financial information is monitored by outside independent agencies such as public accountants or attorneys, as well as by regulatory bodies such as the SEC. Released information must also conform to U.S. Generally Accepted Accounting Principles (GAAP). The quality and reliability of published financial information is imperfectly regulated due to the fact that adherence to standards is not enforced or monitored by independent outside agencies, nor by inside review boards who address financial information disclosure issues (Vishwanath & Kaufmann, 2001). As Vishwanath and Kaufmann (2001) state: "the lack of financial transparency and poor government accountability will be mutually reinforcing. This unregulated environment underscores the importance of working to improve transparency in the economy as a whole rather than in narrow sectors." (p.57). Measurements such as those developed by Vishwanath and Kaufmann are helpful tools.

There are information transparency issues outside the U.S. as well. For example, after information transparency scandals at Italy's food firm Parmalat and Dutch retailer Ahold became publicized, European Union officials have asked more than 7,000 EU firms to examine their financial reports under International Financial Reporting Standards

Corporate Governance

Corporate governance is concerned with managing the relationship among various corporate stakeholders, and has existed in business since the origin of the limited liability form of corporation (Lashgari, 2004). In other words, corporate governance includes the formal and informal contractual agreements among corporate stakeholders (North, 1994). There are many theories of corporate governance, and different authors have studied corporate governance in different ways. In 1996, Hawley and Williams completed a working paper about corporate governance in U. S. corporations for the Organization of Economic Cooperation and Development (OECD). The authors followed the corporate governance guidance issued by the OECD and explained that the primary theories of corporate governance were agency theory, stewardship theory, and stakeholder theory.

Agency Theory

Agency theory arises in business management and interacts with behavioral studies of employer-contractor or employer-employee relations. Agency theory can also be applied to public and non-profit organizations. Agency theory originally developed from research dealing with incomplete information in insurance industry contracts (Spence and Zeckhauser, 1971; Ross, 1973). However, this theory was soon generalized to apply to public corporations (Jenson and Meckling, 1976; Harris and Raviv, 1978).

The main goal of agency theory is how to get the employee or contractor (agent) to act in the best interests of the principal (the employer), when the employee or

contractor has an informational advantage over the principal and has different interests from the principal. Sappington (1991) provided a valuable discussion of principal-agent incentive problems. The agency problem is particularly sharp in Anglo cultures that tend to have dispersed business ownership where corporations do not have supervisory boards and little to no direct relationships with their investors (Monks, 1994). When all shareholders own small minority interests, creating diverse ownership, it is not rational for any investor to spend his/her time or expense supervising management for other investors. In any event, small shareholders may lack the power and influence to acquire information which management should disclose (Monks, 1994).

In their work on agency theory, Hawley and Williams (1996) indicated, "In the finance view, the central problem in corporate governance is to construct rules and incentives (that is, implicit or explicit contracts) to effectively align the behavior of managers (agents) with the desires of principals (owners)" (p/21). In accordance with proponents of agency theory, governments across the world have developed differing sets of regulations to oversee corporate governance. Important corporate governance regulations in the U.S. marketplace include Securities and Exchange (SEC) regulations, Generally Accepted Accounting Principles (GAAP), and, most recently, regulations introduced by the Sarbanes-Oxley Act of 2002 (SOX).

Stewardship Theory

The discussion concerning the concepts of stewardship theory was begun by Pfeffer (1972), when she asserted the fact that Boards of Directors were redundant because internal managers are already well-positioned to represent the best interests of a company's shareholders. Research by Pfeffer (1972) showed that the true value of external directors is the fact that their presence on a Board enhances external investor confidence. She found that the more regulated an industry was, the more likely outsiders were to be present on a company's Board of Directors to reassure regulators, bankers, and other interest groups. Pfeffer's study was one of the starting points of stewardship theory.

Donaldson expanded the concepts that Pfeffer provided and developed stewardship theory in 1985, which asserts that internal managers are best positioned to provide solid corporate governance (Donaldson & Davis, 1991). Donaldson & Davis (1994) explained that managers are good corporate stewards and diligently work to attain high levels of corporate profit and shareholder returns. In commenting on stewardship theory, Donaldson & Davis pointed out that a non-executive board of directors is an ineffective control mechanism because members are not intimately involved with the company and, therefore, lack the in-depth knowledge needed to guide the company to positive performance.

Stewardship theory is at the root of organizational and corporate governance theory as it integrates psychological, sociological, and behavioral systems (Boyd, 1995; Donaldson & Davis, 1991). Especially in the typical CEO duality structure, stewardship theory explains that executives have superior information that enables them to make clear, appropriate decisions for shareholders (Desai, Kroll, & Wright 2003).

Stakeholder Theory

According to stakeholder theory, corporate governance must satisfy the needs of all stakeholders. Stakeholders include a variety of groups and individuals, such as

employees, customers, suppliers, and community members who have legitimate concerns about a corporation and with whom that corporation was interdependent (American Law Institute, 1992).

In 1984 Freeman created stakeholder theory, which provided an important contribution to the existing body of modern financial management and corporate governance theories (Freeman, 1994). Hill & Jones (1992) built upon existing stakeholder theory to explain that the firm does not only belong to shareholders, it also belongs to stakeholders, and these stakeholders also need to take responsibility for the firm, and enthusiastically participate with the members of the board of directors to monitor corporate operating performance (Hill & Jones, 1992). In further explaining stakeholder theory Clarkson (1994) stated: "The firm is a system of stakeholders operating within the larger system of the host society that provides the necessary legal and market infrastructure for the firm's activities. The purpose of the firm is to create wealth or value for its stakeholders by converting their stakes into goods and services." (p.

22).

In 1995 Blair built upon Freeman's stakeholder theory to propose that: "the goal of directors and management should be maximizing total wealth creation by the firm" (p. 322). He explained that to best impact a firm's performance, managers and executives should be given ownership-like incentives. These incentives enhance the prospects of shareholder wealth creation while providing company leaders with motivation to enhance value for all stakeholders (Blair, 1995).

Corporate Social Responsibility

Jackson (2003) developed a model to explain the impact of investor decisions on corporate performance by focusing on the two concepts of external conditions and internal conditions. External conditions include protective actions or rules, such as the SOX Act and SEC regulations, which force company leaders to disclose information. These external conditions enable investors to have more complete information to help them evaluate investment opportunities and to develop their strategies.

Jackson (2003) asserted that an internal condition is when a company has the responsibility to provide training for those who use the companies' financial information. Although market experts provide a variety of analyst reports, Jackson (2003) asserted that enhancing one's knowledge and ability to understand companies' financial reports was important to successful investing practices. Rogers (2003) pointed out that investors need to have confidence in businesses' governance practices, even for the best performing corporations. The average investor's "market model" requires the investor's time to learn how to examine information quality and to meaningfully understand information disclosures.

The Corporate Social Responsibility Model (CSR) was developed by Epstein in 1987. The CSR Model included business ethics, corporate social responsibility, and corporate social responsiveness and was designed to explain the relationship and interactions of a corporation with its internal and external stakeholders (Epstein, 1987). The Corporate Social Responsibility Model not only examines aspects of corporate performance but also evaluates corporate actions (Epstein, 1987). Ross (2000) further developed the CSR Model by establishing three major measurements: screening, which

asserts that investors may eliminate gross polluters and other retrograde companies from their investments, shareholder activism, which asserts that company may obtain discussions and suggestions of CSR issues through the annual shareholder meeting, and community development, which asserts that a company may establish corporate accountability through interaction with the community. According to the CSR model corporate social responsibility is positively correlated with corporate performance and is of concern to investors when creating their long-term investment portfolios (Waring & Lewer, 2004).

Efficient Market Hypothesis

Market efficiency theory can be traced back to 1970 and Fama's Efficient Market Hypothesis (EMH). In this famous hypothesis, Fama developed three degrees of efficiency, which can be applied to the market. First is strong efficiency, which asserts that all public and private information impacts a company's current stock price. All information includes insider information. At this degree, no one outsider and insider can get a superior benefit. Second is semi-strong efficiency, which asserts that all public information is factored into a company's current stock price. Therefore, fundamental analyses including economic, industry, and individual company analyses can not be used to attain superior gain. The third degree, weak efficiency, states that all information about past prices of a stock are reflected in current stock price. As a result, technical analysis can not assist an investor looking for superior gain (Chen, 1999; Sarno & Thornton, 2004). Technical analysis is based on past transaction data and information to predict the trend of future stock prices. Fundament analysis is based on the situation of the economic environment and corporate performance to analyze the reasoned stock price (Chen, 1999).

Malkiel (2002) built upon existing market efficiency theories to assert that a company's stock price will reflect published information about a company. Improving the accuracy and timeliness of information disclosures may help the stock market achieve more efficiency. Sarno & Thornton (2004) asserted that existing asymmetrical information may increase arbitrage behavior in the marketplace. This behavior may make advantages for arbitragers who get company information first.

Jackson (2003) expanded market efficiency theory and separated this theory into two groups of different types of individuals. The first group was comprised of experts in financial markets, such as market analysts. Experts usually had the benefit of obtaining complete financial information based on their educational background or knowledge. The second group was the "market model" or the average investor. This group usually had little relative knowledge or time to read or understand financial information disclosures. This second class of investors relied on the expertise of financial analysts to translate disclosure information into investment references or advice. If the first group evaluated and translated disclosed information to the market efficiently, and the information disclosures were meaningful, the expert group had a way to approach entry with sufficient information to move the stock price. The responsibility of the market experts was to analyze the disclosures and protect the average investors who did not have ability to meaningfully understand disclosed information (Jackson, 2003).

Investor Behavior

Reasoned Action Theory

Ajzen and Fishbein (1980) developed the theory of reasoned action for the prediction of human behavior intentions. Reasoned action theory integrates physiological, psychological, and behavioral systems as well as role theory. The reasoned action model explains that humans often organize their behavior by intention (the original determination in their mind) and transfer this determination to the action. When humans receive related information about their intention, it will change the human determination and reflects in their actions. (Ajzen & Fishbein, 1980).

Donaldson and Davis (1994) extended the reasoned action model to apply to the business environment. They asserted that corporate performance will reflect the top management team's behavior. Positive top management team behavior in a company may lead to positive corporate governance, and this positive behavior (intention) will lead to high-quality corporate performance (actions). Investors' behaviors and actions often rely on corporate performance, which include financial, operating, and social responsibilities of corporate leaders.

In 2002, Uddin and Gillett added to the application of reasoned action theory to business. They explained that the reasoned action model had two dimensions: constructs of investor behavior and investors' attitude toward their behavior. Regulation, corporate governance, corporate performance, and compensation structure will directly effect investors' intentions and actions. Corporate attitude and investor attitude are expected to be strongly correlated. Positive corporate attitudes will directly motivate investors' attitudes and affect their behavior and actions in the stock market. Negative corporate attitude may lead investors to reconsider the inclusion of a company's stock in their portfolios or to discontinue their investment in the stock market.

The following section is a review of research that has tested existing theories of financial information transparency, financial information disclosure, corporate governance, and investor confidence.

Empirical Literature

The behavior and confidence of investors have changed recently because of companies' financial scandals including those at Enron, Arthur Andersen, and WorldCom. Additionally, accounting fraud at Tyco and questionable CEO compensation packages at Tyco and GE have created public awareness of unethical corporate behavior (Moor, & Swartz, 2003). Healey & Kim, (2003) found that worldwide investor confidence has declined since the Enron scandal, which is attributable to problems with corporate financial transparency and information disclosure.

Business Financial Information Transparency and Disclosure

This empirical literature review is about business financial information transparency and the impact of positive corporate governance on increasing investor confidence. This section begins with a review of studies about financial information transparency and is followed by reviews of studies about corporate governance and investor confidence.

Financial Information Transparency

In 2004, Born, Giaccotto and Ritsatos published a study that examined America's insurance industry with respect to signaling theory and financial information transparency. They used a non-experimental, causal comparative, quantitative study design. Born, Giaccotto and Ritsatos's literature review was thorough and current in comparing and contrasting theories about financial information transparency. Empirical studies of signaling theory and financial information transparency were examined, identifying a gap in the literature regarding whether regulations and monitoring reduce the degree of information asymmetry between insurers and investors. Born, Giaccotto and Ritsatos' research hypotheses were that there is a positive relationship between insurers' stock repurchase announcements and insurers' wealth, and that regulation and monitoring have positively reduced the degree of information asymmetry between insurers and investors (Born, Giaccotto and Ritsatos, 2004).

A probability, systematic sampling plan resulted in the data producing sample of 49 insurance companies trading on either the New York Stock Exchange or American Stock Exchange. Reliability and validity were established and data collection procedures were clearly described. Born, Giaccotto and Ritsatos' findings supported their hypotheses and used Tobin's Q ratio (Q-Ratio) to process the data analysis. The Q-Ratio was calculated by dividing the market values of the insurer's equity and debt by their book values. A t-test was used to test the difference in mean excess returns between high and low Q firms and the difference in mean excess returns across lines of business (Born, Giaccotto and Ritsatos, 2004).

Born, Giaccotto and Ritsatos' interpretation of their findings was that corporate

wealth does have a significant positive relationship on that company's stock repurchase announcement in the open market. They also concluded that regulation and monitoring have positively reduced the degree of information asymmetry between insurers and investors when compared with non-regulated industry firms. This led to the conclusion that insurers can increase company wealth through stock repurchase in the open market.

The implication is that improving corporate governance can lead to improvements in information asymmetry between insurers and investors. Born, Giaccotto and Ritsatos' findings support signaling theory. Strengths of Born, Giaccotto and Ritsatos' study are its clear hypotheses and variables in stock repurchase and information asymmetry, and selected reliability and validity of measures of outcome variables which result in a generally high level of data quality, data analysis, and clearly defined procedures allowing replication.

In 2005, Chiang published a study that examined Taiwan's high-tech industry with respect to signaling theory and financial information transparency. He used a non-experimental, causal comparative, quantitative study design. Chiang's literature review was thorough and current in comparing and contrasting theories about financial information transparency. Empirical studies of signaling theory and financial information transparency were examined, identifying a gap in the literature regarding the impact of information transparency on corporate performance especially in the structure of Boards of Directors and ownership. Chiang's research hypotheses were that there was a positive relationship between the size of Board of Directors and operating performance, and that there was a positive relationship between financial transparency and information disclosure and operating performance (Chiang, 2005).

A probability, systematic sampling plan resulted in the data producing sample of 225 high-tech companies in Taiwan. The S&P information transparency measurement . criteria were used to measure the information transparency of selected companies. The information transparency measurement criteria were developed by S&P for transparency of ownership structure, investor relations, financial transparency, information disclosure, and board structure. There were 98 criteria in five categories for a total of 98 points. One point was awarded to a company for each criterion met (Chiang, 2005). Reliability and validity were established and data collection procedures were clearly described. Chiang's findings supported his hypotheses. A multiple regression model (MRM) was used to process the data analysis. MRM is a widely used and versatile dependence modeling technique applicable to business decision-making (Chiang, 2005).

Chiang's interpretation of his findings was that corporate transparency does have a significant positive relationship on a company's operating performance. This led to the conclusion that companies with good corporate governance have a significant positive relationship with operating performance. The implication is that improving corporate governance can lead to improved corporate performance, and outsiders can comfortably rely on information provided by company leaders to make investment decisions. Chiang's findings support signaling theory.

Strengths of Chiang's study are its clear hypotheses and variables in corporate transparency and corporate operating performance, and selected reliable and valid measures of outcome variables which result in a generally high level of data quality, data analysis, and clearly defined procedures allowing replication. Limitations reported by Chiang are that the sample only included Taiwanese high-tech companies. He also did not

clearly define high-tech company in the study. Therefore, the results are difficult to generalize to other countries. Future studies should address these threats to external validity, followed by replication.

Financial Information Disclosure Requirements

In 2001, Gelb and Strawer published a study that examined American publicly traded firms with respect to information disclosure and financial information transparency. They used a non-experimental, causal comparative, quantitative study design. Gelb and Strawer's literature review was thorough and current in comparing and contrasting theories about financial information disclosure. Empirical studies of financial information disclosure and financial information transparency were examined, and they identified a gap in existing literature about an alternative explanation: corporate responsibility and financial disclosure for increased transparency. Gelb and Strawer's research hypothesis was that firms that are more socially responsible are more likely to provide more extensive discretionary disclosures (Gelb and Strawer, 2001).

A probability, systematic sampling plan resulted in the data producing sample of 233 publicly traded firms in United States. Annual reports, 10-Ks, quarterly reports, other published materials, and investor relations programs provided by firms were used to measure the financial disclosure levels and social responsibility of selected companies (Gelb and Strawer, 2001). Reliability and validity were established, and data collection procedures were clearly described. Gelb and Strawer's findings supported their hypothesis and they used multiple regression analysis to process the data analysis. Multiple regression analysis is a widely used and versatile dependence modeling

technique applicable to business decision-making (Gelb and Strawer, 2001).

Gelb and Strawer's interpretation of their findings are that both corporate social responsibility and financial disclosure have a significant relationship with investor concern. This led to the conclusion that companies with high disclosure quality will positively maintain investor relationships. Gelb and Strawer's findings support financial information disclosure. Strengths of Gelb and Strawer's study are its clear hypotheses and variables in financial information disclosure and corporate social responsibility, and selected reliable and valid measures of outcome variables which result in a generally high level of data quality, data analysis, and clearly defined procedures allowing replication.

In 2003, Rezaee, Olibe and Minmier published a study that examined American publicly traded firms with respect to financial information disclosure and corporate governance. They used a non-experimental, causal comparative, quantitative study design. Rezaee, Olibe and Minmier's literature review was thorough and current in comparing and contrasting theories about financial information disclosure. Empirical studies of financial information disclosure and financial transparency were examined, and they identified a gap in existing literature about corporate governance: the role of audit committee disclosures. Rezaee, Olibe and Minmier's research hypotheses were that there is a relationship between the financial disclosure and audit committee performance (Rezaee, Olibe and Minmier, 2003).

A probability, systematic sampling plan resulted in the data producing sample of 100 publicly traded firms which are the listed Fortune 100 in the United States. Financial statement analysis measurement criteria were used to measure the financial performance of selected companies. Financial statement analysis measurement criteria were divided into liquidity, asset management, debt management, profitability, and market value ratios (Rezaee, Olibe and Minmier, 2003). Reliability and validity were established and data collection procedures were clearly described. Rezaee, Olibe and Minmier's findings supported their hypotheses and used multiple regression analysis to process the data analysis. Multiple regression analysis is a widely used and versatile dependence modeling technique applicable to business decision-making (Rezaee, Olibe and Minmier, 2003).

Rezaee, Olibe and Minmier's interpretation of their findings is that audit committee performance does have a significant positive relationship on corporate governance and financial disclosure. This led to the conclusion that companies with strong audit committee performance will improve corporate governance. The implication is that improving corporate governance can lead to improved corporate performance, and outsiders can comfortably rely on information provided by companies to make investment decisions. Rezaee, Olibe and Minmier's findings support financial disclosure theories.

Strengths of Rezaee, Olibe and Minmier's study are its clear hypothesis and variables in financial disclosure and corporate governance, and selected reliable and valid measures of outcome variables which resulted in a generally high level of data quality, data analysis, and clearly defined procedures allowing replication. Limitations of this study are that the survey criteria did not include important regulations of Sarbanes-Oxley Act, which was enacted into law in 2002. The authors suggested that future study should address threats to external validity, followed by replication.

Corporate Governance

Agency Theory

In 2000, Shaw, Gupta, and Delery published a study that examined the United States' trucking industry with respect to agency theory. They used a non-experimental, causal comparative, quantitative study design. Shaw, Gupta, and Delery's literature review was thorough and current in comparing and contrasting theories about corporate governance. Empirical studies of agency theory and corporate governance were examined, identifying a gap in the literature about the impact of a company's performance and compensation system on agent monitoring. Shaw, Gupta, and Delery's research hypotheses were that agent monitoring was negatively related to the use of performance contingent compensation systems, and agent monitoring was positively related to the use of performance contingent compensation systems (Shaw, Gupta, and Delery, 2000).

A probability, systematic sampling plan resulted in the data producing sample of 1,072 trucking companies with at least 30 total employees in the United States. The primary criterion for inclusion was response to a 24-pages questionnaire. All measures were obtained from the questionnaire (Shaw, Gupta, and Delery, 2000). Reliability and validity were established and data collection procedures were clearly described. Shaw, Gupta, and Delery's findings supported their hypotheses. They used regression analysis to test the hypotheses.

Shaw, Gupta, and Delery's interpretation of their findings is that agency predictions and agent monitoring support compensation systems in the organization. This led to the conclusion that agency predictions and agent monitoring are positive influences in the trucking industry. The implication is that the cross-industry sample represents a

more traditional organization of work. Typically managers will spend more time supervising their front-line employees to ensure the quality of their service. Shaw, Gupta, and Delery's findings support agency theory. Strengths of this study are its clear hypotheses and variables in agency and collaborative predictions of performance contingent compensation, and selected reliable and valid measures of outcome variables which result in a generally high level of data quality, data analysis, and clearly defined procedures allowing replication.

In 2003, RandOy, Down, and Jenssen published a study that examined maritime firms in Sweden and Norway with respect to agency theory and corporate governance. They used a non-experimental, causal comparative, quantitative study design. RandOy, Down, and Jenssen's literature review was thorough and current in comparing and contrasting theories about corporate governance. Empirical studies of agency theory and corporate governance were examined, identifying a gap in the literature regarding the impact of corporate performance on board performance especially in the structure of Boards of Directors and ownership. RandOy, Down, and Jenssen's research hypothesis was that Board ownership and independence have a positive influence on the financial performance of maritime firms (RandOy, Down, and Jenssen, 2003).

A probability, systematic sampling plan resulted in the data producing sample of 59 publicly traded maritime companies in Sweden and Norway. Financial statement analysis measurement criteria were used to measure the financial performance of selected companies. Financial statement analysis measurement criteria were divided into liquidity, asset management, debt management, profitability, and market value ratios (RandOy, Down, and Jenssen, 2003). Reliability and validity were established and data collection

procedures were clearly described. RandOy, Down, and Jenssen's findings supported their hypothesis and used multiple ordinary least-squares regression analysis to process the data analysis. Multiple ordinary least-squares regression analysis is a widely used and versatile dependence modeling technique applicable to business decision-making (RandOy, Down, and Jenssen, 2003).

RandOy, Down, and Jenssen's interpretation of their findings is that Board independence is associated with higher performance at maritime firms in Sweden and Norway. This led to the conclusion that Board performance has a significant positive relationship with financial performance and corporate governance. The implication is that improving board performance can lead to improved financial performance and corporate performance, and outsiders can comfortably rely on information provided by company leaders to make investment decisions.

RandOy, Down, and Jenssen's findings support agency theory. Strengths of RandOy, Down, and Jenssen's study are its clear hypothesis and variables in Board independence and financial performance, and selected reliable and valid measures of outcome variables which resulted in a generally high level of data quality, data analysis, and clearly defined procedures allowing replication. Limitations reported by RandOy, Down, and Jenssen are that the sample only included firms from the maritime industry, therefore, the results are difficult to generalize to other industries. Future studies should address these threats to external validity, followed by replication.

Trailer, Rechner, and Hill (2004) conducted a study about agency theory to examine public-private partnerships and to test agency theory in the United States. They used a non-experimental, causal comparative, quantitative design, of public-private partnerships. Trailer, Rechner, and Hill's literature review was thorough and current in comparing and contrasting theories about corporate governance. Empirical studies of agency theory were examined, leading to identification of an important gap in the literature about agency theory and conflict in multiple firms such as public-private partnerships. Trailer, Rechner, and Hill's research hypotheses were that the division of revenues between public and private organizations is Pareto optimal, and the structure of revenue appropriation that grants the public partner non-residual payments will not have a negative association with the operating efficiency of the partnership (Trailer, Rechner, and Hill, 2004).

A probability, systematic sampling plan resulted in the data producing sample of a group of private companies in partnership with universities. However, the sample size was not clearly described in the study. Reliability and validity were established, and data collection procedures were clearly described. Trailer, Rechner, and Hill's findings supported their hypotheses and they used a multiple regression model (MRM) to process the data analysis. Trailer, Rechner, and Hill used the Pareto optimality method to test their hypotheses. The optimality method is one that balances tradeoffs between the other stakeholders such that each party is made as well off as possible. Ultimately, tradeoffs exist such that past a certain point, one party can not benefit further unless another party becomes worse off (Trailer, Rechner, and Hill, 2004).

Trailer, Rechner, and Hill's interpretation of this finding is that agency problems exist in public-private partnerships. They concluded that a public organization has a responsibility to its own agent and also needs to ensure the best interests of its customers. Trailer, Rechner, and Hill's findings support agency theory. Strengths of the study

reported by Trailer, Rechner, and Hill are its clear hypotheses and variables in multiple public-private partnerships, and selected reliable and valid measures of outcome variables which resulted in a generally high level of data quality, data analysis, and clearly defined procedures allowing replication. The main limitation is that the sample size was not clearly stated, and that its results may not be generalizable to partnerships that are not non-public-private. Future studies should address these threats to external validity, followed by replication.

Stewardship Theory

In 2003, Desai, Kroll, and Wright published a study that examined American manufacturing firms with respect to stewardship theory and acquisition announcements. They used a non-experimental, causal comparative, quantitative study design. Desai, Kroll, and Wright's literature review was thorough and current in comparing and contrasting theories about stewardship and corporate governance. Empirical studies of stewardship theory and acquisition governance were examined, and the authors identified a gap in existing literature about corporate governance in organizations. Desai, Kroll, and Wright's research hypotheses were that the presence of CEO duality will be negatively associated with acquisition performance, and in the presence of CEO duality, the percentage of outside board members will be positively associated with acquisition performance (Desai, Kroll, and Wright, 2003).

A probability, systematic sampling plan resulted in the data producing sample of 149 publicly traded U.S. companies. The event-study methodology was used to measure the acquisition performance of selected companies, and they used cumulative abnormal returns analysis to estimate each acquiring firm. The event-study methodology is widely used for measuring the impact of various relevant events on the market value of corporations (Desai, Kroll, and Wright, 2003). Reliability and validity were established, and data collection procedures were clearly described. Desai, Kroll, and Wright's findings supported their hypotheses, and they used a multiple regression model (MRM) for data analysis. MRM is a widely used and versatile dependence modeling technique applicable to business decision-making (Desai, Kroll, and Wright, 2003).

Desai, Kroll, and Wright's interpretation of their findings is that outsider board ownership is positively related to the performance of the entire company after they make a major acquisition in the presence of CEO duality. These findings led to the conclusion that an independent leadership structure is more beneficial for acquisition performance. The implication is that, in the presence of CEO duality, monitoring through a Board of Directors populated by outsiders is another way to ensure owner-interested action. Desai, Kroll, and Wright's findings support stewardship theory. Strengths of Desai, Kroll, and Wright's study are its clear hypotheses and variables in corporate governance and acquisition performance, selected reliable and valid measures of outcome variables which resulted in a generally high level of data quality, data analysis, and clearly defined procedures allowing replication. Limitations reported by Desai, Kroll, and Wright are that the study did not include institutional investors, because they could affect the relationship between CEO duality and performance. Future studies should address these threats to external validity, followed by replication.

In 2004, Leng published a study that examined Malaysian publicly traded companies with respect to stewardship theory and corporate governance. He used a

non-experimental, causal comparative, quantitative study design. Leng's literature review was thorough and current in comparing and contrasting theories about corporate governance. Empirical studies of stewardship theory and corporate governance were examined, identifying a gap in the literature about corporate governance practices in the developing countries. Leng's research hypothesis was that there is some quality of corporate governance that leads to better financial performance (Leng, 2004).

A probability, systematic sampling plan resulted in the data producing a sample of 77 publicly traded companies in Malaysia. Financial statement analysis measurement criteria were used to measure the financial performance of selected companies. Financial statement analysis measurement criteria were divided into liquidity, asset management, debt management, profitability, and market value ratios (Leng, 2004). Reliability and validity were established, and data collection procedures were clearly described. Leng's findings supported the hypotheses, and he used multiple regression analysis for the data analysis. Multiple regression analysis is an extensively used and versatile dependence modeling technique applicable to business decision-making (Leng, 2004).

Leng's interpretation of his findings is that corporate governance does have a significant positive relationship on a company's financial performance. These findings led to the conclusion that companies with some quality of corporate governance have better financial performance. The implication is that improving corporate governance can lead to improved financial performance. As a result, outsiders can comfortably rely on information provided by company leaders to make investment decisions. Leng's findings support stewardship theory. Strengths of Leng's study are its clear hypotheses and variables in corporate governance and financial performance, as well as its reliable and

valid measures outcome variables which resulted in a generally high level of data quality and analysis and clearly defined procedures allowing replication.

Stakeholder Theory

In 1999, Luoma and Goodstein published a study that examined American publicly traded firms with respect to stakeholder theory and corporate performance. They used a non-experimental, causal comparative, quantitative study design. Luoma and Goodstein's literature review was thorough and current in comparing and contrasting theories about stakeholder performance. Empirical studies of stakeholder theory and corporate governance were examined, and the authors identified a gap in the existing literature about the effect of stakeholder and corporate performance on board composition and structure. Luoma and Goodstein's research hypotheses was that the Board of Directors of corporations in more highly regulated industries will have greater proportions of directors who are non-shareholder stakeholders, and Board of Directors of larger corporations will have greater proportions of directors who are non-shareholder stakeholders (Luoma and Goodstein, 1999).

A probability, systematic sampling plan resulted in the data producing sample of 224 publicly traded firms in United States (Luoma and Goodstein, 1999). Reliability and validity were established, and data collection procedures were clearly described. Luoma and Goodstein's findings supported the hypotheses, and they used logistic and hierarchical regression analyses to process the data analysis. These methods are appropriately and widely used when the dependent variable or independent variables are dichotomous in a study (Luoma and Goodstein, 1999).

Luoma and Goodstein's interpretation of their findings is that Board of Directors structure does have a significant relationship with highly regulated industries and organization size. These findings led to the conclusion that larger corporations, in particularly have greater proportions of stakeholder representation on their Boards. The implication is that more highly regulated industries and larger corporations have more proportions of stakeholder directors on their Board to monitor corporate performance. Luoma and Goodstein's findings support stakeholder theory. Strengths of Luoma and Goodstein's study are its clear hypotheses and variables in stakeholder director and board structure, as well as selected reliable and valid measures of outcome variables which resulted in a generally high level of data quality, data analysis, and clearly defined procedures allowing replication.

In 2003, Riahi-Belkaoui published a study that examined American manufacturing and service firms with respect to stakeholder theory and corporate governance. He used a non-experimental, causal comparative, quantitative study design. Riahi-Belkaoui's literature review was thorough and current in comparing and contrasting theories about stakeholders. Empirical studies of stakeholder theory and corporate governance were examined, and the author identified a gap in the existing literature about intellectual capital and US multinational firm performance. Riahi-Belkaoui's research hypothesis was that intellectual capital will positively affect financial performance (Riahi-Belkaoui, 2003).

A probability, systematic sampling plan resulted in the data producing sample of 100 manufacturing and service firms in United States. Financial statement analysis measurement criteria were used to measure the financial and non- financial performance

of selected companies. Financial statement analysis measurement criteria were divided into liquidity, asset management, debt management, profitability, and market value ratios (Riahi-Belkaoui, 2003). Reliability and validity were established, and data collection procedures were clearly described. Riahi-Belkaoui's findings supported the hypothesis, and he used a regression model for data analysis. The regression model is a widely used and versatile dependence modeling technique applicable to business decision-making (Riahi-Belkaoui, 2003).

Riahi-Belkaoui's interpretation of his findings is that intellectual capital does have a significant positive relationship on financial performance. This finding led to the conclusion that companies with good corporate governance concerning intellectual capital have significantly higher levels of financial performance. The implication is that improving governance of intellectual capital can create organizational wealth. Riahi-Belkaoui's findings support stakeholder theory.

Strengths of Riahi-Belkaoui's study are its clear hypothesis and variables in intellectual capital and multinational firms, and selected reliable and valid measures of outcome variables which resulted in a generally high level of data quality and analysis. Additionally, the study had clearly defined procedures allowing for replication. Limitations reported by Riahi-Belkaoui are that the author did not test samples of non-US firms. Future studies should address these threats to external validity, followed by replication.

In 2004, Dimovski and Skerlavaj published a study that examined Slovenian publicly traded companies with respect to stakeholder theory and corporate governance. They used a non-experimental, causal comparative, quantitative study design. Dimovski

and Skerlavaj's literature review was thorough and current in comparing and contrasting theories about corporate governance. Empirical studies of stakeholder theory and corporate governance were examined, identifying a gap in the literature about organizational performance and the influence of information communication technology. Dimovski and Skerlavaj's research hypotheses were that information and communication technology have a positive impact on financial performance, and that information and communication technology have a positive impact on non-financial performance (Dimovski and Skerlavaj, 2004).

A probability, systematic sampling plan resulted in the data producing a sample of 867 publicly traded companies in Slovenia. Financial statement analysis measurement criteria were used to measure financial and non- financial performance of selected companies. Financial statement analysis measurement criteria were divided into liquidity, asset management, debt management, profitability, and market value ratios (Dimovski and Skerlavaj, 2004). Reliability and validity were established, and data collection procedures were clearly described. Dimovski and Skerlavaj's findings supported their hypotheses, and they used structural equation model to process the data analysis (Dimovski and Skerlavaj, 2004).

Dimovski and Skerlavaj's interpretation of their findings is that there is a significantly positive relationship between information communication technology and financial performance. This led to the conclusion that a company using information communication technology can lead to better organizational financial performance. The implication is that a company using information communication technology can lead to better organizational financial performance. The implication is that a company using information communication technology can lead to better organizational financial performance.

and shareholder. Dimovski and Skerlavaj's findings support stakeholder theory.

Strengths of Dimovski and Skerlavaj's study are its clear hypotheses and variables in information communication technology and organizational financial performance, and selected reliable and valid measures of outcome variables which resulted in a generally high level of data quality and analysis, and clearly defined procedures allowing replication. Limitations reported by Dimovski and Skerlavaj are that there is a need to expand the sample, and future studies should address these threats to external validity, followed by replication.

Corporate Social Responsibility

In 2003, McGuire, Dow, and Argheyd published a study that examined American publicly traded firms with respect to corporate social responsibility and corporate performance. They used a non-experimental, causal comparative, quantitative study design. McGuire, Dow, and Argheyd's literature review was thorough and current in comparing and contrasting theories about corporate social responsibility. Empirical studies of corporate social responsibility and corporate performance were examined, and the authors identified a gap in existing literature about CEO incentives and corporate social performance. One of McGuire, Dow, and Argheyd's research hypotheses demonstrated the relationship between corporate governance and strong social performance, which is stronger for firms with a higher percentage of shareholders who are activist institutional investors (McGuire, Dow, and Argheyd, 2003).

A probability, systematic sampling plan resulted in the data producing sample of 374 publicly traded firms in United States. The Kinder, Lindenberg, and Domino (KLD)

database was used to measure corporate social performance of selected companies. The KLD database is a multidimensional corporate social performance database. There are four dimensions of the KLD database: employee, community, product, and environment, and each dimension has a scale rating from 0 (neutral) to 2 (significant strengths or weaknesses) used to evaluate firms (McGuire, Dow, and Argheyd, 2003). Reliability and validity were established, and data collection procedures were clearly described. McGuire, Dow, and Argheyd's findings supported their hypotheses, and they used multiple regression analysis to process the data analysis. Multiple regression analysis is a widely used and versatile dependence modeling technique applicable to business decision-making (McGuire, Dow, and Argheyd, 2003).

McGuire, Dow, and Argheyd's interpretation of their findings is that corporate governance does have a significant positive relationship on a company's corporate social performance. This led to the conclusion that companies with good corporate governance have a positive social performance. The implication is that improving corporate governance can lead to improved corporate social performance, and this positive social performance can interest more institutional investors. McGuire, Dow, and Argheyd's findings support the corporate social responsibility model. Strengths of McGuire, Dow, and Argheyd's study are its clear hypotheses and variables in corporate social performance and corporate governance, and selected reliable and valid measures of outcome variables which resulted in a generally high level of data quality and analysis, as well as clearly defined procedures allowing replication. Limitations reported by McGuire, Dow, and Argheyd are that this study did not examine the link between social strengths and weaknesses and firm performance. Future studies should address these threats to external validity, followed by replication.

In 2003, Snider, Hill & Martin published a study that examined global and American publicly traded firms with respect to corporate responsibility and corporate performance. They used a non-experimental, causal comparative, qualitative study design. Snider, Hill & Martin's literature review was thorough and current in comparing and contrasting theories about corporate responsibility. Empirical studies of corporate responsibility and corporate performance were examined, and the authors identified a gap in existing literature about corporate social responsibility in the 21st century. Snider, Hill & Martin's research question was, what is the content of issues within stakeholder groups that leading firms address on their websites regarding corporate social responsibility (Snider, Hill & Martin, 2003)?

A probability, systematic sampling plan resulted in the data producing sample of 100 global firms which included 50 U.S. firms. The grounded theory method was used to measure levels of information transparency of selected companies. The grounded theory method is a way to methodically collect and analyze data for the building of study (Snider, Hill & Martin, 2003). Reliability and validity were established, and data collection procedures were clearly described. Snider, Hill & Martin's findings supported the research question, and they used qualitative content analysis to process the data analysis (Snider, Hill & Martin, 2003).

Snider, Hill & Martin's interpretation of their findings is that this study discloses that both sets of organizations concentrate attention on a similar set of stakeholders and approximately the same corporate social responsibility issues. This led to the conclusion that the most successful firms in the US, and worldwide, concentrate more attention on

corporate social responsibility than other less successful firms do. The implication is that improving corporate social responsibility can lead to improved corporate performance and firm success in the United States and worldwide.

Snider, Hill & Martin's findings support the corporate social responsibility model. Strengths of Snider, Hill & Martin's study are its clear research question and purpose in corporate social responsibility and corporate performance, and selected reliable and valid measures, which resulted in a generally high level of data and data analysis, as well as clearly defined procedures allowing replication. The main limitation reported by Snider, Hill & Martin was that their qualitative study design did not include quantitative research, and as a result, researchers do not know how frequently identified CRS Model was disseminated. They suggested that future research use a quantitative methodology to test their conclusions.

In 2005, Flouris and Walker published a study that examined the U.S. aviation industry with respect to investor confidence and financial performance. They used a non-experimental, causal comparative, qualitative study design. Flouris and Walker's literature review was thorough and current in comparing and contrasting theories about investor confidence. Empirical studies of investor confidence and financial performance were examined, identifying a gap in the literature about the financial performance of full service airlines in times of crisis. Flouris and Walker's research question included, what is the content of issues within the aviation industry for lead investors who are interested in the companies' financial performance (Flouris and Walker, 2005)?

A probability, systematic sampling plan resulted in the data producing a sample of three major full service airlines in United States. Financial statement analysis

measurement criteria were used to measure financial and non- financial performance of selected companies. Financial statement analysis measurement criteria were divided into liquidity, asset management, debt management, profitability, and market value ratios (Flouris and Walker, 2005). Reliability and validity were established, and data collection procedures were clearly described. Flouris and Walker's findings supported the research question, and they used qualitative content analysis for data analysis.

Flouris and Walker's interpretation of their findings is that a company's financial performance has a positive relationship on investor confidence and interest. This led to the conclusion that companies with good financial performance, in particular profitability ratios, will have more interested investors. The implication is that improving financial performance can attract interested investors and regain their confidence in the stock market. Flouris and Walker's findings support the investor confidence model.

Strengths of Flouris and Walker's study are its clear research question and purpose about investor confidence and financial performance, selected reliable and valid measures which resulted in a generally high level of data and data analysis, and clearly defined procedures allowing replication. The main limitation reported by Flouris and Walker was that their qualitative study design did not include quantitative research, and as a result, the researchers do not know how frequently identified confidence massages were disseminated. They suggested that future research use a quantitative method to test their conclusions.

Efficient Market Hypothesis

In 2004, Fraser published a study that examined U.S. and Japanese investors with respect to the efficient market hypothesis model and their expectations. She used a non-experimental, causal comparative, quantitative study design. Fraser's literature review was thorough and current in comparing and contrasting theories about efficient market hypothesis. Empirical studies of efficient market hypothesis and investor behavior were examined, and she identified a gap in existing literature about how U.S. and Japanese investors process information, and how they form their expectations of the future. Fraser's research hypotheses were that both U.S. and Japanese investors will be pessimistic about their expectations for the future of the Dow Jones Industrial Average Stock Index and the Japanese Stock Index, if they do not offer timely corporate information to investors (Fraser, 2004).

A probability, systematic sampling plan resulted in the data producing a sample of institutional investors both of United States and Japan. A mailed questionnaire was used to gather information from selected investors. Reliability and validity were established, and data collection procedures were clearly described. Fraser's findings supported the hypotheses. She used multiple regression analysis to process the data. Multiple regression analysis is a widely used and versatile dependence modeling technique applicable to business decision-making (Fraser, 2004).

Fraser's interpretation of her findings is that stock market efficiency does have a significant relationship on investor expectations. This led to the conclusion that investor expectations will increase in efficient stock markets. The implication is that improving corporate governance and the efficiency of a stock market can lead to increased investor

expectations, and investors can comfortably rely on information provided by company leaders to make investment decisions. Fraser's findings support the market efficiency hypothesis. Strengths of Fraser's study are its clear hypotheses and variables in stock market and investor expectations, selected reliable and valid measures of outcome variables, which resulted in a generally high level of data and data analysis, and clearly defined procedures allowing replication. Limitations reported by Fraser are that the study did not state the biased nature of expectations. The researcher should avoid bias in the survey. Also, the author did not clearly state the sample size and how the sample was selected in the study. Future studies should address these threats to external validity, followed by replication.

Christopherson and Greqoriou (2004) published a study that examined an American publicly traded firm with respect to the efficient market model and corporate performance. They used a non-experimental, causal comparative, quantitative study design. Christopherson and Greqoriou's literature review was thorough and current in comparing and contrasting theories about efficient market hypothesis. Empirical studies of efficient market hypothesis and corporate governance were examined, and they identified a gap in existing literature about lagged factors affecting Berkshire Hathaway returns. Christopherson and Greqoriou's research hypotheses were that there is negative relationship between high-grade corporate bonds and Berkshire's returns, and there is a positive relationship between low-grade corporate bonds and Berkshire's returns (Christopherson and Greqoriou, 2004).

A probability, systematic sampling plan resulted in the data producing a sample of Berkshire Hathaway which is listed NYSE and ranked in the Fortune 500. Fifty

macroeconomic variables and market factors were used to survey the organizational performance of the company. Reliability and validity were established, and data collection procedures were clearly described. Christopherson and Greqoriou's findings supported the hypotheses. They used multiple regression analysis to process data. Multiple regression analysis is a widely used and versatile dependence modeling technique applicable to business decision-making (Christopherson and Greqoriou, 2004).

Christopherson and Greqoriou's interpretation of their findings is that there is a negative relationship between high-grade corporate bonds and Berkshire's return, and there is a positive relationship between low-grade corporate bonds and Berkshire's return. This led to the conclusion that Berkshire's returns can be predicted not only from value stocks but also from mid cap growth stocks. Christopherson and Greqoriou's findings support the efficient market theory. Strengths of Christopherson and Greqoriou's study are its clear hypotheses and variables, selected reliable and valid measures of outcome variables, which resulted in a generally high level of data quality and analysis, and clearly defined procedures allowing replication. Limitations reported by Christopherson and Greqoriou are that the sample only included one unique company; therefore, results are difficult to generalize to other industries and companies. Future studies should address these limitations and replicate the study for other firms.

Investor Behavior

Reasoned Action Theory

Uddin and Gillett (2002) published a study that examined U.S. publicly traded firms with respect to reasoned action theory and the behavior effect of moral reasoning. They used a non-experimental, causal comparative, quantitative study design. Uddin and Gillett's literature review was thorough and current in comparing and contrasting reasoned action theories. Empirical studies of reasoned action theory and the behavior effect of moral reasoning were examined, and they identified a gap in existing literature about the effects of moral reasoning and self-monitoring on CFO intentions to report fraudulent information on financial statements. Uddin and Gillett's research hypothesis were that high moral reasoners are more influenced than low moral reasoners by their own attitude towards the behavior. (Uddin and Gillett, 2002).

A probability, systematic sampling plan resulted in the data producing a sample of 2,000 which was drawn from the population of U.S. publicly traded firms. Survey questionnaires were used to collect data about the reasoned actions of selected companies. Reliability and validity were established, and data collection procedures were clearly described. Uddin and Gillett's findings supported the hypothesis. They used multiple regression analysis for data analysis. Multiple regression analysis is a widely used and versatile dependence modeling technique applicable to business decision-making (Uddin and Gillett, 2002).

Uddin and Gillett's interpretation of their findings is that companies with a CFO with high self-monitoring behavior are more disciplined than low self-monitors. Uddin and Gillett's findings support reasoned action theory. Strengths of Uddin and Gillett's

study are its clear hypotheses and variables in reasoned action and moral behavior, selected reliable and valid measures of outcome variables which resulted in a generally high level of data quality and analysis, and clearly defined procedures allowing replication. Limitations reported by Uddin and Gillett are that the sample was only 7% of selected companies. Future studies should address these threats to external validity, followed by replication.

In 2003, Carpenter, Pollock, and Leary published a study that examined U.S. high-technology IPOs with respect to reasoned action theory. They used a non-experimental, causal comparative, quantitative study design. Carpenter, Pollock, and Leary's literature review was thorough and current in comparing and contrasting theories about reasoned action. Empirical studies of reasoned action theory were examined, and they identified a gap in the existing literature about the experience of governance, principals, and global strategy in IPO firms. Carpenter, Pollock, and Leary's research hypotheses were that there is a positive relationship between firm internationalization and top management team's global experience, and that there is a positive relationship between firm internationalization and outside Board members' global experience (Carpenter, Pollock, and Leary, 2003).

A probability, systematic sampling plan resulted in the data producing a sample of 256 high-technology IPOs in United States. Survey questionnaires were used to collect data about the reasoned actions of selected companies. Reliability and validity were established, and data collection procedures were clearly described. Carpenter, Pollock, and Leary's findings supported their hypotheses, and they used the multiple regression model (MRM) to process the data. MRM is a widely used and versatile dependence

modeling technique applicable to business decision-making (Carpenter, Pollock, and Leary, 2003).

Carpenter, Pollock, and Leary's interpretation of their findings is that firm internationalization does have a significantly positive relationship with top management team's experience. This led to the conclusion that a top management team with global experience has a significantly positive relationship with a firm's internationalization. Carpenter, Pollock, and Leary's findings support reasoned action theory. Strengths of Carpenter, Pollock, and Leary's study are its clear hypotheses and variables in internationalization and corporate performance, selected reliable and valid measures of outcome variables which resulted in a generally high level of data quality and analysis, and clearly defined procedures allowing replication. Limitations reported by Carpenter, Pollock, and Leary are that the sample only included high-tech companies in the United States. Future studies should address these limitations of external validity, followed by replication.

The gap in this literature review is that some researchers have asserted that greater financial transparency addresses investor needs, enhancing investor satisfaction, and leading to greater public confidence in financial markets. However, there is little empirical research to support this claim. Although some researchers have discussed and examined relationships among financial transparency and investor behavior and positive investor confidence, no study has yet observed any correlation between investor trading behavior and the transparency of disclosure information in the Taiwan stock market. Therefore, additional study in this area is needed to discover if greater financial

transparency in companies listed on the Taiwan stock market is positively correlated with improved investor confidence in the Taiwan stock market.

In order to fill this gap the research will explore the relationship between financial information transparency and investor behavior in the Taiwan Stock Market. The results of this study may have a contribution for corporations, investors, and the other researchers. Corporations may benefit greatly by identifying the most important factors of investors' decisions. Investors may benefit greatly by financial information transparency survey. Other researchers may benefit by duplicating this study and finding other factors based on this study.

Summary and Interpretations

The purpose of this review was to explore existing theoretical and empirical literature about the effects of the transparency of business financial information on investor confidence, and to examine the relationship between corporate governance and investor confidence. A general consensus exists that financial information transparency and disclosure will directly affect investor confidence and stock market efficiency. Improving corporate governance and regulations will help improve investor confidence in stock markets.

Theoretical Literature

Financial Information Transparency

In 1973 Spence developed signaling theory, which presented the idea that unbalanced information exists in current financial markets which may create potential

risks for those using the information (Bhattacharya, 1979; Chen, 1999; Chiang, 2005; Leland & Pyle, 1977; Poitevin, 1990; Ravid & Saring, 1991). Anonymous (1999) and Holzner and Holzner (2002) further segmented financial transparency into clarity, clearness, and comprehensibility, and they asserted that excellent corporate governance was reflected by good information transparency. Recent financial scandals were caused by lack of financial transparency, unethical behavior and imperfect regulations (Hanson, 2003; Holzner et al., 2002).

Financial Information Disclosure Requirements

Vishwanath and Kaufmann (2001) created a model to measure information disclosure. This model assesses information using three factors: accessibility, relevance, and quality and reliability. Accessibility was measured by businesses' communication of financial information to the shareholders and stakeholders. Relevance was measured by whether a company provided appropriate information to shareholders and stakeholders. Quality and reliability were described in that a company needed to provide effective, clear, and simple information to shareholders and stakeholders (Vishwanath, & Kaufmann, 2001). A company publishing financial information to shareholders and stakeholders and stake

Agency Theory

The original concept of agency theory was developed for the insurance industry to explain the behavior of employer-contractor and employer-employee relationships

(Spence & Zeckhauser, 1971; Ross, 1973). This concept was soon generalized to other industries (Jenson & Meckling, 1976; Harris & Raviv, 1978). The agency problem is a principle of agency theory which is described as when all shareholders own small percentages of the capital of a firm so that they lack power and influence to acquire information and directly oversee the management (Monks, 1994; Hawley & Williams, 1996).

Stewardship Theory

The roots of stewardship theory were developed by Donaldson in 1985 who integrated psychological and sociological and behavioral systems (Boyd, 1995; Donaldson & Davis, 1991). Desai, Kroll, and Wright (2003) extended stewardship theory to explain a manager duality structure. According to stewardship theory, more regulated firms were more likely to have outsiders on their Boards to reassure stakeholders about corporate performance.

Stakeholder Theory

Stakeholder theory was developed by Freeman in 1984, providing a significant contribution to both modern financial management and corporate governance. The American Law Institute (1992) defined stakeholder groups to include employees, customers, suppliers, and community members with legitimate concerns about a corporation (Freeman, 1994). Building upon Freeman's stakeholder theory, Hill and Jones (1992) and Blair (1995) explained that there is a contract between managers and stakeholders in certain aspects of firm. Stakeholders enforce and monitor company managers to create maximum wealth for stakeholders, and this behavior positively interacts between manager and stakeholders to create win-win situation.

Corporate Social Responsibility

Jackson (2003) developed a model to explain the impact of investor decisions on corporate performance. This model includes two concepts: internal and external conditions. Internal conditions refer to the training and education of those who use such information. External conditions refer to the economic environment and regulations or rules (Jackson, 2003).

The model of corporate social responsibility was developed by Epstein in 1987 to examine corporate social responsibility and corporate performance (Epstein, 1987). Ross (2000) and Waring and Lewer (2002) extended this model to assert that positive social responsibility by a corporation will attract investor interest.

Efficient Market Hypothesis

An important and famous theory is Fama's Efficient Market Hypothesis (EMH). This model is widely utilized in financial markets and it describes markets as having three efficiency categories: strong efficiency, semi-strong efficiency, and weak efficiency (Chen, 1999; Sarno & Thornton, 2004). Timely information disclosures are positively motivating the stock market toward efficiency (Malkiel, 1992; Sarno et al., 2004).

Building upon previous work, Jackson (2003) developed a model of internal and external conditions to explain efficient markets. There are two groups in this model, an experts group and an average investor group. The experts group usually translates and analyzes information for the average investor group in the stock market. The average investor group acts when it receives advice provided by the expert group. This model provides additional valuable explanations for market efficiency.

Reasoned Action Theory

Ajzen and Fishbein (1980) developed the seminal theory for the prediction of human behavior intentions. This theory integrates physiological, psychological, and behavioral systems. They explained their reasoned action model in that humans often organize their behavior by intention (the original determination in their mind) and transfer this determination to their action. Burnkrant and Page (1988) extended the reasoned action model to apply to business. They asserted that there is a positive relationship between corporate performance and investor behavior. In support of reasoned action theory, Gillett & Uddin, (2002) explained that corporate attitudes and investor attitudes are expected to be strongly correlated. A positive corporate attitude will directly motivate investors' attitudes as well as affect their behavior and actions in the stock market. Negative corporate attitudes may lead investors to reconsider a stock's inclusion in their portfolios.

Empirical Literature

Financial Information Transparency

In 2004, Born, Giaccotto and Ritsatos published a study that examined the American insurance industry with respect to signaling theory and financial information transparency. They found that corporate wealth had a significant positive relationship on a company's stock repurchase announcement in the open market, and that regulations and monitoring have positively reduced the degree of information asymmetry between insurers and investors when compared to non-regulated industries. The implication is that improving corporate governance can lead to improved information asymmetry between

insurers and investors.

Chiang's 2005 study of 225 Taiwanese high-tech industry firms found that corporate transparency has a significant positive relationship on a company's operating performance. His conclusion is that improving corporate governance can lead to improved corporate performance, and outsiders' comfort with information provided by company leaders for investment decision supports theories of transparency.

Financial Information Disclosure Requirements

In 2001, Gelb and Strawer published a study that examined 223 American publicly traded firms with respect to information disclosure and financial information transparency. Their findings are that both corporate social responsibility and financial disclosure have a significant relationship on investor concern. This led to the conclusion that companies with disclosure quality will positively maintain investor relationships.

In 2003, Rezaee, Olibe and Minmier published a study that examined 100 American publicly traded firms with respect to financial information disclosure and corporate governance. Their findings are that audit committee performance does have a significant positive relationship with corporate governance and financial disclosure. This led to the conclusion that companies with strong audit committee performance will improve corporate governance. The implication is that improving corporate governance can lead to improved corporate performance, and outsiders can more comfortably rely on information provided by the company to make investment decision.

Agency Theory

In 2000, Shaw, Gupta, and Delery published a study that examined the United States' trucking industry with respect to agency theory. They concluded that when stakeholders more closely monitor the company, there are positive influences on the compensation system in the trucking industry.

In 2003, RandOy, Down, and Jenssen published a study that examined maritime firms in Sweden and Norway with respect to agency theory and corporate governance. They found that Board independence was associated with better firm performance which led to the conclusion that board independence has a significant positive relationship with financial performance and corporate governance. The implication is that improving board independence can lead to improved financial performance and corporate performance, and outsiders can comfortably rely on information provided by company leaders to make investment decision.

Trailer, Rechner, and Hill (2004) conducted a study about agency theory to examine public–private partnerships and test agency theory in the United States. Their findings are that agency problems exist in the public-private partnerships. They concluded that a public organization has a responsibility to its own agent and also needs to ensure the best interests of its customers. There are a significant number of empirical studies supporting agency theories.

Stewardship Model

In 2003, Desai, Kroll, and Wright published a study that examined American manufacturing firms with respect to stewardship theory and acquisition announcements. Their findings are that outsider board participation positively related to acquisition firm performance in the presence of CEO duality. These findings led to the conclusion that independent leadership structures are more beneficial for acquisition performance. The implication is that in the presence of CEO duality, monitoring through the outside Board

of Directors is another way to ensure owner-interested action. Desai, Kroll, and Wright's findings support stewardship theory.

In 2004, Leng's study about Malaysian publicly traded companies also supported stewardship theory by finding that corporate governance has a significant positive relationship on a company's financial performance. These findings led to the conclusion that companies with some quality corporate governance leads to better financial performance. The implication is that improving corporate governance can lead to improved financial performance, and outsiders can comfortably rely on information provided by company leaders to make investment decision.

Stakeholder Model

In 1999, Luoma and Goodstein published a study that examined U.S. publicly traded firms with respect to stakeholder theory and corporate performance. They found that the Board of Directors structure has a significant relationship with highly regulated industries and organizational size. Their findings led to the conclusion that highly regulated industries and larger corporations have greater proportions of stakeholder directors on their Boards to monitor corporate performance.

In 2003, Riahi-Belkaoui published a study that examined American manufacturing and service firms with respect to stakeholder theory and corporate governance. His findings were that intellectual capital has a significant positive relationship on financial performance and that improving intellectual capital governance can lead to organizational wealth creation.

Dimovski and Skerlavaj's 2004 study examining Slovenian publicly traded companies found a significant positive relationship between information communication

technology and firm financial performance. These studies all support stakeholder theory.

Corporate Social Responsibility

In 2003, McGuire, Dow, and Argheyd published a study that examined U.S. publicly traded firms with respect to corporate social responsibility and corporate performance. Their findings that corporate governance had a significant positive relationship on corporate social performance led to the conclusion that improving corporate governance can lead to improved corporate social performance, stimulating interest by institutional investors.

In 2003, Snider, Hill & Martin examined global and U.S. publicly traded firms to find that both sets of organizations concentrated on similar sets of stakeholders and corporate social responsibility issues. They concluded that the most successful U.S. and overseas firms concentrate more on corporate social responsibility than less successful firms do. The implication is that improving corporate social responsibility can lead to improved corporate performance.

Flouris and Walker's 2005 study examined the American aviation industry with respect to investor confidence model and financial performance. Their findings that positive financial performance, in particular, profitability is attractive to investors and that improving financial performance can lead to more interested investors and regained market confidence support investor confidence theory.

Efficient Market Hypothesis

In 2004, Fraser published a study that examined American and Japanese investors with respect to efficient market hypothesis model and their expectations. Her findings were that stock market efficiency has a significant relationship with investor expectation which led to the conclusion that investor expectations will increase with efficient stock markets. Improving corporate governance and stock market efficiency can lead to increased investor expectations.

Christopherson and Greqoriou's 2004 study found that there is negative relationship between high-grade corporate bonds and Berkshire's return, and there is a positive relationship between low-grade corporate bonds and Berkshire's return. This led to the conclusion that Berkshire's returns can be predicted not only from value stocks but also from mid cap growth stocks, supporting the efficient market hypothesis.

Reasoned Action Theory

Uddin and Gillett's 2002 study supported reasoned action theory by finding that high moral reasoners are more influenced than low moral reasoners by their own attitude towards a specific behavior. Carpenter, Pollock, and Leary's 2003 study about U.S. recently IPO'ed high-technology firms also supported reasoned action theory in its findings that firm internationalization has a significant positive relationship with top management's global experience.

Theoretical Framework for the Study

The major theories that guide this study consist of signaling theory developed by Spence (1973), and reasoned action theory developed by Ajzen and Fishbein (1980). The theoretical literature begins with the concept of financial information transparency, corporate governance, corporate social responsibility, market efficiency, and investor behavior, which is the major area for this study. The theoretical literature emphasizes two major arenas- financial information transparency and investor perception. A schematic model (see Figure 1) depicts the relationships among the major theories and variables in this study.

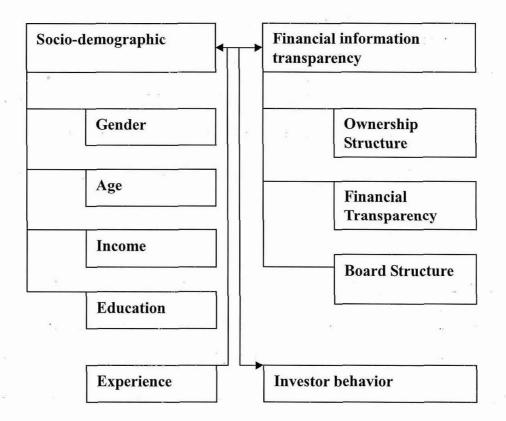


Figure 1: Schematic model of variables in this study.

The gap in this literature review is that there is little empirical research to support the relationship between financial information transparency and investor behavior, especially in the Taiwan stock market. Therefore, additional study in this area is needed to discover if greater financial transparency is positively correlated with improved investor confidence and investor behavior in the Taiwan stock market. In order to fill this gap, the researcher explored the relationship between financial information transparency and investor behavior in the Taiwan Stock Market. The results of this study may have contributions for corporations, investors, and other researchers. Chapter 3 presents the methodology used to answer the research question and explanatory hypothesis.

CHAPTER III

RESEARCH METHODOLOGY

Introduction

Chapter three presents a description of the methodology for this study, which focuses upon the impact of financial information transparency on investor behavior. The research questions and hypotheses which appear in Chapter I and Chapter III evolve from gaps in the literature. The main purpose of this study is to assess stock market investors' feelings, thoughts, and attitudes about the financial information transparency.

Research Design

Research Questions and Hypothesis

The aim of this study is to explore the key factors that explain the impact of financial information transparency on investor behavior in Taiwanese companies that are listed on the Taiwan Stock Exchange (TSEC). This research study proposes a theoretical framework based on the modified theory of Gillett and Uddin's study (2002) that includes corporate governance and corporate performance to explain how financial information transparency may influence investor behavior.

Research Questions

The major research questions that were addressed by this study are as follows:

 Is there a relationship between TSEC investor perceptions of dimensions of financial information transparency and investor behavior in the Taiwan Stock Market?

- 2. Are there differences in TSEC investor perceptions of each dimension of financial information transparency according to demographic variables?
- 3. Are there differences in TSEC investor behavior according to different categories of investor experience?

Hypothesis

The following hypothesis guided the research of this study:

H: TSEC investor perceptions of financial information transparency dimensions, investor demographic, and investor experience are significant explanatory variables of investor behavior in the TSEC.

In order to answer the research questions and test the hypothesis, the research focused on eight independent variables and one dependent variable.

Quantitative Method Approach

The five research questions lead to the development of a non-experimental survey research study. The research design employed a mixed method approach using 19 closed-ended questions, plus one open-ended question on a survey instrument. Baker (1999) declared that quantitative research seeks to establish facts, make predictions, and test hypotheses that have already been stated. Babbie (2002) defined the difference between qualitative and quantitative data as, "quantitative data are numerical data; qualitative data are not." (p.39). Anderson and Kanuka (2003) explained that quantitative methods allow researchers using a variety of mathematical techniques to investigate the relationship between the data in descriptions, correlations, significant differences, or

multivariate relationships. Analysis is the process that attempts to find answers from collecting data.

Due to the character of quantitative research, certain types of research that study the preferences, practices, attitudes, or interests of some groups of people are more likely to be carried out by this method, rather than the methods involved in qualitative research (Creswell, 2002). Generally speaking, the aim of quantitative research methodology is to determine whether a particular population shares certain characteristics in common.

Definition of Terms

There are a total of nine variables used in this study, which include one dependent variable and eight independent variables. The definitions of each variable are as follows:

Independent variables:

Demographic variables:

- *Age*: In this research study, age is divided into four groups: 18-30 years, 31-45 years, 46-60 years, and more than 60.
- Gender: In this research study, gender is divided into two groups: males and females.
- *Education level*: In this research study, education level is divided into four groups: high school degree or under, 2 years college degree, Bachelors degree, and Masters degree or above.
- *Annual income*: In this research study, annual income is divided into four groups: less than 10,000 USD, 10,000 to 25,000 USD, 25,001 to 35,000 USD, and more than 35,000 USD.

Experience of buying shares: In this research study, buying shares experience is divided into three groups: less than 4 years experience, 4 to 9 years experience, and more than 9 years experience.

Financial information transparency *(FIT)*: The financial information transparency measurement criteria were divided by S&P in transparency of ownership structure, investor relations, financial transparency, information disclosure, and board structure. There were 98 criteria with 98 points in five categories, and one point was awarded to each company that met the criteria (S&P's company, 2002, Chiang, 2005). Based on abovementioned descriptions, the researcher defined FIT in this study as: FIT is the persuasion of investors by using logic in the stock market. This study focuses on annual reports and corporation websites, such as Botosan (1997) stated "Although the annual report is one means of corporate reporting, it should serve as a good proxy for the level voluntary disclosure provided by a firm across all disclosure avenues. This is because annual report disclosure levels are positively correlated with the amount of disclosure provided via other media (Lang, and Lundholm, (1993)). The annual report is the focus of my disclosure index because the annual report is generally considered to be one of the most important sources of corporate information."(p.323).

Sub-independent variables:

Financial information transparency (FIT): there are three sub-variables under FIT (ownership structure and investor relations, financial transparency and information disclosure, and Board and management structure and process):

- 1. Ownership structure and investor relations (OSIR): Understanding the ownership structure of the company is essential, especially when there is a known majority holder or when the majority holdings may exist on the basis of collusive shareholding arrangements. Similarly, the existence of a large number of nominee shareholders will make any analysis of the concentration of share ownership difficult. The researcher defined ownership structure and investor relations in this study as: the number of transparency criteria of ownership and investor's relations.
- 2. Financial transparency and information disclosure (FTID): Transparency involves the timely disclosure of adequate information concerning a company's operating and financial performance and its corporate governance practice. For a well-governed company, standards of timely disclosure and transparency are high. The researcher defined FTID in this study as: the number of transparency criteria of financial transparency and information disclosure / total number of transparency criteria of financial transparency and information disclosure.
- 3. Board and management structure and process (BMSP): Board structure and process addresses the role of the corporate Board and its ability to provide independent oversight of management performance and hold management accountable to shareholder and other relevant stakeholders. The researcher defined BMSP in this study as: the number of transparency criteria of Board and management structure and process / total number of transparency criteria of

Board and management structure and process.

Dependent Variable

Investor Behavior:

Ajzen and Fishbein (1980) developed the seminal theory for the prediction of human behavior intentions. This theory integrates physiological, psychological, and behavioral systems. They explained their reasoned action model in that humans often organize their behavior by intention (the original determination in their mind) and transfer this determination to their action. Donaldsom and Davis (1994) extended the reasoned action model to apply to business. They asserted that there is a positive relationship between corporate performance and investor behavior. In support of reasoned action theory, Uddin and Gillett, (2002) explained that corporate attitudes and investor attitudes are expected to be strongly correlated. A positive corporate attitude will directly motivate investors' attitudes as well as affect their behavior and actions in the stock market. Negative corporate attitudes may lead investors to reconsider a stock's inclusion in their portfolios.

According to these definitions of each variable above, the research design will include an appropriate closed-end 1 to 9 Likert scale of survey questions to evaluate the relationships among the variables. These variables will be measured using an Investment Behavior Questionnaire, developed by the researcher.

Procedure

All procedures of this study were described in explicit terms so that other researchers will be able to replicate the study. For this study, the researcher defined the research questions to be answered, and than designed an appropriate questionnaire to measure all of the variables. The content validity of the questionnaire will be based on a review of relevant literature, and incorporation of ideas from dissertation committee members.

The criterion for selection in this study is that only the respondents who have previous experience with buying shares in TSEC will be included in this survey. Participation in this survey was completely voluntary. Participants could withdraw from the survey at any time without specifying the reasons. The aim of this survey was to help the researcher to identify the critical factors that may explain the impact of financial information transparency on investor behavior in Taiwan Stock Exchange.

The research study employed the following procedures to conduct this investigation:

1. This research used closed-end questions with 1 to 9 Likert scale response designed for every question in the questionnaire. Survey instructions to participants were as follows: In answering all of the questions, the respondents were requested to use a scale from 1 to 9 where 1 means" very strongly disagree", 5 means "neither agree nor disagree", and 9 means "very strongly agree". Write a number in the space provided that best indicates respondents' feeling about the question.

2. The research includes one open-ended question, at the end of questionnaire, to

ensure that respondents had the full opportunity to express their comments and suggestions for this survey.

- 3. As all respondents were Chinese, the questionnaire was translated from English into Chinese by using the reverse-translation method with an official endorsement from an expert who is fluent in both the Chinese and English languages to ensure the consistency of the questionnaire. The certificate letter for the translation of questionnaire is provided.
- 4. Current research protocols require that all dissertation designs must be approved by the University's Institutional Review Board (IRB) for research concerning human subjects. After the study was approved by the Lynn University Institutional Review Board (IRB), this survey was conducted with investors in TSEC.
- 5. This survey selected investors from the stock market in Taiwan. This questionnaire collected quantitative data from investors who have experience with buying shares at TSEC in Taiwan.
- 6. The whole procedure of responding to this survey is totally anonymous. The conduct of this survey took approximately one week, from December 12, 2005 to December 18, 2005. There was no compensation offered to study volunteers. This research intended to recruit a minimum of 300 participants, based on the principle that a valid statistical analysis will need to look for about 5 to 10 responses in each of the major sub-categories of the sample for this study.
- 7. After getting all responses from participants, the researcher developed a database structure which integrated the data for this study. The researcher will

keep all the information that participants provided completely confidential.

8. The statistical techniques for data analysis include descriptive, correlation, independent sample t-test, one-way ANOVA analysis, and multiple regression analyses. For this study, the level of confidence indicating statistical significance was $p \leq .05$. The procedures were as follows: (1) the data was analyzed in a standard SPSS statistical program and a simple descriptive analysis was run. (2) the study used correlation analysis to examine the relationship between variables. (3) multiple regression analysis was used to interpret relationships among variables.

9. Finally, the researcher will interpret and discuss the results of all the data analyses, and make conclusions and recommendations for the study.

Ethics

Ethical behavior in educational research is in large part a personal matter, and researchers have the ethical responsibility to protect the anonymity of participants (Creswell, 2002). Babbie (1991) stated "the fundamental ethical rule of social research is that it brings no harm to research subjects." (p.38).

In this study, the survey was distributed by the researcher to those who have previous experience with investing or buying shares in companies listed on the Taiwan Stock Exchange. In order to address ethical issues, a brief introduction was included in the beginning of the questionnaire to explain the purpose of this research to participants, and offer respondents an extended opportunity to ask questions.

The potential participants were approached by the researcher outside of an

underwriter's office and were provided with an explanation of the research. If they were interested in participating, they were provided an Informed Consent letter, and questionnaire. By completing the survey, the participant gave their consents. When the survey was completed by the participants, the researcher collected the questionnaires. The participants did not write any identifier on the questionnaire and no one can identify the respondents from this survey. Participation in this survey was totally voluntary, they could stop answering the questions or withdraw in the survey at any time. The whole process of participation in this survey was completely anonymous and voluntary. A participant was not requested to mention or write his/her name on the questionnaire. Therefore, there is no way for the researcher to know who provided the responses. The whole procedure was to guarantee respondents' anonymity and they were free to discontinue participation at any time.

In this survey, human rights and data protection regulation are guaranteed by the researcher. Confidentiality of survey data will be maintained and stored in the researcher's personal database pool. The data will be saved no longer than one year from when the study is completed and no one can access the researcher's personal database pool except the researcher.

Instrumentation

Introduction

One instrument was used for the collection of the questionnaire data: *The Investor Behavior Questionnaire*, which includes a demographic profile (see Appendix A), developed by the researcher. There were a total of 20 questions. An Information and

Informed Consent Statement for Participants also explained the purpose of the study and the aim of this survey to potential participants. The researcher conducted this survey using a sample of investors who have previous experience with buying shares in TSEC.

The demographic profile portion of the questionnaire was constructed by the researcher, and was intended to provide background information on each individual in the study. The questionnaire asked for information such as: age, gender, and highest level of education. The demographic statistics enabled the researcher to examine the impact of demographic characteristics of the investors on their investment behavior. A survey with a closed-ended 1 to 9 Likert scale questionnaire was developed and employed to rate the impact of an information transparency on investor behavior.

Rationale of Selecting Instrument

Baker (1999) explained survey research as: "a research method that analyzes the responses of defined sample to a set of questions measuring attitudes and behaviors." (p.505). Babbie (1991) identified that a survey design is to provide a quantitative or numeric description of attitudes, opinions, or trends of a population by investigating a sample of the population. Surveys represent one of the most common types of quantitative, social science research. The objective of a survey is to employ questionnaires or interviews to gather data from a sample that has been chosen to demonstrate a population to which the findings of the data analysis may be generalized (Anderson & Kanuka, 2003).

The major benefit of survey research is that it presents all subjects with a standardized stimulus, and can eliminate to a large degree unreliability in the researcher's

observations (Anderson & Kanuka, 2003). On the other hand, the disadvantage of survey research is that researchers must develop questions general enough for all respondents. However, it is not possible to deal with the context, under which the respondents make their choices (Babbie 1991).

Development of the Questionnaire

Questionnaires are employed widely in educational research to gather data about phenomena that are not easily observable. Dillman (2000) explained that when designing a survey, a researcher has to make decisions such as whether they would like to employ an oral or written method, and whether they prefer open or close-ended questions. Questionnaire methodology is to ask the same questions to all participants in the sample. Participants write down a response to each questionnaire item (Babbie 1991). In this study, the researcher will employ a questionnaire method and choose close-ended questions along with one open-ended question.

The purpose of writing a survey is to develop a written set of questions for the respondents, and make every participant interpret these questions in the same way (Babbie 1991). Researchers need to be careful with regard to the type, content, wording, and order of the questions that are included in a questionnaire (Dillman, 2000).

There are several reasons for the researcher to select a questionnaire type of survey design in this study.

1. The cost of survey questionnaires is relatively lower than through a one-to –one interview process.

2. Standardized questions can help the researcher make precise measurements and

results which are easy to interpret by statistical analysis.

- 3. The time required to gather the data is less than resorting to the interview technique.
- 4. Many questions can be asked about a given topic and a large sample size is possible.

Many factors need to be considered when creating a questionnaire. This research followed four procedures (determine the questions to ask, select the question format, design the wording of questions, determine the order of questions), proposed by Fong (2004), to build a valid questionnaire instrument:

- 1. Determine the Questions to Ask: The aim of this study was to investigate the critical factor of financial information transparency that effects investor behavior in the Taiwanese Stock Exchange. This study was interested in analyzing investor attitudes and perceptions about information transparency using a classic reasoned action theory approach. The questions helped this research study to successfully obtain the answers of its research inquiries. In addition, questions should be precise, and not ambiguous in order to receive specific feedback from participants. Therefore, this questionnaire was expected to complete the purpose of this study.
- 2. Select the Question Format: A questionnaire can be either open form or closed form. It depends on the objective of the question. The researcher decided to use closed-ended questions with a 1 to 9 Likert scale response for each question in the questionnaire. In this research also was included one open-ended question at the end of survey to collect qualitative data. There are three techniques

employed in designing the questionnaire, there are closed-ended question, 1 to 9 Likert scale, and one open-ended question. The purpose of selecting this questionnaire format was to obtain a wider range of replies from participants.

- 3. Design the wording of questions: The general rule is to keep questions as simple and straightforward as possible (Fong, 2004). The researcher also considered the following rules to create the wording of questions: (1) avoid biased or leading questions, (2) avoid double-barreled questions, (3) avoid questions involving confusion, ambiguity, and negatives, (4) avoid questions involving personal privacy, and (5) avoid asking questions that are beyond the scope of the study.
- 4. Determine the Order of Questions: Burgess (2001) stated that questionnaires should be kept logical and short. Illogically-ordered and longer questionnaires may result in lower response rates. In this research, the researcher kept the questionnaires logical, short, and easy for respondents. The purpose of this design is to improve response rates by easy-to –answer formats and respondent-friendly questionnaire. The researcher also arranged similar questions together for participants replying to the questionnaire. Additionally, in order to avoid participants feeling uncomfortable with providing personal information to strangers at first, the researcher placed demographic questions near the end of the questionnaire.

Construction of the Questionnaire

The survey used for this study is based on the Reasoned Action Theory. The questionnaire included an Information and Informed Consent Statement and an Investor : Behavior Questionnaire developed by the researcher (see Appendix A). The Information and Informed Consent Statement includes a brief explanation of the objective of the survey, the confidentiality of respondents' information, and instructions on completing the survey. The researcher's personal contact information was offered to assure respondents that they could ask questions or request further information about this research study.

The questionnaire is composed of 20 questions. Questions 1 to 14 pertained directly to the influence of three elements (financial information transparency, social responsibility and investor behavior) in the Taiwan Stock Market. There are a total of nine questions for financial information transparency and disclosure, one question for corporate social responsibility and four questions for investor behavior. Questions 11 to 14 are designed to survey investor behavior of the sample. Questions 15 to 19 are directed to the participants' demographic information, such as: gender, age, education level, attending stock market experience, and annual income. The last question is an open-ended question. It allowed respondents to write down additional comments, and suggestions, and any relevant issues that were not mentioned in the questionnaire. The questions were divided as follows:

Transparency of Ownership questions: 1, 2, and 3.

Financial Transparency and Information Disclosure questions: 4, 5, 6, 7, and 8.

Board Structure and Process question: 9. Corporate Social Responsibility question: 10. Corporate Scandals questions: 11, 12, and 13. Government Regulatory question: 14. Demographic questions: 15, 16, 17, 18, and 19. An open-ended question: 20.

Response Rate

The research study process requires a high participation rate in a sample selected from a population to assure the possibility that bias is less likely. The following strategies were conducted to enhance the response rate for this study:

- 1. Meeting with an expert to enhance the validity of the questionnaire.
- 2. Make sure all questions avoid problems with wording.
- 3. Ensure questions are easy and clear for participants to answer.
- 4. Employ the convenience sampling method to select the sample.
- 5. Visit local underwriters and institutions agencies to encourage they invite participants to join this survey.

Reliability and Validity

Backer (1999) stated that reliability has to build upon the accuracy and quality of measurement. Therefore, the issue of reliability deals with the question of whether this instrument will design the same finding each time the survey is processed to the same participants in the same situation. However, Borg and Gall (1983) stated validity means

"in testing, the appropriateness, meaningfulness, and usefulness of specific inferences made from test scores." (p.733). Therefore, validity is concerned about the study's achievement in measuring what the researcher set out to measure and reliability is concerned about the precision of the actual measuring or procedure instrument.

This study employed the following strategies to ensure the reliability and validity of this research.

- 1. Quantitative research method: This research is conducted through a quantitative research method to create the reliability and validity of the study. The results in a quantitative research method are based on large sample sizes. Therefore this research used a large enough sample of participants to provide meaningful data that rely on statistical procedures.
- 2. A questionnaire type of survey: This study utilized a structural research instrument a questionnaire type of survey to enhance the reliability and validity of the study. A questionnaire survey can be asked about a specified topic in many questions. This type of survey provides great flexibility to the researcher in the data analysis.
- 3. Work with dissertation committee members: The researcher worked with the dissertation chair and committee members who are the experts in this topical area to ensure the validity of the study. The researcher edited the study questionnaire by meeting with the dissertation chair prior to the study. A meeting with an expert helped the researcher to develop better questions and adapt questions for final participants to answer.

Another method used to ensure the reliability of this study was to conduct a rating format in the design of the questionnaire. The researcher used a survey questionnaire with a closed-ended 1 to 9 Likert scale to ask participants the extent to which they agree or disagree. Each question was designed to illicit a numerical value from 1 to 9. The researcher's bias was eliminated through a standardized format that is presented to all respondents. Higher reliability also could be obtained from this standardized format.

Population and Sampling Plan

Target and Accessible Population

A sample population is used due to researchers being unable to access all members of the population. Investigating an entire population who are associated with a study is almost impossible. Sometimes this kind of problem is due to limitations in time, money or other resources (Babbie, 2002; Black, 1999).

Certain sampling methods are designed to increase the validity of study findings. Researchers had to ensure that a large percentage of the chosen sample population will respond. On the other hand, the statistical significance of the relationships among the variables may be higher if the researchers have a high participation rate in a sample selected from a population.

In this study, the target population was investors who have experience buying shares of companies listed on TSEC. There are approximately 3 million investors trading securities in the TSEC. The accessible population was limited to investors prior to their entry into the security brokers and dealers. This study employed the convenience sampling method to select the sample. Respondents were selected by a random sampling method. The reason to select this sampling method in the study is: the convenience sampling method is the most economical, time-efficient, and feasible method for the researcher. On the other hand, the random sampling method can increase the validity of this study but also can avoid the bias by researchers (Creswell, 2002).

Eligibility Criteria

The main purpose of this study is to analyze the impact of financial information transparency on investor behavior in Taiwan. For that reason, the eligibility criteria for this study are:

- 1. The geographic area and setting was limited to a public area, near the entrance to one underwriter in Taiwan.
- 2. Investors agreed to participate in this study and to complete a questionnaire.
- 3. Investors were able to read, write, and speak Chinese, were 18 years or older.
- 4. Investors must have had experience investing in the TSEC.
- 5. The questionnaire was translated from English into Chinese by using the reverse-translation method with an official endorsement from an expert who is fluent in both the Chinese and English languages to ensure the consistency of the questionnaire.

Systematic Sample (Probability)

The sample was selected from investors who have experience in TSEC, using systematic sampling, a probability sampling plan. The using of systematic sampling is commonly used in research in which large populations are studied. Systematic sampling is "sampling in which individuals are selected from a list by taking every K name" (Gay, 1996. p.122). The process of systematic sampling of subjects was choosing investors who departed the underwriter as they finished their businesses.

Data Collection

A questionnaire was used to collect data from those who have previous experience with buying shares in corporations listed on the Taiwan Stock Exchange. Quantitative data was collected using 19 closed-ended questions with 1 to 9 Likert scales, ranging from very strongly disagree to very strongly agree (1= very strongly disagree, 5= neither agree nor disagree, 9= very strongly agree). Before conducting the survey, meeting with an expert helped to improve the reliability and validity of the questionnaire. This researcher study planned to recruit 300 respondents to participate in the survey. The researcher selected investors from those who registered with the underwriters in Taiwan. This questionnaire collected quantitative data from investors who have experience with buying shares at TSEC and at least 18 years old in Taiwan. The researcher stood outside of the underwriter office to look for investors who met the requirements and were willing to be a participant. After obtaining replies from the respondents, the researcher created a database file that integrated the variables for the study, and then entered the collected data into an SPSS statistical program.

Data Analysis

Introduction

The study used statistical methods to analyze the impact of financial information transparency and corporate governance on investor behavior. This research followed five major steps, proposed by Fong (2004), in the conduct of a study:

1. Structuring the data for analysis and validity measurement

2. Verifying the data

- 3. Describing the data (descriptive statistics)
- 4. Determining the relationships between variables (correlation analysis)
- 5. Examining the relationship among the independent variables and dependent variable (multiple regression analysis)

Following the above steps, data was collected and entered into an SPSS program for statistical analysis. Reliability was determined by Cronbach's Alpha (α) Reliability.

Correlation analysis was used to determine the relationship between variables. If there is a strong positive relationship between two variables the correlation coefficient will be close to +1. 0, and if there is a strong negative relationship between two variables the correlation coefficient will tend toward to -1. 0. Finally, this study employed a multiple regression analysis to determine relationships among the variables. Multiple regression analysis presents the important degree of influence of two or more independent variables on a single dependent variable.

Methods of Data Analysis

Five different statistical analyses were used in this study (descriptive statistics, correlation analysis, independent-samples t-test analysis, one-way ANOVA analysis, multiple regression analysis).

- 1. *Descriptive statistics*: Descriptive statistics are designed to achieve information concerning the distribution of variables (Creswell, 2002). After data was collected, the researcher ran the sample descriptive statistics in a standard SPSS program to interpret the validity on data status in this study. The frequency distribution of discrete variables (gender, level of education, buying shares experience, and annual income) was checked by the researcher. Further, the frequency distribution of continuous independent and dependent variables was analyzed with histograms.
- 2. Correlation analysis: Correlation analysis was used to develop a simple correlation between two continuous variables (Creswell, 2002). The researcher employed correlation analysis to examine the relationships between the independent variables to ensure that all independent variables are independent of each other. The researcher also conducted correlation analysis to examine the relationships between the independent variables and the dependent variable to measure whether the research questions in this study are supported.
- 3. *Independent samples t-test analysis*: The t-test is used to compare the values of the means from two different samples. A t-test determines if the means of the two sample distributions vary significantly from each other (Creswell, 2002). In this study, independent sample t-test analysis was used to examine the

independent and dependent variables to determine whether there is a different tendency among participants according to the demographic variable of gender.

4. *One-way ANOVA* analysis: One-way ANOVA analysis is designed to measure the relationship between one dependent variable and multiple independent variables. This is different from the t-test analysis which compares only two distributions. One-way ANOVA analysis can compare two or more independent variables (Creswell, 2002). In this study, one-way ANOVA analysis was employed to examine whether there are any statistical differences between diverse experience groups in the Taiwan Stock Exchange. Experience was divided into three groups: less than 4 years, 4-9 years, and more than 9 years, which were coded numerically as 1, 2, and 3. In one-way ANOVA analysis, the researcher explored whether there are significant differences within any of the comparisons of the three groups in the sample.

5. *Multiple regression analysis*: Regression analysis is designed to measure a linear relationship between variables. It can be used to calculate the values of a dependent variable and one or more independent variables. The results presented by multiple regression analysis are four main values:

 R^{2} : The R value indicates the strength of the relationship between the dependent variable and independent variables. The square of R indicates the extent of the variance of the dependent variable that is explained by the set of independent variables. The R value ranges from 0.0 to 1.0, 0.0 means no relationship. The larger the value of R, the better (Creswell, 2002).

F statistic: The F statistic represents a probability value that the relationship

between the dependent variable and the set of independent variables could have happened by chance (Creswell, 2002).

Beta weight: The Beta weight indicates the unique contribution of each independent variable to explain the dependent variable. Beta weight is similar to a correlation coefficient and the value ranges from -1 to +1. Generally speaking, the beta weight represents the direction and the strength of the relationship between the dependent and independent variables (Creswell, 2002).

t statistic: The t statistic indicates the degree of probability of the relationship between each independent variable and dependent variable (Creswell, 2002). In this study, multiple regression analysis was used to examine the relationships between the independent and dependent variables.

In this study, the regression equation takes the form as below:

 $Y = f(X_1, X_2, X_3, X_4, X_5, X_6, X_7, X_8) + e$

Where Y = Investor Behavior (Dependent variable)

- $X_1 = OSIR$ (Independent Variable 1), ownership structure and investor relations.
- $X_2 = FTID$ (Independent Variable 2), financial transparency and information disclosure.
- $X_3 = BMSP$ (Independent Variable 3), board and management structure and process.

 $X_4 = Gender (Independent Variable 9)$

 $X_5 = Age$ (Independent Variable 10)

 X_6 = Education (Independent Variable 11)

X₇ = Annual income (Independent Variable 12)
X₈ = Experience (Independent Variable 13)
e = error term

Summary

This chapter presents a description of the methodology for this study, which focuses on the impact of financial information transparency on investor behavior in the Taiwan Stock Exchange. The five research questions led to the development of the survey of this study with descriptive and exploratory purposes. The research design employed a non-experimental, causal-comparative, quantitative method approach. There are 8 independent variables and 1 dependent variable in this study. The survey uses 19 closed-ended and one open-ended question in the survey instrument.

The statistical techniques for data analysis included descriptive statistics, correlation analysis, independent sample t-test, one-way ANOVA analysis, and multiple regression analysis. A multiple regression analysis was employed to examine the relationship among independent and dependent variables. The R square value was used to examine the significance of the overall model. The results of this study can make a significant contribution to the development of effective corporate governance on investor behavior in the Taiwan Stock Exchange.

CHAPTER IV

RESULTS

Introduction

The purpose of this study was to demonstrate how financial information transparency factors affect investor behavior in the Taiwan stock market. The major independent variable was financial information transparency. Sub-variables for the independent variable financial information transparency included ownership structure, financial transparency, and board structure. Demographic variables were gender, age, education, and income. The last independent variable was investing experience. The dependent variable was investor behavior.

The research conducted a quantitative method approach, using closed-end questions on survey instruments. Participants were instructed to indicate how strongly they disagreed or agreed with a number of their descriptors and feelings about the impact of financial information transparency on investor behavior in the Taiwan stock market. A nine point Likert scale was used in the survey (1 = very strongly disagree, 5 neither agree nor disagree, 9 = very strongly agree). The survey was distributed by the researcher to investors who have experience with buying shares in the Taiwan stock market. Data was collected during December of 2005. A total of 305 responses were received by the deadline. In general, the study's results indicate the inference of relationships between financial information transparency and investor behavior in the Taiwan stock market.

This chapter presents the major results assessed from the data collection. Chapter four begins with descriptive characteristics of the participants. These findings support the purpose of the study to answer and test the following research questions and hypothesis

investigated:

Research Questions

- Is there a relationship between TSEC investor perceptions of dimensions of financial information transparency and investor behavior in the Taiwan Stock Market?
- 2. Are there differences in TSEC investor perceptions of each dimension of financial information transparency according to demographic variables?
- 3. Are there difference in TSEC investor behavior according to different categories of investor experience?

Hypothesis

H: TSEC investor perceptions of financial information transparency dimensions, investor demographic, and investor experience are significant explanatory variables of investor behavior in the TSEC.

Research methods of data analysis included the descriptive statistic, correlation analysis, independent-samples t tests analysis, one-way ANOVA analysis, and multiple regression analysis (Leech, Barrett, & Morgan, 2005; SPSS Inc. 2005).

Descriptive Characteristics of Respondents

A sample survey in the Taiwan stock market was obtained with an "N" count of 305. Of the respondents, gender was divided somewhat evenly with 158 (51.8%) males, and 147 (48.2%) females. The mean age group for those respondents in the survey was 2.78 with a standard deviation of 0.87 for four age groups (18-30, 31-45, 46-60, more than 60), while 5.6% were between 18 to 30 years old. The median age group was 3. The

age ranged from 46-60 yeas of age. Figure 2 shows the age distribution of samples in this study.

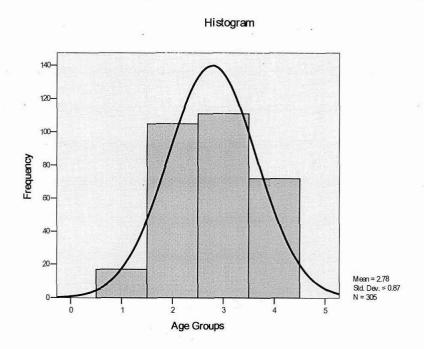


Figure 2: The age distribution of samples in this study.

The divisions of the educational background of respondents were as follows:

A total of 94 respondents (30.8%) had a high school degree or under, 105 (34.4%) had a two years college degree, 70 (23%) had a bachelor degree, and 36 (11.8%) had a masters degree or above. Figure 2 shows the educational background distribution of samples in this study.

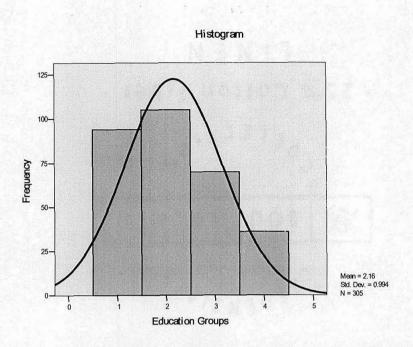


Figure 3: The educational background distribution of samples in this study.

The division of income for respondents was as follows:

A total of 69 respondents (22.6%) had a less than 10,000 USD, 107 (35.1%) had 10,000 to 25,000 USD, 63 (20.7%) had 25,001 to 35,000 USD, and 66 (21.6%) had more than 35,000 USD. Figure 3 shows the annual income distribution of responses in this study.

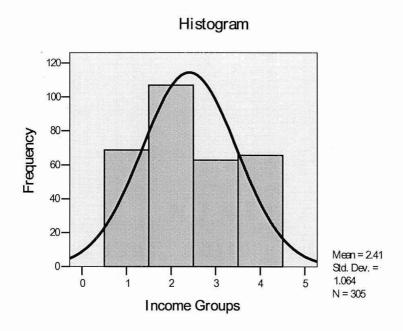


Figure 4: The income distribution of responses in this study.

Research Question 1

Is there a relationship between TSEC investor perceptions of dimensions of financial information transparency and investor behavior in the Taiwan Stock Market? In order to answer the research question 1, two different statistical analyses were employed. They were descriptive analysis and correlation analysis.

Descriptive Analysis for Questions 1

The report of frequencies count concerning independent variables (i.e., ownership structure, financial transparency, board structure) showed that financial transparency had the highest mean score of 4.813 (SD = 1.074). Board structure had the second highest mean score of 4.472 (SD = 1.886). Ownership structure had the lowest mean score of 4.031 (SD = 1.268). The dependent variable of investor behavior had a mean score of

4.617 (SD =1.714). Table 1 below displays the basic descriptive data of ownership structure, financial transparency, board structure, and investor behavior.

Table 1

Variable	Mean	Std. Error of Mean	Median	Mode	Std. Deviation
Ownership Structure	4.031	.073	4.00	3.50	1.268
Financial Transparency	4.813	.061	4.75	5.52	1.074
Board Structure	4.472	.108	5.00	5.00	1.886
Investor Behavior	4.617	.098	4.33	4.33	1.714

The Results of Frequencies Ccount for Investor Behavior and Three Independent Variables (Ownership Structure, Financial Transparency, Board Structure) N=305

Correlation Analysis for Question 1

Correlations analysis was conducted using the Pearson Product Moment technique for three continuous independent variables (ownership structure, financial transparency, board structure) and one continuous dependent variable (investor behavior). The purposes of doing the correlation analysis for research question 1 are that correlation analysis can measure if three independent variables (ownership structure, financial transparency, board structure) are independent from each other and correlation analysis can measure if each independent variable has high correlation coefficient with the dependent variable (investor behavior).

As shown in Table 2, all of the correlation coefficients are lower than .85. If the

correlation coefficient is higher than .85, they the variables are not independent from each other. Therefore, the three independent variables (ownership structure, financial transparency, board structure) were independent from each other.

Table 2

The Results of Pearson Correlation Coefficients among the Independent Variables (Ownership Structure, Financial Transparency, Board Structure) N=305

Ownership	Financial	Board	
Structure	Transparency	Structure	
1	.430**	.797**	
.430**	1	.432**	
.797**	.432**	1	
	<u>Structure</u> 1 .430**	Structure Transparency 1 .430** .430** 1	

A correlation coefficient is a number that indicates the degree of relationship between variables. The value of the correlation coefficient ranges from -1.0 to +1.0. A positive correlation (1 > r > 0) means two variables have a positive relationship. On the other hand, a negative correlation (-1 < r < 0) means two variables have negative relationship. As shown in Table 3, the coefficients are positive (1 > r > 0) and are statistically significant different at p = <.01 level between independent variables (ownership structure, financial transparency, board structure) and investor behavior in the Taiwan stock market.

Table 3

Variable	Ownership	Financial	Board
	Structure	Transparency	Structure
Investor Behavior		185 (*) 8	

The Results of Pearson Correlation Analysis for Investor Behavior and Independent Variables (Ownership Structure, Financial Transparency, Board Structure) N=305

In general, investor behavior had a strong positive correlation to the independent variables (ownership structure, financial transparency, board structure). The correlation between investor behavior and independent variables was statistically significant at the p = < .01 level, which means they had a strong positive relationship. This number represents that as the value of one independent variable increases, the value of the dependent variable (investor behavior) also tends to increase. This result illustrates that corporations enhancing ownership structure, financial transparency, and board structure can improve relationships with investors.

Research Question 2

Are there differences in TSEC investor perceptions of each dimension of financial information transparency according to demographic variables? In order to answer research question 2, descriptive statistics, independent-samples t test analysis and ANOVOA were utilized. The independent-samples t test can compare the means of two different groups such as females and males. ANOVA can compare three or more groups in the study.

Descriptive and Independent-Sample t Test Analysis for Question 2

The data sample consists of 305 respondents who completed the survey; including 158 (51.8%) males, and 147 (48.2%) females. Gender is a nominal variable. It was taken on two values, males and females in the survey, which were coded numerically as 1 and 2. Table 4 displays the mean scores for males and females with regard to the financial information transparency variables in this study. The table also displays the results of the two-tailed significant difference between males and females.

Table 4

Variable	<u>Males (N=158)</u>	<u>Females (N=147)</u>	t	
	Mean	Mean	(two-tailed)	
Ownership	4.515	3.510	7.53**	
Structure				
Financial	5.316	4.273	9.67**	
Transparency	. ···	a)		
Board	5.639	3.217	14.59**	
Structure				
$\overline{*p} = <.05$ $**p =$	<.01 ***p =<.001			

The Result of Mean Scores and Independent-Sample t test for Males and Females

The results indicated that among financial information transparency elements, all of the elements had significant difference between males and females. In ownership structure, the independent-sample t test analysis indicated that the 158 males had a mean of 4.515; the females had a mean of 3.510 in the study, which had the score of mean difference 1.005. The means differ significantly at the p < .01 level (p = .000). In financial transparency, the independent-sample t test analysis indicated that the 158 males

had a mean of 5.316; the females had a mean of 4.273 in the study, which had the score of mean difference 1.042. The means differ significantly at the p < .01 level (p = .000). In board structure, the independent-sample t test analysis indicated that the 158 males had a mean of 5.639; the females had a mean of 3.217 in the study, which had the score of mean difference 2.42. The means differ significantly at the p < .01 level (p = .000).

This finding indicated that males and females were significantly different from each other in the elements (ownership structure, financial transparency, and board structure) of financial information transparency. This means that males were more concerned with strong financial information transparency than females in the Taiwan stock market. This result can help us understand that stock market investors who have high-quality requirements for information transparency and disclosure, can take the desire of improvement with financial information transparency in the Taiwan stock market and start their investment strategy more easily with male investors.

ANOVA Analysis for Question 2

In this study, age was divided into four groups: 18-30 years, 31-45 years, 46-60 years, and more than 60 years, which were coded numerically as 1, 2, 3, and 4. Income was divided into four groups: less than 10,000 USD, 10,000-25,000 USD, 25,001-35,000 USD, and over 35,000 USD. ANOVA analysis was used to examine whether there are any statistical differences between diverse age groups and income groups in the financial information transparency. Post Hoc tests include a Scheffe test to identify which groups differ significantly from each other.

ANOVA Analysis in Ownership Structure According to Age Groups

According to the Table 5, there was no significant difference which existed among the four groups at the .01 level. The mean difference between each group also was not statistically significant. There were no significant differences in the ownership structure of financial information transparency. Table 6 displays descriptive information of each age group.

Table 5

(I) Age	(J) Age	Mean Difference	Post Hoc Co	mparisons
			p Scheffe	p LSD
18-30 (N=17)	31-45	.263		
	46-60	.106		
	>60	.191		
31-45 (N=105)	18-30	263		
	46-60	156		
	>60	071		
46-60 (N=111)	18-30	106	8.4	
	31-45	.156		
	>60	.085		
>60 (N=72)	18-30	191	ž g	
	31-45	.071		
	46-60	.085		
F=.38	ŀ	<i>p</i> =.764		

The Result of ANOVA and Post Hoc Comparisons of Significant Differences in Ownership Structure According to Age Groups N=305

As shown in Table 6 for descriptive information of each age group in ownership structure. The mean of group 18-30 was 4.205 and 4.013 in group of over 60 years.

Age Groups	Mean	Std. Deviation	Std. Error	Minimum	M	aximum
18-30 (N=17)	4.205	.969	.235	2.5	2	5.5
31-45 (N=105)	3.942	1.269	.123	1.5		7.5
46-60 (N=111)	4.099	1.324	.125	1.5	5 x	8.0
>60 (N=72)	4.013	1.253	.147	1.5		6.0
Total(N=305)	4.031	1.268	.072	1.5		8.0

The Result of Descriptive Information of Each Age Group in Ownership Structure

ANOVA Analysis in Financial Transparency According to Age Groups

Table 7 displays the result of ANOVA analysis for financial transparency. There were no significant difference which existed among the four groups at the .01 level. In Table 8, the data indicate the four age groups did not have means which differed significantly (p = < .05) from each other. According to Table 8, descriptive data, age group 1 had the highest mean score (M = 5.029) in financial transparency. Age group 4 had the lowest mean score (M = 4.673) in financial transparency. The results indicated that among the four age groups, age group 1 (18-30 years) were more concerned with financial transparency in the Taiwan stock market. However, age group 4 (more than 60 years) paid less attention to financial transparency in the stock market.

(I) Age	(J) Age	Mean	Difference	Post Hoc Co	mparisons
		-		p Scheffe	p LSD
18-30 (N=17)	31-45		.074		
	46-60		.290		
	>60		.355		
31-45 (N=105)	18-30		074		
	46-60		.216		
	>60		.281		
46-60 (N=111)	18-30		290		
	31-45		216		
	>60		.065		
>60 (N=72)	18-30		355		
	31-45	t/	281		
	46-60		065		
F=1.42		<i>p</i> =.253			

The Result of ANOVA and Post Hoc Comparisons of Significant Differences in Financial Transparency According to Age Groups N=305

As shown in Table 8 for descriptive information of each age group in financial transparency. The mean of group 18-30 was 5.029 and 4.673 in group of over 60 years. Table 8

The Result of Descriptive Information of Each Age Group for Financial Transparency

	Mean	Std. Deviation	Std. Error	Minimum	Μ	aximum
18-30 (N=17)	5.029	1.015	.246	3.5		6.5
31-45 (N=105)	4.954	1.017	.099	2.5		7.0
46-60 (N=111)	4.738	1.152	.109	1.75		7.0
>60 (N=72)	4.673	1.033	.121	1.75		6.25
Total(N=305)	4.813	1.074	.061	1.75	30 10	7.0

ANOVA Analysis in Board Structure According to Age Groups

Table 9 displays the result of ANOVA analysis for board structure, p = .004, there was significant difference which existed among the four groups. The asterisks (*) indicate there were two pairs of groups (group 2 and group 3, and group 2 and group 4) whose means differ significantly (p = < .05) from each other. According to Table 10, descriptive data, group 4 had the highest mean score (M = 4.875) in board structure. Group 4 also had a mean differ significantly with group 2 (M = 3.990). The result indicates that among four age groups, age group 4 (more than 60 years) paid more attention to the board structure, information, and process with corporations.

Table 9

(I) Age	(J) Age	Mean Difference	Post Hoc C	omparisons
8		5 9 N	p Scheffe	p LSD
18-30 (N=17)	31-45	.009)	
	46-60	738	3	
	>60	875	5	
31-45 (N=105)	18-30	009)	1
	46-60	748*	k	.003
	>60	884*	k	.002
46-60 (N=111)	18-30	.738	3	
	31-45	.748*	k	.003
*	>60	136	5	
>60 (N=72)	18-30	.875	5	
	31-45	.884*	k	.002
	46-60	.136	5	
F=4.63		<i>p</i> =.004		4
* <i>p</i> = < .05 ** <i>p</i>	=<.01	***P = <.001		1) n

The Result of ANOVA and Post Hoc Comparisons of Significant Differences in Board Structure According to Age Groups N=305

As shown in Table 10 for descriptive information of each age group in board structure. The mean of group 18-30 was 5.029 and 4.673 in group of over 60 years. Table 10

5	Mean	Mean Std. S Deviation		Minimum	Maximum
18-30 (N=17)	4.000	1.118	.271	2.0	5.0
31-45 (N=105)	3.990	1.431	.139	1.0	8.0
46-60 (N=111)	4.738	2.122	.201	1.0	9.0
>60 (N=72)	4.875	2.075	.244	1.0	9.0
Total(N=305)	4.472	1.886	.108	1.0	9.0

The Result of Descriptive Information of Each Age Group for Board Structure

The final results represent that there was no effect for ownership structure and financial transparency among the four age groups in the study. However, there were significant differences existing among the four groups for board structure. Age group 1 (18-30 years) had more concern for financial transparency and information disclosure in the Taiwan stock market. On the other hand, group 4 (more than 60 years) paid more attention to the board structure, information, and process with corporations.

ANOVA Analysis in Ownership Structure According to Income Groups

In this study, individual annual income was divided into four groups: less than 10,000USD, 10,000-25,000USD, 25,001-35,000USD, and more than 35,000USD, which were coded numerically as 1, 2, 3, and 4. One-way ANOVA analysis was used to examine whether there are any statistical differences between diverse income groups in the financial information transparency. Post Hoc tests include a Scheffe test to identify which

groups differ significantly from each other.

According to the Table 11, there was a significant difference which existed among the four groups at the .01 level. Table 12, p = .000, the mean difference between each group were also statistically significant. There were significant differences in the ownership structure of financial information transparency. Table 12 displays descriptive information of each income group. Group 4 (more than 35k) had the highest mean score (M = 4.674) and group 1 (less than 10k) had lowest mean score (M = 3.318). The result indicates that higher income persons had more concern for ownership structure than lower income persons.

Table 11

(I) Income	(J) Income	Mean Difference	Post Hoc Co	mparisons
		đ	p Scheffe	p LSD
Less than10,000 USD (N=69)	10,001-25,000	779*	.001	.000
	25,001-35,000	704*	.010	.010
	>35,000	-1.355*	.000	.000
10,000-25,000 USD (N=107)	Less than10,000	.779*	.001	.000
	25,001-35,000	.074		
	>35,000	576*	.024	.002
25,001-35,000 USD (N=63)	Less than10,000	.704*	.010	.001
	10,001-25,000	074		
	>35,000	650*	.023	.002
Over 35,000 USD(N=66)	Less than10,000	1.355*	.000	.000
100 M	10,001-25,000	.576*	.024	.002
	25,001-35,000	.650*	.023	.002
F=14.78	p=.(

The Result of ANOVA and Post Hoc Comparisons of Significant Differences in Ownership Structure According to Income Groups N=305

p = <.05 p = <.01 p = <.01

As shown in Table 12 for descriptive information of each income group in ownership structure. The mean of the group less than 10,000 USD was 3.318 and 4.674 for the group of over 35,000 USD.

Table 12

	Mean	Std. Deviation	Std. Error	Minimum	Maximum
Less than10,000 (N=69)	3.318	1.131	.136	1.5	6.0
10,000-25,000 (N=107)	4.098	1.270	.122	1.5	7.5
25,001-35,000 (N=63)	4.023	1.161	.146	1.5	6.5
Over 35,000 (N=66)	4.674	1.138	.140	2.0	8.0
Total(N=305)	4.031	1.268	.072	1.5	8.0

ANOVA Analysis in Financial Transparency According to Income Groups

According to Table 13, there was a significant difference which existed among the four groups at the .01 level. Table 14, p = .000, the mean difference between each group also were statistically significant. There were significant differences in the financial transparency of financial information transparency. Table 14 displays descriptive information of each income group. Group 4 (more than 35k) had the highest mean score (M = 4.815) and group 1 (less than 10k) had lowest mean score (M = 3.617). The result indicates that higher income persons paid more attention to financial transparency and information disclosure than lower income persons in the stock market.

(I) Income	(J) Income	Mean Difference	Post Hoc Comparisons			
			p Scheffe	p LSD		
Less than10,000 USD (N=69)	10,001-25,000	748*	.000	.000		
16 M 16	25,001-35,000	-1.108*	.000	.000		
	>35,000	-1.406*	.000	.000		
10,000-25,000 USD (N=107)	Less than10,000	.748*	.000	.000		
	25,001-35,000	360				
	>35,000	657*	.000	.000		
25,001-35,000 USD (N=63)	Less than10,000	1.108*	.000	.000		
	10,001-25,000	.360				
	>35,000	297				
Over 35,000 USD(N=66)	Less than10,000	1.406*	.000	.000		
	10,001-25,000	.657*	.000	.000		
	25,001-35,000	.297	t.	D		
F=27.12 $*p = <.05$ $**p = <.05$	p=.00 =<.01 ***p=<					

The Result of ANOVA and Post Hoc Comparisons of Significant Differences in Financial Transparency According to Income Groups N=305

Shown in Table 14 is the descriptive information of each income group in financial transparency. The mean of the group less than 10,000 USD was 4.018 and 5.424 for the group of over 35,000 USD.

÷	Mean	Std. Deviation	Std. Error	Minimum	Maximum
Less than10,000 (N=69)	4.018	.823	.099	1.7	5.7
10,000-25,000 (N=107)	4.766	1.002	.096	2.0	6.5
25,001-35,000 (N=63)	5.127	1.029	.129	1.7	7.0
Over 35,000 (N=66)	5.424	.943	.116	3.0	7.0
Total(N=305)	4.813	1.074	.061	1.7	7.0

The Result of Descriptive Information of Each Income Group for Financial Transparency

ANOVA Analysis in Board Structure According to Income Groups

Table 15 displays the result of ANOVA analysis for board structure, p = .000. There was a significant difference existing among the four groups. According to Table 16, descriptive data, group 4 had the highest mean score (M = 5.666) than the other groups in board structure. Group 1 had the lowest mean score (M = 3.318). The result indicates that among four age groups, income group 4 (more than 35,000USD) paid more attention to the board structure, information, and process.

(I) Income	(J) Income	Mean Difference	Post Hoc Comparisons		
			p Scheffe	p LSD	
Less than10,000 USD (N=69)	10,001-25,000	-1.083*	.00.1	.000	
	25,001-35,000	-1.284*	.000	.000	
	>35,000	-2.347*	.000	.000	
10,000-25,000 USD (N=107)	Less than10,000	1.083*	.001	.000	
	25,001-35,000	201			
	>35,000	-1.264*	.000	.000	
25,001-35,000 USD (N=63)	Less than10,000	1.284*	.001	.000	
	10,001-25,000	.201			
	>35,000	-1.063*	.007	.001	
Over 35,000 USD(N=66)	Less than10,000	2.347*	.000	.000	
	10,001-25,000	1.264*	.000	.000	
	25,001-35,000	1.063*	.007	.001	
F=21.039	<i>p</i> =.	000			

The Result of ANOVA and Post Hoc Comparisons of Significant Differences in Board Structure According to Income Groups N=305

p = <.05 p = <.01 p = <.001

As shown in Table 16 for descriptive information of each income group in board structure. The mean of the group less than 10,000 USD was 3.318 and 5.666 for the group of over 35,000 USD.

2	Mean	Std. Deviation	Std. Error	Minimum	Ma	ximum
Less than10,000 (N=69)	3.318	1.429	.172	1.0	i.	7.0
10,000-25,000 (N=107)	4.401	1.725	.166	1.0	; '	9.0
25,001-35,000 (N=63)	4.603	2.067	.260	1.0		9.0.
Over 35,000 (N=66)	5.666	1.639	.201	2.0		9.0.
Total(N=305)	4.472	1.886	.108	1.0		9.0

The Result of Descriptive Information of Each Income Group for Board Structure

The final results show that there is an effect for financial information transparency among the four income groups in the study. Therefore, there were significant differences which existed among the four income groups for ownership structure, financial transparency and board structure. Income group 4 (more than 35,000USD) had more concern about financial transparency and information disclosure in the Taiwan stock market. On the other hand, group 1 (less than 10,000USD) paid less attention to the financial information transparency in a stock market, especially in the ownership structure with corporations.

Research Question 3

Are there differences in TSEC investor behavior according to different categories of investor experience? In order to answer research question 3, two statistical analyses were employed. They were descriptive statistics and ANOVA analysis.

ANOVA Analysis for Question 3

In this study, the number of years of investing experience was divided into three groups: less than 4 years, 4-9 years, and more than 9 years, which were coded numerically as 1, 2, and 3. ANOVA analysis was used to examine whether there are any statistical differences between diverse investing experience groups in the investor behavior. Post Hoc tests include a Scheffe test and LSD test to identify between which groups differ significantly from each other.

ANOVA Analysis in Investor Behavior According to Experienced Groups

According to the Table 17, (p = .507) there were no significant difference existing among the three groups at the .01 level. The mean difference between groups also was not statistically significant. There were no significant differences in investor behavior with investing experience. Table 18 displays descriptive information of each investing experience group.

(I) Experienced	(J) Experienced	Mean Difference	Post Hoc Co	omparisons
2	2 3	e di Brenz	p Scheffe	p LSD
Less than 4 years (N=39)	4-9 years	251	2	var
	More than 9 years	352	u.	5 5
4-9 years(N=96)	Less than 4 years	.251		
	More than 9 years	100		
More than 9 years (N=170)	Less than 4 years	.352		n na shekarara na sh K
	4-9 years	.100		
F=.68	<i>p</i> =.507			
*n = < 05 **n =	$< 01 ***n = < 00^{\circ}$	ľ		

The Result of ANOVA and Post Hoc Comparisons of Significant Differences in Investor Behavior According to Experienced Groups N=305

As shown in Table 18 for descriptive information of each income group in investor behavior. The mean of the group less than 4 years was 4.341 and 4.694 for the group of more than 9 years.

Table 18

The Result of Descriptive Information of Each Investing Experience Group for Investor Behavior

	Mean	Std. Deviation	Std. Error	Minimum	Maximum
Less than 4 years (N=39)	4.341	1.298	.207	1.3	8.0
4-9 years(N=96)	4.593	1.630	.166	1.0	8.3
More than 9 years (N=170)	4.694	1.841	.141	1.0	9.0
Total(305)	4.617	1.714	.098	1.0	9.0

The final results represent that the number of years of investing experience does not affect investor behavior among the three investing experience groups in the study. Therefore, there were no significant differences existing among the three groups for investor behavior.

Hypothesis

Hypothesis: TSEC investor perceptions of financial information transparency dimensions, investor demographic, and investor experience are significant explanatory variables of investor behavior in the TSEC. Multiple regression analysis was used to test whether there are any statistical differences among variables in the TSEC investor perceptions of financial information transparency dimensions.

Multiple Regression Analysis for Hypothesis Testing

Multiple regression analysis was used to examine the relationship between socio-demographic variables (gender, age, income, education level), financial transparency variables (ownership structure, financial transparency, board structure), and experience variable and the dependent variable of investor behavior. As shown in Table 20, the *F* value (62.37) for the overall regression equation was significant (*p*=.000). The adjusted R square indicated the regression equation using the independent variables explain 55% (54.8) of the variation in investor behavior. In terms of relative importance of these predictors, based on the values of the beta (β) coefficients, the order of importance was board structure (β =.894), age (β =-.870), ownership structure (β =.837), financial transparency (β =.632), education (β =.469), gender (β =-.411), income (β =.081), and experience (β =.042). As reported, the hypothesis that TSEC investor perceptions of financial information transparency dimensions, investor demographic, and investor experience are significant explanatory variables of investor of investor behavior in the TSEC was partially supported.

 $BETA(\beta)$

p

t

Table 19

Explanatory	b	SE	
Variable			

Multiple Regression of Investor Behavior

Variable			and the second second	0	
Socio-demographic	. *				
Gender	-1.407	.160	-8.807	411	.000
Age	.171	.090	1.906	.870	.058
Education	.809	.077	10.496	.469	.000
Income	.130	.078	1.671	.081	.004
Experience	.102	.103	.990	.042	.555
Financial Transparency					
Ownership Structure	1.132	.042	26.275	.837	.000
Financial Transparency	1.008	.071	14.182	.632	.000
Board Structure	.812	.023	34.711	.894	.000
N=305 F=62.37 df=8 p<.	$R^2 = .54$	57 Ad	justed R ² =	548	

A regression analysis can determine the effect of a set of independent variables on the dependent variable. Investor behavior was the dependent variable in this study. A regression analysis of the set of independent variables results in an $R^2 = .557$. The score for R square was statistically significant at the .01 level. The result represents that this study has an appropriate set of independent variables to predict the dependent variable. According to the score of R square, the independent variables account for 55.7% of the variation of the dependent variable. The remaining 44.3% of the variation of the dependent variable is due to other variables not included in this study. In general, there was a moderately strongly relationship between investor behavior and independent variables (ownership structure, financial transparency, board structure).

According to the Beta (β), board structure had the most important effect on investor behavior, which was .894 at the .01 level of significance. The analysis represents that board structure was a significant predictor for investor behavior. The findings of this analysis are that the independent variables (ownership structure, financial transparency, board structure) have a moderately strong affect on investor behavior. That means focusing on these independent variables is a positive strategy for corporations to increase investment and activity in a stock market.

Estimates of Construct Validity Using Factor Analysis

Bryman & Cramer (1997) suggested that the greater value of Kaiser- Meyer-Olkin (KMO) and not less than .5 will be accepted to do the factor analysis for construct validity in a study. Stevens (1992) suggested that if the samples of the survey are over 250, the value of KMO should be above .6. As shown in Table 20, the KMO was .758 and significant.

KMO	Chi-square	df	Р
		t.	
.758	2456.846	91	.000

According to Figure 5 Scree Plot and Table 21 total variance explained, there are four components extracted in the survey. Figure 5 Scree Plot showed after component number 4 that the Scree becomes a smooth line. The extracted 4 components were utilized for this questionnaire design. Table 28 Total Variance Explained presented that only four components of Total Initial Eigenvalues value were over 1. Therefore, Extraction Sums of Squared Loadings suggested extracted 4 components were appropriate for this survey.

Scree Plot

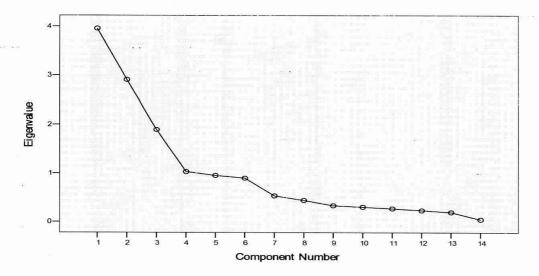


Figure 5: Scree Plot.

Table 21

Component		Initial Eigenvalues		Extraction Sums of Squared			
componen				Loadings			
	Total	% of	Cumulative	Total	% of	Cumulative %	
2	Total	Variance	%	Total	Variance	Cullulative 70	
1	3.593	28.237	28.237	3.593	28.237	28.237	
2	2.909	20.775	49.012	2.909	20.775	49.012	
3	1.890	13.501	62.513	1.890	13.501	62.513	
4	1.033	7.375	69.888	1.033	7.375	69.888	
5	.954	6.814	76.702				
6	.898	6.417	83.120				
7	.534	3.812	86.932				
8	.441	3.152	90.084				
9	.335	2.396	92.480		2		
10	.306	2.184	94.664				
11	.272	1.943	96.606				
12	.233	1.688	98.274			ж	
13	.195	1.396	99.670				
14	.046	0.330	100.000				

Total Variance Explained of Initial Eigenvalues on Questionnaire Design

According to Table 22 Rotated Component Matrix, the components allocation was identical with the questionnaire which was designed by the researcher. Therefore, the construct validity was identified by factor analysis.

Table 22

Component					
	1	2	3	4	
a8	.860		.186		
a6	.827	.135		.173	
a5	.775	.352	.274		
a7	.606	461	.263	263	
a4	.488		147	.200	
a9		.928	.143	.106	
a10	.117	.919	.203		
a3			.890		
a1	.112		.868		
a2	.149	.148	.771	148	
a13			.171	.869	
a14				.765	
a12	566	.186	110	.669	
a11		100	.202	.347	

Rotated Component Matrix

*Extraction Method: Principle Component Analysis

*Rotation Method: Varimax with Kaiser Normalization

Estimates of Reliability Using Cronbach's Alpha

Nunnally (1978) and Devellis (1991) suggested that .7 of Cronbach's Alpha is the minimum value acceptable in a survey. As shown in Table 23, the four dimensions for the total scale resulted in good internal consistency, evidenced by an alpha of .88. In this study, the 3 items ownership structure scale had an alpha of .72. The 5 items financial transparency scale had an alpha of .71. For the board structure scale, the alpha was .86. The last dimensions, investor behavior scale, had an alpha of .80.

Table 23

Dimensions	Number of Items	Cronbach's Alpha
Ownership Structure	3	.7180
Financial Transparency	5	.7143
Board Structure	2	.8555
Investor Behavior	4	.7987
Total Scale	14	.8816

Cronbach's Alpha of the Four Dimensions Scale of Investor Behavior Instrument (N=305)

Based on Table 23 all dimensions scale of Cronbach's Alpha were over .7. In addition, the total scale of Cronbach's Alpha was .8816. Therefore, the instrument for this study had good reliability.

CHAPTER V

SUMMARY, INTERPRETATIONS, IMPLICATIONS, CONCLUSIONS, LIMITATIONS, AND FUTURE STUDY

Chapter five provides a final review of the study. The following sections are included; the summary of the study, the interpretations of the findings, practical implications of the findings, conclusions, the limitations of the study, and recommendations for future study.

Summary of the Study

Recent cases of accounting fraud, financial misstatements and poor corporate governance have become widely publicized. However, the improvement of financial information transparency may provide investors the opportunity to conduct their investing strategy in the stock market. Investor behavior is the relationship between an investor and a company, and the relationship needs to be managed. Therefore, the study demonstrated a framework that is grounded in the financial information transparency concepts of ownership structure, financial transparency, and board structure in order to examine investor behavior.

This research addressed the following questions and hypothesis:

Research Questions

 Is there a relationship between TSEC investor perceptions of dimensions of financial information transparency and investor behavior in the Taiwan Stock Market? Are there differences in TSEC investor perceptions of each dimension of financial information transparency according to demographic variables?
 Are there differences in TSEC investor behavior according to different categories of investor experience?

Hypothesis

 H: TSEC investor perceptions of financial information transparency dimensions, investor demographic, and investor experience are significant explanatory variables of investor behavior in the TSEC.

In order to answer the three research questions and test the hypothesis, the study focused on eight independent variables and one dependent variable. The major independent variable is financial information transparency, sub-variables for the independent variable included ownership structure, financial transparency, and board structure. Demographic independent variables included gender, age, education, and income. The eighth independent variable is investing experience. The dependent variable was investor behavior.

The research design used a quantitative method with 19 closed-ended questions, and one open-ended question on the survey instrument. The questionnaire was scored on a 9 point Likert scale (9 = very strongly agree, 5 = neither agree nor disagree, 1 = very strong disagree). The study used a sample of investors who have previous investing experience in the Taiwan stock market. Data was collected in a period of one week from December 12^{th} to December 18th of 2005. A total of 305 respondents (158 males and 147 females) completed the survey. Collected data was analyzed by SPSS windows version 13.0. Five different statistical analyses were employed for the survey. They were descriptive statistics, correlation analysis, independent-sample t test analysis, one-way ANOVA analysis, and multiple regression analysis.

Interpretations of Findings

Research Question 1

Is there a relationship between TSEC investor perceptions of dimensions of financial information transparency and investor behavior in the Taiwan Stock Market?

Findings in question 1 reveal that investor behavior had a strong positive correlation to the three financial information transparency elements (i.e., ownership structure, financial transparency, and board structure) in the Taiwan stock market. Among the three elements, board structure had the strongest relationship with investor behavior in the study, which was r = .848 and the relationship was statistically significant (p = .000) at the p=<.01 level. Generally, the results support the inference of financial information transparency (ownership structure, financial transparency, and board structure) and investor behavior relationship. The findings also supported the hypothesis.

Research Question 2

Are there differences in TSEC investor perceptions of each dimension of financial information transparency according to demographic variables?

The independent-samples t test can compare the means of two different groups such as males and females. The results show that among ownership structure, financial transparency, and board structure, there were significant differences between males and females in financial information transparency. In ownership structure, the independent-sample t test analysis indicated that the 158 males had a mean of 4.515; the females had a mean of 3.510 in the study, which had the score of mean difference 1.005. The means differ significantly at the p < .01 level (p =.000). In financial transparency, the independent-sample t test analysis indicated that the 158 males had a mean of 5.316; the females had a mean of 4.273 in the study, which had the score of mean difference of 1.042. The means differ significantly at the p < .01 level (p =.000). In board structure, the independent-sample t test analysis indicated that the 158 males had a mean of 5.639; the females had a mean of 3.217 in the study, which had the score of mean difference of 2.42. The means differ significantly at the p < .01 level (p =.000). Overall, the findings indicate that males were more concerned with strong financial information transparency than females in the Taiwan stock market. The findings also support the hypothesis.

ANOVA analysis was employed to examine whether there are any statistical differences between different age groups in financial information transparency in the stock market. Post Hoc tests include Scheffe test and LSD test to recognize which groups differ significantly from each other. The final results represent that there was no effect for ownership structure and financial transparency among four age groups in the study. However, there were significant differences which existed among the four groups for board structure. Age group 1 (18-30 years) had more concern about financial transparency and information disclosure in the Taiwan stock market. On the other hand, group 4 (more than 60 years) paid more attention to the board structure, information, and process with corporations. The findings also supported the hypothesis.

ANOVA analysis was used to examine whether there are any statistical differences between diverse income groups for financial information transparency. Post Hoc tests include a Scheffe test and LSD test to identify which groups differ significantly from each other. The final results show that there were differences for financial information transparency among the four income groups in the study. Therefore, there were significant differences which existed among the four income groups for financial information transparency. Income group 4 (more than 35,000USD) had more concern about financial information transparency which includes ownership structure, financial transparency, and information disclosure, and board structure, information and process in the Taiwan stock market. On the other hand, group 1 (less than 10,000USD) paid less attention to the financial information transparency, especially in the ownership structure and board process with corporations in the stock market. The findings also supported the hypothesis.

Research Question 3

Are there differences in TSEC investor behavior according to different categories of investor experience?

ANOVA analysis was used to examine whether there are any statistical differences between diverse investing experience year groups in investor behavior. Post Hoc tests include a Scheffe test and LSD test to identify which groups differ significantly from each other. The final results represent that there was no difference in any of the levels of investing experience group. Therefore, there were no significant differences existing among the three groups for investor behavior. The findings also rejected

hypothesis.

Generally, the findings support Born et al's (2004) proposition that improving corporate governance can lead improvements in information asymmetry between company and investors. The findings also support Chiang (2005) who found that corporate transparency impacts the corporate performance and investor relationship. The findings are also consistent with the concept of Uddin and Gillett (2002) that investor behavior might affect corporate transparency and performance.

The results of the study were consistent with Rezaee et al's (2003) findings that board structure and process impacts investor behavior. The findings also confirm RandOy et al's (2003) and Leng's (2004) proposition that board performance impacts corporate performance and investor relationship. The findings also confirm the concept of Ajzen and Fishbein (1980), and Donaldson and Davis (1994) that investor behavior will affect corporate governance and corporate performance.

The findings supported Flouris and Walker (2005) who indicated that better financial performance would enhance investors' confidence and interest. The findings also supported Luoma and Goodstein (1999) who indicated that larger corporations have more stakeholder directors on the board to monitor company transparency. The findings do not support Fraser (2004) in investor expectations. The findings also do not support Gelt and Strawer (2003) that corporate social responsibility impacts investor behavior.

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Practical Implications

Financial information transparency in the Taiwan Stock Market needs to be improved upon. This will require change. However, financial information transparency is not a guaranteed path to success for corporations and investors. There are lots of reasons that can affect investor behavior in the stock market. As stock market investing is growing in popularity, the more quantitatively empirical studies in this area are needed for investors.

This study cites some practical implications for creating transparency in the stock market:

- 1. Among the three major financial information transparency independent variables, board structure had the most effect on investor behavior. Additionally, board structure was the strongest persuasive predictor for investor behavior. Therefore, if corporations want to create a long-term relationship with investors, the most important strategy is to provide more transparency of board structure, members' personal and trading information, and board committee process for investors in the stock market.
- 2. The results of the multiple regression analysis showed that the independent variables had a moderately strong effect on investor behavior in the stock market. This indicated that improving financial information transparency with corporations can increase investor activities in the stock market. This finding illustrates that corporations could benefit from improving financial information transparency which could maintain the relationship with the investor.

3. The results of this study indicated that males and females were significantly different of financial information transparency; ownership structure, financial transparency, and board structure. This means that males were more concerned with strong financial information transparency than females in the stock market, particularly in board structure and financial transparency. Therefore, if corporations want to target males, they might consider improving board process information and transparency in the stock market to attract more investors.

Conclusion

The impact of financial information transparency on investor confidence in the Taiwan stock market needs to be addressed. However, it also raises many questions and doubts for investors. This study focused on financial information transparency, which influences investors' behavior in the stock market. Investor behavior has been widely discussed for a few years, but the stock market has changed rapidly since financial scandals at Enron, WorldCom, Adelphia. Investors need more information about financial information transparency to secure their investment.

This research implemented a mixed method to understand investor behavior in the Taiwan stock market. The researcher expected that a mixed method could help to answer existing questions and test the hypothesis. Therefore, this study identified how financial information transparency impacted investor behavior in the Taiwan stock market.

This research has addressed and examined by different statistical analyses the three research questions. 1. Is there a relationship between TSEC investor perceptions of dimensions of financial information transparency and investor behavior in the Taiwan Stock Market? 2. Are there differences in TSEC investor perceptions of each dimension of financial information transparency according to demographic variables? 3. Are there differences in TSEC investor behavior according to different categories of investor experience? This study also has tested one hypothesis. H: TSEC investor perceptions of financial information transparency dimensions, investor demographic, and investor experience are significant explanatory variables of investor behavior in the TSEC.

Generally, the study found that improving financial information transparency will lead to increase investor activity in the stock market. These findings support the initial assumption of the studies, improving financial information transparency in corporations can positively affect investor behavior.

In conclusion, the improvements of financial information transparency address stock market efficiency. Corporations need to understand that continuing to improve financial information transparency is a way to maintain the relationship with the investor. This study provides suggestions to improve financial information transparency to create a win-win situation for companies.

Limitations of the Study

The following are some limitations, which need to be considered with the research findings:

 Sample limitation. The sample of this study may not be representative of the population of the other countries' investors, because the sample is only derived from Taiwan stock market. Due to the nature of the sample, the generalizability of the finding is somewhat limited.

- Independent variables. Financial information transparency was developed for independent variables that affect investor behavior in this study. More independent variables need to be identified in future studies for a better understanding of the stock market.
- 3. Corresponding finding. The research context of the present study is the stock market, the corresponding findings may not be applicable in other financial product markets such as corporate bond market, derivatives market, and other financial markets.

Recommendations for Future Study

There are few empirical studies concerning the relationship between financial transparency and investor behavior in the Taiwan stock market. This study provides some findings to fill this gap. Future research may consider both pedagogical and operational studies in this area. Recommendations for future study include:

- Cross-cultural comparison. Additional studies should consider stock markets in different countries to compare investor behavior in markets such as the New York Stock Exchange, the Tokyo Stock Exchange, and the Hong Kong Stock Exchange. The cross-cultural comparison may help us understand if different cultures behave differently as investors.
- 2. Other specific independent variables. This study focused on financial information transparency. Future study may consider other specific factors that can affect investor behavior in the stock market such as corporate governance, corporate accounting performance, the regulations of a stock exchange, and the Sarbanes-Oxley Act.

- 3. Improving reliability and validity. For future study, other researchers may replicate the research process which was created by the researcher. Additionally, researchers may add more questions and items to the questionnaire, reword questions to avoid participants from misunderstanding the questions, and revise the instrument to avoid bias so that reliability and validity are enhanced.
- 4. Other statistical analyses. MANOVA and SEM may be recommended for future study. Descriptive statistics, independent sample t test, correlation, ANOVA, and multiple regression analysis were used in this survey. MANOVA and SEM analyses are recommended for future study to discover other findings.
- 5. Future study should also examine if differences in investor behavior exist for situations such as; established public companies versus those at the IPO stage, long-term investors versus speculators, and institutional investors versus individual investors.

REFERENCES

- Admati, A., & Pfleiderer, P. (2000). Forcing firms to talk: Financial disclosure regulation and externalities. *Review of Financial Studies*, 13(3), 479-519. Retrieved May 14, 2004, from ProQuest database.
- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. New York, NY: American Institute of Certified Public Accountants.
- American Law Institute (1992). Principles of corporate governance: Analysis and recommendations: proposed final draft. Philadelphia, PA: American Law Institute.
- Anderson, T., & Kanuka, H. (2003). e-Research: Methods, strategies, and issues. Boston,MA: Pearson Education Inc.
- Anonymous (1999). Transparency. *Quarterly Review of Doublespeak*, 25(4), 8-9. Retrieved May 14, 2004, from ProQuest database.
- Atkins, N. (1999). Communication and politics: Transparency, dialogue and ethical decision-making. *Vital Speeches of the Day*, 65(11), 347-351. Retrieved May 14, 2004, from ProQuest database.

Babbie, E. (1991). Survey research methods (2nd ed.). Belmont, CA: Wadsworth.

Babbie, E. (2002). *The practice of social research (9th ed.)*. Belmont, CA: Wadsworth.

Backer, L.C. (2002). The Sarbanes-Oxley Act: Federalizing norms for officer, lawyer, and accountant behavior. St. John's Law Review, 76(4), 897-951. Retrieved May 14, 2004, from ProQuest database.

Baker, T. L. (1999). Doing social research (3rd ed.). New York: McGraw-Hill College.

Bhattacharya, S. (1979). An exploration of non-dissipative dividend-signaling structures. Journal of Financial and Quantitative Analysis, 14(4), 667-668.

Black, T. R. (1999). Doing quantitative research in the social science: An integrated approach to research design, measurement and statistics. Thousand Oaks, CA: Sage Publication, Inc.

Blair, M.M. (1995). Ownership and control. Washington, DC: The Brookings Institution.

- Born, P., Giaccotto, C., & Ritsatos, T. (2004). The wealth and information effects of insurer's open market stock repurchase announcements. *Risk Management and Insurance Review*, 17(1), 25-40.
- Borg, W. R., & Gall, M. D. (1983). Educational research: An introduction (4th ed.). New York: Longman.
- Botosan, C. A. (1997). Disclosure level and the cost of equity capital. *The Accounting Review*, 72(3), 323-349.
- Boyd, B. (1995). CEO duality and firm performance: a contingency model. *Journal of Strategic Management, 16*(4), 301-312.
- Bryman, A. & Cramer, D. (1997). Quantitative data analysis with SPSS for windows, London: Routledge.
- Burgess, T. F. (2001). A general introduction to the design of questionnaires for survey research. Retrieved September 1, 2005, from University of Leeds Information System Services Web site:

http:// www.leeds.ac.uk/iss/documentation/top/top2.pdf

Carpenter, M. A., Pollock, T. G., & Leary, M. M. (2003). Testing a model of reasoned risk-taking: governance, the experience of principals and agents, and global strategy in high-technology IPO firms. *Strategic Management Journal, 24*(9), 803.

Chen, L. C. (1999). Modern financial management. (2ed). Taiwan: Hawtai.

- Chiang, H. (2005). An empirical study of corporate governance and corporate performance. *Journal of American Academy of Business, 6*(1), 95-101.
- Christopherson, R., Greqoriou, G. N. (2004). Lagged factors affecting Berkshire Hathaway. Journal of Asset Management, 5(4), 272-276.
- Clarkson, M.B.E., (1994). A risk based model of stakeholder theory, The Centre for Corporate Social Performance & Ethics, University of Toronto. Retrieved May 14, 2004, from ProQuest database.
- Creswell, J. W. (2002). Educational Research: planning, conducting, and evaluation quantitative and qualitative research. New Jersey: Merrill & Pearson, Inc.
- Desai, A., Kroll, M., & Wright, P. (2003). CEO duality, board monitoring, and acquisition performance: a test of competing theories. *Journal of Business Strategies*, 20(2), 137.

DeVellis, R. F. (1991). Scale Development Theory and Applications. London: SAGE.
Dillman, D. A. (2000). Mail and Internet surveys: The tailored design methods (2nd ed.).
New York: John Wiley & Son, Inc.

- Dimovski, V., & Skerlavaj, M. (2004). A stakeholder theory approach to the organisational performance and influence of information-communication technology: model conceptualization and testing. *Economic and Business Review* for Central and South-Eastern Europe, 6(3), 245-265.
- Donaldson, L., & Davis, J.H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. Australian Journal of Management, 16(1), 49-65.
- Donaldson, L., & Davis, J.H. (1994). Boards and company performance Research challenges the conventional wisdom. *Corporate Governance: An International Review*, 2(3), 151–60.
- Epstein, E. (1987). The corporate social policy process: Beyond business ethic, Corporate social responsibility, and corporate social responsiveness. *California Management Review, Berkeley Spring 29*(3) 99-144.
- Fama, E. & Jensen, M. (1983a). Agency Problems and Residual Claims. Journal of Law and Economics, 26, 327–375.
- Fama, E. & Jensen, M. (1983b). Separation of Ownership and Control. Journal of Law and Economics, 26, 301–326.
- Florini, A. (1998). The end of secrecy. Foreign Policy, 111, missing pages. Retrieved May 14, 2004, from ProQuest database.

- Flouris, T., Walker, T. J. (2005). The financial performance of low-cost and full service airlines in times of crisis. *Canadian Journal of Administrative Science*, 22(1), 3-20.
- Fong, T. S. (2004). The impact of web site design on consumer loyalty in business-to-customer (B2C) internet commerce: A rhetorical approach. Doctoral Dissertation, Lynn University.
- Fraser, P. (2004). How do US and Japanese investors process information, and how do they from their expectation of the future? Evidence from quantitative survey based data. *Journal of Asset Management*, 5(2), 77-90.

Freeman, E. R. (1984). Strategic management – A stakeholder approach. London: Pitman

Freeman, E. R. (1994). The politics of stakeholder theory: some future directions. Business Ethics Quarterly, 4(4), 409-421.

Fried, J. M. (2003). Insider abstention. The Yale Law Journal, 113(2), 455-515

- Gay, L. R. (1996). Educational research: Competencies for analysis and application (5th ed.). Upper Saddler River, NJ: Prentice-Hall, Inc.
- Gelb, D. S. & Strawer, J. C. (2001). Corporate social responsibility and financial disclosure: an alternative explanation for increased disclosure. *Journal of Business Ethics*, 33(1), 1-13.
- Hanson, M. (2003). The global promotion of transparency in emerging markets. *Global Governance*, 9(1), 63.
- Harris, M. & Raviv A. (1978). Some results on incentive contacts with applications to education and employment, health insurance, and law enforcement. *American Economic Review* 68: 20-30.

- Hawley, J., & Williams A. (1996). Corporate governance in the United States. The rise of fiduciary capitalism, Working Paper, Saint Mary's College of California, School of Economics and Business Administration.
- Healey, T. J., & Kim, Y. J. (2003). The benefits of mandatory auditor rotation. Regulation, 26(3), 10.
- Hill, C.W.L. & Jones, T.M. (1992). Stakeholder Agency theory. Journal of Management Studies, 29(2), 131–184.
- Holzner, B., & Holzner, L. (2002). The transparency syndrome in global change: A sociological concept paper. *Ekistics*, 69(412/414), 152.
- Jackson, H. E. (2003). To what extent should individual investors rely on the mechanisms of market efficiency: A preliminary investigation of dispersion in investor returns. *Journal of Corporation Law, 28*(4), 671-689.
- Jenson, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3, 303-360.
- Jucca, L. (2004). Government accounting worse then private sector. Retrieved June 20, 2005, from

http://www.reuters.com/newsArticle.jhtml?type=reutersEdge&storyID=6407932

Kulzick, R. S. (2004). Sarbanes-Oxley: Effects on financial transparency, S.A.M.
 Advance Management Journal, 69(1) 43-49. Retrieved May 14, 2004, from
 ProQuest database.

- Lang, M., & Lundholm, R. (1993). Cross-sectional determinants of analyst ratings of corporate disclosures, *Journal of Accounting Research*, 31, 246-271.
- Lashgari, M. (2004). Corporate governance: theory and practice. Journal of American Academy of Business, Cambridge, 5(1/2),46-51.
- Leech, N. L., Barrett, K. C., & Morgan, G. A. (2005). SPSS for intermediate statistics: use and interpretation (2nd ed.). Mahwah, NJ: Lawrence Erlbaum.
- Leland, H., Pyle, D. H. (1977). Information Asymmetry, Financial Structure and Financial Intermediation. *Journal of Finance*, 32(2), 371-388.
- Leng, A. C. A. (2004). The impact of corporate governance practices on firm's financial performance: evidence from Malaysian companies. ASEAN Economic Bulletin, 21(3), 308-318.
- Lenter, D., Slemrod, J.,& Shackelford, D. (2003). Public disclosure of corporate tax return information: Accounting, economic, and legal perspectives. *National Tax Journal*, *56*(4) 803.
- Luoma, P,& Goodstein, J. (1999). Stakeholders and corporate boards: institutional influences on board composition and structure. Academy of Management Journal, 42(5), 553-563.
- Malkiel, B. G. (2002). Efficient market hypothesis, the new palgrave dictionary of money and finance. New York: MacMillan.
- McGuire, J., Dow, S.,& Argheyd, K. (2003). CEO incentives and corporate social performance. *Journal of Business Ethics*, 45(4), 341.
- Monks, R.A.G. (1994). Relationship investing. Corporate Governance: An International Review, 2(2), 58–76.

- Moore, F., & Swartz, N. (2003). Keeping an eye on Sarbanes-Oxley. *Information Management Journal*, 37(6), 20. Retrieved May 14, 2004, from ProQuest database.
- North, D. (1994). Economic performance through time. American Economic Review, 359-368.
- Nunnally, J. C. (1978). *Psychometric theory. (2nd ed.)*. New York, NY: McGraw-Hill Book Company.
- O'Hara, P. A. (2000). Insider trading in financial markets: legality, ethics, and efficiency. International Journal of Social Economics, 28(10/11/12), 1-12.
- Pfeffer, J. (1972). Size and composition of corporate boards of directors: the organization and its environment. *Administrative Science Quarterly*, 17, 218–245.
- Poitevin, M. (1990). Strategic financial signaling. Internal Journal of Industrial Organization, 8(4), 499-518.

Pritchard, A. C. (2003). Self-regulation and securities markets. Regulation, 26(1), 32-39.

- Quall, J. C. (2004). Implementing Section 404: A practical approach to the Sarbanes-Oxley Act. *The CPA Journal*, 74(8) 52-58.
- Ramirez, S. (2003). A flaw in the Sarbanes-Oxley reform: can diversity in the boardroom quell corporate corruption? *St. John's Law Review*, 77(4) 837-866.
- RandOy, T., Down, J., & Jenssen, J. (2003). Corporate governance and board effectiveness in maritime firms. *Maritime Economic& Logistics*, 15(1), 40.
- Ravid, S.A., Saring, O.H. (1991). Financial signaling by committing to cash outflows. Journal of Financial and Quantitative Analysis, 26(2), 165-181.

- Rezaee, Z., Olibe, K. O., & Minmier, G. (2003). Improving corporate governance: the role of audit committee disclosures. *Managerial Auditing Journal*, 18(6/7) 530-537.
- Riahi-Belkaoui, A. (2003). Intellectual capital and firm performance of US multinational firms. *Journal of Intellectual Capital*, *4*(2), 215.
- Rogers, J. (2003). Good governance doesn't just happen: Judging ourselves. Vital Speeches of the day. 69(15) 464.
- Ross, S. (1973). The economic theory of agency: The principal's problem. American Economic Review, 63(2): 134-139.

Ross, S. (2000). Responsible Investing. Sierra San Francisco, Nov/Dec 85(6) 26-28.

- Sappington, D. (1991). Incentives in principal agent relationships. *Journal of Economic Perspectives 3*(2): 45-66.
- Sarno, L., & Thornton, D. L. (2004). The efficient market hypothesis and identification in structural VARs. *Review- Federal Reserve Bank of St. Louis*, 86(1), 49.
- Shaw, J. D., Gupta, N., & Delery, J. E. (2000). Empirical organizational-level examinations of agency and collaborative predictions of performance-contingent compensation. *Strategic Management Journal*, 21(5), 611.
- Snider, J., Hill, R. P., & Martin, D. (2003). Corporate social responsibility in the 21st century: A view from the world's most successful firms. *Journal of Business Ethics*, 48(2), 175.
- Spence, M. (1973). Job market signaling. Quarterly Journal of Economics, 57(3), 355-379.
- Spence, M. and R. Zeckhauser (1971). Insurance, information and individual action. American Economic Review 61(2): 380-387.

SPSS Inc. (2005). SPSS BASE 13.0-Applications Guide. Chicago: SPSS Inc.

- Sridharan. U.V., Dickes L., & Caines. W. R. (2002). The social impact of business failure:
 Enron. *Mid-American Journal of Business*, 17(2), 11-21. Retrieved May 14, 2004, from ProQuest database.
- Standard & Poor's company (2002). Transparency and disclosure: overview of methodology and study result- United States. Retrieved May 20, 2005, from ProQuest database.
- Standard & Poor's company (2002). Standard & Poor's corporate governance scores: criteria, methodology and definitions. Retrieved May 20, 2005, from ProQuest database.
- Stevens, J. (1992). Applied Multivariate Statistics for the Social Sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Taiwan Stock Exchange Corporation (TSEC) 2004. Retrieved September 15, 2005 http://www.tse.com.tw/ch/statistics/statistics.php?tm=07
- Trailer, J. W., Rechner, P., & Hill, R. C. (2004). A compounded agency problem: an empirical examination of public-private partnerships. *Journal of American Academy of Business, Cambridge, 5*(1/2), 308-315.
- Uddin, N. & Gillett, P.R. (2002). The effects of moral reasoning and self-monitoring on CFO intentions to report fraudulently on financial statements. *Journal of Business Ethics*, 40(1) 3.
- Vishwanath, T., & Kaufmann, D. (2001). Toward transparency: New approaches and their application to financial. *The World Bank Research Observer*, 16(1), 41-57.
 Retrieved May 14, 2004, from ProQuest database.

Waring, P., & Lewer, J. (2004). The impact of socially responsible investment on human resource management: A conceptual framework. *Journal of Business Ethics*, 52(1) 99.

Young, B. (2003). Corporate governance and firm performance: Is there a relationship? Ivy Business Journal Online, Sep/Oct 1.

BIBLIOGRAPHY

- Aaker, J., Fournier, S., & Brasel, S. A. (2004). When good brands do bad. Journal of Consumer Research, 31(1) 1-16.
- Aihashim, D. D. (2002). The accounting crisis as a result of the Enron case, and its implications on the U.S. accounting profession. *Journal of American Academy of Business, Cambridge, 2*(1) 210-214.
- American Psychological Association. (2001). Publication manual of the American Psychological Association. (5th ed.). Washington, DC: Author.
- Analytica (1992). Board Directors and Corporate Governance: Trends in the G7 Countries Over the Next Ten Years. England: Oxford Analytica Ltd.
- Anonymous (2003). The good, the bad, and their corporate code of ethics: Enron, Sarbanes-Oxley, and the problems with legislating good behavior. *Harvard Law Review*, 116(7) 2123. Retrieved May 14, 2004, from ProQuest database.
- Baxter Jr, T. C. (2003). Governing the financial or bank holding company: How legal infrastructure can facilitate consolidated risk management. *Current Issues in Economics and Finance*, 9(3) 1-7.
- Beattie, A. (2000). G24 coalition bristles at IMF demands for fiscal transparency. *Financial Time*, 16. Retrieved May 14, 2004, from ProQuest database.

- Beecher-Monas, E. (2003). Corporate governance in the wake of Enron: An examination of the audit committee solution to corporate fraud. *Administrative Law Review*, *55*(2), 357.
- Bhattacharya, U., Groznik, P., & Haslem, B. (2003). Is CEO certification credible? *Regulation*, 26(3), 8.
- Bossone, B., & Lee, J. K. (2004). In finance, size matters: The "systemic scale economies" hypothesis. *IMF Staff Papers*, 51(1) 19-46.
- Boyce, G. (2000). Public discourse and decision making exploring possibilities for financial, social and environmental accounting. *Accounting, Auditing & Accountability Journal, 13*(1) 27.
 - Boylan, S. J. (2004). A classroom experiment on the benefit of auditing in financial markets. *Issues in Accounting Education*, 19(2), 189-209.
 - Brewer, J. (1996). Editorial. Corporate Governance Quarterly, Hong Kong Institute of Company Secretaries, March 2(1), 1.
 - Business Objects. (2004). Business objects launches new Sarbanes-Oxley analytic solution to help businesses manage compliance. Retrieved March 10, 2005, from http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId =news
 - Byington, J. R., & Christensen, J. A. (2002). A high stakes game of risk for the independent auditor. Southern Business Review, 28(1) 20-28. Retrieved May 14, 2004, from ProQuest database.
 - Carrigan, C. R., Carrington, A., Cocozza, T., & Rabun, D. (2003). Rx for financial statement acceleration-using technology to ease the pain. *The Journal of Government Financial Management*, 52(2) 34.

- Cashell, J. D.,& Aldhizer, III G. R. (2004). Construction contract auditing in local government entities. *The Journal of Government Financial Management*, 53(1) 42-49.
- Chambers, V.,& Crowley, P. (2003). Capitalism and accounting reform. S.A.M. Advanced Management Journal, 68(3) 44.
- CIO view. (2004). CIO view delivers security now! : provides financial transparency for IT security; increases security auditor productivity 90%. Retrieved May 14, 2004, from

http://home.businesswire.com/portal/site/google/index.jsp?ndmViewId=news_vie w&news

- Clark, J. M., Ferrell, L., & Ferrell, O. C. (2003). Conflicts of interest arising from the prudent investor rule: Ethical implications for over-the-counter derivative securities. *Journal of Business Ethics*, 47(2), 165.
- Cordella, T., & Yeyati, E. L. (1998). Public disclosure and bank failures. International Monetary Fund, Staff Papers – International Monetary Fund, 45(1) 110-131.
- Cox, P., Brammer, S., & Millington, A. (2004). An empirical examination of institutional investor preferences for corporate social performance. *Journal of Business Ethics*, 52(1) 27.
- Daily Times. (2004). EU strikes accounting deal, misses transparency goal. Retrieved May 14, 2004, from http://www.dailytimes.com.pk/default.asp?page5 18
- Dondog, L. (2004). Implementing international accounting standards (IAS) implementation in Mongolia. *The Journal of Government Financial Management*, 53(3) 8-9.

- Dorsey, W. (2003). Behavioral trading: Methods for measuring investor confidence, expectations and market trends. Retrieved September 20, 2004, from http://www.economics-finance.com/Behavioral_Trading_Methods_for_Measurin g Investor Confidence Expectations and Market Trends 1587991640.html
- Drucker, P. (1976). The unseen revolution: How pension fund socialism came to America. New York: Harper & Row.
- Elias, R. Z. (2002). Determinants of earnings management ethics among accountants. Journal of Business Ethics, 40(1/3) 33-45. Retrieved May 14, 2004, from ProQuest database.
- FDIC (2002). Enhancing financial transparency. Retrieved May 14, 2004, from http://www.fdic.gov/bank/analytical/fyi/2002/072402fyi.html.
- Fekrat, M A. (1998). Multinationality: The financial accounting implications. *Managerial Finance*, 24(5) 42-52.
- Fountain, J.R., Patton, T. K., & Steinberg, H. I. (2004). Improving performance reporting for government: New guidance and resources. *The Journal of Government Financial Management*, 53(1) 60-64.
- Furman, J., & Stiglitz, J. E. (1998). Economic crises: Evidence and insights from east Asia. Brooking Papers on Economic Activity 2 1-135.
- Gara, S. C., & Langstraat, C. J. (2003). The Sarbanes-Oxley Act of 2002: A new ballgame for accountants. *The University of Memphis Law Review*, 34(1) 73-114.
 Retrieved May 14, 2004, from ProQuest database.
- Gates, M. N. (2003). The Sarbanes-Oxley Act and non-US issuers: Consideration for international companies. *Journal of Commercial Biotechnology*, 10(1), 40.

- Gerde, V. W., & White, C.G. (2003). Auditor independence, accounting firms, and the securities and exchange commission. *Business and Society*, *42*(1) 83-114.
- Giles, J. P., Venuti, E. K., & Jones, R. C. (2004). The PCAOB and convergence of the global auditing and accounting profession. *The CPA Journal*, *74*(9) 36-39.
- Goh, K. L. (2003). Does consumer confidence forecast consumption expenditure in New Zealand? Retrieved September 14, 2004, from http://www.treasurry.govt.nz
- Graves, S., & Waddock, S. (1994). Institutional owners and corporate social performance. Academy of Management Journal 37(4), 1034-1046.
- Hall, S. C. (2003). Sarbanes Oxley Act of 2002. Journal of Financial Service Professionals, 57(5), 14.
- Heinemann, F., Nagel, R., & Ockenfels, P. (2004). The theory of global games test: experimental analysis of coordination games with public and private information. *Econometrica*, 72(5) 1583-1599.
- Jansen, W. J., & Nahuis N. J. (2002). The stock market and consumer confidence: European evidence. Retrieved September 14, 2004, form http://www.technicalanalysis.org.uk
- Leeds, R. (2003). Breach of trust: Leadership in a market economy. Harvard International Review, Fall 25(3) 76.
- Lewis, K. D. (2002). The responsibility of the CEO: Providing ethical and moral leadership. *Vital Speeches of the Day, 69*(1), 6-9.
- McGowan, D. M., & Brisendine, A. T. (2003). What's next after Enron and Sarbanes-Oxley? *Benefits Law Journal*, 16(1), 94-105.

Metzger, L. M. (2004). Accounting ethics, imagine that. The Journal of Government Financial Management, 53(1) 22-27.

- MENAFN-Middle East North Africa Financial Network. (2004). Bahrain to ensure highest standards of transparency. Retrieved May 14, 2004, from http://www.menafn.com/qn news story s.asp?SttoryId=65386
- Montana, J. (2003). Sarbanes-Oxley one year later. Information Management Journal, 37(4), 18.
- Multinational Monitor (2002). Accounting for bad accounting. *Washington Jan/Feb* 23(1&2) 36.
- Pergola, T. M. (2005). Management entrenchment: can it negate effectiveness of recently legislated governance reform? *Journal of American Academy of Business*, 6(2), 177-183.
- PhD. (2004). The valuation effect of investor behavior on the relevance of financial information. Retrieved May 20, 2005, from http://wwwlib.umi.com/dissertations/fullcit/3118119
- Phelan, S. E. (1997). Exposing the illusion of confidence in financial analysis. Management Decision, 35(2) 163-168.
- Robertson, D.M., & Tortora, A. A. (2003). Reporting requirements for lawyers under Sarbanes-Oxley: Has Congress really changed anything? *The Georgetown Journal of Legal Ethics*, 16(4) 785. Retrieved May 14, 2004, from ProQuest database.
- Russel, P. S. (2004). Money Laundering: A global challenge. Journal of American Academy of Business, Cambridge, 259 (1/2) 259-265.

Schenk, J. J., & Yoder-Wise, P. S. (2002). Professional self-regulation- another Enron casualty? *The Journal of Continuing Education in Nursing*, 33(3) 100-101.

Seeholzer, R. (2004). Into the light. Risk Management, 51(9) 40-44.

- Semple, J. W. (2003). The effect of the Sarbanes-Oxley Act on the attorney-clinet privilege. *FDCC Quarterly*, *53(4)*, 419.
- Shende, S., & Bennett, T. (2004). Transparency and accountability in public financial administration. Retrieved May 14, 2004, from

http://unpan1.un.org/intradoc/groups/public/documents/un/unpan007716.pdf

- Shleifer, A. & Vishny, R.W. (1996). A survey of corporate governance, national bureau of economic research, *Working Paper 5554, Cambridge, MA.*
- Snyder, J. (2005). Regulation of lawyer conduct under Sarbanes-Oxley: minimizing law-firm liability by encouraging adoption of qualified legal compliance committees. *The Review of Litigation, 24*(1), 223-252.
- Stephenson, C. (2004). Rebuilding trust: The integral role of leadership in fostering values, honesty and vision. *Ivey Business Journal Online, Jan/Feb 1*.
- Swartz, N. (2003). The cost of Sarbanes-Oxley. Information Management Journal, 37(5) 8.
- Thompson, J. W., & Lange, G. (2003). The Sarbanes-Oxley Act and the changing responsibilities of auditors. *Review of Business*, 24(2) 8-12. Retrieved May 14, 2004, from ProQuest database.
- Turban, D., & Greening, D. (1996). Corporate social performance and organisational attractiveness to prospective employees. Academy of Management Journal 40(3), 658-672.

- Wallace, W.A. (2004). Inter-country public sector comparisons and harmonization of international accounting, auditing and regulation. *The Journal of Government Financial Management*, 53(3) 10-16.
- Waring, C. G., & Daugherty, C. A. (2004). Auditing ethics-make them an offer they can't refuse. *The Journal of Government Financial Management*, *53*(1) 34-40.

Waxman, R. N. (2004). A Test of Controls. The CPA Journal, 74(8) 26-32.

- Wendland, T. A. (2003). Measuring governmental performance-the accountants weigh in. The Journal of Government Financial Management, 52(3) 56.
- West, J. P.,& Berman, E. M. (2002). Increasing urban government financial accountability: The role of multiple stakeholders. *Journal of Public Budgeting*, *Accounting & Financial Management*, 14(4) 497-534.
- Wheeler, D. & Grayson, D. (2001). Session 2- Business and its stakeholders. Journal of Business Ethics, 32(2) part 2.
- Wyman, P. (2004). Is auditor independence really the solution? *The CPA Journal*, 74(4) 6-7.

Appendix A

Authorization for Voluntary Consent



THIS DOCUMENT SHALL ONLY BE USED TO PROVIDE AUTHORIZATION FOR VOLUNTARY CONSENT

PROJECT TITLE: EFFECTS OF FINANCIAL INFORMATION TRANSPARENCY ON INVESTOR BEHAVIOR IN TAIWAN STOCK MARKET

Project IRB Number: 2005-045 Lynn University. 3601 N. Military Trail, Boca Raton, Florida 33431

I, Hsiu-Jen Fu, am a doctoral student at Lynn University. I am studying Global Leadership, with a specialization in Corporate and Organizational Management. Part of my education is to conduct a research study.

DIRECTIONS FOR THE PARTICIPANT

You are being asked to participate in my research study. <u>Please read this carefully</u>. This form provides you with information about the study. The Principal Investigator (Hsiu-Jen Fu) will answer all of your questions. Ask questions about anything you don't understand before deciding whether or not to participate. You are free to ask questions at any time before or after your participation in this study. Your participation is entirely voluntary and you can refuse to participate without penalty or loss of benefits to which you are otherwise entitled.

PURPOSE OF THIS RESEARCH STUDY: The purpose of this study is to examine the impact of financial information transparency on investor behavior in Taiwan stock market. There will be approximately 300 of people participating in this study. These are investors who have experience with buying shares in Taiwan stock market. The participants must be 18 years and older.

PROCEDURES: All participants will be invited to participate via questionnaire that provided by the researcher. In this survey, the questionnaire will collect from investors who have at least 18 years old and who have experience buying shares in Taiwan. The researcher will stand outside of the underwriter office to look for investors who meet the requirements and are willing to be a participant. You will be prompted to answer questions about your perception of financial information transparency. It takes about 10 minutes to complete. When the survey is completed by the participants, the researcher will collect the questionnaires. The participants will not write any identifier on the questionnaire and no one can identify the respondents from this survey. This survey will be anonymous and voluntary. You will finish the survey in private and the researcher will not collect any identifying information linking the participant to the survey data.

POSSIBLE RISKS OR DISCOMFORT: This study involves minimal risk. You may find that some of the questions are sensitive in nature. In addition, participation in this study requires a minimal amount of your time and effort.

POSSIBLE BENEFITS: There may be no direct benefit to you in participating in this research. However the results of the study will be important to corporations, investor behavior, and other researchers. Corporations may benefit greatly by identifying the most important factors of investors'

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decisions. Investors may benefit greatly by financial information transparency survey. Other researchers may benefit by duplicating this study and finding other factors based on this study.

FINANCIAL CONSIDERATIONS: There is no financial compensation for your participation in this research. There are no costs to you as a result of your participation in this study.

ANONYMITY: Anonymity will be maintained to the entire survey. The researcher will not identify you and data. Individual responses will not be identified nor tracked as part of data collection. Participation in this survey is voluntary and return of the completed survey will constitute your informed consent to participate. No one can connect to the researcher's personal database pool except the researcher. The data and questionnaires will be kept in a locked cabinet for five years and than destroyed after five years. The results of this study may be published in a dissertation, scientific journals or presented at professional meetings. Your anonymity will be maintained in all publications or presentations results from this study.

RIGHT TO WITHDRAW: You are free to choose whether or not to participate in this study. There will be no penalty or loss of benefits to which you are otherwise entitled if you choose not to participate.

CONTACTS FOR QUESTIONS/ACCESS TO CONSENT FORM: Any further questions you have about this study or your participation in it, either now or any time in the future, will be answered by Hsiu-Jen Fu (Principal Investigator) who may be reached at: or or

and Dr. Ralph J. Norcio, faculty advisor who may be reached at:

For any questions regarding your rights as a research subject, you may call Dr. Farideh Farazmand, Chair of the Lynn University Institutional Review Board for the Protection of Human Subjects, at . If any problems arise as a result of your participation in or email to

this study, please call the Principal Investigator (Hsiu-Jen Fu) and the faculty advisor (Dr. Ralph J. Norcio) immediately.

A copy of this consent form will be given to you.

INVESTIGATOR'S AFFIDAVIT: I have carefully explained to the subject the nature of the above project. The person participating has represented to me that he/she is at least 18 years of age, and that he/she does not have a medical problem or language or educational barrier that precludes his/her understanding of my explanation. I hereby certify that to the best of my knowledge the person who is signing this consent from understands clearly the nature, demands, benefits, and risks involved in his/her participation and his/her signature is legally valid.

Signature of Investigator

Date of IRB Approval: 12/12/200 7.7.



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Appendix B

Authorization for Voluntary Consent (Chinese Version)



Lynn University

本文件只適用於提供自願參與的同意書

研究計畫名稱: 財務資訊透明度對台灣股市投資人之行為影響

研究計畫 IRB 號碼: 2005-045. Lynn University 3601 N. Military Trail Boca Raton, Florida, FL 33431

本人,是美國 Lynn University 博士班學生,目前正在研究全球性之領導統御之議題,我的主修是 企業與組織管理,此一學術研究是我教育學習的一個重要階段,真誠的邀請您參與這份研究計畫。

參與者須知:

您被邀請參與這份研究計畫,以下內容將提供您關於這份研究的相關資料,請仔細閱讀。主要研 究員傅秀仁將回答您所有問題,若有任何疑問,請務必在決定參與前提出。您可以在參與此學術 研究之前後或進行當中自由發問。您的參與是完全自願性的,您可以拒絕參與而不用擔心任何權 益上的損失或懲罰。

研究目的:這份研究試圖,將探討財務資訊透明度是否會影響台灣股市投資人之行為。大約 300 人將受邀參與此次研究。受訪者必須要有台灣股市投資經驗並須年滿 18 歲以上。

程序:你將需要完成一份名稱為"投資人行為"的問卷,這份問卷將針對您對台灣股市財務資訊 透明度的觀感進行評估。您至少須年滿18歲以上且有交易股票之經驗。研究者將於券商營業廳 外尋求符合且願意之投資人回答問卷。整份問卷大概需要十分鐘即可完成。如果需要的話,研究 員可以協助您完成本問卷調查。這份問卷將採匿名方式進行,您的身分將無法辨認。這份問卷將 不會收集任何足以辨認身分之個人資料

可能性之風險或不適感:此研究牽涉極微小之風險,但您可能會覺得有些問題比較敏感。此外, 參與這份問卷調查將佔用您少量的時間和心力。

可能性之受益:參與這次研究,您將無法直接受益。但研究結果所獲得的知識將幫助企業了解投 資人對財務資訊的需求投資人並可藉由此次調查而了解行為決策之因素,另外其他研究者亦可藉 由此一研究發展其他方面之相關研究,讓投資人能間接受益。

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財務考量:參與這次研究您將不會獲得金錢上的報酬,但也不會造成您任何損失。

匿名性:本問卷採匿名方式進行,您的身分將無法辨認,所有資料將集體整理。這份問卷將不會 收集任何足以辨認身分之個人資料(例如:姓名、身分證字號 等等)。所蒐集的資料與問卷將儲 存於上鎖之儲櫃5年並於5年後銷毀。參與這份研究是自願性的,問卷的填寫及繳回將視同您 同意參與此學術研究。

這份研究報告結果將可能發表於論文、學術期刊或學術會議,您的個人隱私在所有發表刊物上將 受到同等的保護。

撤銷之權利:您可以自由選擇是否參與此學術研究,若您選擇不參與,將不會導致任何懲罰或權 利的損失。

相關問題的聯絡人:任何進一步與此學術研究相關的問題,將由主要研究員傅秀仁...(聯絡電

話:0912-338700)或此研究之指導教授 Dr. Ralph J. Norcio (聯絡電話:

指導教授 Dr. Ralph J. Norcio。此外,您將收到此一同意書之副本。

研究員誓詞:我已經仔細向受訪者說明此次的研究計畫,我也確認過受訪者的年紀年滿 18 歲,並 且沒有任何醫療上的問題與語言或教育的障礙,來影響受訪者理解我的說明。我藉此保證在我的 最佳認知之下,參與者已清楚瞭解此一研究計畫以及所有參與過程所牽涉的利益及風險。此份簽 名之同意書是具有法律效益的。

_ IRB Approval 核准日期: ___**I2./I2 / 2***00 5*

研究員的簽名



答。

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Appendix C

Certification of Translation

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TRANSNATIONAL SERVICES, INC

8760 S.W. 80th Street, Miami, FL 33173 Tel : Fax: Fax:

CERTIFICATE OF ACCURACY

STATE OF FLORIDA)

) COUNTY OF DADE)

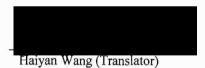
Mr. Haiyan Wang, a certified Chinese and Russian translator and interpreter for U.S. Department of State, Federal Courts, Miami Immigration Courts, Miami-Dade and Broward County Courts and a member in good standing of the American Translators Association (ATA), being duly sworn, deposes and says,

That he is fluent in both the English and the Chinese languages.

SS:

That he has translated the annexed documents from the English into the Chinese language described as <u>A. Directions For the Participant; B. The Investor Behavior Questionnaire</u> consisting of <u>2</u> pages for each document, that this is a true and complete translation to the best of his knowledge, ability and belief.

FURTHER AFFIANT SAYETH NOT



SUBSCRIBED AND SWORN TO before me at Miami-Dade County, Florida on this 8th day of December, 2005



Notary Public (Seal)

My Commission Expires:

JIAN YU MY COMMISSION # DD 078662 A OF NOR EXPIRES: February 26, 2005 1-600-3-NOTARY FL Notary Service & Bonding, Inc.

Appendix D

Survey of Instrument

The Investor Behavior Questionnaire

Survey Instructions

Please follow the directions below to complete this survey.

 In answering all of the questions, please use a scale from 1 to 9 where 1 means "very strongly disagree", 5 means "neither agree nor disagree", and 9 means "very strongly agree". Write a number in the space provided that best indicates your feelings about the question.

Section 1: Financial Information Transparency and Disclosure

Rate the following questions from 1 to 9. Please use the scale as explained in the survey instructions.

- Transparency of Ownership
- 1. _____ The company's web site helps me to understand ownership structure information.
- 2. Shareholder meetings help me to understand a corporation's performance.
- 3. ____ I will buy a corporation's shares if it offers specific ownership structure information to me.
- Financial Transparency and Information Disclosure
- 4. The company's web site helps me to understand financial information.
- 5. I will buy a corporation shares if it offers timely financial information to me.
- 6. I trust a corporation's financial statements.
- 7. _____ I trust a corporation's financial statements that are approved by an independent accountant.
- 8. _____ I believe that good information transparency will make the stock market more efficient?
- Board Structure and Process
- I will buy a corporation's shares if it provides pertinent information on its Board members.

10. _____ I will buy shares if a corporation demonstrates both financial success and social responsibility.

Section 2: Investor Behavior

Rate the following questions from 1 to 9. Please use the scale as explained in the survey instructions.

- Corporate Scandals
- 11. Corporate scandals make me reduce my shareholding.
- 12. Corporate scandals make me lose confidence in the stock market.
- 13. ____ Corporate scandals are the responsibility of accountants.
- Government Regulations
- 14. ____ Government regulations such as Sarbanes-Oxley Act. 2002, in the United States make me more likely to buy a corporation shares.
 - _____

Please write your responds regarding your basic information

- 15. Gender
- \square Male \square Female
- 16. Age

 \square 18-30 \square 31-45 \square 46-60 \square more than 60 years old

- 17. Highest Level of Education
- \square High school degree or under \square 2 years college degree \square Bachelors degree
- ☐ Masters degree or above
- 18. Experience in buying corporation shares
- \Box less than 4 years \Box 4 to 9 years \Box more than 9 years
- 19. Annual income (USD)

 \Box less than 10,000 \Box 10,000 to 25,000 \Box 25,001 to 35,000 \Box more than 35,000

20. Do you have any additional comments regarding investor behavior? Please write below:

Appendix E

Survey of Instrument (Chinese Version)

投資人行為問卷

填寫問卷說明

請根據以下說明完成此份問卷.

● 在回答所有問題時,請使用1到9數字評分1表示"極度不同意",5表示"介

於同意與不同意之間",9 表示"極度同意".並請以上述評分之級距填寫於各

項問題前之空格內,以表達最接近您的想法

第一部分: 財務資訊透明度與揭露

請參閱填寫問卷說明以1到9數字評分完成此部分問題

公司股權結構透明度資訊

公司網頁內容能幫助我了解公司股權結構資訊

2. 股東會能幫助我了解企業績效

如果企業提供明確的股權結構資訊,我將願意購買該公司股票

財務資訊透明度與揭露

4. 公司網頁內容能幫助我了解企業財務資訊

5._____ 如果企業提供即時的財務資訊, 我將願意購買該公司股票

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6. 我相信公司所編置的財務報告

7. 我相信經會計師簽證過的公司財務報告

8. 我相信好的即時的財務資訊透明度將會使股票市場更有效率

● 董事會結構與程序

9. 如果企業提供董事會成員資訊及董事會程序,我將願意購買該公司股票

10. 若企業能展示成功的財務績效與社會責任,我將願意購買該公司股票

第二部份:投資人行為

請參閱填寫問卷說明以1到9數字評分完成此部分問題

● 企業醜聞(弊案)

11. 我會因企業醜聞(弊案)降低手中持股

12. 我會因企業醜聞(弊案)對股市失去信心

13. 會計師應對企業醜聞(弊案)負責

● 管理制度

14. 若國內實施類似美國沙賓法案的管理制度我將更有意願投資股市

請填寫您個人相關資料

15.性別

□男□女

16.年齡

□ 18-30 □ 31-45 □ 46-60 □ 61 歲及以上

17.最高教育程度

□ 高中職及以下 □ 專科 □ 大學 □ 碩士及以上

18.股市交易年資

□ 3 年及以下 □ 4 to 9 年 □ 10 年及以上

19.年收入 (新台幣元)

□ 32 萬及以下 □ 32 萬零 1 元-80 萬 □ 80 萬零 1 元-112 萬□ 112 萬以上

20. 您若有其他有關投資人行為的意見, 請在以下空白處填寫您的意見 並再一次感

謝您的此次參與調查.

Appendix F

IRB Approval



Principal Investigator: Hsiu-Jen Fu

Project Title: Effects of Financial Information Transparency on Investor Behavior In Taiwan Stock Market.

IRB Project Number 2005-045

APPLICATION AND PROTOCOL FOR REVIEW OF RESEARCH INVOLVING HUMAN SUBJECTS OF A NEW PROJECT: Request for Exempt Status _____ Expedited Review_____ Convened Full-Board X

IRB ACTION by the CONVENCED FULL BOARD

Date of IRB of application and Research Protocol 12/12/05

IRB ACTION: Approved X Approved w/provision(s) Not Approved Other

COMMENTS

Consent Required: No ___ Yes \underline{X} Not Applicable ___ Written \underline{X} Signed ___ Consent forms must bear the research protocol expiration date of $\underline{12/12/06}$ Application to Continue/Renew including an update consent, is due:

- (1) For a Convened Full-Board Review, two month prior to the due date for renewal \underline{X}
- (2) For an Expedited IRB Review, one month prior to the due date for renewal
- (3) For review of research with exempt status, <u>one month</u> prior to the due date for renewal

Name of IRB Chair (Print) Farideh Farazmand

Signature of IRB Chair

Date: 12/12/05

1

Cc: Dr. Norcio Dissertation Chair

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