Directions for Rebuilding Corporate Governing Structure to Prevent Accounting Fraud*

(회계부정 방지를 위한 기업지배구조 재구축 방향)

이기열(Giyoul Lee)**

ABSTRACT

기업의 소유주인 주주들은 그들의 부를 보호하기위한 제도적 장치를 필요로 하며 이사회가 이 기능을 담당한다. 주주들은 기업의 제반업무를 감시, 감독, 지도하기 위한 그들의 대리인으로 이사들을 선출한다. 이사들은 기업경영에 대한 책임을 전문경영자에게 위탁하나 경영자들은 때때로 개인적인 탐욕, 증권분석가들의 기대에 부응하기위해 또는 다른 이유들로 부정을 저지르곤 한다. 경영자의 부정은 재무보고서의 진실성에 대한 공공의 신뢰를 무너뜨릴 뿐만 아니라 금융시장의 붕괴를 초래할 수 있다. 경영자들은 서류를 조작하거나 내부통제 조직절차를 무력화 시킬 수 있는 위치에 있기 때문에 그들의 부정을 적발하기가 쉽지 않다. 따라서 재무보고 작성 전 과정을 이사회가 감시하는 것이 필요하나 많은 이사들은 전문성의 결여 또는 다른 이유로 인해 재무보고 감시기능은 감사위원회에 일임한다. 이사회의 이사들은 그들의 책무를 공정불편하게 수행하기위해 독립적인 외부인사들 로 구성이 되어야 한다. 그러나 외부인들은 내부인 에 비해 기업정보에 어둡다(정보 불균형). 따라서 이사들이 그들의 업무를 효과적으로 수행하기위해선 기업에 대한 정보가 제공이 되어야 한다. 이 기능을 감사위원회가 담당한다. 감사위원회는 재무보고 전 과정을 감시하며 또한 내부 및 외부 감사인 들과 면밀히 교제하기 때문에 많은 기업정보를 가지고 있다. 이들이 습득한 정보를 정보열세에 있는 이사들에게 제공함으로서 이사회가 본연의 기능을 수행하도록 돕는다. 그러나 이사회는 경영자와 대립관계에 있는 것 이 아니고 기업의 소유주인 주주들의 부의 증진을 위해 경영자와 또한 상호 협력관계를 유지하여야 한다.

Key Words : Audit Committee(감사위원회), Board of Directors(이사회), Corporate Governance(기업지배구조), Management Fraud(경영자의 부정)

I. Introduction

Recent accounting frauds involving high profile companies such as Enron, WorldCom, Tyco, Global Crossing, Sunbeam, etc. have called into question accounting practices and undermined public confidence in the accounting profession.

* 이 연구는 2006년도 단국대학교 대학연구비의 지원으로 연구되었음
** 단국대학교 회계학 교수

During the 1990s, Enron—a Houston-based marketer of electricity, natural gas, energy, and other physical commodities, recorded spectacular growth in revenue and income, and its stock price skyrocketed. In 2000, Enron reported $101 billion in revenue, making it the 7thlargest U.S. company, and employed more than 21,000 over 40 countries. Upon the Securities and Exchange Commission(SEC) investigation, it restated its financial statements for 1997-2000, slashing $581 million profits to losses over a 3-year period. Its stock price plummeted from high $90's to less than $1 in a matter of days. It ended up with bankruptcy. Its auditor, Arthur Andersen, was indited by federal prosecutors for destroying Enron-related documents and was convicted of obstruction of justice. As a result of the conviction, it was prohibited from auditing public companies and went out of business. The 89-year-old Arthur Andersen was one of the Big Five accounting firms with 2001 revenue of $9.3 billion and more than 85,000 professionals in 84 countries.

Although everyone agrees that fraud has been increased both in size and frequency, it is difficult to know its magnitude for sure. The Association of Certified Fraud Examiners (ACFE) conducted a survey from 1134 cases of occupational frauds that were investigated between 2004 and 2006. It estimated that U.S. organizations lost 5 percent of their annual revenue to fraud. Applied to the estimated 2006 Gross Domestic Product (GDP), this figure would approximate $652 billion in fraud losses. Occupational fraud scheme is very difficult to detect because the median length of time to detect is 18 months. The ACFE also reported that organizations that had internal audits department or that performed surprise audits or that educated their employees for anti-fraud training experienced far less fraud losses than those organizations that did not have such actions(ACFE 2006).

On August 17, 2007, the audit committee of the Dell Inc. wrapped up yearlong internal investigation into accounting problems, which would cost Dell as much as $150 million. Dell admitted earnings manipulation between 2003 and the first quarter of 2007 to meet performance goals. While the SEC's investigation of Dell is going on, the Chief Financial Officer (CFO) said, "[they] identified evidence that certain adjustments appear to have been motivated by the objective of attaining financial targets"(Forbes August17,2007). Such a fraud harms users by providing incorrect financial information for their decision making and shakes public confidence in the financial market.

In July 2002, President Bush unveiled a plan to battle the "moral confusion and relativism" that devastated lives of so many innocent people(Green 2005). His remarks were not about the terrorist attacks, but aimed at Wall Street in the wake of Enron and WorldCom scandals to restore public confidence in the financial market. About a month later, President Bush signed the Sarbanes-Oxley Act (SOX hereafter), which signaled a long and tortuous efforts to reform corporate governance and accounting practices.

The current research is to address directions rebuilding corporate governing structure to prevent accounting frauds and to restore public confidence in the financial information, because fair presentation of financial statements is vital for the information users to make their rational decisions, which , in turn, helps the effective functioning of the securities market. Even though management is ultimately responsible for the fair presentation of financial statements, it may manipulate those informations due to various motives. Hence the internal and external mechanisms to oversee the overall financial reporting process is needed. The board of directors with help of the audit committee assumes the coordinating role between internal and external monitoring mechanisms(corporate governance). The purpose of this research is to deal with duties and formation of the board of directors and audit committee for their watchdog role for the financial reporting processes. The remainder of this paper is organized as follows: Section II discusses corporate governance, Section III presents monitoring functions of the corporate board, followed by formation of the board in Section IV. Section V discusses the audit committee, followed by the conclusion in Section VI.

II. Corporate Governance

The U.S. economy has grown substantially until the OPEC oil embargo and the stagflation of the 1970's. Stocks of large U.S. corporations were sold less than book value, meaning that their companies were better off dead than alive. Languishing stock prices throughout the 1970s and into the 1980s caused investors, especially institutional investors, to become increasingly disenchanted with corporate America's performance. Michael Porter attributed the anemic performance of the U.S. economy to a faulty corporate governance system that forced managements to focus on stock prices rather than on the long-term interests of the company(Porter 1992). On the other hand, Bernstein concluded that the cure advocated by Porter was fallible: Managements and boards had become too cozy and were not paying enough attention to stock prices. The approaches advocated and implemented by Bernstein were hostile takeovers, leveraged buyouts (LBO's), proxy fights, and reformation of corporate governance(Bernstein 1992).

Institutional investors led the way regarding corporate governance reforms and effectiveness of the board of directors. Among the most influential institutional investors for corporate governance reforms were the Teachers Insurance and Annuity Association (TIAA)—College Retirement Equity Fund(CREF) and California Public Employees Retirement System (Calpers). TIAA-CREF manages multi- billion dollars of pension fund, and Calpers, with assets totaling more than $166 billion, is the largest public pension fund in the U.S. and the third largest in the world(TIAA-CREF 2004).

A corporation has three distinctive features—unlimited life, limited liability of owners, and the divisibility of ownership (shareholders). Owners (shareholders)need a mechanism to protect their ownership interests in the company because they do not participate in the operation of business. The board of directors has evolved to fulfill this function. The shareholders elect directors as their representatives to monitor and manage the affairs of the business. The directors, referred as the board of directors as a group, then delegate responsibilities for running the business to the top management, called Chief Executive Officer (CEO), whom they hire. The CEO is accountable to the board of directors, which is accountable to the shareholders individually and collectively.

The board advises and approves strategies and operation of the business as well as monitoring them. This system of authoritative directions is called corporate governance, which has a profound effect on performance of the business. The essence of corporate governance is the board of directors, which governs the directions, strategies, operation, and financial reporting of the business. Because directors are elected by the shareholders as their representatives, they are expected to demonstrate underlying loyalty to shareholders and exercise due diligence in performing their responsibilities (fiduciary responsibilities). Any individual who assumes a director's role must be qualified to perform prescribed duties as well. In addition, a majority of the board must be filled with independent directors to minimize any conflict of interests with management.

III. Monitoring Functions of the Board

As representatives for the shareholders, the directors are responsible for monitoring the affairs of the company for the best interests of the shareholders. The board's main functions are to oversee the following:

- The way that top managements run the business (business operation)
- Risks that the business faces and the way to handle those risks (business risks)
- The way that top managements comply with various rules and regulations, company policies, and code of ethics(monitoring management)

1.Monitoring Business Operation

Developing and using benchmarks is a useful tool to monitor business operation. Benchmarks can be developed externally or internally. External benchmarks could be developed from industry statistics, or data compiled and reported from independent sources. They help identify best practice, highlight performance gaps, and competitive advantages or disadvantages. They can also be used as a milestone to measure success of the business. Internally developed benchmarks may be utilized to monitor the operation, but internal data tend to be manipulated. For internal benchmarks to be meaningful, creditability of the data needs to be assured.

Several quantitative and qualitative measures could be developed to gauge operational effectiveness and efficiency. These examples are:

- financial measures such as return of investment (ROI), return on asset (ROA), or return on equity (ROE), revenue growth, and profitability
- Customer-related measures, such as market share, customer retention percentage, and customer satisfaction

Devising good key performance indicators is essential to diagnose the health of the business. Those indicators could be used to educate future investors, outside analysts, employees, and other stakeholders. For example, the New York City Police Department (NYPD) tracks the number of complaints to determine the effectiveness of crime fighting. The New York City Crime Index has decreased approximately 700,000 complaints in 1990 to under 250,000 in 2003. The NYPD has also identified response time as a key indicator, which is used as an efficiency measure in reaching a crime scene. Quick response time improves the chance that a criminal will be apprehended. The NYPD response time was improved by 29 percent over the year of 2004. By utilizing those quantitative and qualitative indexes, the board can monitor how well the business is in operation(Dewan 2004).

2.Monitoring Business Risks

Risk oversight and management are the corporate board's major responsibilities. The National Association of Corporate Directors (NACD) states quite clearly that a corporate board's risk oversight responsibilities as "The board's role, quite simply, is to provide risk oversight. This means making sure that management has instituted processes to identify and bring to the board's attention, the major risks the enterprise faces. It also means the continual reevaluation of these monitoring processes and the risks with the help of the board and its committees"(NACD 1999). From the excerpt, it is clear that the directors must try to identify the potential risks that the business faces and to understand the implication and consequences of those risks. These pertain to the nature and complexity of the business, its transactions, and financial condition. Examples may include:

- Significant pressure to obtain additional capital necessary to remain competitive in the industry.
- Unusual transactions involving significant amounts.

Furthermore, these may involve the economic and regulatory environment in which the business organization operates. Examples are the following:

- New accounting, statutory, or regulatory requirements that could impair the financial stability or profitability of the business.
- Increased business failures in the industry in which the business organization operates and significant decline in customer demands.
- Rapid technological change in the industry or rapid product obsolescence

These tasks may challenge the board members who work as part-time. They usually face many issues with limited time to review and resolve the matters. To help them fulfill their assigned responsibilities and decisions, several committees are required. Those committees and their duties are as follows:

- Audit committees are responsible for supervising the internal audit function, hiring and reviewing the work of external auditors, approving periodic financial reports, and many other reporting related activities. The committee is the Securities and Exchange Commission (SEC) mandated board committee. The audit committee is discussed in Section V.
- Compensation committees make decisions for officer's compensation. This committee also reviews and approves stock options and other benefit programs by

working closely with the human resources department.

- Nominating committee helps to recruit candidates for directors.

The corporate board may establish various committees as needs arise. With ongoing interests in corporate ethics and governance, many corporations have established ethics and governance committee. With growing attention given to various aspects of risk management, the corporate board may establish the risk committee. This committee is responsible for monitoring risk issues at a very high level, coordinating closely with the audit committee, and communicating risk-related issues with the board.

3.Monitoring Management

Management often commits fraud tempted by various motives. Such motivations arise from desire to achieve personal gains, such as higher stock prices or bonuses, or to avoid financial difficulties that the company faces. The two most common types of management fraud involve improper revenue recognition and overstatement of assets. According to a study commissioned by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), 50 percent of U.S. companies committing management fraud recorded revenues prematurely or created fictitious revenue transactions. Also 50 percent of the fraud companies overstated assets by overvaluing assets, recording assets not owned, or capitalizing items that should have been expensed. According to the study, consequences of the fraud were significant. More than a half of the fraud companies filed for bankruptcy or were under different ownership(Treadway Committee:COSO 1999). The board of directors is responsible for monitoring management's characteristics and influence over internal control environments. These pertain to management's abilities, pressures, style, attitude relating to internal control and financial reporting process.

In addition to financial reporting related frauds, others that may damage public interests include insider trading, misuse of corporate assets, and conflicts of interest with those of shareholders. Shareholders want the management to own shares of the corporation on the belief that it aligns management interest with that of shareholders. However, dishonest management uses the intimate knowledge of the company for his or her own benefits. One example of trading abuse was embodied by Enron managements who sold their shares while freezing employees'shares by creating a blackout. Many employees and retirees saw their savings evaporate while top managements made a big fortune by cashing out their shares.

As a consequence, the SOX prohibits insider trades during pension blackout periods. To be specific, in section 306 the Act spells out that it shall be "unlawful for any director or executive officer ... to purchase, sell, or otherwise acquire or transfer any equity security of the issuer during any blackout period"(U.S. House of Representatives 2002). The Act also authorizes the company to recapture any profits made on such trades. The board of directors is responsible for monitoring all trades of directors and executives. These are requirements of the Sarbanes-Oxley Act, and a violation of this Act may severely damage the corporation. Section 402 of this Act specifically prohibits companies from extending credit to executives other than those available to the general public because managements often abuse corporate assets by having loans available for them.

The board of directors is also responsible for monitoring benefit programs such as employee pension, relocation, and stock option programs. Regular meetings with the human resources department personnel and with internal audit staffs help directors identify whether corporate assets are not abused.

Ⅳ. Formation of the Board

For the board to discharge its duties effectively, it must consist of qualified and experienced directors. The desirable attributes of a board member may depend on the type of the business organization. Furthermore, the board must include functional expertise in the areas of accounting, marketing, operation, management, and other specific field applicable to the characteristics of the business.

1.Independence

The board of directors is responsible for reviewing and approving all major decisions for the organization. The board is the independently managing representatives charged with responsibilities to make major decisions for the organization, based on the board members'assessments of the situation. However, these fiduciary duties of the board have been eroded in many business organizations until a few years ago that the SOX came to exist. Before the Act, the majority of a board consisted of senior management members, called inside (or employee) directors. Moreover, many outside (non-employee) directors were often friends or relatives of the CEO. These people were often obligated to the CEO who rewarded them lushly in addition to their normal compensation. Until the Act passed into the law, the boards' decision in many companies was nothing more than "rubber stamp"to affirm the CEO's decisions.

However, the Sarbanes-Oxley Act has changed the corporate governance environment. The Act prohibits director consulting fee rewards and allows litigation against individual board member for poor decisions. In the end, the Act increased the board's responsibilities for reviewing and making decisions for major activities. The Act requires the audit committee of the board to be filled with independent directors only.

2.Retired Executives and Major Shareholders

Retired executives would not be considered independent until at least three years have passed since their retirement. However, they often remain on the board on the ground that their knowledge and skills of the business would benefit the company. The disadvantage of retaining them on the board is their ties to the current management. A retired executive might give burden to the new executive, especially if he/she wants to initiate changes to the business. It would also be difficult for a retired executive to oppose the recommendations or acts of the new executive. Major shareholders often want to be or to have their representative on the board. This is acceptable practice as long as they recognize that every director must represent shareholders as a whole. It is not appropriate for an individual to represent solely his or her own interest on the board.

3.Expertise

The board must be composed of members equipped with trustworthiness, responsibility, and care. A typical board may include experts in business, operation, strategic planning, mergers and acquisitions(M&A), or technology development. For the board to discharge financial report-related monitoring activities, financial experts in accounting or finance area must be on the board.

V. Audit Committee

An audit committee is in charge of supervising the entire financially reporting process. Until the late 1980's. there were no restrictions on who could serve on the audit committee. Sometimes employee directors, such as a CFO, served on the committee and approved the financial statements that he/she prepared. Since the New York Stock Exchange (NYSE) required that all members of an audit committee be independent and non-employee (outside) directors, many changes have been entailed. In December 1999, the SEC issued rules for the committee covering such matters as independence, qualifications, charters, and outside auditor involvement. However, real charges did not occur until the collapse of Enron and the passage of the Sarbanes-Oxley Act.

Even though the audit committee of the Enron was completely composed of outside directors, many members of the committee did not fully understand the complex financial transactions that caused Enron to collapse. Moreover, the committee members spent only limited time in reviewing and approving some complicated transactions. Since the fall of Enron, the business environment has been changed and the audit committee has become the highest profile of the board of directors' committees. The primary purpose of the committee is to oversee the financial reporting process and to maintain ongoing communication with both internal and external auditors. This allows them to discuss matters related to management, such as integrity, to the committee directly. Over the years the committee's function has been expanded into oversight of financial controls with the help of internal audit staffs. These expansion includes monitoring compliance with laws, regulations, and the corporate code of conduct, and conducting special investigation, if needed.

In detail, the audit committee should:

- encourage an operating environment that espouses integrity, compliance with laws and regulations, fair financial reporting in accordance with Generally Accepted Accounting Principles(GAAP), and timely disclosure of all relevant information
- have direct communications with both external and internal auditors.
- make it sure that both external and internal auditors report directly to the audit committee.
- review the scope of internal audit program, the performance of both internal and external audit groups, and their findings.
- review and discuss with external auditor and management about the adequacy and effectiveness of the company's internal controls including any significant deficiencies and changes in internal controls.

Internal control is a system designed to provide reasonable assurance that objectives in the following three areas are achieved:

- Efficiency and effectiveness of operations
- Reliability of financial reporting
- Compliance with laws and regulations

However, the effective audit committee depends on members' abilities to ask tough questions and pursue inquiries until they fully understand and are satisfied with answers.

VI. Conclusion

Owners of the company need to monitor and evaluate managerial performance to protect their ownership interests. The board of directors has evolved to fulfill this function for the owners. The board of directors is charged with responsibilities for monitoring and supervising management of the company for the best interests of the shareholders. To scrutinize managements' activities in running the business, the board members must understand and approve the managements' strategic plans, and then monitor execution of those plans. The board evaluates operating results periodically and decides its intervention, if needed.

The effective corporate governance has the following features:

- The board hires a competent CEO and gives him/her the authority to run the business.
- The board members carry out their fiduciary duties with integrity, due diligence, and competence.
- A rational business ideas devised by the top management and its team with the board's advice and consent. A rational business idea means the one that meets the customers' needs in a superior and unique way that allows the business to remain competitive and profitable.
- The interests of the board and management are aligned with those of owners.

Even though the board of directors monitors and intervenes, if necessary, managements' plans and activities, the relationship between them must not be adversary, but harmonious and productive. In the end, good corporate governance requires a team effort between management and the board of directors.

Mere existence of the board of directors is not enough to prevent manipulation of financial reporting. The board members must be vigilant and diligent in performing their oversight duties. In addition, the majority (preferably all) of the board must be composed of outside (independent) members to carry out their prescribed responsibilities in unbiased fashion. But outside directors have less information about the organization than insiders (information asymmetry), which hampers effective functioning of the board. The audit committee may help the outside directors lessen their information gap, because the committee members have plenty of information about the organization due to their close contacts with internal and external auditors. Hence the role of audit committee for the effective board should be studied in future research. Furthermore, experimental research on the performance of organizations with independent vs. non-independent directors may be warranted.

References

Abbott, L.J., and S. Parker. (2000) "Audit committee characteristics and auditor choice" Auditing: A Journal of practice & Theory 10 (Spring):47-66.

Albredt, W.S.and C. Albrecht (2004) Fraud Examination and Prevention. South-Western.

The Association of Certified Fraud Examiners (ACFE 2006) The Report to the Nation on Occupational Fraud and Abuse. Austin, TX.

Beasley, M.S. (1996) " An empirical analysis of the relation between the board of director composition and financial statement fraud". The Accounting Review 71(Oct.):443-465

Bernstein, Peter L. (Summer 1992) "Are Financial Markets the Problem or the Solution? A Reply to Michael Porter," Journal of Applied Corporate Finance 5, no. 2 17-22.

Blue Ribbon Committee(BRC). (1999) Improving the Effectiveness of Corporate Audit Committees. Stamford, CT:FASB.

Carcello, J.V., and T.L. Neal (2000) "Audit committee characteristics and auditor reporting". The Accounting Review 75 (oct.):453-467

Carcello, D.R. Hermanson, and T.L. Neal. (2002) "Disclosure in audit committee charters and reports". Accounting Horizons(Dec.):291-304

Colley, J.L. Hr., Doyle, J.L., Logan, G.W. and Stettinius, W. (2005). What is Corporate Governance? New York: McGraw-Hill.

Defond, R. Hann, and X. Hu. (2005) "Does the market value financial expertise on audit committees of board of directors?" Journal of Accounting Research 43(may): 153-193

DeZoort, F.T. (1997) "An investigation of audit committees' oversight responsibilities. Abacus(Sept.):208-227

DeZoort, and S. Salterio (2001)" The effects of corporate governance experience and financial reporting and audit knowledge on audit committee members' judgments". Auditing: A Journal of Practice & Theory20(Sept.);#1-47

DeZoort, D. Hermanson, D. Archambeault, and S. Reed. (2002) "Audit committee effectiveness: A synthesis of the empiricial audit committee literature". Journal of Accounting Literature (21):38-75

Dewan, Shailia K. (Dec.31 2004) "As Murders Fall, New Tactics Are Tried Against Remainder," New York Times, B1.

Gompers, P., A. Metrick, and J. Ishii(2003) "Corporate governance and equity prices". The Quarterly Journal of Economics 118 (1):107-155

Green, S. (2005) Sarbanes-Oxley and the Board of Directors. John Wiley and Sons, Inc.

Hadden, L.B., F.T. DeZoort, and D.R. Hermanson (2003) "IT risk oversight: The role of audit committees", internal auditors and external auditors Internal auditing (Nov./Dec.):28-33

Hankins, Melissa (April 12, 2001) "Battle over the Boardroom," Wall Street Journal, p. R6

Institute of Internal Auditors (Nov. 2005) Tone at the Top Altamonte Springs, FL.

Kaen, F.R. (2003) A Blue Prince for Corporate Governance. American Management Association.

Kalbers, L.P., and T.J. Fogatty, (1993) "Audit committee effectiveness : An empirical investigation of the contribution power". Auditing: A Journal of Practice & Theory (Spring):24-49

Kaplan, Robert S. and Norton, David P. (1996) "The Balanced Scorecard" Boston: Harvard Business School Press p.306

National Association of Corporate Directors (NACD) (1999)Report of the NACD Blue Ribbon Commission on Audit Committees. Washington, D.C.:NACD

McDonald,P. (2003) "Staffing today's internal audit function" Internal Auditor(Oct.):46-51

Moeller, R.R. (2001) COSO Enterprise Risk Management: Understanding the New Integrated ERM Framework.

Porter, Michael E. (Summer 1992). "Capital Choices: Changing the Way America Invests in Industry," Journal of Applied Corporate Finance 5, no. 2.: 4-16.

Roth, J. and Espersen, D. (2003) Internal Audit's Role in Corporate Governance: Sarbanes-Oxley Compliance. The Institute of Internal Auditors Research Foundation.

Stuart, I. and Stuart, B. (2004) Ethics in the Post-Enron Age. Southwestern Inc.

Treadway Committee :Committee of Sponsoring Organizations of the Treadway Commission COSO) (1999) "Fraudulent Financial Reporting, 1987-1997, An Analysis of U.S. Public Companies" New York.

U.S. House of Representatives, 2002. The Sarbanes-Oxley Act of 2002. Public Law 107-208 (10H.R.3763) Washington, D.C.: Government Printing Office.

TIAA- CREF Policy Statement on Corporate Governance (2004). TIAA-CREF. New York

Ward, R. (2003) Saving the Corporate Board. John Wiley& Sons, Inc,

http://www.forbes.com/2007/08/17/dell-computer-closer-markets-equity-cx-jl

저자약력: 현재 단국대학교 경상대학 회계학교수로 있으며 연구 분야는 회계감사이며 이중 경영자부정 및 기업부패 예방과 탐지방법에 특별한 관심을 가지고 있다. 연세대학교를 졸업하고 미국 University of Georgia에서 회계학석사 및 경영박 박사학위를 취득하였으며, 미국 공인회계사(CPA) 자격증을 소지하고 있다.