Implications of Executive Succession Upon Financial Risk and Performance

Susan F. Weiss

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Walden University
2011
Abstract

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by

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M.B.A., Bryant University, 2004
B.S., Rhode Island College, 1988

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

Applied Management and Decision Sciences/Finance

Walden University

November, 2011
Abstract

Executive replacements have historically created fluctuations in the market value of a company and precipitated inappropriate investor reaction. However, the direction and statistical significance of relationships between executive turnover, market value, financial risk, and investor reaction among a census of highly performing firms was previously unexplored. The purpose of this study was to determine the extent of the relationship between CEO turnover and indicators of company performance. Theoretical foundation for this study was the efficient markets hypothesis. Hypotheses tests were designed to support an ex-post facto research methodology for pre-post comparison of volatility of financial metrics, which are indicators of market value (market value added), investor reaction (Tobin’s q), risk (beta), executive performance (economic value added and return on assets), and turnover frequency given CEO succession. Statistically significant differences in firm risk emerged from comparisons of highly performing firms exemplified in the foundational leadership text Good to Great. Approximately 45% of firms sampled did not experience volatility of financial metrics, which supported the presence of a leadership legacy, or strategic management behavior which minimized financial risk. Contrary to prior studies, financial metrics sampled within an interval immediately surrounding the succession event were less indicative of significant financial risk as compared to metrics sampled over the entire tenure of executives. Implications for positive social change include reducing investor risk in selection of equity holdings; capital fairly directed to entities results in benefits for society including job creation, economic stimulus, safer retirement accounts, and corporate sustainability.
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Dedication

This composition is dedicated to my family, colleagues, and faculty. The acquisition of knowledge required to consummate this endeavor could not have transpired without their support.
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Chapter 1: Introduction to the Study

Introduction

An entity’s competitive advantage is manifested through extraordinary financial performance; informed decision-making, applied through the prowess of experienced leadership, sustains strategic competition. An executive leader’s “ability, preferences, operating policies, and ultimate decisions affect the firm through the projects the firm selects, its financial policy, and the corporate culture...[since] decisions differ across individuals, CEO changes can alter the course of the firm and its performance” (Clayton, Hartzell, & Rosenberg, 2005, p. 1779). Therefore, a personnel change at the chief executive level has an impact upon strategic operations, as discernable through the analysis of accounting and financial metrics, as well as security market participant reaction. Further, as fervent sales or purchase transactions occur in reaction to personnel succession, stockholders’ perceptions of management turnover often gives rise to trading activity, which may project unqualified volatility upon the corporation’s stock price, affecting market values of equity during the interval circumscribing the event date. Investors participating in the market environment may indecisively perceive the impact of the personnel change contingent within the risk context, and react by altering demand for equity in response. Accurate accounting metrics and financial analysis will eventually countermand spurious valuation effects of a market anomaly characterized by investor overreaction. Through information communicated within an entity’s official financial disclosures, including the Securities and Exchange Commission’s required Forms 10K and 10Q, preparers of financial statements portend information facilitating more accurate
valuation of stock prices given a change in personnel, accompanied by a change in strategy. As Graham, Harvey, and Rajgopal (2005) acknowledged, “voluntary disclosure policies are integral to the earnings reporting process…disclosure beyond that mandated in regulatory filings…shape[s] the perceptions of market participants and other stakeholders” (p. 27).

Upon sampling more than 1000 succession events accompanied by changes in financial performance, Cannella Jr. and Lubatkin (1993) said, “return and risk, however defined, are not highly correlated, suggesting that each represents a separate performance dimension” (p. 779). Whereas financial return is a manifestation of the outcome of decision-making, financial risk is a reflection of the inherent quality of decision-making within the endogenous and exogenous context of the entity. As distinguished inside followers and outsiders receive new executive appointments, researchers have found stockholder reaction to succession events to be statistically inconsistent (Friedman & Singh, 1989; Gibson, 2003; Clayton, et al., 2005). Researchers have also differentiated actual rather than perceived financial performance dynamics prior and subsequent to succession events and revealed similar inconsistencies of statistical significance. Whereas Kaplan (1994), Dahya, Lonie, and Power (1998), and Huson, Parrino, and Starks (2001), disclosed a statistically significant relationship between poor financial performance and executive turnover by type of successor, conversely, Friedman and Singh (1989) and Puffer and Weintrop (1991) discovered no significant statistical relationship between performance and turnover variables. These disparate results may have been attributable to time-series sampling. This void within the literature was effectively bridged through
purposive sampling entailing a novel approach: the analysis of entities characterized by exceptional performance, and the observance of dynamics affecting sustained financial and operational results given the occurrence of chief executive departure.

Since “traditional economic theory holds that the market for management control acts as a disciplinary device on nonvalue maximizing management” (Kennedy & Limmack, 1996, p. 267), the prevalence of executive removal is conjectured to increase as earnings volatility and operational ineffectiveness are addressed by principals who exercise their governance control. Researchers have statistically attested to the increased incidence of executive turnover, given the presence of diminishing financial returns (Friedman & Singh, 1989; Puffer & Weintrop, 1991; Cannella Jr. & Lubatkin, 1993; Allgood & Farrell, 2000). Conversely, an analysis of chief executive turnover in the presence of exceptional financial performance warranted review through the administration of a substantive framework of evaluation, to determine whether an individual’s distinct approach to the implementation of the objectives of the entity affect risk dynamics, resulting in statistically significant variation of financial performance metrics.

Statement of the Problem

Variations in equity market returns are often experienced by investors subsequent to a change in an entity’s executive leadership. Researchers (Dahya et al., 1998; Clayton et al., 2005) have revealed various degrees of statistical significance of changes in equity returns as changes in leadership occur through analyses of samples ranked by financial performance level.
The problem is that executive replacements create a fluctuation in the market value of a company and frequently precipitate inappropriate investor reaction. It is integral to determine the direction and significance of the relationship between executive turnover, market value, financial risk, and investor reaction to replacement events among highly performing firms. Potential impacts were revealed through statistical comparison of metrics that indicate market value (market value added), investor reaction (Tobin’s q), risk (beta), executive performance (accounting metrics economic value added and return on assets), and turnover frequency. A chief executive’s distinctive approach or style used in the implementation of strategy as compared to a predecessor differentiated levels of financial performance and risk for an organization.

Bower (2007) contemplated the implications of succession planning: “it occurred to me toward the end of a decade’s research on the work of corporate leaders that CEO succession had everything to do with a company’s ability to sustain high performance over decades” (p. x). Identified within a comprehensive analysis conducted by Collins (2001) was a sample of high performing entities led by outstanding executives. Analysis of executive turnover, replacement, and succession applicable to this sample warrants investigation, and thus satisfies the following research question: In the event of executive departure, is the individual risk management style of the successor, as differentiated from the predecessor, perceptible through a time-series financial analysis of highly performing companies? As the introduction of new executive strategic decisions may be the source of financial instability, investors often find that a different level of risk does not align with their own specific risk tolerance. The investor may engage in buying or selling activity on
the basis of the perceived implications of executive change when financial performance may or may not result in statistically significant change. Economic resource allocations within society are affected as a result.

As financial returns are variable for many firms experiencing a change in leadership, fiscal performance may deteriorate or improve. Investors rely on continuity of returns resulting from experienced leadership. As they seek sustainability of results for their own benefit, investors are often sensitized to the fiscal implications of leadership changes. Investors, at a minimum, are conjectured to respond appropriately given financial results yielded as a result of personnel change, and any strategic endeavors detected through the observation of financial metrics. The change in accounting results is measurable through observation of return on assets and economic value added, while the change in investor response is detectable through observation of Tobin's $q$, beta, and market value added.

Inadequate financial performance is a relative term. Dahya et al. (1998) observed: “the probability of a forced management change is in practice very small even when the firm is in the lowest decile of performance or in imminent danger of liquidation” (p. 1091). These authors documented that, generally, financial performance must be abysmal for an entity’s board to replace top management, thus indicating reticence of board members and principals to supplant poorly performing executives. A selected set of qualifying ratios and indicators which are utilized to detect results of expected versus actual performance requisitely satisfies the research question regarding the financial implications and relative risk of differing tactics in the achievement of strategic
outcomes. These benchmarks of executive financial and operational performance, optimally designated, are administered in practice and monitored for stakeholder tolerance. All leaders must eventually be replaced, as a natural progression of firm continuity; however, upon replacement, risk specific to firm performance as perceived by investors and detectable through financial metrics may change in response. Deterioration in financial performance is expected to be followed by an executive replacement event. Tangentially, such an investigation is anticipated to reveal reticence to remove executives despite the lucid presence of diminished performance sustainability, exposing stakeholders to a manifested dearth of corporate governance and social responsibility. Whether the problem of inconsistency of financial performance pursuant to a CEO change remains pervasive among firms experiencing outstanding and sustained returns regardless of the formidability of firm financial structure and operational policy is tested within this analysis.

**Background of the Problem**

“Success in today’s competitive environment requires an organizational commitment to compete over the long run” (Lee & Milne, 1988, p. 25). Strategic continuity is essential for long-term operational and financial success; the implementation of transformational initiatives often necessitates regimented adherence to planned allocations of human, tangible, and financial resources. Conversely, economic changes within the environment in which the firm operates may compel an executive response. Contemporary global competition among entities further dimensionalizes risk. Bower (2007) asserted: “more than two thirds of the top companies of 1990 were gone by
2004…those hapless companies went bankrupt, were sold, or were broken up principally because their management could not redeploy resources in productive ways” (p. 6). Executives lagging in their discernment of factors challenging the future success of the entity are often not able to formidably and appropriately react to “pervasive, frame-breaking...and transmuting internal and external environmental conditions” (Gordon, Stewart, Sweo, & Luker, 2000, p. 912).

Further, Bower (2007) observed:

…and what we see, time and time again, are companies that fail to respond to changing circumstances and that fail to look forward…the ability of companies to adjust their capabilities and direction over the long term—to meet the challenges of new markets and new competitors—grows directly out of the quality of their leadership. (p. 7)

It is therefore imperative that a CEO serve as the strategic steward entrusted by stakeholders to effectively command enterprise endeavors, to swiftly react to firm-specific opportunities, and to coordinate appropriate responses among executive team members. Rappaport (2005) reflected: “to evaluate the sustainability and potential growth of sales and cash flow, [shareholders] must weigh such factors as industry growth potential, the company’s competitive position, the likely behavior of competitors, technological change, and quality of management” (p. 66). As a majority of the entity’s stakeholders typically do not have the skills, access, or time to accomplish these assessments, agents are assigned to the task; it is the responsibility of the primary agent,
the CEO, to engender the best demonstrated practice of augmented value creation, and support the concept of capital maintenance.

Gray and Cannella, Jr. (1997) contemplated: “What happens, for example, when the firm’s environment, and hence its strategy, changes dramatically?” (p. 537). Exceptionally sustained operational and financial performance is an imposing objective for any leader directing a team of diverse individuals, particularly in an economic environment characterized by the presence of macro-level international hyper-competition in many sectors. Few top executives have the propensity to conjure such an enduring legacy. Collins (2001) posited: “leadership…is equally about ferocious resolve, an almost stoic determination to do whatever needs to be done to make the company great” (p. 30), and further acknowledged: “Greatness is not a function of circumstance. Greatness…is largely a matter of conscious choice” (p. 11). From these observations, Collins exalted respective executives and their 11 entities (e.g., Abbott Laboratories, Circuit City, Fannie Mae, Gillette, Kimberly Clark, Kroger Inc., Nucor Corporation, Philip Morris (Altria), Pitney Bowes, Walgreens, and Wells Fargo) upon testing realized results versus a designated litmus of 15 years of sustained exceptional financial performance, or “cumulative returns at least three times the market over the next fifteen years” (p. 6). Current stakeholders and future investors seeking stability of returns to satisfy a portfolio objective of growth are acutely interested in the auspice of financial outcomes. To the extent that exceptional financial performance may be sustained by strategic continuity afforded through the applied talent of a particular executive officer, uninterrupted tenure may augur mitigated risk and amplify value added.
Eventually, a competent chief executive must conclude tenure due to obligatory retirement or ailing health; alternatively, resignation may occur as the executive pursues employment with another firm. The chief executive successor may offer strategic continuity resulting in desirable operational or financial sustainability. The successor may conversely introduce a culture of strategic and transformational change, inflicting comparatively more business risk upon the entity than a predecessor. As financial risk is borne by the entity, its stock price and accounting metric volatility is exhibited through financial reporting, and is detectable through ratio analysis and event studies. Since entity performance may vary with the acuity of leaders’ decision-making, there exists a contingency that a momentous operational or environmental watershed may trigger disruptive erosion of financial returns.

Following a review of executive change occurring from 1980 through 1993, Allgood and Farrell (2000) observed, “the mean and standard deviation of the stock return diminish with tenure” (p. 389). These results implied that, as an executive garners longer tenure, stock prices exhibit less volatility and risk becomes tempered, while returns contemporaneously decrease due to more pervasive agency effects, regardless of the consistency of profitability ratios and other performance metrics. Allgood and Farrell also conceded that “recent research suggests that accounting measures are better predictors of management changes than are stock returns” (p. 390). Accordingly, it is more empirically comprehensive to query the prevalence of risk in the context of market reaction, and complement such an event study with the outcome of decision-making as manifested through an examination of accounting performance within pertinent periods.
Thus, Collins’s (2001) sample exemplifying exceptional leaders and performing entities provided the litmus for examination of the succession event, while Bower (2007) contended that deliberate succession planning directed toward a candidate selected from an internal coterie provided the greatest assurance of strategic continuity. Combining these two analyses, it is informative to reveal the results of financial performance and the magnitude of entity risk in the event of CEO replacement, and conduct analysis based on the origin of the successor—insider or outsider—to differentiate fiscal outcomes of decision-making.

**Purpose of the Study**

The purpose of this study is to determine the extent of the relationship between executive turnover and company performance. Substantive tests of financial risk and accounting performance conducted upon a specific sample of highly performing entities experiencing a change in leadership reveal the significance of these relationships. Overarchingly, this research provides an intensive study of the volatility of a firm’s equity, specifically changes in market value added, as well as financial risk observable through the beta metrics, and investor reaction observable through the Tobin’s $q$ metric. It is conjectured that certain operational management behavior and decision-making in practice is evocative of the existence of an operational management style, discernable through consistency afforded by US Generally Accepted Accounting Principles (GAAP) and pervasive within the presentation of the entity's financial statements. The eliciting of such risk factors is of interest to investors, portfolio managers, employees, and executive boards; the level of relative risk informationally affords the investor a more replete
consideration of variability of financial return. Further, this exposition is of significant interest to financial analysts seeking to measure and predict the manifestation of risk within the stock price or beta metric, and potentially enhances the accuracy of analysts’ forecasting.

Since samples subjected to previous scrutiny were often drawn from larger populations of principally US publicly-owned, exchange-listed companies, prior analysis is deficient of samples of US entities dichotomized by performance; thus, there exists a gap in the literature. Samples stratified by deciles exist, but entities achieving performance levels exclusively deemed exceptional have not previously been reviewed for effects of CEO change with respect to risk.

Adapted from Collins’s (2001) study of exceptionally performing companies, the purpose of this analysis thus differs from the research inquiry of other authors with respect to sample. Differing samples were analyzed by Conyon and Florou (2002), who selected a UK sample which they documented as “[not biased] towards good performers” (p. 212). Clayton et al.(2005) sampled the entire range of US firms experiencing turnover during the 1979-1995 period, as documented in Forbes Executive Compensation Surveys (p. 1788). Stathopoulos, Espenlaub, and Walker (2005) stratified a sample of financial results of UK companies into poorly, average, and highly performing subsamples; however, this approach is yet to be utilized for a sample of US entities. A research approach to sampling applicable CEO turnover occurrences which fails to dichotomize entities’ polarized financial results may not prove to be generalizable to entities in highly performing strata subsamples. This deficiency in research literature for US entities, the
subject of Collins’s sample, is the source of this research inquiry and analysis. A study focalized upon the relative unsystematic change in risk to which highly effective firms are subject due to a change in leadership may provide insight upon the implications of turnover for succession planning, strategic continuity, and equity valuation. Revelations derived from this conceptual distinction may also be utilized to develop a strategic approach to succession planning, which Bower (2007) termed as a “process [which] reflects the discipline with which a company is managed and its culture” (p. xi) ultimately intended to sustain an entity’s competitive advantage, and hence, financial performance.

**Conceptual Support for the Study**

Puffer and Weintrop (1991) conveyed the paramount importance of gauging financial performance under successive executive command:

…agency theory suggests that an important function of the compensation contract is to align the interests of the manager with those of the shareholder’s representatives…Since the board of directors cannot observe all of the CEO’s actions, the board must rely on various outcomes of corporate performance to evaluate the CEO’s effectiveness in what is a complex process. Further study of this process could make sense of the disparate findings from past studies of the performance-turnover relationship and clarify the board of directors’ expectations for the CEO’s role in firm performance. (p. 17)
The performance/turnover relationship is equally worthy of examination from a number of other financial perspectives. Shareholder and investor expectations may be manifested as a result of anticipated performance or unrealized as a result of sudden volatility. Operational and financial risk variation resulting from strategic realignment may signal the need for portfolio reconstruction, or inclusion or exclusion of an entity’s stock given an investor’s policy statement and designated risk tolerance. Risk variation may also diminish the firm’s future ability to augment leverage within the capital structure; “increased volatility could alter the firm’s investment policy going forward via an increased cost of capital or by a reduction in the attractiveness of the firm’s equity as a medium for acquisitions or compensation” (Clayton et al., 2005, p. 1780). Increased cost of capital also curtails the firm’s future prospects with respect to expansion projects. Continuity of financial performance is also a theoretically pervasive construct underlying equity valuation; veracity in forecasting may be compromised in the presence of unpredictable returns.

Forced CEO departures have been precipitated in practice by declining stock prices, indicating market participants’ evaluation of the entity’s future prospects. Since “the data indicate…that turnover tends to occur when…stock returns have recently been negative” (Huson et al. 2001, p. 2280), incidence of executive removal is inversely related to stock price. Agency theory, advocating discipline in the event of nonperformance, is evidently applied through the actions of the entity’s principals, particularly the board of directors.
Assumptions

One underlying assumption of this analysis is that directors, executives, and shareholders prefer favorable rather than unfavorable performance. To be sure, Collins’s (2001) intent in commending subject firms within his composition was predicated upon this assumption. Cannella Jr. and Lubatkin (1993) posited that “a relationship between risk and outsider selection can be drawn from some of the arguments concerning return, as low levels of return and high levels of risk can each be interpreted as unsatisfactory outcomes” (p. 773). They further indicated that a single “benchmark of expected, or normal, performance…may lack construct validity in that [it does] not adequately capture directors’ perceptions of good and bad performance” (Puffer & Weintrop, as cited in Cannella Jr. & Lubatkin, 1993, p. 773). Thus, an established benchmark utilized to determine performance within the entity, such as a budget or forecast, may be the comparative established to determine performance; such benchmarks are typically not publicly available. Analysts’ forecasts or industry benchmarks are often instituted as proxies for established performance comparatives. The propriety of utilizing analysts’ forecasts as a surrogate for firms experiencing turnover was attested by Sheikholeslami, Wilson, and Selin (1998): “financial analysts might do better than statistical forecasting techniques because they might be able to integrate outside (i.e., non-time-series) information into the forecasting process. Often this information can indicate that the time-series pattern is changing” (p. 72). This precept supports the infusion of news announcement implications of succession events into security market prices following dissemination, and theoretically aligns with the semi-strong form of the efficient markets
hypothesis. Thus, “CEO changes may cause operational (‘real’) change in the earnings stream” (p. 72); it is the sensitivity to these dynamics which is sought via the research hypotheses presented. “To the extent the announcement of CEO change calls attention to the announcing firm (‘Attention Directing Hypothesis’), it may result in reassessment of future performance by market analysts” (p. 72).

Accordingly, Leibowitz (2005) indicated: “in perfectly efficient markets, all information would be immediately embedded in prices” (p. 33). Similarly, CEO succession is an important event in firm life, and the market price reflects changes in the value proposition of the firm’s strategy as perceived by investors; these changes are perceptible through the observation of a time-series of financial metrics about the succession event. Offering additional support for the impounding of changes in the stock price, Friedman and Singh (1989) concurred: “stock returns associated with successions, measured as deviations from the pattern of expected returns of a firm’s stock, reflect stockholder evaluations of a new CEO’s differential influence on the future viability of a firm” (p. 728). Hence, effectively applying the concept of the efficient markets hypothesis, they clarified: “the movement of returns on a firm’s stock around the time of a succession effectively captures the response of stockholders to information about the event” (p. 728). However, not all publicly announced events result in appropriate responses of investors to equity prices; within a study of firms experiencing earnings restatements, Marciukaitye and Varma (2007) elicited: “industry related news does not have a significant effect on the market reaction to restatement announcements and on the loss in equity value associated with restatements” (p. 15). This suggested the presence of
some inefficiency within the market and concomitant lack of perception among market participants of the potential impact of news events upon equity pricing, resulting in overvaluation or undervaluation. Investor expertise in evaluating the potential financial effect of any news event somewhat delimits the market price response within the efficient markets context. Resultantly, an assumption applicable to this analysis is that investors engage in rational behavior according to their perception of the informational content of news events, germane to the semi-strong form of the efficient markets hypothesis and demonstrative of the outcome of investor decision-making. Although widely accepted as a valuation input variable, one of the related assumptions underlying the application of the metric is that returns in the future will mirror those of the past.

Since this study uses audited financial statements of large public corporations, the relevant qualities of transparency and veracity of financial disclosures are assumed to be present in the unqualified financial statements issued within the time intervals under examination. Indeed, although financial disclosures of certain entities issued during the first decade of the 21st century have been characterized by material misstatements, there was an incident of restatements of financial data among the companies under study. On a theoretical accounting basis, this sample offers relative validity; comparatively, previous studies have included more material entities now defunct due to a lack of verifiability of obligatory financial disclosures.

**Scope and Delimitations**

The scope of this study is circumscribed by the sample of highly effective entities identified within Collins’s (2001) analysis, *Good to Great*. As Collins identified 11
publicly traded US firms exhibiting 15 years of performance meeting or exceeding treble returns on the US stock market, he extolled the leadership qualities of these entities’ chief executives. Collins qualitatively analyzed firms experiencing a succession event within the time interval under study for strategic conformance or incongruity; however, he did not document changes in financial outcomes and risk consequent to executive succession. The time interval under examination for the subject firms commences in accordance with Collins’s initially identified interval of returns, and concludes with each entity’s publicly disseminated financial reporting of fiscal 2008. As certain of these entities did not experience a change of chief executive within the interval identified by Collins, it is necessary to extend the relevant range of the time-series to examine a turnover event. Information pertaining to any delisted company for which data could not be obtained throughout the continuum delineated above due to access issues subsequent to merger and acquisition activity is limited to data publicly available in print within qualified investor resources, e.g., Moody’s Industrial Manual. For this reason, an element of survivorship bias, or the influence of the inclusion of only firms which are currently going concerns, affects outcomes of this analysis to a minor extent since such characteristics affect only one entity within the sample.

Within much of the literature on event studies and the examination of executive turnover, designation of the successor source is often delimited by examination of the prior enumeration of executives present in publicly disseminated news events and obligatory quarterly and annual financial reporting. The classification of a successor as an insider or outsider is thus identifiable; financial performance based on source of
successor has been extensively documented, primarily by Shen and Cannella, Jr. (2002). Bower (2007) espoused that an inside outsider, or a capable successor not necessarily predisposed to assume the chief executive position, may offer viable candidacy due to diffused political loyalty within the executive hierarchy. However, such successors, upon examination, or for that matter, polling, are difficult to exact; such designations may be based on internally biased observation. Therefore, via exemplification of available data, the analytical technique of Shen and Cannella Jr. (2002) is used: Turnover of an executive under the age of 64 is considered a forced replacement, and turnover of an executive at the age of 64 or over is considered a retirement. The subsequent endeavors of the CEO upon conclusion of tenure are researched to verify this assertion. If the successor hailed from within the company, the new executive is considered an insider; if the successor was sourced externally, the new executive is considered an outsider.

Succession planning and successor source have been determined to be of paramount importance with respect to strategic continuity (Gordon et al., 2000; Bower, 2007). The extent to which succession planning exists within each organization under scrutiny is not specifically examined through the course of this analysis.

**Limitations**

The primary limitation of this study is generalizability. Since firms within the selected sample are characterized by exceptional financial and operational performance within their industry or sector, the application of theoretical constructs derived herein may be limited by the comparability of performance among the entities within the sample itself, as these entities hail from divergent sectors. Additionally, the extrapolation of these
results to firms not characterized by highly effective performance is surmised to be limited.

The comparability and interpretation of financial cross-sectional analysis among differing entities is limited to an extent by the selection of accounting methodologies and the application of generally accepted accounting principles. A time-series analysis of a single company’s financial results may also be subject to such limitations of comparability due to updates in accounting principles, conscious revisions in methodologies, and changes in the exogenous economic environment. The presence of nonrecurring, extraordinary, restructuring charges in particular within a company’s income statement indicate a strategic revision of planned future operations; a review for the presence of these elements often provides qualitative support to quantitative financial analysis dynamics.

Additionally, the predictive value of the beta metric, or the covariance of the return on the market and the return on the firm’s equity market price divided by the variance of the market, is limited, as it is a historical metric of the variability of returns. In practice, endogenous and exogenous factors impact the variability of the stock price; the outcome of the event study to be conducted herein may be indicative of the utility of beta to predict the entity’s equity risk given a change in chief executive. The utilization of accounting metrics which allow further interpretation and analysis of results were chosen to provide more comprehensive basis for this study than financial risk factors alone.
Research Design

An *ex-post facto* research design is employed to document and statistically analyze prior-issued financial statements and resultant metrics as a chief executive replacement event transpired. As the executive turnover event is typically anticipated in the event of a retirement, but not in other instances, dynamics due to forced replacements, expiration, or catastrophic illness (i.e., generally nonretirement related) prompt organizational consequences typically not observable prior to transpiration. Primarily, statistical analysis of financial event studies is conducted *ex-post facto*. Considering this type of design, “the researcher identifies events that have already occurred or conditions that are already present, and then collects data to investigate a possible relationship between these factors and subsequent characteristics” (Leedy & Ormrod, 2005, p. 232). Observations are limited to experiences rather than treatments (p. 232-233). Conditionally, the outcome of this analysis is the statistical prevalence of “characteristics [that] tend to be associated with certain preexisting conditions” (p. 233); statistical observations of existing relationships will not prove the existence of a causal relationship between financial performance and chief executive turnover.

Definition of Terms

*Beta*: the covariance of the return on the entity's stock price and the return on the market divided by the variance of the market; ultimately, a measure of volatility of the market price of firm equity (Downes & Goodman, 1995, p. 47).
Contenders: executives who, “following a CEO’s dismissal…[win] the support and approval of the board of directors…likely to be charged with a mandate to initiate strategic change” (Shen & Cannella, Jr., 2002, p. 719).

Economic Value Added: “the excess of the dollar amount of net operating profit after tax (NOPAT) over the dollar charge for capital (both debt and equity) obtained by multiplying the percentage weighted-average cost of capital (WACC)” (Cordeiro & Kent, Jr., 2001, p. 57). This serves as a measure of shareholder value created during the measurement period through the employment of financed assets to generate operating earnings.

Efficient Markets Hypothesis: the hypothesis “states that market prices fully reflect all available information” (Xiong, 2006, p. 214); the semi-strong form, prevalent in US market analyses, confers that “knowledge of information does not allow investors to earn excess profits because prices already incorporate the information” (p. 214).

Followers: “inside executives who are promoted to CEO positions following the ordinary retirements of their predecessors” (Shen & Cannella, Jr., 2002, p. 719).

Market Value Added: “calculated as (Number of shares outstanding x Stock price) + Market value of preferred stock + Market value of debt – Total capital” (Ramezani, Soenen, & Jung, 2002, p. 57). While the primary measurement of EVA® is the level of stockholder returns generated from internal sources, the primary measurement of MVA is the level of stockholder and debtholder returns generated from external sources, predicated by changes in market valuation. MVA is resultanty a measure of the market perception of the value of the firm (p. 57).
*Outsiders:* executives who “come to new CEO positions from other organizations” (Shen & Cannella, Jr., 2002, p. 719).

*Return on Assets:* accounting net income divided by total assets; a measure of asset utilization undertaken by the firm.

*Tobin’s q:* total assets minus the book value of common equity plus the market value of common equity divided by total assets (Marciukaityte & Varma, 2007, p. 18).

*Volatility:* “characteristic of security…to rise or fall sharply in price within a short-term period” (Downes & Goodman, 1995, p. 647). Beta encapsulates the volatility of the stock price of the entity relative to the stock market.

**Hypotheses**

Seven hypotheses are tested. Specifically,

Hypothesis 1 entails the measurement of CEO replacement rate within Collins’s sample, an indicator of the stability of firms within the sample:

There is a significant difference in the rate of CEO change evident in the time-series analysis of the entities within Collins’s sample for the period \(t=15\), as compared to a multiyear sample within the literature spanning a time frame representative of Collins’s entities.

A comparison of the rate of CEO turnover of the firms in Collins’s (2001) study is compared to the analysis of Comte and Mihal (1990), which is a comprehensive study of turnover frequency which appropriately aligns with the time-series under investigation. As Defond and Hung (2004) defined the “[classification] of a firm-year as a turnover year of the name of the CEO changes between successive fiscal years” (p. 280); the same
definitional basis is applied to events analyzed within the study. Since “large organizations tend to choose inside successors” (Friedman & Singh, 1989, p. 728), the expected outcome of a statistical significance test of Collins’s (2001) sample is that most successors are insiders and thus, there is limited stockholder reaction to CEO change, as a result; see also Hypothesis 2.

Hypothesis 2 entails the measurement of stockholder reaction to CEO change, intrafirm:

There is a significant stockholder reaction to CEO change evident in the time-series analysis of the Tobin’s $q$ metric for entities within Collins’s sample for the period $t-2$ and the period $t+3$, where $t$ represents the year of CEO change.

It is expected that a significant statistical difference in the time-series of the Tobin’s $q$ metric is discernable if stockholder perception of a change in chief executive officer precipitates a forward-looking negative financial impact.

Hypothesis 3 entails the measurement of financial market risk relative to CEO change, intrafirm, as a proxy for volatility:

There is a significant change in the magnitude of financial risk relative to CEO change evident in the time-series analysis of beta for entities within Collins’s sample for the period $t-2$ and the period $t+3$, where $t$ represents the year of CEO change.

Defond and Hung (2004) measured the “extent to which stock prices are likely to impound information about firm performance (as opposed to noise)...the propensity for stock prices in a country to move in the same direction—termed synchronicity” (p. 280). Hence, the level of synchronicity indicates the prevalence of the efficient markets
hypothesis informational infusion of equities and is, in effect, a proxy for the reliance of risk calculated from historical prices, or beta, within a relevant market. Indeed, it must be predicated that the informational power of beta to portend an entity’s equity value is reliant upon and limited by the assumption that past experience is an indicator of future returns. To the extent that strategic transformation is present, presumably, stock prices will respond dynamically to the perception of risk ascertained by market participants.

Since “the firm’s market price aggregates signals received by the market and the firm’s accounting system” (Dutta & Richelstein, 2005, p. 1071), the extent of sensitivity to a change in stratagem perceptible through market price kinetics may be proxied through an analysis of financial fundamentals. However, “the market sometimes misinterprets or overreacts to earnings and disclosure announcements; therefore [executives] work hard to meet market expectations so as not to raise investor suspicions or doubts about their firms’ underlying strength” (Graham et al., 2005, p. 4).

“In high beta firms, stock price movements are strongly associated with economy-wide influences such as economic cycles, interest rates, and government policies. Management exerts little or no control on these macroeconomic variables” (Gray & Cannella, Jr., 1997, p. 523). The extent to which the implications of transformational strategy materialize into changes in market risk and pricing of equity is tested through this hypothesis.

Friedman and Singh (1989) formulated a hypothesis regarding the change in market response relevant to their sample: “the lower the presuccession performance, the
more positive the stock market reaction to a CEO succession” (p. 723). The outcome of
the hypothesis test relative to Collins’s (2001) sample of entities yields a similar result.

Hypothesis 4 entails the measurement of differences in accounting ratio analysis
(return on assets) relative to CEO change, intrafirm, as a proxy for execution of strategic
change:

There is a significant change in the magnitude of accounting performance relative
to CEO change evident in the time-series analysis of return on assets, or ROA, for entities
within Collins’s sample for the period t-2 and the period t+3, where t represents the year
of CEO change.

Hypothesis 5 entails the measurement of differences in accounting performance
analysis (economic value added) relative to CEO change, intrafirm, as a proxy for
execution of strategic change:

There is a significant change in the magnitude of accounting performance relative
to CEO change evident in the time-series analysis of economic value added, EVA®, for
entities within Collins’s sample for the period t-2 and the period t+3, where t represents
the year of CEO change.

Hypothesis 6, represented through the measurement of differences in accounting
ratio analysis (market value added) relative to CEO change, intrafirm, as a proxy for
increases in stockholder value, is entailed thus:

There is a significant change in the magnitude of accounting performance relative
to CEO change evident in the time-series analysis of market value added, or MVA, for
entities within Collins’s sample for the period \( t-2 \) and the period \( t+3 \), where \( t \) represents the year of CEO change.

With respect to managerial incentives awarded upon successful execution of stratagem under the aegis of the agency relationship and existing informational asymmetry, “optimal incentive provisions must combine ‘forward-looking’ market information with ‘backward-looking’ accounting information…optimal performance measures can be expressed as a weighted average of economic value added (residual income) and market value added” (Dutta & Richelstein, 2005, p. 1069). The utilization of multiple accounting-based metrics demonstrates a comprehensive approach to evaluation of dynamic and strategic outcomes.

Hypothesis 7 entails measurement of interactions between variables relative to CEO change:

There are significant interactions between the variables listed above relative to CEO change evident in a time-series analysis of terms for entities within Collins’s sample for the period \( t-2 \) and the period \( t+3 \), where \( t \) represents the year of CEO change.

Instruments chosen reflect those utilized in prior research, particularly with respect to applicable intervals for time-series event studies, as external validity and tests of robustness have been performed previously (Freidman & Singh, 1989; Defond & Hung, 2004).

As Doran (2000) acceded, “studies where scrutiny of earnings divergence (e.g., forecast error, earnings performance, forecast bias, etc.) is of primary importance should closely examine the distributional properties of the sample data” (p. 32). Thus, graphical
representations of relevant data distribution are presented as supporting evidential matter for conjectures purported herein.

**Significance of the Study**

This research endeavor promotes positive social change through enhanced investor education. As the propriety of reaction to changes in market value added and risk are revealed, investors may align their market behavior and equity holdings with expectations of continued investment returns as leadership succession transpires. Investors may thus protect their assets more effectively and adjust their portfolios according to the outcomes of informed risk analysis. As the relationship between leadership change and equity return variability among highly performing firms is understood, society as a whole may more effectively assess the basis of financial resource allocations.

As a primary impetus for this study is the observation of stockholder reaction and market value fluctuations, it is informative to conduct a comparison of dynamics in accounting metrics which are contemporaneous to the actions of investors. The interpretation of these statistical outcomes may be indicative of or dispute the application of rational investor decision-making. “Collective assessments made by the investment community, a salient constituency for corporate managers, can be measured by examining how stock prices move in response to announcements of CEO changes” (Friedman & Singh, 1989, p. 719). However, the extent to which stockholder reaction is appropriate may be demonstrated by the observation of financial outcomes, which ultimately support equity valuation. Such metrics are not justified by investor perception,
but by financial reporting summarization through the observation of ratio analysis. “The market reacts to how well, compared to their predecessors, new CEOs are suited for the demands of their roles, and to the potential for disruption in organizational performance attending leadership transitions” (p. 719). The investor reaction to chief executive change and other news events, as espoused through the efficient markets hypothesis, generally may or may not be appropriate given their investment risk and return objective. An indication of potential investor loss sensitizes market participants’ risk perception. Investor sensitivity to risk dynamics may or may not be appropriate in the event of CEO replacement. Hence, investor response to CEO change through observation of financial metrics, and the alignment of investor response to accounting performance of highly performing firms, are analyzed.

Depending on the significance of the volatility, “a forced turnover increases a firm’s hurdle rate by [two] percentage points, which could change the optimal/accept reject decision for a given project” (Clayton et al., 2005, p. 1779). Given this salient level of sensitivity, upcoming or in-progress strategic initiatives may have to be re-evaluated for financial feasibility. To this end, statistical tests of the beta metric, ultimately used in the derivation of the weighted average cost of capital applied to project evaluation for public firms, may provide further validity to the utilization or adjustment of this risk factor in the practice of financial analysis. Inquiry into the risk element of CEO turnover further clarifies investor perception of forced personnel change in the case of exceptional financial performance. As the dissemination of information leads ultimately to greater
transparency, positive social change is realized as investors are able to fully discern the financial implications of chief executive turnover and adjust market reaction accordingly.

Statistical outcomes of this analysis may potentially guide newly appointed executives to initially align strategic objectives with the current direction of the firm, in the event of outstanding performance. Shen and Cannella Jr. (2002) offered the following caveats: “we advise newly appointed outsider CEOs to be prudent when making executive replacement decisions and to strive for some executive leadership stability in their firms…boards may also need to consider giving outside successors more time to smooth the transition” (p. 730). An analytical outcome which indicates positive stockholder reaction throughout the transition period and maintenance of accounting metrics subsequent to executive change supports the advisement of Shen and Cannella, Jr.

Acknowledging the social change impact, there is also a demonstration of the application of agency theory. “What has become clear is that troubled companies and concerned boards are no longer waiting around to replace poor or marginal performers...[since] a convergence of economic, historical, and political forces has produced a unique, new business climate” (Korn, 1985, p. 30). Thus, principals must not be reticent to address the actions of chief executive agents who do not enable and materialize the strategic plans of their firms.

This study lends further validity to financial assessment techniques which serve to facilitate the institution of “governance mechanisms that will provide for the most effective decision-making on the part of top managers, particularly CEOs…how to
appropriately structure the organization” (Coles, McWilliams, & Sen, 2001, p. 24). Particularly, utilization of ratio analyses which facilitate the discernment of agency effects among entities experiencing CEO turnover will reveal the degree of executive alignment with firm performance hence affecting positive social change, both endogenously relative to the organization and exogenously relative to financial market volatility.

**Summary**

Although analyses of the financial risk and return implications resulting from executive change have been previously studied, a gap in the literature exists for implications given exceptionally performing firms experiencing executive succession events. Additionally, Collins’s (2001) endeavor provided a formidable exploration of highly performing entities as well as a robust examination of leadership characteristics of prominent and successful executives. However, his analysis is deficient of observation of the financial risk and return outcomes given executive turnover, and may be improved through additional analysis which features indicators of market declines and corrections experienced in fiscal 2008.

The statistical analysis impacting an array of accounting and financial metrics in the event of executive change is tested within this study. Potential limitations include generalizability to poorly performing entities, inter-industry comparability of accounting metrics among entities, and potential misstatements of financial data by a firm despite granting of an unqualified opinion by an auditor, all of which may bias results.
Ultimately, favorable social impact may be realized as investors refrain from irrational selling (or purchasing) reactions to news events of chief executive turnover. Preservation or imperilment of invested shareholder capital affected by the turnover event will serve as an indicator of the entity’s strategic continuity. If robust statistical results are derived which indicate that internally-sourced followers provide strategic continuity in the event of succession, the propriety of chief executive succession planning characterized by internal candidate sourcing for highly performing firms may be supported by this analysis.

Correspondingly, chapter 2 includes a review of relevant literature. Chapter 3 contains an explanation of the research methodology utilized in this analysis. Chapter 4 contains the results of data analysis. Chapter 5 contains a summarization of the outcomes of the research endeavor, including recommendations for future research, as well as implications for social change.
Chapter 2: Literature Review

Introduction

Financial event studies are “based on a comparison of the variability of equity price changes before and after the event to determine the volatility impact of the event” (Clayton et al., 2005, p. 1793). In garnering evidence to develop hypotheses for an ex-post facto research study of highly performing firms, an observation regarding the population from which samples of prior studies are derived is required. As field literature is bereft of a sample of entities characterized solely by exceptional financial results in the presence of CEO turnover, “the consequences of turnover for equity volatility have been previously unexplored” (p. 1780) for this characteristic sample in context. Chang and Wong (2005) echoed this observation: “existing empirical studies focus primarily on corporate control exercised by private shareholders in U.S. and Japanese publicly listed companies” (p. 2). In prior research, these experiments were sampled from entities representing the entire spectrum of financial performance levels.

Collins (2001) identified a sample of entities exemplifying exceptional financial performance through an extensive time-series review of US market-listed firms. However, researchers contributing to his analysis did not test the interaction of beta nor other factors as sources of risk under the premise of executive replacements among the entities researched; the contributors merely documented the sample entities’ financial performance for a 15 year time-series interval. Herein, an investigation of literature is conducted to garner evidence applicable to potential financial and leadership dynamics.
affecting firms within Collins’ specific sample, in order to develop a framework of evaluation for risk orientation under circumstances of leadership succession.

Although Cannella, Jr. and Lubatkin (1993) revealed that “succession events are generally smooth and predictable transitions that imply few changes in strategy” (p. 768) many prior analyses relating leadership change to equity risk do not yield consistent results which support their assertion. However, succession events generally “have provided a means for assessing the efficacy of leaders in shaping organizational fortunes by demarcating areas of stewardship” (Friedman & Singh, 1993, p. 718). Perpetuating strategic intent of the predecessor theoretically should offer continuity of acceptable operating results, ceteris paribus. To the extent that market participants are appropriately sensitive to potential risk volatility at the nascence of an executive’s term, abnormal returns may temporarily accrue to or detract from shareholder value. The identification of such opportunities is of interest to institutional and private investors alike.

An integral approach used in the compilation of research for the review was the requirement of primarily quantitative data indicating frequency of turnover among firms given diminished performance. Essentially, many different financial and accounting metrics are employed in academic research as litmus for determining significant changes in financial performance; often executives are compensated and incentivized based on changes in the selected metrics. Given the dichotomy of outcomes present within the results of prior studies, it is critical to note that similar variability of results may emerge from an empirical analysis of Collins’s (2001) sample. This literature review thus serves as documentation of instruments utilized in prior studies which have revealed high
incidences of external validity. As Collins commented extensively on the qualitative personal characteristics of the leaders of the firms within his designated sample, research addressing qualitative aspects of CEO type and characteristic are also presented.

The chapter is organized into four segments. Certain aspects of leadership change and selection greatly influence financial outcomes and command study relevant to this analysis. Within motivations for executive change, aspects of entity ownership and capital structure, operational performance, and external influence that affect executive turnover are enumerated. Within differing successions of executive change, the sources of replacement personnel as well as the preparation methods for succession which influence financial outcomes are outlined. Within consequences of executive change, agency effects, political and director influence, and governance dynamics which affect financial outcomes are reviewed. Within financial performance and risk indicators of executive change, the risk environment including the firm’s exposure to external and internal risk, as well as the suitability of finance and accounting performance benchmarks, are linked to executive change events, as prior researchers (e.g., Clayton et al, 2005; Shen and Cannella, Jr., 2002) have entailed. Qualitative aspects of the firm and its executive influence the incidence of CEO replacement are also appraised; although certain of these qualitative aspects are not hypothetically tested within this body of research, reviews of the tested outcomes of other authors which may lend qualitative explanation to emergent outcomes of data analysis herein are included.

To obtain relevant literature for inclusion, a keyword search was conducted for CEO turnover through an online academic journal research database. As seminal articles
were discovered, references within those bodies of research were analyzed for content; the content of the original articles most relevant to the subject matter was then sourced from an online academic journal database. Collins’s (2001) volume served as the sample source; Bower’s (2007) more recent exposition was utilized as an updated volume providing recent reflections and statistics on sources of successors, which complements and updates the prior research of Cannella, Jr. and Lubatkin (1993), as well as other researchers.

**Motivations for Executive Change**

The incidence of CEO turnover has been extensively acknowledged within analyses of time-series samples throughout research literature. “CEO succession events are of central concern in organization theory. They are universal—if organizations survive long enough, they must experience succession” (Freidman & Singh, 1989, p. 718). Despite the realization that executive change is inevitable, many firms do not give adequate priority to succession planning. Bower (2007) summarized the results of an internet poll through which 60% of human resource managers acknowledged that there was no “CEO succession plan in place” within their firm (p. 14). Succession events are ordinarily precipitated by “resignations for ‘early retirement,’ for policy differences, for differences in style and strategy, resignations amid reports of continuing problems, losses, and poor or lackluster performance” (Korn, 1985, p. 30). The impetus for turnover may thus be ownership and size influenced, operational performance-dependent, or externally precipitated.
Ownership and Firm Size Influences upon Executive Change

Average annual CEO turnover varies by size of firm and more prominently, organizational form. The strength of the governance framework unique to the geographical location and ownership structure of firms may influence rates of CEO turnover among entities. Comte and Mihal (1990) indicated that within the second half of a US entity sample dated 1945-1984, a 37% increase in CEO turnover was present (p. 48), documenting greater frequency of replacement incidence in more recent decades. Increasingly, this evidence specifies that CEO replacement rates, particularly forced replacement rates, are comparatively more prevalent among US firms in recent decades.

In a recent study, Defond and Hung (2004) affirmed:

...recent research asserts that an essential feature of good corporate governance is strong investor protection, where investor protection is defined as the extent of the laws that protect investors’ rights and the strength of the legal institutions that facilitate law enforcement...strong law enforcement institutions significantly improve the association between CEO turnover and poor performance, whereas extensive investor protection laws do not. (pp. 269-270)

Accordingly, the scope of relevant mechanisms subjecting executive officers to reprisal in the event of deficient performance is augmented to include legal obligations, particularly in the context of ethical transgressions. Within environments where corruption and expropriation risks influence financial outcomes, an executive has “limited ability to affect firm performance” (Defond & Hung, 2004, p. 275). Thus, differentiation of transparency and permissive internal control environments may
dissuade investor confidence in less stringently controlled capital markets, and reflect the risk perception of market participants. Mere CEO change portends limited prospects in transformation of deficient governance, given an environment with minimally effective law enforcement. “Because good corporate governance reduces the risk of managers expropriating shareholder wealth (through theft, shirking, or simple mismanagement), shareholders have greater confidence investing in such markets” (p. 276). To safeguard stakeholders’ interests, effective executive succession planning must be predicated by qualification, and not usurped through ancestral incumbency or “nepotism” (p. 277).

When tested empirically, Defond and Hung (2004) disclosed that “among countries with strong investor protection, CEO turnover decisions are likely to rely more on stock return when stock prices are relatively more informative regarding firm performance” (p. 278).

This suggests that the perception of a more robust governance structure among market participants elicits investor confidence by exhibiting greater transparency of strategy and results.

**Operational Performance-Dependent Executive Change**

Replacement of a CEO is frequently precipitated by an entity’s deficient operational performance. “Boards of directors are more assertive of their prerogative of removing CEOs when there is evidence of ineffective management” (Friedman & Singh, 1989, p. 738). Control mechanisms supported through the organizational structure of an entity exist to ensure the removal of executives that do not perform well. Directors and executives remaining in the organization subsequent to CEO turnover and subsequently display allegiance to the former leader may continue to experience future agency
challenges from other stakeholders. Huson et al. (2001) asserted: “stockholders rely on internal and external monitoring mechanisms to help resolve agency problems that arise from the separation of ownership and control in modern corporations” (p. 2265).

As Chang and Wong (2005) acknowledged, “for CEO turnover to be an effective corporate control event, CEOs need to be removed in poorly performing enterprises, and performance has to improve following their turnover” (p. 8). Paradoxically, these authors also evidenced that “forced turnovers are not followed by a significant reduction in the percentage of enterprises experiencing negative earnings” (p. 9). Without a differentiable change in the diminished performance of an entity, CEO replacement may not be worthwhile or result in intended organizational and financial changes, while exposing investors to increased financial risk, observed through changes in financial metrics pre and post turnover.

Further, Cannella Jr. and Lubatkin (1993) hypothesized that “when an outgoing CEO has influence with directors, or when directors have committed to an heir apparent [in a relay succession], performance will be decoupled from the selection decision” (p. 764). Influence and prior performance are integral factors in the consideration of a replacement; given the prevalence of exceptional performance, an influential candidate within the sphere of the outgoing CEO has a greater probability of being selected for succession. In support of this observation, Comte and Mihal (1993) offered the following optimal cyclic succession: “the founding or central leader is eventually replaced by prepared executives who are chosen at an age that allows them ten years at the helm and who leave at a prearranged time” (p. 51). The presence of sustained operational
performance and acceptable positioning will edify board choice and establish an intended relay succession which perpetuates current strategic policy. To this Nagar (2004) added:

…the firm decides what responsibilities to delegate to the employee, keeping in mind the feasible set of performance measures on which incentive contracts can be written to ensure that the firm can hire the right person for the job (adverse selection), and this person works hard after being hired (moral hazard). (p. 317)

Waldman, Ramirez, House, and Puranam (2001) confirmed the existence of a relationship between executive charisma and performance under conditions of uncertainty. Utilizing strategic management theory as a basis, Waldman et al. queried the “leadership characteristics” of “transactional leadership” and “charismatic leadership” (p. 134). While transactional leadership is instituted via the assimilation of the current structure and personnel, establishment of corrective action, and consequent dissemination of rewards, charismatic leadership is instituted on a behavioral basis, engaging the regard and loyalty of subordinates to incite motivation and thus strategic action among them, deemed “collective cohesion” (p. 135), through the development of interpersonal relationships. In times of environmental turbulence, Waldman et al. hypothesized that “CEO charismatic leadership will be highly related to an organization’s performance when the organization’s environment is perceived as uncertain and volatile” (p. 136).

However, Waldman et al. alternatively documented a highly positive relationship between better performance results in the presence of uncertainty and charismatic leadership; this implies that the personality and confidence exhibited by the leader has an
effect upon organizational cohesiveness, a salient component in achieving strategic 
outcomes and profitability given the prevalence of environmental turbulence (p. 140).

**Externally Precipitated Executive Change**

Insightfully, Lee and Milne (1988) conveyed the erosion of competitive 
manufacturing among US firms: “the efforts of major corporations were devoted to 
generating earnings through mergers and acquisitions, or through lucrative financing 
arrangements in debt markets. This trend prevented firms from recognizing the 
importance of developing new products and processes” (p. 26). By stifling the potential 
enhancement of core competencies through innovation, the leadership incentive to realize 
earnings solely through merger and acquisition activity is derived from the myopic 
pursuit of unsustainable extraordinary events. “When there is no long-term consistency in 
developing and maintaining a company’s philosophy, it is impossible to justify making 
decisions on any basis other than financial considerations” (p. 26). Accordingly, leaders 
employing an extensive growth by acquisition strategy must eventually tend to further 
development of the conglomerated entity, as the sustainability of their own strategic 
success is challenged as the pool of potential takeover candidates narrows. In the event of 
CEO replacement following a sustained period of acquisition activity, often the 
successor’s greatest challenge is the identification of synergies pertinent to varied 
divisions, particularly if such development was not addressed by the predecessor. If 
investors perceive such CEO replacement as an impediment to realizing expected returns, 
volatility may characterize the market price of equity as ownership among shareholders 
responsively changes.
Faleye (2004) explored the “control mechanism for addressing the agency problems of excessive corporate liquidity” (p. 2041). If the entity experiences a dearth of positive net present value investment opportunities, this deficiency may resultantly serve as an indicative antecedent of obligatory strategic change for the benefit of shareholders. As excess cash is often an attractive characteristic of takeover targets, elevated corporate liquidity augmented by lack of strategic intent further enhances potential opportunity for an external strategic change agent to transform the targeted entity.

The issuance of new equity or recapitalization efforts suffuses a signaling effect upon the market; investors construe the entity’s investment prospects as limited once new capital is sought to complement the existing capital structure. “As a result,” Hillier, Linn, and McColgan (2005) espoused: “boards of firms that require additional outside capital are likely to be more responsive to outside calls for the removal of top management in return for implicit promises of new funding” (p. 516). Thus, the absence of profitable investment opportunities from the recapitalization perspective may also precipitate a stakeholder-desired change in leadership as a consequence of this perception. In context, this may be demonstrated through a lack or reinvestment, decreasing economic value added, and decreasing return on assets over time. Myopic behavior may result from the curtailment of necessary investment required to maximize longer term growth and profitability, at the sacrifice of contemporaneous profitability.

Finkelstein and Hambrick (as cited in Gray & Cannella Jr., 1997, p. 518), purported that “the most consistent conclusion in the literature is that firm size accounts for the greatest proportion of variance in executive compensation level, and that firm
performance accounts for very little.” Given this observation, it may be conjectured that a higher level of compensation is implicitly relative to agency risk due to the size of the firm. Higher levels of compensation have also been associated with greater levels of entrenchment. In response, Gray and Cannella, Jr. (1997) also observed:

Shareholders manage risk through portfolio diversification.

Executives, however, do not have this option…[they] cannot diversify their risk because of their close association with the firm. An executive can only hold a single job, and is unlikely to be risk-neutral with respect to that job…fixed components [of income] help protect executives from factors beyond their control, such as poor ex poste outcomes from strategies that, a priori, appeared promising…firm risk affects personal risk of the executive when compensation is contingent upon firm-level outcomes such as profitability or stock price movements. (p. 518-520)

As previously noted, a strategy of growth through continuous acquisition, even in the context of diversification, is not indefinitely sustainable. Since the acquisition of capital required to pursue such a strategy may eventually be required to be sourced externally, a CEO endeavoring to mitigate personal income risk through entity diversification may elicit negative shareholder response, ironically affecting the realization of executive remuneration through options and decreasing potential wealth. Offering further perspective, Daily, Certo, and Dalton (2002) asserted:
A fundamental principle of agency theory is an acknowledgement of the propensity of executives to engage in behavior inconsistent with shareholders’ interests, particularly when the interests of these two parties diverge. The board of directors serves as a protective mechanism to ensure that managers are attentive of shareholders’ interest in maximizing the value of the firm. (p. 8)

Offering clarification of the effects of managerial ownership upon the agency relationship, Dahya et al. (1998) summarized the observations of Denis, Denis, and Sarin (as cited in Dahya et al., 1998) by ascertaining: “share ownership levels in excess of 1 percent led to managerial entrenchment in US firms” (p. 1105). These researchers also documented the presence of abnormal returns and post-earnings-announcement drift associated with forced turnover; “results suggest that there is a statistically significant difference in the pre-announcement period abnormal returns for non-routine departures of executives who own less than 1% (abnormal return = -2.19%)” (p. 1107). Such results are indicative of the significance of the turnover event, and potential risk resultanty borne by the firm’s shareholders. Notably, subsequent anticipated improvement may not materialize despite a requisite change of command. “Non-routine top executive departures are associated with a further deterioration in firm performance which is more pronounced in firms where the departing top executive owned a substantial equity stake in the firm” (p. 1110). Successor performance levels are commonly dependent upon the receptive quality of the political hierarchy within the firm.
Cannella Jr. and Lubatkin (1993) reflected: “two performance-related factors to influence the succession decision: risk, or the uncertainty associated with a firm’s income stream, and return” (p. 764). Acknowledgement that these factors were likely to affect turnover correlated with findings of previous studies; however, an emergent underlying assertion predicated by Cannella Jr. and Lubatkin is the view that the CEO is not responsible for all decision-making. “Powerful interests in a firm are able to divert blame for poor performance onto the less powerful” (p. 766); as the senior executive team composition within a firm is considerably influenced through reassignment of culpability for suboptimal performance from the CEO to direct reports, the political environment may noticeably deteriorate, giving rise to dissention and breaches of loyalty.

“External factors such as environmental volatility, resource scarcity, and financial risk, and internal factors such as characteristics of the board of directors…may have important effects on the decision to remove the CEO and who will replace him or her” (Comte & Mihal, 1990, p. 47). A leader significantly challenged by the strategic management of all contemporaneous aspects affecting the entity will often be overwhelmed if supported by inadequate managers and directors. Friedman and Singh (1989) claimed: “the rational adaptation view of organizational change implies that CEO succession is one way organizations can intentionally align resources to better suit changing environmental demands” (p. 719). Accordingly, contextual assumptions are that the succeeding CEO affords a degree of omnipotence, or “abundant discretion” (p. 720), and that the “most appropriate person for the role so defined [is] then chosen as the new CEO” (p. 720). If both of these criterions are satisfied, the probability of instituting
positive organizational change is heightened. However, “CEO succession is a change that, in itself or as an indication of a more fundamental underlying structural shift, is substantial enough to result in a deleterious misalignment with a firm’s environment” (p. 721). Thus, it is integral that the firm’s economic and environmental moats are formidably established to ensure sustainability of strategic intent and to mitigate the risk of exogenous threats, despite the replacement of the top executive position.

Gordon et al. (2000) surmised a relationship between “industry turbulence and CEO turnover, as precursors to strategic reorientation” (p. 911). As Gordon et al. also indicated that “industry turbulence conditions managers’ external attributions for negative financial performance in influencing strategic reorientation” (p. 911), executives often attempt to fundamentally shift culpability for lackluster performance to exogenous origins. Hence, poor operational performance is often deemed a culmination of strategic turbulence, a “phenomenon…[which is] pervasive, frame-breaking, or difficult to predict” and concomitantly influences the prevalence of CEO replacement. As such, deficient performance may reveal the presence of strategic turbulence, given the presence of a weak governance structure and action inspired by moral turpitude. The nascence of corporate change may be elicited by “strategic commitment and power distributions…external stakeholder expectations…industry discontinuities…legal, political, or technical conditions that affect the basis of competition” (p. 914). The pervasiveness of these circumstances will affect financial performance to varying degrees. “Organizational change becomes predicated on the dialectic tension between the forces of inertia and stability, and those of the need for change” (p. 914). Subsequent to
any industry or economic dynamic which precipitates organizational response, a
“strategic reorientation” (p. 915) typically occurs; the organization and its leadership
seeks to establish “rules and routines [to] dominate logic and reduce uncertainty” (p. 915). In response, operational stability endures for a period of time, correspondingly
portending future financial stability.

Shen and Cho (2005) assimilated a “theoretical framework of involuntary
executive turnover…paying close attention to the environmental and organizational
context executives face” (p. 843). Concordant to prior research, particularly that of Gordon, et al., (2000), Shen and Cho (2005) conciliated the emergence of turbulent entity
circumstances which accompany forced ousting of top executives, by indicating the level
of “high-discretion contexts” present within the company (p. 844). An organization
affording the top executive high latitude of objectives allows for “freedom managers have
to pursue personal objectives” whereas, an organization affording the top executive
latitude of actions allows for a “range of strategic options available to managers as they
strive to bring about organizational outcomes demanded by stakeholders” (p. 844).
Constraints and parameters tangential to organizational objectives must be recognized
while developing tactics to address strategic goals, otherwise adverse operational effects
may ensue; for instance, achievement of strategic objectives may be thwarted by a
company’s inability to raise adequate capital to support a novel venture.
Correspondingly, the latitude of action may be low, while the latitude of objectives may
be high. “Latitude of objectives addresses the performance pressure faced by managers,
whereas latitude of actions addresses the range of strategic options available to managers
as they strive to bring about the performance demanded by stakeholders” (p. 846). These authors also conjectured that in an environment characterized by low latitude of objectives and actions, the probability of executive change is higher than differing counterparts, as “managers in this scenario face strong performance pressures” (pp. 847-848). Further, in organizations in which there is high latitude of action, and the CEO has been particularly responsive, replacement of a CEO by an outsider may prove to be more volatile or detrimental from an operational performance perspective. Since there is little strategic change to be garnered by an executive within a low latitude of actions environment, as processes drive action, outsider replacement is theorized to not affect the entity’s performance and risk as adversely as a comparable replacement within an environment exhibiting high latitude of actions. “Because of their high latitude of actions, managers in this context understand that their decisions have significant impacts on organizational performance, which, in turn, affects their reputations and values in the external managerial labor market” (p. 850).

**Differing Successions of Executive Change**

**Successors, Followers, Contenders—and Outsiders**

Executive turnover is manifested through three distinct scenarios, as posited by Shen and Cannella Jr. (2002). Successors may be followers, whose “firm-specific knowledge and the relatively low risk of adverse selection they pose can help reduce the disruption of CEO succession” (p. 720); contenders, whose “firm-specific knowledge, different strategic perspectives, and supportive directors and executives…can not only help them reduce harmful disruption associated with CEO dismissal, but also enable them
to formulate and implement appropriate strategic changes in a timely manner” (p. 720); or outsiders, whose “fresh perspectives and...ability to initiate strategic change” (p. 720) have the potential to result in auspicious and prompt transformation of the entity. Based on successor familiarity with the entity, turnover may result in enhanced, sustained, or erosive operational performance. If the candidate is deficient in “firm-specific knowledge” (p. 720) in initiating corporate transformation, presumably, the lack of intimacy and continuity typically augments financial risk to the firm. “In the eyes of many, good performance implies executive competence” (Cannella Jr., & Hambrick, 1993, p. 738); the competence of an outsider selected to assume the position of CEO is difficult to ascertain if no prior experience exists on record, particularly if the successor hails from a different commercial sector. Despite the fact that the successor may engage in decision making which ameliorates financial results, risk and volatility may be more pronounced; Cannella Jr. and Lubatkin (1993) revealed that “as the firm’s level of unsystematic risk increases, so does the likelihood of outsider selection [of a new CEO]” (p. 784). Stability and sustenance of strategy is increased when turnover is avoided; however, whether the turnover outcome is necessarily low risk and high return is contingent upon the CEO’s experience level and whether the replacement is a follower, contender, or outsider. This observation can be tested for differing performance levels within selected samples.

Upon contemplating executive departures Young (1998) revealed the following: “while senior executives may be pushed when firm performance declines, they may also involuntarily jump in an attempt to preserve the value of their human capital” (p. 1121).
However, Young acknowledged the incidence of such an event to be less likely given the prevalence of significant managerial ownership, mirroring the assertions of Friedman and Singh (1989) and Dahya et al. (1998). Young (1998) also contended that performance declines subsequent to CEO resignation may be the result of “big-bath accounting choices by the incoming CEO” (p.1122).

However, postsuccession senior executive turnover, or the replacement of senior executives with the intent of contributing to strategic change, often occurs following an interval of diminished performance. Comte and Mihal (2001) documented: “firms experiencing performance problems may tend to choose outside successors, whereas firms with good performance would tend to choose insiders” (p. 50). These authors indicated in a study of Fortune 500 firms from 1945-1984 that 23% of turnover was attributable to substandard performance; these results were not statistically significant, however. “Further, the succession context may even significantly moderate the impact of senior executive turnover attributable to dismissal on firm operational performance” (Shen & Cannella Jr., 2002, p. 721). Hillier et al.(2005) discovered additional evidence of turnover and outsider replacement under the pretext of diminished financial performance among UK firms sampled; “outside CEO succession is more likely following poor stock price performance and forced CEO turnover” (p. 530). Notably, stock price performance, or the perception of value placed upon the entity by external market participants is a driver of turnover frequency; however, the conjecture that poor financial (accounting) performance precipitates a stock market response resulting in turnover has also been empirically tested, and will be tested within the context of Collins’s (2001) sample.
Radical personnel and political dynamics are less likely to affect firm performance outcomes in the event of a follower succession, as the “follower successors are usually committed to the retired CEOs' strategies” (Shen & Cannella Jr., 2002, p. 721); thus, a contender’s information asymmetry and informed appraisal of the entity’s *status quo* often results in optimal “restructuring…to suit their new strategies” (p. 722) when required. As Korn (1985) provided statistics on insider promotions through recounting of survey results, “80 percent of executives are, and will continue to be, promoted from within” (p. 32), it is interesting to note that Bower’s (2007) more recent survey revealed that a mere 40 % of entities practice formal succession planning. Reticence to practice formalized succession planning theoretically bodes additional risk for the firm. Volatility may be diminished by an heir apparent organizational succession, as shareholders perceive continuous outcomes with alacrity; in contrast, in the event an inside successor’s intimacy with firm operations is unknown, shareholders may perceive the decreased level of a successor’s familiarity as contributing to organizational and operational upheaval, which in turn may precipitate equity volatility. Dahya et al. (1998) delineated that “governance variables” critical to seamless succession included “potentially important determinants in the strategic management literature: whether replacement executives can be appointed easily (whether the firm has a formal succession plan in place)…characteristics of the industry… remuneration and value of non-pecuniary benefits to senior management” (p. 1096).

Shareholder perception is influenced by CEO turnover precipitated by ad hoc events; “successions that result from a CEO’s death or disability tend to meet with
negative reactions, regardless of the performance context” (Freidman & Singh, 1993, p. 739). As Bower (2007) noted the surprising dearth of succession planning among prominent public entities, investors thus appear to respond appropriately to potential volatility within the risk context. Often “an executive search firm will be retained to find a replacement;” as the timeline of replacement extends approximately “10 months to a year…before any real action is taken by the CEO” (Auchterlonie, 2003, p. 53). Due to the successor’s required assimilation with the entity’s status quo, uncertainty augured by an adverse turnover event bodes additional risk for investors, particularly in the absence of an enhanced governance framework. Within an enhanced governance framework, adequate process and strategy documentation facilitates personnel transitions, and mitigates potential risk of ineffective change conjured by succeeding executives.

**Relay and Planned Successions**

Relay and planned successions are special cases employing follower successions. Zhang and Rajagopalan (2004) examined incidences of “relay” CEO successions, in which successors are specifically groomed by their incumbents prior to assuming their new office; these authors also contemplated the effects upon stock market perception (p. 483). Non-relay CEO succession defines an event in which the successor emerges from within the organization, but was not the chosen “heir apparent” (p. 484); hence, a non-relay succession is a distinctly classified contender succession. “The chance of a mismatch between a new CEO and a firm should be lower in relay succession than in other types of succession and, as a consequence, relay succession should have a positive
impact on post-succession firm performance” (p. 484). A deliberate replacement sequence enhances firm strategic continuity, “enabl[ing] the firm to better manage ongoing strategic and industry instability and turn around poor performance…high strategic instability diminishes the likelihood of relay succession” (p. 485-487). Zhang and Rajagopalan divulged results which indicated relay succession was positively correlated to postsuccession firm performance (p<.01), and outside succession was negatively correlated to postsuccession firm performance (p<.01), (p. 492). Correspondingly, the interactive effects of postsuccession firm performance and high postsuccession strategic instability produced a significant slope component (p<.05) under the prevalence of relay succession, indicating that the strategic effect of relay CEO successions mitigate firm performance in the presence of high postsuccession strategic and industry instability for their sample under study (p. 495-496). These results evidence further the findings of Shen and Cannella Jr. (2002) with respect to the moderation of risk affecting firm performance under the auspices of strategic continuity.

If a particular CEO’s management style is not miscible with the organization and its political hierarchy, it may require alteration to conform; in this case the entity may also experience augmented risk. “Job match theory stresses the importance of the entire CEO succession process, as opposed to focusing solely on how to motivate or monitor CEOs once chosen…good matches are characterized by better firm performance than are bad matches” (Allgood & Farrell, 2003, p. 318). Thus, it is expected that risk outcomes should markedly differ as a result of personnel change conducted under job match theory, and further, that “good matches” augur enhanced financial performance; an “advantage of
studying CEOs is the ability to compare two individuals in the same position with the same firm” (p. 319).

A “peak in the hazard” of a CEO leaving a position “occurs at approximately five years of CEO tenure” (Allgood & Farrell, 2003, p. 319), or at the midpoint of average total CEO tenure of ten years, as documented by Comte and Mihal (2001, p.47). The hazard is defined as: “an instantaneous probability of transition from one state to another, when the transition has not already occurred…an executive had not already departed” (Cannella Jr. & Hambrick, 1993, p. 747). If the hazard of turnover indicates that an inappropriate job match has occurred, then prior to five years of tenure or immediately after, risk should be at a nadir, in accordance with the propriety of the match. Upon analysis of 309 job matches among firms, Allgood and Farrell (2003) ascertained that, “the likelihood of an inside CEO being a good match after the previous CEO quit is significantly greater (83%) than the likelihood of an outside CEO being a good match (67%)” (p. 331). Presumably, the follower/contender successor has strategic intimacy and information asymmetry with the intended change concurrently transpiring in the organization, and may adjust the firm’s dynamic course as required to align with stakeholder expectations. In the event that an initially good match is followed by another good match, the previous CEO institutes a leadership legacy, in which the strategy of the firm is perpetuated through constructive staffing and succession planning. This in turn is surmised to minimize the financial exposure; however, such conjectures remain to be edified empirically for Collins’s (2001) sample.
In their study of CEO succession, Shen and Cannella Jr. (2002) classified the executive turnover of 228 CEO successions as follower, contender, and outsider contexts and compared the dynamics in three-year average industry return on assets (ROA) to that of the entity experiencing personnel change, while controlling for “the entropy measure of diversification as a control variable. The entropy measure has two components: related diversification (DR) and unrelated diversification (DU)” (Palepu, 1985, as cited in Shen & Cannella Jr. 2002, p. 725). Related diversification occurs when diversification transpires as a consequence of succession, whereas unrelated diversification occurs when diversification initiatives were formulated prior to a personnel change. The contingency of financial risk correlating to a change in CEO may be increasingly pervasive if unrelated diversification is experienced; CEO executive ability thus saliently affects any outcome under unrelated diversification.

**Internal Outsiders versus External Outsiders**

Whereas Shen and Cannella Jr. (2002) primarily researched the source of successors, and Allgood and Farrell (2003) essentially investigated the organizational and behavioral suitability of successors, Clayton et al. (2005) synthesized situational reasoning for CEO turnover with the “choice of replacement [type]” (p. 1782); their approach extended prior research. Given the directors’ or stakeholders’ desired outcomes, the CEO selection process is more effectively consummated if a chief executive’s required characteristics are evaluated at or prior to the inception of the selection process; the desired outcomes edify the commencement of an executive search. Clayton et al.(2005) ascribed a “strategy hypothesis” as reasoning for “[financial] volatility;” it
“increases after a turnover…[and is the] result of increased uncertainty about the nature of the strategy that will be implemented by the new CEO” (p. 1783). This scenario is surmised to occur subsequent to a forced turnover and outsider replacement. Following an interpretation of CEO compensation, these authors also indicated: “although some outside CEOs have an established track record from leading another company, most do not” (p. 1785). Further, executive skill may lack portability between individuals, despite transition planning in context. It is hence prohibitively challenging for shareholders to assess financial effects based upon disclosure of such evidence regarding a CEO’s prior experience.

Contrastingly, the “ability hypothesis” was ascribed as reasoning for financial volatility transpiring as “investors gather evidence to evaluate the skill of the new CEO…investors update their ability estimates and revalue the firm” (Clayton et al., 2005, p. 1784). Under the ability hypothesis, “firm strategy is not expected to change significantly” as it is applicable given the succession of an insider (p. 1784). Finally, a “scapegoat hypothesis” was ascribed as the convergence of turnover and agency theory, which induces “a credible dismissal threat…in order to ensure optimal exertion of effort by the CEO…and dismissal occurs when there is poor performance due to chance” (p. 1786). Although it is less likely that performance may be ameliorated by an insider or outsider successor as exogenous variables influence firm results, dismissal is often imminent and implemented to appease shareholders and investors.

Cannella Jr. and Lubatkin (1993) perceived that if performance was exceptionally incommensurate, these factors would precipitate an entity’s board to initiate outside
successor selection (p. 782); “the dismissal group shows higher levels of unsystematic risk than the normal retirement group (p<.05)…systematic risk does not differ significantly among the five disposition categories” as expected. Thus, “low profitability was a good predictor of outside selection, particularly when sociopolitical forces were weak” (p. 789). If sociopolitical forces were weak within the organization, potential vulnerability stemming from lack of managerial “cohesion” (Waldman et al., 2001, p. 135) may result in misalignment toward firm objectives. Khurana (as cited in Bower, 2007) offered additional perspective: “some boards, facing difficult strategic circumstances in the markets for their company’s products and services, lose faith in the capabilities of the insiders who produced those lousy results” (p. 13). Despite the expectation that shareholders seek agency effects to be enhanced following executive replacement by an outsider, Bower noted from his own study of a decade of executive replacement results of firms within the S&P 500 that “insiders outperformed outsiders…especially when the company had had poor prior performance” (p. 12). Should results of this research effort differ, one may question why a particular entity was not subject to this type of unsystematic risk, as it is typical that firms sampled from Collins’s (2001) selection all operate within the same market structure and economic environment and may be subject to similar governance dynamics.
Consequences of Executive Change

Changes in Goal Congruence, Agency Effects, and Organizational Inertia

One integral aspect of a follower’s or contender’s triumph in transformational change may arguably be rooted in “organizational inertia,” which theoretically contributes to hindrances in the execution of strategy; “for successors who want to initiate strategic changes, the strong organizational inertia developed during their predecessors' time in office will increase the difficulty of, or may even prevent, accomplishing their goals” (Shen & Cannella, Jr., 2002, p. 723). This contention was amplified by the findings of Gordon et al. (2000), who conveyed that the CEO is instrumental in overcoming inertia associated with strategic commitment (p. 918). In addition, Gordon et al. substantiated that lack of “environmental awareness,” and “external attribution for negative financial performance” (p. 920) also affects executive and management team recognition of exogenous variables affecting the firm. “A lack of environmental awareness may result in persistence with the current strategy” (p. 920), indicating a recalcitrance to acquiesce to the necessity of strategic transformation.

Friedman and Singh (1989, p. 722) specified: “two sets of contingencies [determine] the efficacy of new CEOs: organizational context (presuccession organizational performance and organizational size) and event content (initiating force impelling a succession, disposition of the predecessor, and origin of the new CEO).” The aftermath of a CEO succession is often perceived by investors as potentially turbulent with respect to operations.
The longer CEO tenure is accompanied by organizational inertia, the more intransigent the entity and its management team will be in accepting and executing novel strategic tactics. Shen and Cho (2005) indicated: “governance and control mechanisms at corporate organizations (e.g., ownership structure, board composition, and investor activism) can have an important effect on the occurrence of involuntary executive turnover during periods of poor performance” (p. 844). The concomitant existence of an indulgent governance structure may further prohibit acceptance of organizational change with the intent of mitigating agency risk. Hermalin and Weisbach (1998, as cited in Allgood & Farrell, 2000, p. 374) indicated that “the balance of power between the CEO and other directors that predicts board independence declines over the course of a CEO’s tenure.” Whereas board independence enhances the custodianship and fiduciary control of the firm while deterring agency conflicts emanating from a single source, a highly influential magnate often attracts directors who succumb to the leader’s capricious pursuit of “costly pet projects and…compensation packages that benefit [them] at the expense of stockholders” (Allgood & Farrell, 2000, p. 374). The degree to which agency effects are omnipresent among the CEO and executives within the entity may contribute to the decreased incidence of stewardship (Coles et al., 2001); “managerial hegemony theory, which views boards as passive instruments who hold allegiance to the managers who selected them” (p. 27) may also be prevalent within the firm, giving rise to the deterioration of directors’ fiduciary control.

To this end, Dahya et al. (1998) observed:
...the benefits of improved goal congruence should include the reduction of asymmetries of information, the diminution of moral hazard and a lessening of the likelihood of adverse selection in policy choice by managers who also have a vested interest in maximising the share values of their companies. (p. 1091)

In effect, agency risk should be mitigated in the presence of CEO turnover by the institution of equitable and incentivizing compensation packages. Supporting this assertion, Conyon (1998) posited: “the estimated pay-for-performance elasticity potentially reveals information about the incentives faced by managers to pursue shareholder interests...the greater the estimated effect, the more congruent are shareholder and managerial interests” (p. 485). This assertion aligns with agency theory, as well as the propriety of CEO dismissal pending abysmal financial performance. Dedman (2003), however, conveyed that due to an acknowledgement of agency effects, “managers have incentives to ‘entrench’ themselves, making themselves more costly to dislodge” (p. 33). Lee, Lev, and Yeo (2007) echoed similar assessments given the presence of organizational complexity: “the scope for moral hazard increases with organizational complexity, especially in firms with high organizational relatedness, because direct monitoring by principals is difficult” (p. 297). Organizational cohesiveness may contribute to malfeasant aspects of collusion prompted through the establishment of intrafirm operational relationships. “Collusion by agents is typically opportunistic because it conceals their aversion and diverts organizational resources suboptimally,
which eventually harms the overall firm performance” (p. 297). Since unique, “firm-specific factors…can consume a large portion of managerial time, thereby changing the nature of managerial work from proactive to reactive” (Mintzberg, 1973, as cited in Cannella Jr. & Lubatkin, 1993, p. 775), it is of paramount importance that personnel as well as initiatives are strategically aligned to create value within the organization, and not garnered to merely enhance political cohesiveness.

Once a “situational analysis” is performed following a dismissal, and it is determined that the business has continued viability, corrective strategic planning is undertaken and an action plan to implement typically developed. “The key to a successful turnaround is early intervention…action and the organization’s willingness to adapt can avert a significant restructuring or worse” (Auchterlonie, 2003, pp. 56-57). Subsequently, the decision to “‘fix, sell, or close’” (Korn, 1985, p. 33) will be addressed in context. In the instance of a business merger or takeover, contrasting personal dynamics are applicable. Cannella Jr. and Hambrick (1993) delineated: “acquisitions…disrupt organizational social standings…the [voluntary] departure of acquired executives is best understood as an outgrowth of social processes” (p. 733). In cases where “autonomy is removed, status is removed, and a climate of acrimony prevails” (p. 733), competent executives are often marginalized and usurped by the institution of a new regime, instead of being proselytized into an elite group with the intent of advancing knowledge through strategic advantage. Often, perception by the acquired party and resultant lack of communication may contribute to the demise of an otherwise potentially advantageous relationship between an incumbent executive leader and the merged firm’s board.
Through an analysis of the computer software and furniture industries, Gordon et al. (2000) substantiated an empirically significant relationship between “CEO turnover… [and the] increased likelihood of strategic reorientation. CEO turnover ($t=1.65, p < .05$) was statistically significant, suggesting that a change in CEO does increase the proclivity to reorient” (p. 930). Surprisingly, the relationship between “environmental awareness,” or essentially, recognition of exogenous economic and strategic influences upon the firm, and poor financial performance was not significant ($p=.42$), (p. 930). Gordon et al. (2000) interpreted their results:

…in this final iteration of the hierarchical analysis, the main effect for both industries is reversed when top management blames the external environment for poor past performance. This means that an external attribution for poor performance in the stable industry increases the probability of strategic reorientation whereas it decreases the likelihood of reorientation in the turbulent industry…Total main effects show that firms with CEO turnover are 12% more likely to have a strategic reorientation, whereas firms with top management team turnover are 18% less likely to have a strategic reorientation. (p. 931-32)

Competent, incumbent CEOs often lend precedent support to succeeding executives promoted from within, especially if the former leader successfully executed transformational change initiatives, and performance prior to acquisition was
satisfactorily achieved. Gordon et al. (2000) ascribed this “psychological investment” of tenured executives as “cognitive commitment” (p. 917). Conversely, within a performance-deficient firm, succession planning is less likely to occur, particularly in the event of a pending merger; in that case, succession efforts may not transpire as intended, due to the nature and typical alacrity of the replacement. Cannella, Jr. and Hambrick (1993) hypothesized: “the lower the pre-acquisition performance of an acquired firm, the greater an acquired executive’s propensity to depart” (p. 739); the authors’ expectations were that performance improves over time as CEO tenure within the merger context is extended. As new owners perceive that strategic reorientation is required to transform the firm’s future destiny, the probability of executive removal increases. Additionally, Cannella Jr. and Hambrick conjectured that “the greater the degree to which autonomy is removed from the acquired firm, the greater an acquired executive’s propensity to depart…we expected the effects of the removal of autonomy…to be relatively slow in appearing…manifesting…in the second and third years” (p. 742). Drawing from a sample size of 430 merger events dated years 1980-1984, Cannella Jr. and Hambrick reported that 67% of executives of acquired firms had departed within 48 months of firm acquisition, with the highest incidence of departure occurring in the second (87 executives) and third (76 executives) years; the model was “highly significant,” with p=.001 (p. 749). Notably, the authors observed that “ROE (return on equity) was negatively associated with executive departure through the second year” (p. 749). The results were statistically significant (with p=.01), and suggested that market reaction to merger and acquisition activity occur contemporaneously. This implies that
differentiation of risk as purported by executive change is perceived as similarly significant by investors. It should also be noted that the effects of decreased ROE dissipated overall in later periods within the Cannella Jr. and Hambrick sample, indicating a tempering of future results as tenure increased (p. 755). Further, the “in the first two time periods [essentially the first twelve months], removal of autonomy was positively associated with departure, as hypothesized” (p. 752).

Whereas Sheikholesami, Wilson, and Selin (1998) advised: “abrupt changes (forced resignations or dismissals) are a surprise and often involve significant shocks to earnings” (p. 74), Allgood and Farrell (2000) asserted in clarification: “when there is greater uncertainty about a new CEO’s ability, the board will be more lenient regarding poor performance that deviates from the expected level” (p. 374). In context, if the board is more permissive in their tolerance of deficient CEO performance, this approach introduces further volatility and risk into financial results. Consider that the efficient markets hypothesis, through which it is posited that stock prices imbue all relevant information, is upheld as a theoretical framework supporting equity markets; hence, it is conjectured that the risk element of earnings variability due to a change in personnel will be distinctly measurable within the market context as investors sense imminent risk changes. “The wealth effect associated with an announced change in CEO can be decomposed into an information effect (the firm’s prospects are worse than previously believed) and a real effect (the new CEO is expected to improve firm performance)” (Clayton et al., 2005, p. 1780). Correspondingly, reaction to the information effect has been shown (Puffer & Weintrop, 1991; Kaplan, 1994; Defond & Hung, 2004) to be more
salient than the real effect in the short term. It is of worthy note that Clayton et al. (2005) also discerned: “poor stock performance and higher volatility typically precede a forced turnover” (p. 1787). These researchers confined sampling to that of poorly performing entities. However, the extent to which the response of market participants affects equity pricing when cash flows have been necessarily altered due to risk and return volatility remains to be tested within Collins’s (2001) sample.

**Dynamics in Organizational Interactions**

Modifications in board composition and hence political influence may also accompany the decision to replace an underperforming CEO. “Boards of directors, then, may be seen as acting as the shareholders’ first line of defence against a potentially self-serving management” (Conyon, 1998, p. 486). They exposted the tenets of Fama (1980, as cited in Conyon & Florou, 2002, p. 210): “the board is viewed as a market-induced institution, the ultimate internal monitor of the set of contracts called a firm, whose most important rule is to scrutinize the highest decision makers within the firm.” In context, the board is responsible for independent governance aspects of monitoring executive performance, regardless of political or organizational alignment of individual directors with the executive team. Prime (2007) fundamentally concurred: “a strong turnover-performance connection provides evidence of good corporate governance within a firm” (p. 79).

CEO replacement may also precipitate turnover among board members, particularly in cases of increased allegiance to the former executive. Farrell and Whidbee
(2000) observed “an increased likelihood of outside director turnover following forced CEO succession, especially among those directors that are closely aligned with the outgoing CEO” (p. 597) According to their findings, in the presence of deficient financial performance, a higher incidence of equity ownership among directors of firms served often motivated an executive dismissal decision. Reticence to oust a poorly performing CEO is less probable with effective incentive alignment among board members. Farrell and Whidbee (2000) asserted that “removing a poorly performing CEO…is one of the most observable signals that outside directors can send to shareholders and labor markets about their effectiveness as directors” (p. 598). Inquiry as to the fulfillment of fiduciary duty and application of objectivity surfaces: “directors with characteristics associated with effective monitoring (e.g., independence from the CEO, substantial equity ownership, and sufficient decision-making expertise to make good replacement decisions) tend to be rewarded for removing a poorly performing CEO” (p. 599). In addition to pecuniary benefits, the likelihood of securing future board seats serving other entities increases for the director based on prior demonstration of successful governance. Consequently, Farrell and Whidbee (2002) also acknowledged, “CEOs have significant control over the director selection process, especially if CEOs serve on the board’s nominating committee…a new CEO is a catalyst for change in board committee structure” (pp. 49-50).

Organizational Effects distinguished by Replacement Type

As an outsider supplants the former CEO, any current affiliated board members are typically replaced as well, especially those serving on fiduciary committees (i.e.,
audit, pension, and nominating). In response to queries regarding the propriety of service, practitioners have decried that myriad and potentially interlocking governance obligations instituted by directors be constrained by limiting of the number of board positions a director may serve. Directors often seek additional board positions to gain exposure to multiple industries and solidify their reputation. To offer apposite evidence, these researchers further elaborated: “when directors become busy as a result of obtaining a new board seat, stock prices tend to drop for the firms in which they are incumbent directors…boards are inclined to become distracted and monitoring intensity is likely to suffer” (Fich & Shivdasani, 2006, p. 692). The probability of busy boards to displace a deficiently performing CEO diminishes as the number of board directorships become more prevalent among members; busy directors will tend to be indifferent to the necessity of ousting a CEO, whereas, contrastingly, non-busy boards are more sensitive to this imperative (p. 716).

If the CEO replaces a company founder, then “the founder may not fully relinquish control of the firm when the new CEO takes over…[and thus is] unable to run the firm as he or she wishes” (Allgood & Farrell, 2003, p. 333). CEO tenure may be prolonged if boards are permissive “in the face of poor performance because [CEOs] have coped successfully with contingencies posed by their environments or strategies in the past” (Comte & Mihal, 2001, p. 50). In this case, previous performance rather than current achievement is utilized as litmus for continuing tenure. Coles et al. (2001) documented the findings of Miller: “the relationship between CEO tenure and firm performance is curvilinear, with the impact on performance increasing to a point and then
becoming negative as the CEO becomes rigid and less likely to engage in environmental monitoring and adaptation” (Miller, as cited in Coles et al., 2001, p. 29). An expectation may exist among board members that an incumbent CEO has the ability to ameliorate future operational outcomes despite more current unsustained performance; directors may conclude that maintenance of the status quo is the best option. From an accounting metric perspective, this conjecture is further substantiated by the findings of Coles et al. (2001) who observed: “significant and negative interaction of CEO tenure and board composition and MVA…indicate that when insiders dominate the board and the CEO has been in the office a long time, market performance declines” (p. 41). Hence, Andrews (2001), subsequent to an observation of Gillette and Xerox, alternatively advocated, “if…companies…are seeking improved performance, the course is clear: Hire an outsider and clear away any obstacles to change” (p. 14).

Friedman and Singh (1989) suggested that the degree of obligatory strategic change may determine the effect of executive successor, based on stockholder expectations:

…results suggest that customary successions are neither adaptive nor disruptive but are best explained by a random transformation view of organizational change: leaders assuming power in the modal succession event do not seem to matter in determining the fortunes of large corporations…stockholders see new CEOs as able to affect strategic change, but only when the firms they lead are in
need of redirection and when the accession to power represents alterations in management practice and corporate policy. (p. 739)

Contrastingly, outsiders do not garner the perspective nor the political influence required to entrench themselves with alacrity, which often hinders the execution of novel strategic initiatives. Auchterlonie (2003) noted that there exists a “’knee-jerk’ tendency to replace CEOs of distressed or underperforming companies that, in many cases, are no more capable of fixing the underlying problems causing the distress than their predecessors” (p. 52). Allgood and Farrell (2000) also posited, “outside hires are unlikely to have influenced the composition of the board before their hire, suggesting it may take several years for them to become entrenched”; the operative duration of tenure required to achieve entrenchment, per their results, was three years (p. 374-376). Hillier et al. (2005) explicated further by indicating that political influence is not promptly garnered by newly appointed outsiders: “External succession is damaging to the incentives of lower management, and therefore, external candidates must display superior potential to that of the available internal talent pool” (p. 530). This indicates that if a post-succession turnover occurs within a fleeting interval following the prior replacement, the outsider successor may have not been able to influence outcomes and build organizational cohesiveness quickly enough to placate the performance expectations of stakeholders, particularly investors and directors.

In a seminal work, Friedman and Singh (1989) conceded:
CEOs succession, therefore, may result in two kinds of disruption. It can destroy the fit between an organization and its environment because, as a structural change, a succession event results in an organization’s selection out of its population (a radical ecological view). Or it can disrupt internal authority relations, breaking up the unity or command and disrobing work patterns (a bureaucratic theory view). Both kinds of disruption may lead to performance decrements and increase the likelihood of organizational death. (p. 721)

**Financial Performance and Risk Indications of Executive Change**

**Effects of the Risk Environment upon Entity Context**

Academicians have conducted myriad analyses in order to investigate the relationship between past financial performance and CEO turnover; however, convergence and resultant consistency fail to dominate conveyed outcomes. Huson et al. (2001) insightfully premised: “[CEO turnover] has long-term implications for a firm’s investment, operating, and financing decisions” (p. 2266). As previously stated, strategic change is often requisite as a new executive attains position, and has the potential to inflict a more pronounced level of risk upon the entity. Although Conyon (1998) acknowledged, “low company profits may be attributable to adverse demand shocks or increases in industry or market costs rather than malfeasance by the agent” (p. 487), it is the responsibility of the entity’s CEO and board to ensure deliverance of expected
financial results according to forecasted projections despite current instability. Financial performance is the ultimate litmus capable of gauging the executives’ and directors’ ability to mitigate risk and augment value within the context of the entity. Mere dismissal of endogenous and exogenous sources of risk currently suffusing financial detriment upon the entity as insurmountable is evocative of executive complacency, entrenchment, and reticence to innovatively realign the entity’s strategic position. Conyon espoused: “a boardroom culture which eschews frankness in favour of politeness and courtesy may be a proximate cause in the failure of the corporate control mechanism” (p. 490).

Subsequent to completion of an analysis of equity volatility following 872 CEO changes occurring from 1979 through 1995, Clayton et al. (2005) evidenced that “the most significant increase [in volatility] is associated with forced turnover” (p. 1781). The forced post-turnover mean standard deviation of returns was 43.2%, as compared to the full sample mean standard deviation of 30.7%, and the voluntary turnover mean standard deviation of 28.7% (p. 1792). Auchterlonie (2003) offered: “involuntary successions in 2002 increased by more than 70% in 2001…with 39% of 2002’s global CEO departures being forced, performance-based change,” (p. 53).

Kaplan commenced studies of the financial performance given the incidence of CEO turnover in Japan (1994) and Germany (1995). Notably, within these cultures, corporate governance structures differ from that of the United States and are more “relationship-oriented” (Kaplan, 1995, p. 23), contingent upon associations with financial institutions and groups of “large shareholders.” Board-level decision-making is viewed as more collaborative, particularly among German firms, as there are typically two
governing boards for each public entity—a supervisory board and a management board—deemed “the codetermination system” (p. 26). Financial performance is attributable to the actions of the entire management board. Hence, “turnover of the management board in German companies increases significantly with poor stock performance and with earnings losses” (Kaplan, 1995, p. 24). This possible replacement of the entire team contrasts significantly with actions often initiated in US firms, in which CEO turnover is typically not accompanied by complete managerial team replacement, excluding the consequences of takeover activity. Managerial ownership among German firms also contrasts with that of US entities; as such, “German banks typically act as custodians for the shares of stock corporations held by small shareholders” (p. 28).

**Increased Governance Risk through Earnings Manipulation**

Detzler and Machuga (2002) amplified Kaplan’s (1994) findings on the incidence of turnover among firms subject to the prevalence of earnings management. Asserting the potential manifestation of four separate hypotheses regarding earnings management during the interval circumscribing the turnover event, these authors revealed that “mutual interests between incoming and outgoing presidents...to portray a triumphant transition” (p. 343) are often addressed to ensure continuity of strategic intent between the newly appointed and outgoing leaders. By expanding tests of the horizon, cover-up, and big bath theories suggested by Murphy and Zimmerman (1993, as cited in Detzler & Machuga, 2002) with the addition of the coaching hypothesis, Detzler and Machuga elucidated that “corporate culture and management succession practices cause managers to face different
incentives to manage earnings in these situations” (p. 344). Horizon theory “suggests that departing CEOs approaching a known retirement date will attempt to increase earnings during their last years at the expense of future earnings...motivations for increasing earnings may be pecuniary” (p. 344); this situation is more prevalent in the case of routine turnovers. Conversely, cover-up theory suggests the concealment of “poor performance in order to avoid disciplinary action” (p. 345); thus earnings manipulation is theorized to be more prevalent given the incidence of forced turnover. Big bath theory “applies to incoming CEOs who attempt to decrease earnings in the transition year in order to report improved earnings in the following year” (p. 345); hence, the incidence of the big bath accounting approach is also surmised to be more prevalent given forced turnover.

The coaching hypothesis, “suggest[ing] that both departing and incoming presidents have incentives to smooth earnings during a routine transition” (Detzler & Machuga, 2002, p. 346) was also derived. The incidence of earnings management in this case may subdue and impede the pronounced and detectable sensitivity of otherwise differentiated results due to manipulated financial metrics. Further, risk perception of shareholders participating in the market may be affected by the application of such practices, to the extent that distorted financial disclosures lead investors to anticipate spurious results. In turn, the authors offered the following conjecture: “since non-routine turnovers are typically unanticipated, it is possible that departing presidents have been managing earnings to cover up poor performance for several years before they are terminated” (p. 365). In contrast to Collins’s (2001) selected sample, inclusion in which
was predicated by fifteen years of extraordinary financial results, it is unlikely that material earnings management could be sustained for a lengthened period of time without being detected through manifestation of cash flows.

Whereas Detzler and Machuga detected the incidence of earnings management through the examination of trends in depreciation, research and development, extraordinary gains and losses, and accounting accrual dynamics, Lee et al. (2007) confined their examination exclusively to accrual dynamics, citing discretionary accrual changes as a proxy for earnings management. “The likelihood of organizational fraud is likely to be positively associated with organizational complexity because of monitoring difficulties and greater information asymmetry” (p. 296).

Upon investigation of the effect of changing discretionary accruals from financial results within CEOs retirement years, Reitanga and Tearney (2003) provided additional edification of the prevalence of the horizon theory, termed ‘short horizon theory’ (p. 255). The resultant augmentation of income is spurred by appealing and reciprocative increases in bonus remuneration to the executive in the final years of service. Additionally, “institutional investors are interested in short-run performance…[which] can exacerbate earnings management behavior” (p. 257); this observation of myopic behavior was also noted by Rappaport (2005). Reitanga and Tearney (2003) found significant “evidence of earnings management” (p. 255) through the analysis of multi-year ascending accrual growth prior to retirements, and descending accrual release upon the executive separation from the entity; they specifically touted the decoupling of the performance effect and turnover effect within their sample by including only normal
retirements. Although the results of Reitenga and Tearney overall did not reveal significant relationships between earnings management through discretionary accruals in the last and fourth years leading to CEO retirement, there was a positive association noted between the variables. In contrast, analysis of the second and third year results prior to departure did reveal a significant relationship between discretionary accruals and retirement (p. 270). To the extent that discretionary accrual adjustments are not material, the subsequent effect upon risk is liminal, if at all detectable.

Lee et al. (2007) also provided evidence of a positive association between earnings management and “organizational relatedness...a high proportion of outside directors and high institutional equity ownership have less pronounced earnings management...[this] suggests an interaction between corporate governance and organizational relatedness” (p. 293). By recounting the incidence of ethical transgressions among financial executives, Lee et al. conjectured that the pervasiveness of collusion within a “multi-person and cross-division [situation]...raises the fundamental question...of how is it possible to get a large and diverse group of top-level employees to participate in sustained fraud,” requiring, “‘commonality of purpose’” (p. 294).

With respect to earnings restatements and risk prevalence, ineffective governance has to date had a relatively minimal effect on investor reaction within a portfolio context, and a marginal effect upon turnover frequency of other board members overall. Marciukaityte and Varma (2007) educed: “firms experiencing large-loss restatements...do not have significantly different composition of boards and audit committees than other restating firms” (p. 31). The principals’ control of the entity’s agent should be
enforceable; if the fiduciary relationship is violated, it becomes the obligation of the board members to act on behalf of the shareholders and rectify any turbid actions on the part of a CEO or ineffective fellow committee members.

Solely, Marciukaityte (2005) documented a positive association between managerial optimism and the magnitude of discretionary accruals, suggesting that “high-growth firms derive a substantial part of their value from highly uncertain growth opportunities, making it harder for investors to appraise the high-growth firms and easier for managers of these firms to mislead investors” (p. 6). Results garnered from a sample of firm financials dated 1988 to 2001 revealed the presence of significantly differing levels of discretionary accruals (p<.01) based on the method of financing major projects, i.e., debt, equity, and retained earnings, with “reliance on external equity financing...negative and significant at the 1 percent level” (pp. 14-15). Generalizing these results, high-growth firms, such as the firms in Collins’s sample, may be less subject to earnings manipulation and more subject to managerial optimism with respect to forecasting future earnings. Equity issuance, despite its signaling effect, may be the financing methodology of choice if management’s projected results are more aleatory than anticipated. More pronounced levels of risk would then result in more highly priced financing for the firm. Considerable financial impact may be experienced if the firm’s hurdle rate must be adjusted by one to two percent in response to personnel change (Clayton et al., 2005, p. 1782).

Defond and Hung (2004) commented upon the “convergence of international corporate governance systems toward a best-practices set of governance rules...regulators
who wish to improve corporate governance may find it more beneficial to expend resources on strengthening law enforcement institutions rather than on adopting additional laws” (p. 274). Without adequate governance addressing the presence of financial management impropriety, transparency and market efficiency are thwarted. A reallocation of resources may be necessary to properly align recognition of malfeasant management activity, and enhance transparency. A significant amount of institutional ownership of a firm’s equity may delimit oversight and external influence from passive investors. Nagar (2004) provided both a rationalization and a caveat, indicating: “if turnover is indeed performance related...[it is] suggested that a change in management should be accompanied by an increase in performance” (p. 315).

**Suitability of Finance and Accounting Performance Benchmarks**

Results of Shen and Cannella, Jr.’s (2002) sociopolitical organizational experiment indicated that the “interactive effects of successor type and postsuccession senior executive turnover on firm ROA” (p. 727) were positively related in the case of contender successors and negatively related in the case of outsider successors, with the slope of the outsider contenders being far more pronounced. These results implicate that erosive financial effects result from outsider CEO succession paralleled with senior executive turnover, and negatively and significantly impact return on assets (ROA) for the sample. Also, these results are consistent with the findings of Allgood and Farrell (2000), who revealed that “performance measures are negatively related to the likelihood of forced turnover...when measuring performance using ROA, 53 percent of the forced turnovers in the sample are in the bottom quartile” the “effect of firm performance
is…negative and significant” (p. 386). Conyon (1998) similarly echoed reciprocity between dismissal and performance in documenting outcomes: “the marginal effect of a performance change on the turnover likelihood is about 8 [percent]” (p. 503). In a subsequent study, Conyon joined Florou (2002) and opined: “there is an inverse and robust relation between the probability of a top management dismissal and firm performance: senior managers are fired for poor performance” (p. 210). Whether diminished results were sustained subsequent to a forced leadership change, or ameliorated temporarily resulting in eventual recidivism of financial failure, remains to be compared within this analysis of Collins’s (2001) sample. Rappaport (2005) presaged: “failure to meet earnings targets is seen as a sign of managerial weakness and, if repeated, can lead to a career-threatening dismissal... managers must develop and effectively execute strategies that maximize the company’s long-term cash flow potential” (p. 69).

Since myriad financial ratios and inputs to equity valuation are saliently influenced by measures of income, it is conjectured that risk indicators such as beta, or the covariance of the equity return versus the market return divided by the variance of the market return, will also be negatively impacted by CEO succession and senior executive team reciprocative dynamics. Presumably, the lack of continuity at numerous supporting levels, excluding the top of the organizational hierarchy, portends operational instability which renders financial risk, until synergy transpires among the senior management team members and the new CEO. The introduction of “incentive contracting…contingent pay and…ownership stakes…[will result in] close alignment between managers’ and outside
shareholders’ interests” (Coles et al., 2001, p. 28). Specific linkage to define the metric utilized to designate performance may drive the CEO to attain the incentive complementarily or detrimentally; it is critical to ensure that metrics are selected with consideration to potential agency conflicts.

Shen and Cannella Jr. (2002) conferred that one of the limitations of their study was the inability to apply outcomes to financial market performance (p. 729); literature is somewhat void of analytics which may be subtended through the examination of the significance of risk factors, and the metrics which specifically augur variation. Although the literature includes limited comparisons of financial metrics given changes in leadership, research to date has specifically addressed sample sizes across the entire range of equities within the US market. A dearth of literature exists addressing the analysis of risk-relative financial effects of leadership turnover within companies deemed exceptional prior to the leader’s departure.

“Turnover is negatively related to prior year stock returns” (Anderson, Bates, Bizjak & Lemmon, 2000, p. 13), which suggests that risk is determinable through observation of beta. If turnover is negatively related to prior year stock returns, then the last year of tenure may prove to inculcate the poorest financial performance of a CEO’s tenure among sampled firms. This is consistent with match theory phenomenon, as presented by Allgood and Farrell (2003). In an earlier study, Allgood and Farrell (2000) also provided evidence that “the mean stock return of firms with new outside CEOs is more than 20 percent…the variation around this mean is enormous with a standard deviation of 264.5 percent” (p. 389). This analysis was based upon a sample which
excluded financial institutions and public utilities. In acquiescence they offered: “the hiring of an outside CEO is a risky decision with the potential for high returns…the mean and the standard deviation of the stock diminish with tenure” (p. 389). Since stock returns are the primary input for the beta, this documented magnitude of change should result in a pronounced variation in beta for equities affected by outsider CEO turnover; this provides edification for an approach to risk measurement through an analysis of investment returns, with the assumption that the semi-strong form of the efficient market hypothesis holds in sample context.

Researchers also conferred the limited miscibility of accounting and finance performance scalars. Allgood and Farrell (2000) observed a dichotomy between accounting and finance metrics; they asserted: “accounting measures are better predictors of management changes than are stock returns” (p. 390). Hambrick and Cannella Jr. (1993) further clarified and advocated the use of time-series accounting metrics: “accounting-based performance measures have well-known limitations, but three-year averages are thought to yield generally robust indications of corporate economic performance” (p. 745). In testing the replicability and extant generalizability of this assertion, one may consider the varying degrees of informational transparency of accounting data across capital markets.

In contrast to accounting data, which exhibits the historical result of previous decisions, stock return data is thought to instantaneously exhibit high variation in the event that the expected effect of CEO change among market participants is an increase in equity risk, which may subsequently be diversified away. Rappaport (2005) summarized
this view by conferring: “earnings are relevant to valuation to the extent that they help investors and analysts estimate the magnitude, timing, and uncertainty of future cash flows”; he also remarked that “earnings are an amalgam of facts (realized cash flows) and assumptions about future outcomes (accruals)” (p. 66). Commenting on suitability, Appleyard (1996) also noted, “central to the success of a piece of work involving the interpretation of evidence from the capital market is that market efficiency holds and that we have a robust model of asset pricing” (p. 287); the underlying assumption remains that fundamental analysis is a robust input of asset pricing models.

Conyon and Florou (2002) advocated the utilization of both market returns and accounting metrics to comprehensively assess the performance of CEOs within their selected sample. As strong proponents of the efficient markets hypothesis, they asserted: “in an efficient market…stock prices anticipate the future benefits of the possibility of CEO dismissal and therefore tend to increase as the capital market becomes aware of new avenues for management improvement” (p. 214). Notably, they also offered, “accounting-based measures, on the other hand, are more stable and not vulnerable to speculative or exogenous shocks (although a counter argument could be made that accounting-based measures are endogenous and susceptible to managerial manipulation)” (p. 215). They revealed a significant relationship (p ≤ .001) between forced turnovers and performance of both stock returns and return on assets for their UK sample from 1990-1998; “the data reveale[d] no association between non-forced departures and firm performance” (p. 218). Dahya et al. (2002) also “employ[ed] both accounting earnings and stock returns to measure corporate performance” (p. 465) through the utilization of
return on assets (ROA) and industry adjusted stock returns, as differentiated from the methodology of Conyon and Florou, who documented abnormal returns circumscribing the announcement date of CEO departure. The test employed by Dahya et. al. (2002) does not distinguish realized returns from the variation stemming from the reaction and perception of risk by market participants at the turnover announcement date.

Accounting information is, in practice, subject to manipulation. In particular, “executives of poorly performing firms have a greater incentive to make discretionary accounting choices to increase earnings than executives of good performing firms” (Detzler & Machuga, 2002, p. 368). However, since the efficient markets hypothesis was established under the premise that equity values are impounded with current relevant information, market prices should thus adjust to perceived risk more promptly than historical accounting information exhibits. Dutta and Richelstein (2005) observed: “one might expect that as market information becomes less precise, an optimal performance measure puts less weight on current stock price and instead relies more heavily on accounting measurements and future cash flows” (p. 1071). Market movements are based on anticipated risk of CEO actions as perceived by stockholders, while accounting information conveys the results of CEO actions executed, as interpreted through the framework of generally accepted accounting principles. However, it is necessary to relate potential limitations of disseminated information, as Allgood and Farrell (2000) purported. Graham et al. (2005) acclaimed a related sentiment by asserting:

…companies voluntarily disclose information to facilitate ‘clarity’ and ‘understanding’ to investors. Executives believe that lack of clarity, or a
reputation for not consistently providing precise and accurate information, can lead to under-pricing of a firm’s stock…accounting earnings matter more to managers than cash flows for financial reporting purposes, which contrasts with the emphasis on cash flows found in the finance literature.

(p. 2)

These researchers substantiated the perspective of surveyed CFOs, and the ascription of Lev (2001, as cited in Graham et al., 2005, p. 31): “GAAP-based financial reporting ignores intangible assets such as ‘people, processes, and brand position.’” To the extent that a chief executive is considered an intangible asset, expertise is not valued per se within a financial statement, but the strategic financial ramifications of executive decision-making have contemporaneous cash flow and earnings implications. Overarchingly, “results indicate[d] that CFOs believe that earnings, not cash flows, are the key metric considered by outsiders” (p. 4), and although fundamentally, earnings are related to cash flows, a distinct difference in shareholder perception exists among finance executives.

As equity valuation models are chiefly derived from expected cash flows, convergence between stock price and accounting data theoretically transpires when the firm’s accrual income closely equates to its cash flow from operations. A time series analysis of accounting metrics identifies trends which provide information useful in the determination of financial outcomes of operations by identifying sustainable cash flows; this is the nature of the predictive value of accounting information. Coles et al. (2001) elicited these potential effects by delimiting the generalizability of their assessment of
EVA® and MVA, since CEO-implemented performance change is ostensible through an extended time series interval in comparing a minimum of two data points, three years apart. Defond and Hung (2004) generalized findings of their studies of both financial and accounting related metrics by indicating: “CEO turnover is negatively related to stock price performance when prices are more informative and negatively related to earnings when stock prices are less informative and earnings are more informative” (p. 272). To the extent that an accurate infusion of the expected results given CEO turnover occurs in the context of an efficient market, CEO turnover is negatively related to stock prices. As a heuristic anticipation of market reaction, Nagar (2004) asserted: “other firms can capitalize on a distressed firm by hiring its talented managers, and investors can turn bearish in anticipation of these managers’ resignations. These effects will also manifest as a negative association between stock price and turnover” (p. 316).

Dutta and Reichelstein (2005, pp. 1069-70) conceded: “to provide incentives for senior managers, firms rely on a range of performance indicators based on accounting data and external market information….inclusion of the ‘forward-looking’ stock price in the manager’s performance measure is one way to generate investment incentives.” This conjecture implicitly assumes that the efficient market hypothesis holds, and the market is at least semi-strong form efficient. By observing that “the role of stock prices can be thought of as a form of intertemporal relative performance evaluation in which current price serves as a benchmark for evaluating the manager’s future performance” (p. 1070), the underlying assumption further requires the continuity of strategic purpose.
Additionally, a chosen robust metric must be sensitive enough to differentiate pricing dynamics relative to such changes. Detzler and Machuga (2002) deferred:

…since firms that undergo non-routine turnovers typically have poor performance, it is especially important to control for firm performance to isolate changes in discretionary financial variables that are caused by changes in firm performance from those caused by management manipulation. (p. 365)

Key financial metrics which detail the financial outcomes of operational investment and marketing endeavors are critical to monitor through CEO transitions. While market value added (MVA) is designated as “the definitive measure of corporate success” (Stern Stewart, 1996, as cited in Coles et al., 2001, p. 33), there is also evidence that economic value added (EVA®) is a salient indicator of a firm’s utilization of assets, and ability of the CEO and executive team to generate shareholder returns from asset expenditures, adjusted by the cost of investment. Coles et al. (2001) disclosed results which “indicate[d] a strong relationship between industry EVA® (or MVA) and performance” (p. 39). Not only did these authors report a significant positive relationship between EVA® and combined leadership structure, they also ascertained a “negative relationship between the proportion of outside directors on the board, and CEO salary sensitivity with MVA” (p. 39). Firm and industry EVA® were both correlated with MVA, at a level of .436 (p. 40).
Şabac (2007) provided further evidence of managerial tenure and performance assessment; “the CEO’s power is based on perceived ability, which in turn is based on observed past performance” (p. 849). The concept of CEO retention until retirement is conducive to the strategic performance continuum; the moral hazard of turnover is thus reduced and risk mitigated. Increased risk is also dependent upon the switching costs of the agent’s subsequent renegotiation at the transpiration of turnover. Şabac construed: “the general solution to the agency problem allows for considering a variety of performance measurement systems, in particular, negatively auto-correlated accounting-based performance measures, and highlights the different implications of using different performance measurement systems” (p. 850).

It is integral, from an operational as well as an agency incentive perspective, for boards of directors to align performance metrics of organizations with those designating the overall acceptability of CEO success. Puffer and Weintrop (1991) ascribed: “to the extent that a performance measure reflects the board’s heuristic of differences from expectations it should be an effective predictor of CEO turnover” (p. 1). Accordingly, they employed a number of financial and accounting metrics to establish linkage from performance to turnover, and established an underlying assumption that analysts’ forecasts could be utilized as a proxy for board expectations of performance, “because much of the information analysts work with comes from executive officers of the firm who are members of the board of directors or advisors to the board” (p. 2). Stock price is often utilized as an exemplary metric, ubiquitously forming the basis of additional compensation schemes designed to incentivize the agent to perform; it may be predicted
with substantial accuracy by financial analysts. Arguably, systematic “exogenous factors” may also unpredictably affect stock prices (p. 3). Therefore, a set of metrics which provide a more comprehensive CEO performance litmus may be more effective in assessing results over the long term, and should be instituted to develop “compensation contracts...used to align the interests of the two parties” (p. 5). Despite their extensive inclusion of independent variables (i.e., unexpected earnings per share, cumulative abnormal returns, return on assets, return on equity, etc.), Puffer and Weintrop failed initially to discover a significant relationship between any of the chosen performance variables and CEO turnover (p. 10). However, in further development of a more parsimonious model based upon the changes in expected EPS and market share, Puffer and Weintrop recounted the significance of a negative relationship (p<.10) between CEO turnover and the EPS comparison versus analyst forecasts and decline in market share (p. 13). The authors contended: “measures of differences between actual EPS and financial analysts’ expectations, which served as a proxy for the board’s expectations, was significant, whereas measures based on mechanical algorithms—changes in accounting ratios...were not significant” (p. 15).

Within two studies, Farrell and Whidbee (2000, 2002) prescribed a significant relationship between accounting performance and CEO turnover, in contrast to a significant relationship between stock returns and CEO turnover. Fich and Shivdasani (2006) denoted through an observation of US firms: “underperforming the industry by 50% in the prior year increases the probability of forced CEO turnover by 4.36 percentage points” (p. 714). Consistent with this assertion, Graham et al. (2005, p. 12)
reflected: “managers believe that meeting benchmarks conveys future growth prospects to investors…in sum, the dominant reasons to meet or beat earnings benchmarks relate to stock prices” otherwise, an “information risk premium” (p. 25) may be expected by investors. Achieving benchmarks invariably signals future predictability to investors, which is critical from a valuation perspective; for this reason, “CFOs equate the idea of smooth earnings with the desire to avoid negative earnings surprises (relative to earnings targets)” (p. 25). As previously asserted, the burden of achieving forecasted results along with pervasive informational asymmetry and a weak governance structure may present the opportunity for an executive to engage in earnings manipulation.

Friedman and Singh (1989) conjectured:

…if a rational selection process has occurred, an appropriate change in strategic direction is signaled. In such cases…the greatest potential for adaptiveness and hence, a positive stockholder reaction is likely…stockholder reaction to inside successors is likely to be positive under conditions of good performance. (p. 725)

The outcome of their empirical tests revealed significant (p<.01) results for the interaction between variables representing performance and cumulative abnormal returns, as well as an inverse relationship to turnover (Friedman & Singh,1989, p. 734). However, outcomes were contrary to their original hypothesis “origin [of the successor] is not a significant predictor of stockholder reaction in any of the regression models shown” (p.
“Results of this study support the notion that stockholder reactions to successions are heterogenous,” (p. 738); these findings indicate ambivalent or latent reactions among shareholders to corporate control events, which is typical of results of event studies.

Utilizing “a matched sample of ‘non change’ firms (control group)” as compared to firms experiencing CEO change, Sheikholesami, Wilson, and Selin (1998, pp. 73-74) disclosed the existence of a “marginally” significant relationship (p<.08 for all variables) between time horizon and change versus non change firms and analyst forecast accuracy. Disclosure of the event led to appropriate analytical “attention directing” which provided greater scrutiny of fundamentals fueling equity pricing given news dissemination; results “indicate[d] that the forecast precision has improved more for CEO change firms than for control firms” (p. 74).

Stathopoulos, Espenlaub, and Walker (2005) stratified samples given financial results of UK firms into highly performing, mid-performing, and poorly performing, and attested to a truncated tenure for CEOs within the poorly performing sub-sample; “CEOs of poorly performing firms are significantly more likely to be dismissed…[these are] companies that have experienced a performance ‘shock’” (pp. 89-92). Results of their study were conjectured to have been impacted by the adoption of the Cadbury Committee’s advisement on governance (i.e., dichotomizing the role of CEO and Board Chair among UK entities). “The turnover more than triples after bad abnormal performance…this corresponds to an increase of 8 percent in the occurrence of CEO turnover in poor performers in year t + 1” (p. 102) or nearly eight times the rate of good and mid performers. Stathopoulos et al. (2005) also disclosed that among entities
represented in their three stratified samples, with respect to compensation, “the CEOs of poorly performing companies are better-off than their counterparts in the well performing firms” (p. 103). These authors also suggested that the primary governance mechanism within the UK sample was CEO removal rather than overall compensation decline, and CEOs are “well protected under their current contract (even in extreme cases of poor corporate performance)” (p. 104). Young (1998) echoed similar theoretical tenets: “turnover frequency may reflect the fact that measures short of outright dismissal (e.g., pay adjustments, early retirement, etc.) are the preferred method for correcting performance problems in the corporate sector” (p. 1125).

Summary

Chapter 2 contained the breadth of research on CEO turnover. Such executive replacements occur through the normal course of retirements and resignations, however, these events may also be precipitated by a continuous exhibition of poor operational and financial performance. As Clayton et al. (2005) ascertained: “a change in executive leadership is a significant event in the life of a firm” (p. 1779). Assuredly, through differing applications of leadership styles and strategies, a change in executive personnel has the potential to exert pronounced operational impact upon a firm. In recounting the results of prior studies of CEO succession, the circumstances precipitating replacement as well as the source (internal or external) of successor may augur an equally significant impact upon financial outcomes. Within Collins’s (2001) sample, significant results of volatility tests within the time-series selected for observation will represent a departure from and an enhancement to the original sampling objectives and methodology. As such,
the litmus an entity’s board applies to justify the replacement decision and the source of
the successor may vary according to political and organizational structure, governance
structure, and ownership structure. Further, agency effects due to entrenchment may
become prevalent as an entity’s board seeks to unseat a deficiently performing executive.
The degree of organizational inertia often predicates the board’s proclivity to act in the
event of a requisite executive replacement.

Financial metrics provide appropriate data regarding performance; the board
utilizes metrics derived from accounting and financial markets regarding executive
achievement. To perform an analysis of the differentiated results given a change in
executive within an extraordinarily performing entity, both accounting and finance
metrics are useful to gauge the propriety of reaction among investors given the
dissemination of accounting information regarding the firm.
Chapter 3: Research Method

Introduction

Through the application of a quantitative \emph{ex-post facto} research design, statistics indicative of the incidence of CEO turnover, as well as accounting performance and risk analysis, were analyzed in order to complete tests of significance for five separately identified metrics. As the sample was indicative of that contained within a foundational piece of management literature, a prior analysis of the data existed (Collins, 2001). Financial data for relevant years under study were collected and analyzed to reveal whether significant statistical differences exists distinguishing financial performance outcomes prior to and post the qualifying CEO replacement event, which served as a nonmanipulated variable. Data was obtained from publicly available sources, including \textit{Moody’s Industrial Manual} and its modern electronic successor, www.mergentonline.com, as well as the United States Securities and Exchange Commission (SEC) online database. Spreadsheet software programs as well as statistical software programs were utilized to complete the required data analysis. Findings are presented in both numeric and graphical formats, as appropriate. These unique tests conducted and documented herein provide an extended framework for evaluating the significance of the main effects of executive turnover upon high performing firms in the financial context.

Description of the Research Design

To assess whether optimal financial performance was affected given chief executive turnover, a series of financial metrics was compared through a time-series
analysis of relevant intervals prior and subsequent to the replacement event. As derived from the literature, risk-related fundamental financial metrics which capture volatility impounded within current stock prices and historic accounting returns which capture the internal performance of firms are often employed as a statistically testable source of variability in accordance with a change in CEO. These metrics were designated to serve as proxies for operational implementation of transformational strategic change by the CEO, stockholder reaction to the CEO turnover event announcement, and overall risk to the firm through observed reaction to and measured perception of market participants prior to and post a qualifying event.

The quantitative *ex-post facto* experimental design elements were modeled after the volatility event tests of Clayton et al. (2005): “a majority of [authors] perform a volatility event study based on a comparison of the variability of equity price changes before and after the event to determine the volatility impact of the event” (p. 1793). To address fiscal linkage to the manifestation of transformational leadership, accounting-based metrics were comparatively employed at the time-series interval advocated by Clayton et al. (2005, p. 1802): “from the fiscal year prior to the turnover (t-1) to the second fiscal year after the turnover year (t+2).” Return on equity, as utilized by Cannella Jr. and Lubatkin (1993, p. 773), was employed as a proxy for transformational leadership, by calculating “income before extraordinary items and discontinued operations as reported during the fiscal year prior to the year of succession,” as noted within the analysis of Clayton et al. (2005). The time-series of the initial metric was identical within these two studies. However, whereas Cannella Jr. and Lubatkin (1993) proceeded to
employ a comparison of entity results versus industry average designated by Standard Industry Code (SIC), Clayton et al. utilized entity metrics for successive time-series as indicated.

Controlling for performance limited the influence of other factors during the initial period of selection; however, through continued longitudinal analysis, differentiable performance occurring as a result of CEO replacement has the potential to transpire in a continuum, edifying the effects of governance and strategic continuity. These tests were thus based on temporal precedence of turnover prior to the observable erosion of financial performance. Since the outcomes sought within this analytical context were driven by past events, an *ex-post facto* design was suitably employed. “Ex-post facto designs provide an alternative means by which a researcher can investigate the extent to which specific independent variables…may possibly affect the dependent variable(s) of interest” (Leedy & Ormrod, 2005, p. 232). This is a basic approach applied in financial research, particularly in event studies, as variables cannot be manipulated for the sole purpose of experimentation in research.

A weakness of the ex-post facto design is inherent as “the experimenter cannot control for confounding variables that may provide alternative explanations for any group differences that are observed” (Leedy & Ormrod, 2005, p. 232). However, financial statements are more revealing by design and generally authentic and transparent in recounting the monetary outcomes of operational decision making within the firm context. Particularly, there is a consistent convergence of unqualified audit opinions and
an absence of material restatements among the sampled entities for the periods under investigation.

This was a pretest / posttest multiple baseline design; the differing time-series under investigation constituted experiences as indicated through transpiration of the turnover event. In the case of experimentation in other social research areas, conclusions of cause and effect are limited in application. Conversely, related conclusions regarding factors leading to the turnover event and significance of the data were drawn through an observation of the underlying financial data, due to its revealing nature.

Hence, the choice of inclusion for multiple financial metrics was initiated to elicit research responses which aid in the assertion of relationships between accounting based performance metrics, market based risk measures, and strategic change. The observed magnitude of return on assets and Tobin’s q indicated whether asset utilization and external stockholder response were aligned as the replacement event occurred.

To determine the turnover year(s) applicable to CEO and firm, the Forbes Survey of CEO Compensation (http://www.forbes.com/2004/04/21/04ceoland .html) was used and compared across annual time-series intervals. The Mergent Online Database, http://0-www.mergentonline.com.helin.uri.edu/compsearch.asp, was also utilized as a source for financial and CEO information, as applicable.

Population and Sample

The population under study was that of entities experiencing a chief executive officer replacement which Collins (2001) identified within his analysis; presence or condition of CEO replacement represented not a treatment but a nonmanipulated
independent variable which delimited the sample under study to the annual financial
results of those entities experiencing such a change in personnel prior to and post the
replacement event. Conjecture that the fiscal effectiveness of strategic changes
implemented by a replaced CEO were presaged to be detectable through a time-series
financial analysis of accounting metrics and market measures of risk delimits this study
to publicly held enterprises for which market information may be acquired through
conventional access. Equity prices of companies are affected by the general reaction of
market participants, as defined by investors who are shareholders or market makers
within the securities market context.

The grid below summarizes the population from which the sample was drawn.
Collins (2001, p.7) identified a “transition point” in firm performance for the eleven
entities outlined in his analysis which indicated the inception of exceptional results. The
original years of Collins’s analysis are distinguished by an asterisk; the financial
performance and CEO replacement events of these entities were scrutinized commencing
at the inception of the transition point and concluding with the fiscal performance of
2008, published through SEC reporting in 2009 and indicated in the grid by an arrow. For
firms which were subsequently acquired since Collins’s text was published, in particular,
Gillette, data analysis was limited to that obtainable through public records disseminated
prior to delisting.
Table 1

Population and Sample

<table>
<thead>
<tr>
<th>Firm Name</th>
<th>Financial Reporting Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>64</td>
</tr>
<tr>
<td>Abbott Laboratories</td>
<td>*</td>
</tr>
<tr>
<td>Circuit City</td>
<td>*</td>
</tr>
<tr>
<td>Fannie Mae</td>
<td>*</td>
</tr>
<tr>
<td>Gillette</td>
<td>*</td>
</tr>
<tr>
<td>Kimberly Clark</td>
<td>*</td>
</tr>
<tr>
<td>Kroger</td>
<td>*</td>
</tr>
<tr>
<td>Nucor Steel</td>
<td>*</td>
</tr>
<tr>
<td>Philip Morris (Altria)</td>
<td>*</td>
</tr>
<tr>
<td>Pitney Bowes</td>
<td>*</td>
</tr>
<tr>
<td>Walgreen’s</td>
<td>*</td>
</tr>
<tr>
<td>Wells Fargo</td>
<td>*</td>
</tr>
<tr>
<td>Total Firm Years</td>
<td>1</td>
</tr>
</tbody>
</table>

* = Collins' identified exceptional financial growth years

>= research years extended to examine financial results of CEO change
The firms included in the sampling frame were: Abbott Laboratories; Circuit City; Federal National Mortgage Association, or Fannie Mae; Gillette, now merged with Proctor and Gamble; Kimberly-Clark; Kroger Foods; Nucor Steel; Philip Morris Company, now Altria; Pitney Bowes Company; Walgreen Company; and Wells Fargo (Collins, 2001). The financial results of high performance years as purported by Collins for each firm were examined beginning with each applicable interval, differing by firm.

Since much of the research addressing CEO replacements to date was conducted within the syntax of stratified financial performance sampling, such results would be generalizable to the relevant population of firms within the market from which the data was derived. Distinguishing the chosen sample as those entities profiled in Collins’s (2001) text limits the population to those eleven entities which were highly performing both operationally and financially, as underscored within the ascribed limitations, generalizability of results of this study may be limited. Collins’s assertions of prevailing excellence in leadership among the companies within the sample allowed for tests of sustainability of strategic outcomes achieved under an individual’s tenure.

Selection of this particular sample delimited the influence of some exogenous or systematic market variables, as it was by definition a nonprobability purposive sample. The sample was a census in which every member of the population is analyzed for inclusion given the presence of a qualifying event. Since the firms in Collins’s (2001) sample were all high performing, most strategies were sustainable and most leaders were effective in combating or mastering the effects of economic and environmental forces.
affecting the firm; this was pervasive during the tenure of the CEOs profiled within the text. Hence, the chosen census was characteristically differentiated from prior research samples which considered the entire population of the market in that high performance, strategic continuity, and presence of a CEO leadership legacy were all relevant among the entire tested population. Whereas prior studies, most notably, Clayton et al. (2005) utilized a sample of entities subject to CEO turnover, but did not feature stratification of the heterogeneous sample according to realized financial performance, the intent in utilizing Collins’s (2001) sample for the study was to determine the degree of change in accounting and financial performance which resulted from a change in leadership among exceptionally performing firms. Further rationale was that results of this study are potentially generalizable specifically to exceptionally performing firms; contrastingly, samples derived from a larger population include the performance of poorly performing firms, which may not be generalizable to highly performing firms. The probability of CEO turnover and the choice of successor type, whether insider, follower, or outsider, have both been correlated to firm financial performance by a myriad of researchers (Farrell & Whidbee, 2005; Fich & Shivdasani, 2006; et al.). An intimate understanding of the propriety of strategic personnel fit in the turnover circumstance assists in the development of appropriate succession planning strategies for a continuum of firm financial performance.

**Instrumentation**

Initially, the published balance sheets, statements of income, and selected stock data applicable to each firm for the 360 reporting years ascribed in the above grid were
recorded manually within an Excel spreadsheet format for years prior to 1994, and obtained from an online data base for years subsequent to 1994. The data collection exercise was performed to facilitate calculation of Tobin’s $q$ and beta financial metrics as well as the return on assets, economic value added, and market value added accounting metrics applicable to the historical population. As a condition of testing, metrics of the aforementioned companies comprising the sampling frame were compared pre-and-post to the conditional change of CEO replacement; these metrics served as the independent variables under investigation; the CEO replacement event serves as the nonmanipulated dependent variable. The test of Hypothesis 1 specifically entailed the experimentation of the annual probability rate of CEO replacement for Collins’s (2001) sample of firms versus that was also entailed in the research of Comte and Mihal (1990), which addressed the historical rate of CEO turnover for US public firms during the years 1945 through 1984. The tests of Hypotheses 2 and 3 entailed a pre-and-post CEO replacement time-series analysis of the exogenous financial metrics Tobin’s $q$ and beta. The tests of Hypotheses 4, 5, and 6 entailed a pre-and-post CEO replacement time-series analysis of the endogenous accounting metrics return on assets or ROA, economic value added or EVA®, and the hybrid market value added or MVA, respectively. As EVA® and MVA are absolute measures of firm performance, the annual financial statement outcomes must be inflation adjusted for these items. The source for US inflation adjustment employed is available at http://data.bls.gov/cgi-bin/cpicalc.pl. The test of Hypothesis 7 entailed an analysis of variance, testing interactions between the variables of the financial and accounting metrics ascribed. Accordingly, a test of multicollinearity was performed in the
form of an $F$-test to determine the existing level of interrelatedness among these dependent variables. Comparison of financial and accounting metrics as ascribed served as the instrumentation of the experiments. Parametric tests of statistical significance, as entailed in the hypotheses, were conducted subsequent to the sampling and calculation of the relevant interval of CEO tenure as documented in Collins’s (2001) volume.

**Data Collection Procedures**

All financial data utilized within this study was derived from publicly available resources. Interpretive background and analysis of the personal qualities of the CEO under study for any particular firm was garnered from Collins’s (2001) summary of highly performing entities, or factual data from the firm’s annual financial reporting filed with the Securities and Exchange Commission of the United States, or the SEC. As previously designated, the time-series of financial results within Collins’s sample differ by firm, according to the inception of the period of high performance in which the firm earned returns which significantly exceeded the general market return for the same interval. With the earliest year of Collins’s analysis being 1964 and the latest being 1999, the earliest time frame of results was not readily available electronically through the SEC electronic resource database known as EDGAR. Principal sources of financial data prior to 1994 were annual entries within *Moody’s Industrial Manual*, an investor resource of compiled annual financial data. Data for financial statements published within the last 15 years was also harvested from the Mergent Online database, http://0-www.mergentonline.com.helin.uri.edu/compsearch.asp, a successor of *Moody’s* through which financial data in worksheet format and extensive commentary for investor and
academic analysis are available. Certain of these financial statement elements, as mentioned, were adjusted for inflation. Relative measures of financial statement data utilizing dollarized measures in all ratio inputs did not require conversion; however, as certain ratios and metrics included a dollarized financial statement element in a single input, this element required conversion to a reference point in time to ensure relative comparison. To facilitate this exercise, the Bureau of Labor Statistics website was utilized to convert relevant measures:  http://data.bls.gov/cgi-bin/cpicalc.pl. The relevant elements were converted into 2008 US dollars. Following the calculation of all relevant test metrics, the data was identified for inclusion within the sample. The data was compiled and analysis completed within a spreadsheet format (Microsoft Excel) or statistical package as appropriate.

Data Analysis

The time-series under investigation varied according to the applicable interval as indicated in Collins’s (2001) study. To adequately assess differing financial performance levels for the firms’ time-series under comparison, the approach of Clayton et al. (2005, p. 1794), utilizing standard deviations calculated in accordance with a five-year period: at \((t-2), (t-1), (t), (t+1), (t+2), \) and \((t+3)\) was employed. This represented a longitudinal analysis of annualized financial results, the most comprehensive of which spans a period exceeding four decades. As Clayton et al. also tested the volatility of financial results of other intervals circumscribing the event date based on a stratified sample of CEO replacement type, it will be informative to develop the same interval for investigation, pending data availability. In general, nearly all CEOs within the population under study
were sourced from within the firm. Tests of significance were conducted for each individual firm. The regression derived from the set of five control variables, accounting and finance metrics Tobin’s $q$, beta, ROA, EVA®, and MVA, were observed for robustness, as entailed by the correlation coefficient, given a test for multicollinearity. Within this analysis of variance application, the difference in the five metrics pre-and-post turnover served as independent variables. The observed $p$-values for each of the variables were utilized to assert inferences regarding the robustness of the resultant statistical model. In the event of an indication of multicollinearity, systematic improvements to the model were suggested in order to robustly enhance its predictive value.

Significance of volatility was tested through the employment of a standard parametric $F$-test for the ratio of variances, derived from sample standard deviations of each applicable finance or accounting metric of the sample squared. The time-series interval advocated by Clayton et al. (2005, p. 1794) required standard deviations to be calculated in accordance with a five-year period: at $(t-2)$, $(t-1)$, $(t)$, $(t+1)$, $(t+2)$, and $(t+3)$; “volatility is calculated as the standard deviation of returns over the event year” (pp. 1794-1795). Volatility in the applicable capital asset pricing model (or CAPM) over the same time period capturing was indirectly tested through the employment of the $F$-test for beta. Note that the CAPM is employed as the covariance of the equity return against the market return divided by the variance of the market return (Sharpe, 1972, p. 93). Tobin’s $q$, a measure of the total market value of the firm divided by total asset value of the firm, is a metric that has not yet been applied in research to discern and identify the risk
content of a CEO replacement event; however, it is a formidable litmus utilized to characterize stockholder value perception in many other financial contexts. Directional consistency was expected to occur across a time-series analysis between the beta metric and the Tobin’s q metric, representing convergence of the stockholder perception of enterprise asset value. This assertion was commented upon pending the completion of Hypotheses tests 2 and 3, and indicated in Chapter 5. The efficient markets hypothesis, or the extant impounding of monetary implications of extant events affecting the entity, whether internal or exogenous, was also indirectly tested. Further, the robustness of beta, or the covariance of the entity's stock price versus the variance of the market, was addressed and tested to determine if this metric was sensitive to stock price movements which result due to a change in executive leadership.

The EVA® metric is more conducive to differentiating risk to the firm, as it captures the cost-of-capital and the change in the cost of capital relative to a change in leadership. As EVA® is a managerially oriented metric, its complement, MVA, is market-oriented metric. Hence, it is useful to calculate and compare both measures of value added, addressing the intrinsic addition of value and the extrinsic perception of added value. Coles et al. (2001) purported:

The EVA® measure, which contains a weighted average cost of capital, explicitly controls for the riskiness of the firm. The MVA measure only accounts for the actual accumulated value of the firm, but the risk factor borne by investors to obtain this value is not explicitly reflected in the MVA measure. (p. 43)
A qualitative commentary of the factors influencing the performance of each firm given a CEO turnover event was undertaken following the data analysis. Given contemporaneous and precipitous market declines experienced in the 2008 reporting year for many public firms, it was integral to interpret statistical findings if CEO change occurred during the reporting year. Although Collins’s (2001) analytical classification technique warranted investigation as certain firms within his prior sample were no longer going concerns, it was revealing to perform financial analysis and differentiate factors which precipitated significant value erosion among these firms, and introduce techniques which enhance or refute prior approaches. Qualitative aspects and quantitative financial trends were reviewed and compared intra and inter firm for factors influencing risk differentiation as identified in the literature review. These descriptive and revealing qualitative aspects ascribed financial results by providing ancillary explanations which asserted reasons for the direction of data influence. This paralleled the technique of Clayton et al. (2005) in which “alternative explanations for volatility changes” (p. 1787) were sought through research technique. Potential aspects of governance which precipitate executive turnover, including agency effects and hierarchical firm structure, were identified in the literature review and may be qualitatively related as explanations for trends and significance discovered through data analysis.

Summary

A test of financial performance outcomes of strategic continuity, given the presence of CEO replacement, was conducted in order to provide evidence for and operationalize an assertion regarding the research question: given a change in chief
executive within a highly performing firm, can strategic continuity of financial results be sustained subsequent to departure? The relative frequency of CEO changes among highly performing firms within Collins’s (2001) sample are compared to the results of Comte and Mihal’s (1990) 80 randomly selected sample of Fortune 500 firms spanning the years 1945-1984.

The financial performance of all eleven firms in Collins’s (2001) seminal work were reviewed for the years of coverage of Collins’s research, and extended to the reporting year of dissemination, 2007. Level of significance of change in financial and accounting metrics Tobin’s $q$, beta, ROA, EVA®, and MVA, was determined and presented, as well as a test of interaction of all metrics, serving as independent variables within a binary logistic regression. Qualitative commentary as well as interpretations, convergences to, and divergences from Collins’s assertions and observations is presented in both statistical and graphical format where appropriate.

The data collection process for this research effort has been approved by the Institutional Review Board of Walden University, approval # 06-29-09-0305190.
Chapter 4: Results

Introduction

This chapter contains the statistical results of hypothesis testing conducted on the financial ratios for the sample of firms as detailed in Collins’s (2001) analysis and extended time-series, given the presence of chief executive replacement events. The incidence rate of chief executive turnover as compared to prior studies and tested in Hypothesis 1 is statistically analyzed for significance through the application of a studentized \( t \) test. The establishment of a leadership legacy by the incumbent chief executive hinges upon the presence of volatility in financial metrics as compared to a successor. Thus, \( F \) tests that provide indication of the statistical significance of the variance of the metrics asserted within the hypothesis tests are conducted in conjunction with hypotheses 2 through 6. The significance of each of five ratios as independent variables in a predictor equation of chief executive turnover (prior versus post event comparison) is presented in support of Hypothesis 7.

To provide an additional point of comparison to that of the sampled time-series \((t-2), (t-1), (t), (t+1), (t+2), \) and \((t+3)\), which aligned with the prior research approach taken by Clayton et al. (2005), an \( F \)-test of the volatility of financial ratios is also conducted for the time-series representing the entire tenure of the chief executive officer, in comparison to the performance of that of the successor executive. This additional comparison departs from the Clayton et al. study and provides edification as to whether a traditional event study approach yield results similar to that of a longitudinal study of expanded length, which would presumably demonstrate tempered results, as conjectured \textit{a priori}. An
expanded interval exhibiting less volatility results in differentiation from typical event studies in which investor trading precipitates increased volatility as the event date transpires, during an interval immediately circumscribing the event date.

Contents of this chapter are presented thus: a data description within which the resources utilized in the procurement of data are enumerated; tests of hypothesis: Ratio Analysis, within which the results of a Studentized $t$ test and $F$ tests performed to examine volatility among financial metrics by firm for hypotheses 1 through 6 are enumerated; and Test of Hypothesis: Regression, within which the results of a regression analysis performed to examine the significance of independent variables (i.e., ratios tested in hypotheses 2 through 6) to the dependent variable, pre-and-post CEO turnover. The chapter concludes with a brief Summary

**Data Description**

The primary source of financial data for the analyses conducted herein was the electronic successor of *Moody’s Industrial Manual*, Mergent Online. It is noted that Collins’s (2009) team also utilized Moody’s reporting to develop a quantitative analysis of firms under review; hence, sources of data essentially align. Further reliable support for notable events or recognized trends providing support to observations was garnered from the sample firms’ US Securities and Exchange Commission (SEC) annual 10K filings; generally, electronic filings were procured through the Mergent Online portal which provides electronic access to EDGAR, the SEC’s Electronic Data Gathering, Analysis, and Retrieval System. A firm’s management’s discussion and analysis included in SEC reporting, as well as notes to the financial statements provide insight with respect
to past or contemporaneous material or strategic events. Each firm’s balance sheet, income statement, and daily equity prices were extracted from the aforementioned website in a spreadsheet format for the maximum retrievable annual reporting time frame of 15 years. For most firms, this retrieval began with the reporting year 2008 and concluded with the reporting year 1994. The exception to this was the analysis of Gillette, as it had been procured by another entity after 2004. To the extent that Collins’s (2001) analytical interval extended further into the chronological past, the data were obtained from the firm’s earliest obtainable SEC 10K reporting first, then complemented with earlier required data from *Moody’s Industrial or Financial Services Manual*, as applicable. All calculations of relevant data comprising empirical and fundamental analyses were originated from the data retrieved; if the ratio under examination was available for retrieval directly from the Mergent Online website, it was recalculated in order that, should it be subject to further analysis on separate componentized fundamentals, analyses would reveal trends integral to further conclusions.

In order to support the calculation of dollars of relevant weighted average cost of capital required to complete the computation of EVA®, an Excel spreadsheet was retrieved from www.stern.nyu.edu/~adamodar/pc/wacccalc.xls (Damodaran, n.d.). The reconciliation of the weighted average of debt issues outstanding by dollar amount, maturity, and applicable interest rate were conducted through the review of each firm’s 10K debt disclosures or *Moody’s Industrial or Bank & Finance Manual*, as applicable. In addition, the beta of each firm’s equity was calculated from the derived covariance of two years of stock price movements versus the market. In the event that the stock price
movements were not retrievable from Mergent Online, the subsequent period’s beta
calculation was utilized for the calculation of the weighted average cost of capital and the
statistical calculation required to test Hypothesis 3. In certain cases in which stock price
movements could not be determined, the test of beta for that event was excluded.

As modeled after the research of Clayton et al. (2005), the delimited sample was
utilized for the hypothesis testing. It was drawn from the population of 360 firm years
which includes ratios calculated for the entire sample and extracted from the time-series
interval in accordance with a five-year period: at \((t-2), (t-1), (t), (t+1), (t+2),\) and \((t+3)\). In
addition, due to the heightened sensitivity of the \(F\)-test employed for statistical analysis
when samples are limited in size, \(F\)-tests of ratios were also conducted for an expanded
interval which began with the year following the turnover as tenure began; this was
compared to the performance interval for the entire tenure of the CEO successor for
hypothesis tests two through seven.

**Test of Hypotheses: Ratio Analysis**

1. **Hypothesis 1**: Measurement of CEO change rate within Collins’ sample, an indicator of the stability of firms within the sample.

   \(H_0\): There will be no significant difference in the rate of CEO change evident in the time-series analysis of the entities within Collins’ sample for the period \(t=15\), as compared to a multiyear sample within the literature spanning a time frame representative of Collins’ sample.
Ha: There will be a significant difference in the rate of CEO change evident in the time-series analysis of the entities within Collins’s sample for the period $t=15$, as compared to a multiyear sample within the literature spanning a time frame representative of Collins’s entities.

Comte and Mihal (1990) documented executive turnover events for four decades, a time-series which extended from 1945 through 1984. The randomly selected sample originated from *Fortune* 500 firms, and was further dichotomized into two twenty year subsamples, the second of which spanned the years 1965 through 1984. This body of research based on the named decades most closely aligned with the fifteen year spans of observation performed by Collins (2001) for the relevant census, the earliest and latest of which began in 1964 and 1984, respectively. Comte and Mihal (1990) denoted firms comprising the sample displayed higher, similar, and lower turnover rates for the second two decades under observation; data provided within a frequency histogram of their findings was expressed as a percentage frequency. The average CEO turnover across all of the 80 firms sampled in these classes was 9% for the years 1965 through 1984 (p. 48).
Table 2

Descriptive Statistics: CEO Turnover for Collins’s (2001) and extended samples

<table>
<thead>
<tr>
<th>Firm Name</th>
<th>Initial Year</th>
<th>15 yr freq</th>
<th>15 yr %</th>
<th>Final Year</th>
<th>extended sample</th>
<th>Total sample years</th>
<th>Total sample freq</th>
<th>10.28 % Total sample freq</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbott Laboratories</td>
<td>74</td>
<td>1</td>
<td>6.67</td>
<td>08</td>
<td>3</td>
<td>8.57</td>
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<td>Circuit City</td>
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<td>6.67</td>
<td>08</td>
<td>3</td>
<td>11.11</td>
<td>27</td>
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<td>Fannie Mae</td>
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<td>04</td>
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<tr>
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<td>0</td>
<td>0.00</td>
<td>08</td>
<td>2</td>
<td>5.41</td>
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<td>3</td>
<td>8.33</td>
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<td>Walgreen's</td>
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<td>08</td>
<td>4</td>
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<td>Wells Fargo</td>
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<td>3</td>
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<td>Total CEO Turnover Events</td>
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<td></td>
<td>2.92</td>
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The table above displays the descriptive statistical calculation of the mean CEO turnover for Collins’s (2001) sample, and the extended sample as ascribed within Table 1, denoting 360 firm reporting years. During that time, the mean frequency turnover percentage was 5.45 %. To statistically compare this to Comte and Mihal’s (1990) sample, as the variance of that sample is not known, a t-test was conducted to determine whether the mean as calculated above is significantly different than the mean value of 9 % as reported.
The Hypothesis 1 test is thus indicated as:

\( H_0: \mu = 9\% \).

\( H_a: \mu \neq 9\% \).

The sample t-statistic is defined as follows: 

\[ t = \frac{\bar{X} - \mu}{s / \sqrt{n}} \]

Hypothesis testing will primarily be completed at the 95% confidence level. The critical value of the t-statistic at 10 degrees of freedom and an assumed 95% confidence level for a two-tailed test is \( \pm 2.228 \).

Calculation of the t-statistic for the initial 15 year sample indicated by Collins (2001) yields a value of -2.929. Hence, the null hypothesis may be rejected in favor of the alternative at the 95% level of confidence, that the mean CEO turnover rate occurring
within Collins’s 15 year sample statistically is significantly different from that of Comte and Mihal’s (1990) sample.

Calculation of the \(t\)-statistic at the 95% confidence level for the extended sample continued through 2008 (or until acquisition or liquidation as applicable by firm) yields a value of 1.454. Hence, the null hypothesis may not be rejected in favor of the alternative at the 95% level of confidence. The mean CEO turnover rate occurring among Collins’s (2001) highly performing firms extended sample is not statistically different from that of Comte and Mihal’s (1990) sample. An extension of the sample to include more recent experience does not statistically differentiate the mean CEO turnover of highly performing firms from the results reported by Comte and Mihal at the 95% confidence level. In addition, the results of the test of Hypothesis 1 for the extended sample further support the finding present in the research of Comte and Mihal, that the mean CEO turnover rate continued to increase as time progressed and the interval was expanded.

Hypothesis 2: Measurement of stockholder reaction to CEO change, intrafirm.

\(H_0\): There will be no significant stockholder reaction to CEO change evident in the time-series analysis of the Tobin’s \(q\) metric for entities within Collins’s sample for the period \(t-2\) and the period \(t+3\), where \(t\) represents the year of CEO change.

\(H_a\): There will be a significant stockholder reaction to CEO change evident in the time-series analysis of the Tobin’s \(q\) metric for entities within Collins’s sample for the period \(t-2\) and the period \(t+3\), where \(t\) represents the year of CEO change.
Tobin’s $q$ may be employed as a determinant of investor perception of market value of assets. To the extent that a point value for market price at the balance sheet date is correlated with the general trend in the direction of market price, then price will have revealing valuation qualities, although price may be significantly differentiated from book. Clayton et al. (2005) empirically tested the statistical significance of volatility of the Tobin’s $q$ metric for firms experiencing CEO turnover as compared to their sector (p. 1797).

Results of the test of Hypothesis 2 were mixed; a statistical test of volatility as measured through an $F$-test of variance revealed that stockholder reaction is fairly sensitive, in some instances, to the event as measured within the interval confined immediately prior and subsequent to the CEO change. Thus, metrics were computed at the interval when the departing executive’s impact on financial performance is conjectured to be influential, i.e., $t-2$ representing the year of the turnover event less two years, and conversely, inconsequential, i.e., $t+3$. If turnover occurred subsequent to 2006, a completed pair of observations could not be drawn; hence, for events so affected, the observation was excluded from the analysis. The number of turnover events affected by this exclusion is eight. Additionally, if the sampled intervals representing the entire CEO tenure resulted in a single year between events subsequent to the turnover, the $F$-test for the event was undefined, for the degrees of freedom in the denominator amounted to zero. As certain events also resulted in degrees of freedom of zero in the numerator, these were also excluded. The number of events affected by either of these potential anomalies was eight.
Table 3 below details the results of hypothesis testing for the Tobin’s $q$ metric for Collins’s (2001) interval extended for each firm through fiscal 2008 for the time frame indicated by Clayton et al. (2005). In addition the extended interval over the entire tenure for which the metric prior and subsequent to each turnover was measured from the inception of Collins’s (2001) analysis through fiscal 2008. For turnover events within Collins’s (2001) extended time-series of eleven firms through 2008 utilizing the Clayton et al. (2005) $t-2$ vs $t+3$ sampling, the test of variance of the Tobin’s $q$ metric yielded a statistically significant $F$-test at the 95% confidence level for three of the pre-versus-post CEO turnover events of the total sample of 29 turnovers emerging from the financial history of Collins’s (2001) eleven selected firms. These were: Kimberly Clark, 2003; Kroger, 1989; and Walgreen Company, 2005. This statistical result implies that for approximately 10.34 % of the CEO turnover events sampled, shareholders were sensitive to the potential change in market value of the firm which coincided with a succinct interval circumscribing the event; shareholders promptly reacted to the perceived change in market value, despite a brief comparison interval.

In contrast to the results provided through the modeled application of the Clayton et al. (2005) interval, the expanded interval documenting results of the entire tenure of the chief executive supported the conjecture that shareholder sensitivity, as measured through the Tobin’s $q$ metric, more prevalently yielded a statistically significant $F$-test at the 95% confidence level. Over a prolonged time-series which encompassed the CEO’s entire tenure, shareholders were thus more highly sensitive to a total of nine, or 31.04 %, of turnover events, which were: Fannie Mae, 1989 and 1998; Gillette, 1990 and 1999;
Kimberly Clark, 2003; Kroger, 1977 and 2003; Philip Morris, 2002; and Wells Fargo 2001. Statistically significant results at the 95% confidence level are designated by the double asterisk included to the left of the $F$-test result.

Table 3

$F$-Tests: Tobin’s $q$ for Collins’s (2001) and extended samples

<table>
<thead>
<tr>
<th>Firm Name</th>
<th>Turnover</th>
<th>Year</th>
<th>$F$-test of variance</th>
<th>$F$-critical $\alpha = .05$</th>
<th>Firm Name</th>
<th>Turnover</th>
<th>Year</th>
<th>$F$-test of variance</th>
<th>$F$-critical $\alpha = .05$</th>
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<td>199.50</td>
<td>Abbott Laboratories</td>
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<td>1.36</td>
<td>3.59</td>
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<td></td>
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<td>3.29</td>
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<td>2003</td>
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<td>5.96</td>
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<td>2002</td>
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</table>

**significant at 5% level

Hypothesis 3: Measurement of financial market risk relative to CEO change, intrafirm, as a proxy for volatility.
\textit{H0}: There will be no significant change in the magnitude of financial risk relative to CEO change evident in the time-series analysis of beta for entities within Collins’s sample for the period \( t-2 \) and the period \( t+3 \), where \( t \) represents the year of CEO change.

\textit{Ha}: There will be a significant change in the magnitude of financial risk relative to CEO change evident in the time-series analysis of beta for entities within Collins’s sample for the period \( t-2 \) and the period \( t+3 \), where \( t \) represents the year of CEO change.

Table 4 below reveals the significance of the \( F \)-test of variance for the beta metric for the intervals specifically surrounding three CEO turnover events for Kroger, Pitney Bowes, and Wells Fargo. These results implicate that for financial risk as indexed through the beta metric defined as 

\[ \beta = \frac{\text{Cor} (\text{market, security})}{\text{std} (\text{market})} \]

for approximately 88\% of turnover events, stock price volatility was not measurably statistically distinguished by significance as compared through observation of the variance, pre-versus-post turnover. Overall, this result is not consistent with the expectations of and outcomes present within many event studies. Typically, the results of event studies align with outcomes consistent through applications of the theory behind the semi-strong form of the efficient markets hypothesis, that news concerning the firm that reaches the market precipitates valuation reassessments of their own holdings by investors as well as managers of larger holdings on behalf of investors.
Table 4

$F$-Tests: Beta for Collins’s (2001) and extended samples

<table>
<thead>
<tr>
<th>Firm Name</th>
<th>Turnover</th>
<th>$\beta$ $t-2$ vs. $t+3$</th>
<th>Turnover</th>
<th>$\beta$ full tenure</th>
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<td>Year</td>
<td>F-test of variance</td>
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<td>Wells Fargo</td>
<td>2001</td>
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</tbody>
</table>

**significant at 5% level

Contrastingly, in observation of the time-series which extended through the entire
tenure of the executive, nearly treble the amount of turnover events or 32% of events
under scrutiny resulted in significant volatility in stock price through observation of the
variance of the beta metric, pre-versus-post turnover. Fannie Mae (1989 and 2005),
Kimberly Clark (1991 and 2003, or all events within this firm’s time-series), Kroger
(1989), Philip Morris (Altria) (1992), Pitney Bowes (1996), and Walgreen Company
(1998) all experienced significant changes in stock price volatility as measured through beta for the interval extending throughout tenure.

Hypothesis 4: Measurement of differences in accounting ratio analysis (return on assets) relative to CEO change, intrafirm, as a proxy for execution of strategic change.

\( H_0 \): There will be no significant change in the magnitude of accounting performance relative to CEO change evident in the time-series analysis of return on assets (ROA) for entities within Collins’s sample for the period \( t-2 \) and the period \( t+3 \), where \( t \) represents the year of CEO change.

\( H_a \): There will be a significant change in the magnitude of accounting performance relative to CEO change evident in the time-series analysis of return on assets (ROA) for entities within Collins’s sample for the period \( t-2 \) and the period \( t+3 \), where \( t \) represents the year of CEO change.

Return on assets, or ROA, is typically employed as a litmus for the efficacy of managerial operations and strategy measured through accrual net income in relation to the general utilization of all firm resources. It should be noted that in comparison to financial market-based metrics, ROA is a historical assessment of performance. Changes in performance are materialized through the dynamic realization of accrual based income for the firm, and are based on US GAAP financial reporting for firms in this analysis.
The occurrence of statistically significant variation in pre-versus-post turnover ROA for firms in Collins’s (2001) sample for the interval \( t - 2 \) vs \( t + 3 \) is eight of 29 events, or 27.6% of all events expressed as an incidence rate. In terms of directional change for those events which are statistically significant, Abbott Laboratories (1978), Gillette (1990), Pitney Bowes (1996), and Wells Fargo (1995) all experienced increases in performance when viewed chronologically with respect to the time-series return on assets for the shortened interval.

Table 5

\[ F\text{-Tests: ROA for Collins’s (2001) and extended samples} \]

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**significant at 5% level
Abbott Laboratories (1998), as well as Fannie Mae (1998 and 2005) also realized significant directional declines in ROA performance for the periods under scrutiny. Fannie Mae performance in particular supported the true degradation in performance which occurred after aberrant financial reporting was discovered through a study completed by the OFHEO (2004). Kimberly Clark (2003) experienced significant volatility in general which did not, upon observation, delineate directional change in a particular trend as compared to predecessor term results.

With respect to the comparison of the full tenure intervals pre-and-post turnover, the incidence rate of significance of variance nearly doubles in comparison to the events measured through the interval surrounding the event date, as 14 of the 29 of the turnover events, or 48.3%, are characterized by salient differences in ROA performance. An ascending direction of change in ROA is noted through observation of chronological succession for Abbott Laboratories (1989), Kroger (1977), Nucor Steel (1999-2000), Philip Morris/Altria (2002), Pitney Bowes (1983) and Wells Fargo (2001). Contrastingly, five of these same firms also experienced overall comparative declines in ROA performance; affected thus were Abbott Laboratories (1998), Circuit City (1986), Fannie Mae (1989 and 2005), Gillette (1999), and Kimberly Clark (1991). The lengthened time-series interval pertaining to entire tenure also results in a significance of variance for Kimberly Clark (2003); however, as noted with respect to the shortened interval surrounding the event date, there is no particular trend in an overall direction of change, and as such, the comparison for this firm yielded aleatory results.
Hypothesis 5: Measuring differences in accounting ratio analysis (economic value added) relative to CEO change, intrafirm, as a proxy for execution of strategic change.

\( H_0 \): There will be no significant change in the magnitude of accounting performance relative to CEO change evident in the time-series analysis of economic value added (EVA®) for entities within Collins’s sample for the period \( t-2 \) and the period \( t+3 \), where \( t \) represents the year of CEO change.

\( H_a \): There will be a significant change in the magnitude of accounting performance relative to CEO change evident in the time-series analysis of economic value added (EVA®) for entities within Collins’s sample for the period \( t-2 \) and the period \( t+3 \), where \( t \) represents the year of CEO change.

EVA® has been more prevalently utilized in the last decade as a performance, compensation, and investment appropriation litmus since the total cost of capital structure is considered. The metric itself has been devised based on the sustainability of operating profit in excess of financing costs and tax expenses for a given firm. As defined in Chapter 1, the calculation of total net operating profit after tax less the total dollar amount of cost of capital simulates the deduction of all financing costs, including not only interest but equity costs from earnings, even if no dividends were disbursed. Coles, McWilliams, and Sen (2001) opined that “EVA® also can be adapted to measure and evaluate many different internal corporate activities, including divisional
Table 6

_F*-Tests: EVA® for Collins’s (2001) and extended samples_

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<td>Philip Morris (Altria)</td>
<td>2002</td>
<td>1.88</td>
<td>199.50</td>
<td>4.95</td>
</tr>
<tr>
<td>Pitney Bowes</td>
<td>1983</td>
<td>2.30</td>
<td>199.50</td>
<td>3.10</td>
</tr>
<tr>
<td>Pitney Bowes</td>
<td>1996</td>
<td>1.20</td>
<td>199.50</td>
<td>3.10</td>
</tr>
<tr>
<td>Walgreen's</td>
<td>1998</td>
<td>5.62**</td>
<td>199.50</td>
<td>3.44</td>
</tr>
<tr>
<td>Walgreen's</td>
<td>2002</td>
<td>4.01</td>
<td>199.50</td>
<td>19.00</td>
</tr>
<tr>
<td>Wells Fargo</td>
<td>1995</td>
<td>20.59**</td>
<td>199.50</td>
<td>3.20</td>
</tr>
<tr>
<td>Wells Fargo</td>
<td>2001</td>
<td>14.49**</td>
<td>199.50</td>
<td>6.39</td>
</tr>
</tbody>
</table>

**significant at 5% level

performance, project performance, and managerial performance...[and] use yearly

EVA® to evaluate and compensate managers” (pp. 33-34). As such it has been heralded
as a superior “short-term [performance] measure” (p. 47). Coles, Williams, and Sen also corroborated with the Stern Stewart regression analysis conducted which revealed that “EVA® is the single best predictor of standardized MVA (with an R-squared of 0.50)” (p. 33). Subsequent to acknowledging limitations of the impact between CEO tenure and EVA®, Coles, McWilliams, and Sen extended further documentation of their own empirical evidence which indicated that there was a “positive relationship of EVA®, an accounting measure of performance to combined leadership structure” (p. 43).

Economic value added® experience for the firms under study is calculated based on a conversion of the reporting year accounting based disclosures of net operating profit after tax less the weighted average cost of capital to 2008 inflation adjusted US dollars. Results are characterized by a statistically significant F-test of variance for four of 29 of the t - 2 versus t + 3 intervals surrounding the events, which constituted 13.8% of the CEO turnover events under study. The results evidenced in Table 6 above indicate that statistically significant, increasing variability in EVA® was more prevalent as the time-series of CEO tenure under observation was lengthened. In consideration of the CEO’s full tenure, the likelihood of significant variance with respect to this accounting metric was over four times versus the interval immediately surrounding the turnover event. Hence, for 17 of 29 occurrences, or 58.6% of extended tenure events, statistically significant variability of EVA® was noted.

In terms of individual firm impact, it is notable that Abbott Laboratories, Fannie Mae, Kroger, and Wells Fargo all experienced significant volatility in EVA® for every CEO turnover event noted for the entire extended periods under observation for these
firms, which were between 25 and 36 years; Abbott Laboratories, Fannie Mae, and Kroger experienced three successions each, and Wells Fargo experienced two.

Hypothesis 6: Measuring differences in accounting ratio analysis (market value added) relative to CEO change, intrafirm, as a proxy for increases in stockholder value.

\[ H_0: \text{There will be no significant change in the magnitude of accounting performance relative to CEO change evident in the time-series analysis of market value added (MVA) for entities within Collins’s sample for the period } t-2 \text{ and the period } t+3, \]

where \( t \) represents the year of CEO change.

\[ H_a: \text{There will be a significant change in the magnitude of accounting performance relative to CEO change evident in the time-series analysis of market value added (MVA) for entities within Collins’s sample for the period } t-2 \text{ and the period } t+3, \]

where \( t \) represents the year of CEO change.

Coles, McWilliams, and Sen (2001) posited: “MVA focuses on a long-range perspective of performance…the measure of performance focused on investors. It captures the extent of wealth created for the shareholders over a given period of time” (p. 47). It must be acknowledged that disparate time-series performance may be reflected through the observation of EVA® as a contemporaneous interpretation of the culmination of efforts of a CEO to sustain and increase firm market value, while MVA may be viewed as a longitudinal analysis of the market’s perception of the value of the firm’s
capital. Although these two metrics differ from the perspective of accounting versus market based measures, these both warrant concurrent observation in the contrast of short term versus long term performance, although not convergent. Employing an effective performance litmus may elucidate the effect of agency theory, stewardship, and governance in the retention and sustenance of market value by the agent(s) on behalf of shareholders (p. 25). It should be noted that, similar to the approach of Clayton et al. (2005), Coles et al. (2001) utilized a five year interval to observe the occurrence of statistically significant changes in EVA® and MVA, and defended by acknowledging, “we examine a five-year time period to allow for compensation, ownership, and governance structure to have a material effect on both of our performance measures” (p. 36). Empirical evidence from event studies (e.g., Coles et al., 2001) indicated that changes in EVA® and MVA are sensitized to such changes in operational approaches and the organizational structure of the entity.

As evidenced in the left panel of Table 7 below, the incidence rate of statistical significance of the variance of MVA is minimal among the sampled firms for the time-series interval \(t-2 vs. t +3\) surrounding the CEO turnover event date. Four of twenty-nine events affecting four different firms are associated with significant volatility in market value added pre-versus-post CEO change; the firms affected were Abbott Laboratories, Gillette, Kroger, and Wells Fargo. Although the incidence rate is lower for significant volatility of Tobin’s \(q\) and beta for the same interval, one event, the Kroger CEO turnover of 1989, resulted in significant volatility in relation to both of these market metrics as well as MVA. The Wells Fargo turnover event of 1995 was characterized by significant
variances pre-and-post turnover in beta and MVA, as well as EVA® and ROA. Hence, metrics which are sensitive market indicators of investor behavior had some likelihood of concurrent statistical significance among some of the firms sampled.

This observation may be extended to the results of the entire tenure of the CEO as related to turnover, presented in the right panel of Table 7. A concerted inspection of the incidence rate of significance of variance pre-and-post comparison revealed sixteen of twenty-nine events were statistically significant at the 5% level. Of the sixteen events which exhibited statistical significance, two events for Fannie Mae (1989 and 1998), two events for Gillette (1990 and 1999) and one event each for Kimberly Clark (2003), Kroger (1977), and Wells Fargo (2001) exhibited statistical significance of variance concomitantly for both Tobin’s $q$ and MVA. All three equity market-related metrics—Tobin’s $q$, beta, and MVA—of both Fannie Mae (1989) and Kimberly Clark (2003) events exhibited statistical significance of variance.
Table 7

*F*-Tests: MVA for Collins’s (2001) and extended samples

<table>
<thead>
<tr>
<th>Firm Name</th>
<th>Turnover</th>
<th>F-test of variance</th>
<th>F-critical α = .05</th>
<th>Firm Name</th>
<th>Turnover</th>
<th>F-test of variance</th>
<th>F-critical α = .05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbott Laboratories</td>
<td>1978</td>
<td>516.76 **</td>
<td>199.50</td>
<td>Abbott Laboratories</td>
<td>1978</td>
<td>23.07 **</td>
<td>8.81</td>
</tr>
<tr>
<td>Abbott Laboratories</td>
<td>1989</td>
<td>47.26 **</td>
<td>199.50</td>
<td>Abbott Laboratories</td>
<td>1989</td>
<td>7.49 **</td>
<td>3.29</td>
</tr>
<tr>
<td>Abbott Laboratories</td>
<td>1998</td>
<td>2.96</td>
<td>199.50</td>
<td>Abbott Laboratories</td>
<td>1998</td>
<td>1.03</td>
<td>3.68</td>
</tr>
<tr>
<td>Circuit City</td>
<td>1987</td>
<td>3.94</td>
<td>18.51</td>
<td>Circuit City</td>
<td>1986</td>
<td>44.70 **</td>
<td>3.59</td>
</tr>
<tr>
<td>Circuit City</td>
<td>2000</td>
<td>4.78</td>
<td>18.51</td>
<td>Circuit City</td>
<td>1999</td>
<td>1.73</td>
<td>5.93</td>
</tr>
<tr>
<td>Fannie Mae</td>
<td>1989</td>
<td>67.44 **</td>
<td>199.50</td>
<td>Fannie Mae</td>
<td>2005</td>
<td>3.69</td>
<td>224.60</td>
</tr>
<tr>
<td>Fannie Mae</td>
<td>1998</td>
<td>0.03</td>
<td>18.51</td>
<td>Fannie Mae</td>
<td>1998</td>
<td>6.43 **</td>
<td>3.97</td>
</tr>
<tr>
<td>Gillette</td>
<td>1990</td>
<td>0.97</td>
<td>18.51</td>
<td>Gillette</td>
<td>2005</td>
<td>4.26</td>
<td>5.79</td>
</tr>
<tr>
<td>Gillette</td>
<td>1999</td>
<td>14.97 **</td>
<td>18.51</td>
<td>Gillette</td>
<td>1990</td>
<td>41.66 **</td>
<td>3.29</td>
</tr>
<tr>
<td>Gillette</td>
<td>2001</td>
<td>51.00 **</td>
<td>18.51</td>
<td>Gillette</td>
<td>1999</td>
<td>50.27 **</td>
<td>6.04</td>
</tr>
<tr>
<td>Kimberly Clark</td>
<td>1991</td>
<td>1.47</td>
<td>18.51</td>
<td>Kimberly Clark</td>
<td>1991</td>
<td>9.51 **</td>
<td>2.41</td>
</tr>
<tr>
<td>Kimberly Clark</td>
<td>2003</td>
<td>7.35</td>
<td>18.51</td>
<td>Kimberly Clark</td>
<td>2003</td>
<td>9.76 **</td>
<td>5.96</td>
</tr>
<tr>
<td>Kroger</td>
<td>1977</td>
<td>1.19</td>
<td>199.50</td>
<td>Kroger</td>
<td>1977</td>
<td>222.34 **</td>
<td>8.79</td>
</tr>
<tr>
<td>Kroger</td>
<td>1989</td>
<td>24.98 **</td>
<td>18.51</td>
<td>Kroger</td>
<td>1989</td>
<td>2.43</td>
<td>2.91</td>
</tr>
<tr>
<td>Kroger</td>
<td>2003</td>
<td>1.60</td>
<td>18.51</td>
<td>Kroger</td>
<td>2003</td>
<td>1.22</td>
<td>5.91</td>
</tr>
<tr>
<td>Nucor Steel</td>
<td>1995</td>
<td>6.12</td>
<td>18.51</td>
<td>Nucor Steel</td>
<td>1995</td>
<td>1.80</td>
<td>19.45</td>
</tr>
<tr>
<td>Nucor Steel</td>
<td>1999</td>
<td>1.12</td>
<td>199.50</td>
<td>Nucor Steel</td>
<td>1999</td>
<td>19.66 **</td>
<td>19.35</td>
</tr>
<tr>
<td>Nucor Steel</td>
<td>2000</td>
<td>1.33</td>
<td>199.50</td>
<td>Nucor Steel</td>
<td>2000</td>
<td>29.39 **</td>
<td>8.89</td>
</tr>
<tr>
<td>Philip Morris (Altria)</td>
<td>1978</td>
<td>2.13</td>
<td>18.51</td>
<td>Philip Morris (Altria)</td>
<td>1978</td>
<td>15.07 **</td>
<td>8.71</td>
</tr>
<tr>
<td>Philip Morris (Altria)</td>
<td>1983</td>
<td>3.11</td>
<td>199.50</td>
<td>Philip Morris (Altria)</td>
<td>1983</td>
<td>792.08 **</td>
<td>8.89</td>
</tr>
<tr>
<td>Philip Morris (Altria)</td>
<td>2002</td>
<td>109.17 **</td>
<td>199.50</td>
<td>Philip Morris (Altria)</td>
<td>2002</td>
<td>2.18</td>
<td>4.39</td>
</tr>
<tr>
<td>Pitney Bowes</td>
<td>1983</td>
<td>167.83 **</td>
<td>199.50</td>
<td>Pitney Bowes</td>
<td>1983</td>
<td>81.67 **</td>
<td>3.10</td>
</tr>
<tr>
<td>Pitney Bowes</td>
<td>1996</td>
<td>1.05</td>
<td>199.50</td>
<td>Pitney Bowes</td>
<td>1996</td>
<td>1.11</td>
<td>2.90</td>
</tr>
<tr>
<td>Walgreen's</td>
<td>1998</td>
<td>1.68</td>
<td>199.50</td>
<td>Walgreen's</td>
<td>1998</td>
<td>3.16</td>
<td>3.44</td>
</tr>
<tr>
<td>Walgreen's</td>
<td>2005</td>
<td>12.46 **</td>
<td>199.50</td>
<td>Walgreen's</td>
<td>2002</td>
<td>1.35</td>
<td>19.00</td>
</tr>
<tr>
<td>Wells Fargo</td>
<td>1995</td>
<td>320.510.84 **</td>
<td>199.50</td>
<td>Wells Fargo</td>
<td>1995</td>
<td>7.13 **</td>
<td>3.20</td>
</tr>
<tr>
<td>Wells Fargo</td>
<td>2001</td>
<td>10.72 **</td>
<td>18.51</td>
<td>Wells Fargo</td>
<td>2001</td>
<td>9.23 **</td>
<td>6.39</td>
</tr>
</tbody>
</table>

**significant at 5% level

Test of Hypothesis: Regression

Hypothesis 7: Measuring interactions between variables relative to CEO change.
**H₀**: There will be no significant interactions between the variables listed above relative to CEO change evident in a time-series analysis of terms for entities within Collins’s sample for the period $t-2$ and the period $t+3$, where $t$ represents the year of CEO change.

**H₁**: There will be significant interactions between the variables listed above relative to CEO change evident in a time-series analysis of terms for entities within Collins’s sample for the period $t-2$ and the period $t+3$, where $t$ represents the year of CEO change.

Table 8

Regressions: for Collins’s (2001) and extended samples by firm, interval t-2 vs. t+3

<table>
<thead>
<tr>
<th>Firm Name</th>
<th>Constant</th>
<th>p-value</th>
<th>Tobin's Q p-value</th>
<th>Beta p-value</th>
<th>ROA p-value</th>
<th>EVA* p-value</th>
<th>MVA p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbott Laboratories</td>
<td>(41.7933)</td>
<td>0.17</td>
<td>+ 4.4680 0.14</td>
<td>27.933</td>
<td>0.18 +</td>
<td>(21.1217) 0.74</td>
<td>4.60E-06 + 0.20 + 4.00E-07 0.26</td>
</tr>
<tr>
<td>Circuit City</td>
<td>(1,165.9100)</td>
<td>0.98</td>
<td>954.4110 0.98</td>
<td>(458.7870) 0.98</td>
<td>1.396-4000 0.98</td>
<td>-2.41E-03 0.98</td>
<td>5.16E-04 0.98</td>
</tr>
<tr>
<td>Fannie Mae</td>
<td>46.661</td>
<td>0.17</td>
<td>+ (44.6730) 0.16</td>
<td>(5.6010) 0.18 +</td>
<td>244.6600 0.02</td>
<td>-1.00E-05 0.15 + 1.00E-07 0.29</td>
<td></td>
</tr>
<tr>
<td>Gillette</td>
<td>5.606</td>
<td>0.65</td>
<td>(1.7976) 0.78</td>
<td>(3.6641) 0.58</td>
<td>12.5600 0.56</td>
<td>-2.00E-07 0.87</td>
<td>0.00E+00 0.72</td>
</tr>
<tr>
<td>Kimberly Clark</td>
<td>474.8210</td>
<td>1.00</td>
<td>(262.2190) 1.00</td>
<td>(121.4870) 1.00</td>
<td>378.4000 1.00</td>
<td>-1.40E-04 1.00</td>
<td>5.00E-08 1.00</td>
</tr>
<tr>
<td>Kroger</td>
<td>(336.8870)</td>
<td>0.99</td>
<td>36.6350 0.99</td>
<td>428.6520 0.98</td>
<td>6.222900 0.98</td>
<td>-7.21E-04 0.98</td>
<td>1.00E+05 0.99</td>
</tr>
<tr>
<td>Nucor Steel</td>
<td>50.2930</td>
<td>0.99</td>
<td>104.6590 0.99</td>
<td>(85.0616) 0.98</td>
<td>(764.3730) 0.99</td>
<td>0.00E+00 1.00</td>
<td>0.00E+00 1.00</td>
</tr>
<tr>
<td>Philip Morris (Altria)</td>
<td>(4.5563)</td>
<td>0.43</td>
<td>(1.0291) 0.69</td>
<td>1.2734 0.59</td>
<td>66.6728 0.11 +</td>
<td>2.00E-07 0.46</td>
<td>0.00E+00 0.91</td>
</tr>
<tr>
<td>Pitney Bowes</td>
<td>(247.2210)</td>
<td>0.99</td>
<td>136.2970 0.99</td>
<td>63.9221 1.00</td>
<td>(54.4820) 0.99</td>
<td>5.11E-05 0.99</td>
<td>-5.00E-06 1.00</td>
</tr>
<tr>
<td>Walgreen's</td>
<td>697.1660</td>
<td>0.99</td>
<td>79.3287 0.99</td>
<td>(196.5200) 0.99</td>
<td>(6,490.3000) 0.99</td>
<td>3.70E-05 1.00</td>
<td>-5.70E-05 1.00</td>
</tr>
<tr>
<td>Wells Fargo</td>
<td>(111.5270)</td>
<td>0.33</td>
<td>102.4540 0.33</td>
<td>21.0144 0.35</td>
<td>(220.7600) 0.08</td>
<td>1.00E-06 0.54</td>
<td>5.00E-07 0.39</td>
</tr>
</tbody>
</table>

Results of a binary logistic regression conducted across all independent variables (i.e., the designated financial ratios and metrics) attributed to pre-versus-post turnover
(expressed as a qualitative dependent variable) are displayed in Table 8 for the interval $t-2$ versus $t+3$ surrounding the turnover event. A binary logistic regression as a statistical method is characterized by two modalities, or potential outcomes, representing the qualitative dependent variable, which in this case were pre-and-post succession events. A separate regression analysis was conducted for each firm; firm coefficients and the p-values relative to significance for the analysis for each firm are provided in Table 8 above. In addition, the significance of each coefficient is designated at the 5, 10, and 20% levels, as additional pertinent information. Observation was made for the potential presence of multicollinearity or exhibition of high correlation among the independent variables of the regression for the intervals immediately surrounding the succession events, and no events fulfilling the criteria were noted. The results of the extended tenure sample firms were also screened for multicollinearity, with no observed emergent issues. As a result, the potential for multicollinearity among the independent variables was fairly low.

Results were generally of minimal significance, however, of the sampled firms, the experience of Abbott Laboratories and Fannie Mae displayed lower levels of significance for most individual independent variables considered; significance was noted at the twenty percent level for Tobin’s $q$, beta, and EVA®. Of the independent variables noted within the Philip Morris analysis, ROA was significant at the twenty percent level as well. These outcomes indicate that pre-and-post performance event metrics for these firms displayed statistically significant changes in market and accounting based metrics as shown for the firms in question.
Table 9

Regressions: for Collins’s (2001) and extended samples by firm, full tenure

<table>
<thead>
<tr>
<th>Firm Name</th>
<th>Constant</th>
<th>p-value</th>
<th>Tobin’s Q</th>
<th>p-value</th>
<th>Beta</th>
<th>p-value</th>
<th>ROA</th>
<th>p-value</th>
<th>EVA®</th>
<th>p-value</th>
<th>MVA</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbott Laboratories</td>
<td>(2.2300)</td>
<td>0.71</td>
<td>(0.1388)</td>
<td>0.66</td>
<td>1.5813</td>
<td>0.73</td>
<td>(3.9678)</td>
<td>0.66</td>
<td>9.00E-07</td>
<td>0.49</td>
<td>1.00E-07</td>
<td>0.31</td>
</tr>
<tr>
<td>Circuit City</td>
<td>(0.4407)</td>
<td>0.73</td>
<td>(0.0887)</td>
<td>0.92</td>
<td>0.9881</td>
<td>0.37</td>
<td>(12.0473)</td>
<td>0.32</td>
<td>1.20E-06</td>
<td>0.46</td>
<td>2.00E-07</td>
<td>0.52</td>
</tr>
<tr>
<td>Fannie Mae</td>
<td>2.6118</td>
<td>0.67</td>
<td>(2.9446)</td>
<td>0.58</td>
<td>(0.4732)</td>
<td>0.42</td>
<td>76.1926</td>
<td>0.53</td>
<td>-2.00E-07</td>
<td>0.09 *</td>
<td>0.00E+00</td>
<td>0.15 +</td>
</tr>
<tr>
<td>Gillette</td>
<td>(4.4318)</td>
<td>0.05 **</td>
<td>0.4814</td>
<td>0.70</td>
<td>1.4379</td>
<td>0.36</td>
<td>10.9458</td>
<td>0.55</td>
<td>4.00E-07</td>
<td>0.21</td>
<td>1.00E-07</td>
<td>0.09 *</td>
</tr>
<tr>
<td>Kimberly Clark</td>
<td>(1.4125)</td>
<td>0.75</td>
<td>(2.6962)</td>
<td>0.50</td>
<td>3.8466</td>
<td>0.39</td>
<td>(17.5220)</td>
<td>0.28</td>
<td>1.00E-06</td>
<td>0.25</td>
<td>3.00E-07</td>
<td>0.07 *</td>
</tr>
<tr>
<td>Kroger</td>
<td>0.1011</td>
<td>0.96</td>
<td>(0.7941)</td>
<td>0.54</td>
<td>0.1186</td>
<td>0.90</td>
<td>5.3463</td>
<td>0.78</td>
<td>-4.00E-07</td>
<td>0.62</td>
<td>1.00E-07</td>
<td>0.54</td>
</tr>
<tr>
<td>Nucor Steel</td>
<td>12.7039</td>
<td>0.09 *</td>
<td>(11.4737)</td>
<td>0.04 **</td>
<td>4.2949</td>
<td>0.31</td>
<td>(90.1250)</td>
<td>0.04 **</td>
<td>0.00E+00</td>
<td>0.28</td>
<td>0.00E+00</td>
<td>0.03 **</td>
</tr>
<tr>
<td>Philip Morris (Altria)</td>
<td>(1.1498)</td>
<td>0.62</td>
<td>(1.2106)</td>
<td>0.20</td>
<td>(0.4592)</td>
<td>0.72</td>
<td>(0.0000)</td>
<td>0.11 +</td>
<td>(0.0000)</td>
<td>0.48</td>
<td>0.00E+00</td>
<td>0.18 +</td>
</tr>
<tr>
<td>Pitney Bowes</td>
<td>(6.9758)</td>
<td>0.14 +</td>
<td>1.1383</td>
<td>0.67</td>
<td>2.1599</td>
<td>0.43</td>
<td>10.3808</td>
<td>0.62</td>
<td>2.00E-06</td>
<td>0.47</td>
<td>5.00E-07</td>
<td>0.05 **</td>
</tr>
<tr>
<td>Walgreen’s</td>
<td>(20.4370)</td>
<td>0.99</td>
<td>(18.4324)</td>
<td>0.99</td>
<td>169.0270</td>
<td>0.99</td>
<td>63.3103</td>
<td>1.00</td>
<td>2.70E-05</td>
<td>1.00</td>
<td>8.00E-06</td>
<td>0.99</td>
</tr>
<tr>
<td>Wells Fargo</td>
<td>(9.3073)</td>
<td>0.63</td>
<td>1.1648</td>
<td>0.94</td>
<td>0.8286</td>
<td>0.83</td>
<td>254.3540</td>
<td>0.35</td>
<td>3.00E-07</td>
<td>0.48</td>
<td>1.00E-07</td>
<td>0.29</td>
</tr>
</tbody>
</table>

significant at: ** 5% level, * 10% level, + 20% level

The p-values for two of eleven firms were statistically significant at the five percent level for a limited amount of the independent variables under observation. Of these two firms, from an individual firm perspective, Nucor Steel experienced statistical significance among three independent variables (Tobin’s q, ROA, and MVA) at the five percent level. Pitney Bowes’s results exhibited statistical significance for the independent variable MVA at the five percent level. Philip Morris (Altria) experienced statistical significance at the twenty percent level for ROA and MVA. Gillette and Kimberly Clark also experienced statistical significance at the ten percent level for MVA, while Fannie Mae experienced statistical significance at the ten percent level for EVA® and at the twenty percent level for MVA.
Summary

Collins (2009) explained the emergence of unsustainable financial performance levels among firms selected for his prior (2001) research:

…the principles in Good to Great were derived primarily from studying specific periods in history when the good-to-great companies showed a substantial transformation into an era of superior performance that lasted fifteen years. The research did not attempt to predict which companies would remain great after their fifteen-year run. Indeed, as this work shows, even the mightiest of companies can self-destruct. (2009, p. 4)

As Collins (2009) further acknowledged: “the critical question is: ‘what do we learn by studying the contrast between success and failure?’” (p. 15). The conjecture that a CEO has the ability to direct an organization through “frame-breaking,” transformation (Gordon, et al., 2000) requires significant financial flexibility.

It may be stated that a leadership legacy is defined as sustained financial performance or non-significance of statistical assessment of risk as measured through the observation of variances of financial metrics related to past performance and market perception. From the results of analytical testing presented, as summarized through Hypothesis 6, a leadership legacy so defined was attained by approximately half of the executives of highly performing firms. Hence, Collins’s (2001) original litmus of Level 5 Leadership present in highly performing firms was indicative of a sustained presence of

Table 10

Compiled Results of significance of Hypothesis Tests 2-6, for Collins’s (2001) and extended samples by firm, interval and full tenure

<table>
<thead>
<tr>
<th>Firm Name</th>
<th>Turnover</th>
<th>Year</th>
<th>Tobin's q</th>
<th>Beta</th>
<th>ROA t-2 vs. t+3</th>
<th>EVA® t-2 vs. t+3</th>
<th>MVA t-2 vs. t+3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbott Laboratories</td>
<td>1978</td>
<td>**</td>
<td>**</td>
<td>**</td>
<td>Abbott Laboratories</td>
<td>1978</td>
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<tr>
<td>Abbott Laboratories</td>
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<td>Abbott Laboratories</td>
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<tr>
<td>Abbott Laboratories</td>
<td>1998</td>
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<td>**</td>
<td>Abbott Laboratories</td>
<td>1998</td>
<td>**</td>
</tr>
<tr>
<td>Circuit City</td>
<td>1987</td>
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<td>Circuit City</td>
<td>1986</td>
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<td>Circuit City</td>
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<td>Circuit City</td>
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<tr>
<td>Fannie Mae</td>
<td>1989</td>
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<td>Fannie Mae</td>
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<td>Fannie Mae</td>
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<td>Fannie Mae</td>
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<td>Fannie Mae</td>
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<tr>
<td>Gillette</td>
<td>1990</td>
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<td>Gillette</td>
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<tr>
<td>Kimberly Clark</td>
<td>1991</td>
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<td>Kimberly Clark</td>
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<tr>
<td>Kimberly Clark</td>
<td>2003</td>
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<td>**</td>
<td>Kimberly Clark</td>
<td>2003</td>
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<tr>
<td>Kroger</td>
<td>1977</td>
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<td>Kroger</td>
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<td>**</td>
<td>Kroger</td>
<td>2003</td>
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<tr>
<td>Nucor Steel</td>
<td>1995</td>
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<td>Nucor Steel</td>
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<td>**</td>
<td>Nucor Steel</td>
<td>2000</td>
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<tr>
<td>Philip Morris (Altria)</td>
<td>1978</td>
<td>**</td>
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<td>Philip Morris (Altria)</td>
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<td>Philip Morris (Altria)</td>
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<td>Philip Morris (Altria)</td>
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<td>Philip Morris (Altria)</td>
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<td>**</td>
<td>Philip Morris (Altria)</td>
<td>2002</td>
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<tr>
<td>Pitney Bowes</td>
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<td>Pitney Bowes</td>
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<td>Pitney Bowes</td>
<td>1996</td>
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<tr>
<td>Walgreen's</td>
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<td>Walgreen's</td>
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<tr>
<td>Walgreen's</td>
<td>2005</td>
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<td>**</td>
<td>**</td>
<td>Walgreen's</td>
<td>2005</td>
<td>**</td>
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<tr>
<td>Wells Fargo</td>
<td>1995</td>
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<td>**</td>
<td>Wells Fargo</td>
<td>1995</td>
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<td>Wells Fargo</td>
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<td>**</td>
<td>**</td>
<td>**</td>
<td>Wells Fargo</td>
<td>2001</td>
<td>**</td>
</tr>
</tbody>
</table>

**significant at 5% level
The results of testing for Hypotheses 2 through 6 are shown in Table 10 above in the left hand side of the panel. Considering the contemporaneous incidence rate of significance for the variance of financial metrics of three or more of the five financial metrics tested, evidence suggests the lack of a leadership legacy among the sampled firms surrounding the succession. Kroger (1989) and Wells Fargo (1995) exhibited variances in three and four metrics, respectively, which were statistically significant. These firms were not able to mitigate financial performance risk in the short term given the succession event. However, for the majority of firms, a leadership legacy in terms of financial performance was sustainable over the interval, and the interval surrounding the event date was not characterized by pervasive volatility and risk as observable through financial metrics.

In contrast, an observation of right panel details the incidence rate of significance of variance for five financial metrics, given the full tenure of the CEO. Twelve of twenty nine events resulted in a majority of statistically significant results. From these outcomes it was observed that approximately 41% of the firms experienced results which were not indicative of the establishment of a leadership legacy. Measurable financial risk was observable through the variance in metrics. Further, in consideration of the affected entities, certain firms experienced significant variances in terms of volatility of financial metrics for the entire tenure and each succession event in the history of the sampled interval. These firms were Fannie Mae, Gillette, and Kimberly Clark. Despite the replacement of the top executive position, it is integral that the firm’s economic and environmental moats are established to ensure sustainability of strategic intent. If this is
effectively accomplished, significant volatility emergent due to financial risk may potentially be mitigated.

There is evidence that, for firms demonstrating volatile financial performance, sustainability of the firm through the development of a robust and fortuitous operational and financial structure to mitigate risk may be particularly challenging. Volatility of earnings is a deterrent to capital accumulation which potentially nullifies the future ability of the entity to seize opportunity for growth. Certainly, with two of the said firms experiencing acquisition (Gillette) and near failure (Circuit City), research outcomes herein support the culmination of such exogenous events within financial markets.
Chapter 5: Discussion, Conclusions, and Recommendations

Summary

The objective of determining an indication of sustainability of financial performance was addressed through an empirical study reported in chapter 4. Conjectured to potentially emerge through the observation of a time-series of financial metrics was an absence of significant financial volatility as executive succession occurred among a census of highly performing firms first identified by Collins (2001). Performance bereft of significant financial volatility was hypothesized to be an indicator of the establishment of a leadership legacy. An executive succession characterized by a leadership legacy was hypothesized to not give rise to significant financial risk from strategic instability, as evidenced through statistically significant changes in financial metrics. Risk mitigation gives rise to effectively planned growth, realization of opportunity, return on capital, stability of value proposition for shareholders, and concomitant sustainability of the entity.

Collins’s (2001) original assertion held that the sampled companies of his study initially demonstrated sustained high performance from both a financial and operational perspective. The query herein sought to demonstrate whether the integral factors underlying the assertion of sustainability of performance, primarily during and after leadership succession, were associated with augmented risk for the firm. The hypotheses were tested through a statistical investigation of concurrent financial performance related to asset management and efficiency, market risk, market perception of firm value, and economic value of the firm.
This study yielded mixed results, that financial performance over the time-series beyond the years originally sampled by Collins (2001) was sustainable for certain of the firms within the census, and unsustainable for others. Of the eleven firms originally identified as highly performing firms by Collins, three (i.e., Circuit City, Fannie Mae, and Gillette) were liquidated, acquired, or affected by substantial financial restatements. However, a closer investigation of financial metrics herein either provided evidence which indicated certain challenges due to heightened volatility, or supported earnings persistence through observation of minimal volatility. As an example, though Philip Morris/Altria experienced prominent operational and legal challenges to its fundamental product offerings, but sustained performance throughout the period under scrutiny, with barely observable change in overall risk. This firm was able to mitigate environmental risk despite the influence of ‘frame-breaking’ change to its constituency and operations.

**Conclusions**

There is notable evidence that sustainability of firm financial performance among highly performing firms may be threatened by the emergence of financial risk, despite a concerted effort toward a controlled relay succession approach to CEO turnover. This level of financial risk is more pervasively evident in consideration of the time-series of the entire tenure of the CEOs under study than in consideration of an interval surrounding the event date. Of 29 succession events sampled among the firms in Collins’s (2001) original analysis, approximately 41.4% resulted in a statistically significant variance for three or more of the tested market and financial measures of Tobin’s $q$, beta, ROA,
EVA®, and MVA. The prevalence of this statistical significance is an indication of financial risk, and not indicative of the establishment of a leadership legacy.

Discussion of Hypothesis 1

Hypothesis 1 featured a conjecture addressing the incidence rate of chief executive turnover for the sample under investigation. Contemplating the statistical outcomes of Hypothesis 1, the incidence rate of succession events within the fifteen year period sample initiated by Collins (2001) of 4.02 % was significantly different from the incidence rate of approximately nine percent noted by Comte and Mihal (1990) in their time-series analysis extending from 1945 through 1984. These results implied that there was greater leadership stability in terms of CEO tenure during the periods that Collins (2001) observed for the analysis completed within Good to Great as compared to the generalized population of publicly held firms empirically tested within Comte and Mihal’s (1990) research. In contrast, no statistical significance was noted for the alternative hypothesis of differentiating the incidence rate of chief executive turnover for the extended full tenure sample of 10.28 % from that derived from Comte and Mihal’s incidence rate of nine percent.

These results may also be uniquely interpreted in the context of the source of successors, and whether these executives hailed from inside or outside the company (see also Comte & Mihal,1990; Cannella Jr. & Lubatkin, 1993; Collins, 2001; Clayton et al., 2005; Bower, 2007). Comte and Mihal (1990) presented empirical research detailing that, of the number of successions occurring across 41 selected firms, the selection rate of insiders as successors was 96 % (p. 49). Collins (2001) confirmed that “in our previous
research, over 90 percent of the CEOs that led companies from good to great came from inside” (p. 95), and further indicated that for an extended review of highly-performing sample firms through 1998, the selection rate of outsiders as successors was 4.76 %, which implies that the complement of 95.24 % of successors were insiders. Hence, the sampled entities more prevalently selected insiders as successors to the CEO position. Further, Collins suggested that a “search for a disciplined executive with a bias for selecting a proven performer from the inside” (p. 90) is a formidable practice which may allow the company to “reverse a downward spiral” (p. 90). Notably, the result also contrasts with the observations of Allgood and Farrell (2000), who predicated the mean percentage of outsider sourced successors within “a sample of 760 firms with 7,402 CEO years between 1980 and 1993” (p. 378) was 26.7 % of all turnovers. This result generally supported the incidence of “relay successions” (Zhang & Rajagopalan, 2004, p. 483) in which the predecessor CEO supports the transition process to seamlessly indoctrinate the successor CEO for future service. Although evidence reviewed for each firm was not detailed to confirm this, succession planning in general incorporates this approach, as also implicated by Bower (2007).

Leadership and governance researchers (e.g., Dahya, Lonie, & Power, 1998) have opined the potential conflicts of interest present if the CEO is also simultaneously permitted to hold the position of Chairman of the Board. Within the sampled history of the eleven entities comprising the census for the study herein, it was observed that for 88.6 % of the 360 firm years under observation, CEOs concomitantly held the position of Chairman of the Board. Debatably, the entity within the sample that was most
pervasively affected by governance inquiries and resultant financial restatements was Fannie Mae. For approximately four percent of the entire interval under study for Fannie Mae, or one single firm year of the sampled interval, the CEO position was not held by the same individual who assumed the Chairman of the Board position.

Discussion of Hypothesis 2

Regarding Hypothesis 2, the magnitude of stockholder reaction was measured through observation of the Tobin’s $q$ metric for the sample under investigation during the time-series interval $t-2$ and the period $t+3$ where $t$ represents the year of CEO change. The test was also performed for the entire tenure of the CEO in addition to the interval circumscribing the succession event. Of 29 succession events observed across 11 firms in the sample for the time-series interval surrounding the succession event, a statistically significant variance as measured through application of an $F$-test for the Tobin’s $q$ metric at the 95% confidence level was ascertained for three occurrences or 10.34% of the succession events sampled. Of the 29 succession events observed across the eleven firms in the sample for the time-series interval extending throughout the entire tenure of the executive, nine occurrences or 31.04% of events demonstrated a statistically significant variance.

As Conyon and Florou (2002) hypothesized: “in an efficient market...stock prices anticipate the future benefits of the possibility of CEO dismissal and therefore tend to increase as the capital market becomes aware of new avenues for management improvement” (p. 214). In addition, they asserted that “accounting-based measures…are more stable and not vulnerable to speculative of exogenous shocks” (p. 214) as
accounting information is based on historical financial reporting and actual results rather than the heuristic conjecture of investors. Therefore, reaction among market participants, i.e., investors, aligns with the tenets asserted through the efficient markets hypothesis. The results of Conyon and Florou’s observation of the correlation between stock prices and non-forced turnover for the period 1991-1993 and 1994-1997 yielded non-significant results for the initial interval and significant results for the latter interval (p. 220). There is marginal evidence through the observation of the results of the F-tests of significance of the Tobin’s q metric that the brief interval surrounding the event may be too succinct in certain instances for investors to form an opinion of the outcome of the event. However, it is acknowledged that the frequency of observation of statistically significant reaction among investors increases by treble in consideration of the entire period of tenure for predecessor versus successor. This general result provided further evidence of whether the perceived equity valuation on the part of investors, through observation of the conversions of accrual income and realization of cash flows, supports a post facto observation following the initial assessment. The evidence derived supported updates in assessments by market participants in periods beyond the initial succession event.

Whether these perceptible assessments of investors were warranted and pervasive was further edified through the observation of the statistical significance of the variance of other accounting metrics. Such information is espoused to be impounded in the informational content of the stock price as the event (in this case CEO turnover) transpires, through application of the efficient markets hypothesis. However, investors must be perceptive enough to discern the financial impact of the event in the immediate
for the full inflection to be realized through the stock price. Whether the majority of
investors are able to perform such assessments given the present level of GAAP
disclosure with appropriate perspicuity has been the subject of debate among those
advocates of the existence of post-earnings-announcement drift and similar market
anomalies (e.g., Brown, 1999).

Discussion of Hypothesis 3

Results for market based metrics herein (i.e., Tobin’s $q$, beta, and MVA), provide
a measure of confirmative evidence on the part of investors to discern the long term
effects of succession events given prolonged tenure, in comparison to the initial and
fundamental perception of market participants for the initial $t-2/t+3$ interval surrounding
the event. Researchers have indicated the observance of limited perception of market
participants through the pursuit of empirical research on event studies, particularly with
respect to post-earnings-announcement drift (Jegadeesh & Livnat, 2006). In addition the
contrary outcome, that investors are highly perceptive in their assessments, and their
responses accurate however, potentially tardy, has also been observed (Brown, 1999).
Given these conflicting observations, it may be noted that with respect to the variances
within the initial interval surrounding the succession event, the reactions of market
investors resulted in significant changes in beta for three events of 29 events sampled. Of
those three events, two (i.e., Kroger, 1989 and Pitney Bowes, 1996) resulted in sustained
beta volatility when comparing the variance of the beta recorded during the entire tenure
of the successor to that of the former.
In consideration of the comparison for events and the entire interval of CEO tenure pre to post turnover for the Collins (2001) firm sample, the frequency of statistical significance of pre-vs-post beta comparison was eight of 24, or 33.33 % of turnover events. Clayton et al. (2005) indicated that volatility was higher for the time-series interval immediately surrounding the event, “the 2-year period following a turnover” (p. 1791), and decreased thereafter. This would presumably be attributable to the pervasiveness and occurrence of transformational change following the event, which tends toward stability (i.e., mean reversion) as tenure increases. However, given consideration of the results of the entire tenure for the census of Collins (2001) firms, the results for highly performing firms contradicted these findings. The occurrence of more statistically significant volatility as measured by beta was more pervasive as the tenure interval was lengthened.

The study of Clayton et al. (2005) included the financial results of all firms that experienced chief executive turnover as indicated in the Forbes Annual Survey of Compensation from 1979 through 1995. Evidenced were equity “volatility changes from pre to post event” which were “statistically significant” (p. 1791). The results of the more limited census of Collins’s sample for the same interval implicated that, unlike the array of firms sampled by Clayton et al. (2005), the selected firms of Collins’s (2001) research exhibited less equity volatility within the interval surrounding the turnover event. Merely three of 24 events, or 12.5 % of turnover events, resulted in statistically significant pre-to-post comparisons with respect to changes in beta; this outcome is not dominant. Hence, although operationalized differently than the study of Clayton et al. (2005),
analysis of an interval more confined to firms comprising Collins’s (2001) sample demonstrated that investors were less likely to ascertain a change in firm value to potentially correlate with the occurrence of CEO turnover.

Notably, the statistical non-significance for the beta metric among the firms may have been limited by the accessibility to stock prices for certain of the events. However, this is less likely to be a contributing factor to the t-2 / t+3 interval comparison in contrast to the entire tenure comparison. Dynamics noted with respect to beta revealed varying levels of performance-related risk for different firms at various times. At best, beta is an archival rather than a contemporaneous or prospective indicator of observable risk. However, in most analytical contexts it is utilized as a valuation tool (e.g., cost of capital, etc.).

Clayton et al. (2005) asserted: “in an efficient market, the volatility we observe should be associated with new information being incorporated into prices” (p. 1800). Hence, any significant volatility observed through the recognition of variance in the beta metric for an extended sample may be interpreted as the effect of semi-strong form market participants reacting not to the turnover event, but to the sustained performance of one chief executive versus another, as measured through stock prices realized during the executives’ entire tenure. This would implicate that stock price and tendency of the firm’s equity returns to mirror general market returns during a particular CEO’s tenure was significantly more (or less) volatile than the predecessor.

The importance of observing results emerging from the expansion of the interval also allows for consideration of the effect of entrenchment as opined by Allgood and
Farrell (2000): “when there is greater uncertainty about a new CEO’s ability, [the board] will be more lenient regarding poor performance that deviates from the expected level” (p. 374). Investors, as well as boards, were more likely to similarly apply this performance litmus. Investor perception of firm value and market risk demonstrated through the observation of Tobin’s $q$ and beta were more often significantly different in terms of variance for pre-and-post turnover comparisons given an observation of the entire tenure of the executive. Allgood and Farrell (2000) also noted the prevalence of entrenchment increases with the source of successor and length of tenure. As educated previously, the rate of insider succession among the firms under Collins’s (2001) research was over 96 %, which would correspond with a higher level of entrenchment among sampled firm CEOs.

**Discussion of Hypothesis 4**

The results of Hypothesis 4 eminently contrasted with those of prior researchers who also utilized the return on assets ratio as a performance litmus. Allgood and Farrell (2003) focalized a research effort upon comparison of pre-to-post turnover ROA for firms sampled form the Forbes Annual Survey of Executive Compensation for the “period 1981-93” (p. 324), and summarily noted: “the average ROA of the previous CEO is about the same as the average ROA of the current CEO” (p. 327). Allgood and Farrell also acquiesced that “ROA has a negative and significant effect on the probability of forced turnover for new and old [outside hire] CEOs” (p. 388). However, they conceded that relative performance of inside hires is inversely related to ROA (p. 387). Farrell also collaborated with Whidbee (2000) and reported no mean difference in average ROA for
forced versus non-forced CEO turnovers for 66 matched sample firms from the period 1982-1992 (p. 604).

Huson, Parrino, and Starks (2001) observed financial reporting relating to an expanded interval of turnover events reported in the same *Forbes* Annual Survey of Executive Compensation source, for the period 1971-94 (p. 2284). These researchers evidenced that ROA, as defined by the ratio of EBIT to “beginning of period book assets less the median value…for all firms in the same two-digit Standard Industry Classification,” was significant as an indicator of the “performance-turnover relation” (p. 2284) and varied inversely with ROA (p. 2286). However, other ROA independent variables noted of stratified samples indicative of six year subperiod observation intervals, as well as the change in ROA, were not statistically significant. Results were mixed when a second regression model, “turnover outcome”, was developed which dichotomized data between voluntary and forced turnovers. For the interval 1977-1982, statistical significance was shown to exist characterizing the inverse relationship between ROA and the change in ROA for forced turnovers (p. 2288). Although operationalized from differently within this study, the incidence of variation as compared to prior ROA experience was significant for a majority of turnover events, for full tenure intervals of firms within Collins’ (2001) sample. The data provided an indication that ROA performance variation was statistically significant for approximately half of the events. However, the direction of the performance subsequent to change was fairly mixed as, of 14 statistically significant events within the sample, seven resulted in significantly
improved performance, six resulted in significantly deteriorated performance, and one resulted in mixed performance overall.

Shen and Cannella Jr. (2002) espoused that “financial event studies have generally used market indicators to examine immediate investor reactions to succession announcements rather than actual cash flows generated by the firms over the first two or three years of the new CEOs’ tenures” (p. 719). As investors react with fervor to firm circumstances perceived as salient events and estimate changes in cash flows resulting from these dynamics, forecasting accuracy is questionable. Post-earnings-announcement drift and other market anomalies have been documented in various event studies as researchers have noted that investors are often inaccurate in their projections which lead to market reactions through purchase and sale of equities (Mendenhall, 2002). Clayton et al. (2005) acknowledged similar effects in response to CEO turnover and inferred a regression model to estimate the significance of the independent variables of quarterly earnings on the dependent variable CAR, or cumulative abnormal returns, given the presence of CEO turnover. Shen and Cannella Jr. (2002) empirically tested accounting metrics as determinants to measure the impact of CEO successors on firm performance. They developed a regression model featuring post-succession ROA as a dependent variable, and conveyed that pre-succession firm ROA was a positive, statistically significant factor relative to post-succession ROA (p. 726). The results in Table 5 concorded with these findings, as the most prominent statistically significant outcome was increased and positive variance as compared to pre-succession performance.
Discussion of Hypothesis 5

As EVA® is an accounting measure of incremental value achieved within a particular reporting period based on the accrual method of measuring GAAP income for the firms under study, any potential manipulation in accounting policies may influence the magnitude of calculated EVA®. Among firms employing EVA® as the basis of incentive compensation, the potential for management manipulation of accrual based income should be considered from a behavioral perspective as a potential source of volatility.

In recounting the results offered in Table 6, statistical $F$-tests of the variance of EVA® for the intervals surrounding the event demonstrated a lesser incidence rate of significance than extended full tenure intervals of CEOs for firms in the sample. The probability of statistically significant volatility increased more than four times, from four of 29 events, or 13.8 %, to 17 of 29 events, or 58.6 %, in comparison of the two sets of intervals for sampled firms. Since EVA® is derived from accrual-based GAAP income measures and the applicable weighted average cost of capital, factors contributing to variation may include attrition in operating earnings as well as capital structure changes. Earnings management or increased levels of compensation as the CEO’s tenure lengthens may also be contributing factors.

With respect to the relevance of the sample under study, it is notable that among the results as presented in Table 6, Fannie Mae’s results for full tenure revealed statistically significant volatility for all three CEO turnover events occurring within the sample. As Fannie Mae’s record of earnings management had been extensively
documented in the Office of Federal Housing Enterprise Oversight or OFHEO (2004) Report, there is potential that the earnings management divulged in 2004 and occurring prior to that point contributed to the statistically significant difference in EVA® for this firm.

Earnings management may be a confounding factor in the increased volatility of EVA®. However, such changes are also attributable to a variant level of net operating profit after tax as a result of various performance factors affecting the firm’s earnings, whether exogenous or endogenous. Deliberate strategic change may intentionally precipitate a positive change in EVA®. For a given firm it may also be attributable to changes in the total dollar amount of weighted average cost of capital. Coles, McWilliams, and Sen (2001) postulated:

The EVA® measure, which contains a weighted average cost of capital, explicitly controls for the riskiness of the firm. The MVA measure only accounts for the actual accumulated value of the firm, but the risk factor borne by investors to obtain this value is not explicitly reflected in the MVA measure. (p. 43)

As weighted average cost of capital is influenced not only by capital structure but also by the relevant beta assessed at the time of the calculation, volatility and/or an increasing trend in beta typically would signify an increase in the calculated relevant total dollar amount of weighted average cost of capital. Six of the eight full tenure observations which exhibited a statistically significant beta variance also experienced
statistically significant EVA® variance for the period under scrutiny. Firms affected were Fannie Mae, Kimberly Clark, Kroger, Philip Morris and Walgreen Company.

Discussion of Hypothesis 6

Although EVA® is essentially derived from accrual-based GAAP financial reporting (as applicable for these US-based firms through the 2008 reporting year) and a market based calculation of weighted average cost of capital, in contrast MVA is a litmus of changes in market value supported primarily by equity price dynamics. For companies included in the sample, the most material change in the metric for a particular period is comprised of changes in the market price of total equity financing.

Essentially, the incidence rate of statistical significance of Hypothesis 6 aligned with the incidence rate of significance of Hypothesis 5. Four of 29 intervals surrounding the succession events exhibited a statistically significant variance in pre \((t-2)\) versus post \((t+3)\) EVA® and MVA. For the extended tenure calculation, seven of the eleven firms in the sample exhibited statistical significance in the variance of EVA® in addition to statistical significance in the variance of MVA. These occurrences were pervasive as evidenced in the two far right columns of Table 10. Note that the \(F\)-test exhibited statistical significance for both metrics for the full tenure intervals for 17 events. For four entities -- Abbott Laboratories, Fannie Mae, Nucor Steel, and Wells Fargo -- the concurrence of the statistical significance of the variance of both metrics occurred multiple times.

Convergence of the statistical significance of the results of financial market metrics and historical accounting metrics in particular is a strong indicator of increased
perception among investors to assess the effectiveness of the CEO over tenure. In addition, investors align the negotiable market price of the firm’s capital with a change in reported income dynamics which affect cash flow. An underlying assumption is that the informational content of historical financial reporting is effectively utilized in developing fair market pricing of equity. In order for this to be achieved, financial statements should primarily be characterized, qualitatively, by the substantiation of relevancy and predictive value of information, which is integral to the financial calculation of equity value. In the longer term, investors responded via a market-based reaction measured through observation of direct price changes in relation to other assets in the market (beta), the difference between the book value of assets/capital structure and the market value of same (MVA), and the relationship between the book value of assets and the market price of equity (Tobin’s \( q \)), especially over the full tenure of the executive. Apparently, the higher level of incidence of statistical significance of the longer tenure intervals for all five ratios tested implicated that over time, executive performance was more subject to volatility as tenure increased and the observation intervals expanded. The prominent increase and convergence in the incidence rate of significance was noted for both financial (market based) and accounting (historically based) metrics.

**Discussion of Hypothesis 7**

Subsequent to the observation of the results of Hypothesis 7 presented in Table 8, a conclusion may be asserted: a stable relationship amid pre-and-post financial and accounting metrics existed for the sampled firms exhibiting limited statistical significance in the immediate surrounding interval. This outcome implicates that overarchingly,
succession events had minimal influence on changes in financial performance for the firm. The leadership and strategic approaches established by predecessors pervaded, particularly over the initial interval prior to and following the change in command, $t-2$ vs. $t+3$. Hence, the sampled firms’ leaders were able to navigate and sustain performance through periods of economic instability. Results similar to those established during the period of assessment as a high-performing firm by Collins (2001) were essentially maintained throughout the course of personnel changes in top executive positions, at least within the interval limited to a five year span surrounding the succession event. These results were indicative of the establishment of a leadership legacy for the periods indicated, which was maintained through the leadership transition period. In addition, these results comported with those of Zhang and Rajagopalan (2004), for which performance relative pre-and-post to relay succession events evidenced minimal change and stable yet slightly increased performance in firms experiencing minimal strategic instability (p. 495). This may be expected for firms experiencing a non-forced turnover (due to a retirement) of an incumbent who has exhibited Level 5 leadership qualities (Collins, 2001) during tenure. These results also corroborate with the fact that few of the CEO turnover events under observation in the sample were forced.

Of the firm variables that were characterized by statistical significance for the time-series surrounding the successions, seven individual ratio calculations (which exclude the consideration of the constant) were significant at the 20 % level for three firms. These were Tobin’s $q$, beta, and EVA® for Abbott Laboratories and Fannie Mae, as well as ROA for Philip Morris/Altria. The incidence rate of significance was thus
greater for market based metrics over the time-series than for accounting metrics. These occurrences provide evidence of investor perception in the pre-and-post assessments surrounding the succession event, resulting price changes and volatility in the beta metric as well as Tobin’s \( q \). Indeed, the semi-strong form of the EMH may be applicable, and the potential to imbue stock prices with informational content may be noted within this analysis. The signage of the independent variables was negative for Fannie Mae, indicating that financial performance was inversely related to the post succession interval. Thus, there was a tendency for financial performance to decline in the interval subsequent to succession as compared to the interval prior to succession.

The results of the extended tenure binary logistic regressions conflicted with the prior results of observations of the intervals immediately surrounding the CEO turnover events. Given the succinct interval surrounding the turnover, stability in terms of accounting and financial results was fairly well maintained for the transition period immediately surrounding the turnover event. As tenure lengthened, the incidence rate of significance of metrics for pre-and-post succession events throughout the observation period to the 2008 reporting year became pronounced and frequent. Table 9 presents the results of regressions for the extended samples by firm for full tenure. Exclusive of the results of constants, the results of Nucor Steel for Tobin’s \( q \), ROA, and MVA were all statistically significant at the five percent level. Pitney Bowes also sustained statistical significance of MVA at the five percent level. The financial reporting of these two firms was characterized by significantly different pre-and-post succession results in these designated metrics. In addition, Fannie Mae experienced an EVA® metric significant at
the ten percent level, as well as MVA significant at the twenty percent level. Philip Morris/Altria also experienced both ROA and MVA significant at the twenty percent level. Both Gillette and Kimberly Clark experienced MVA significant at the ten percent level. Of these ten statistically significant incidences (exclusive of the constant), four were inversely related to the dependent variable. As an example, Nucor Steel’s Tobin’s $q$ and ROA were both inversely related to post succession performance; Fannie Mae’s EVA® was also inversely related to post succession performance.

From these results, there is supportive evidence that the independent variables considered, financial and accounting ratios and metrics, were significant. These results also imply that a leadership legacy, long-term, was not established for some of these firms demonstrating statistical significance for metrics prior and post comparison, as defined by overall stability of financial and accounting ratios and metrics, or statistically non-significant levels (i.e., greater than five percent level) of performance pre-and-post succession. Hence, results are generally mixed, as one firm experiencing bankruptcy (Circuit City), both exhibited statistical non-significance within the analysis. However, the analysis of one firm experiencing high financial reporting instability (Fannie Mae) resulted in statistical significance to an extent for both analyses. Therefore, approximately half of the leaders of highly performing firms (i.e., six of eleven firms or 54.5%) overall differentiated long-term performance (either improved or deteriorated) for some of the metrics at a statistically significant level. However, as stability of risk and return is to define the establishment of a leadership legacy, approximately 45.5% of the leaders of highly performing firms provided statistical evidence of achievement.
Discussion of Hypotheses Test Results

Hypotheses tests substantiated the increased probability of statistically significant variation in financial metrics as the time-series under observation encompassed the entire tenure of the executive. This was in contrast to the probability of statistically significant variation for the interval espoused by Clayton et al. (2005), which was characterized by a five year interval immediately circumscribing the succession event. Clayton et al. noted perceptible and augmented risk within the interval immediately surrounding the succession of the CEO, consistent with empirical results indicative of event studies. However, risk noted among the sample specifically limited to firms within Collins’s (2001) analysis, and tested herein, were not overly indicative of increased risk in consideration of the census for this same interval. As noted in a regression analysis of pertinent variables, further inquiry culminated in the observation that approximately 55% of firms realized some significant variation in pre-versus-post succession performance metrics when the time-series under investigation covered the entire tenure of the executive. Forty-five percent of firms sampled, did not experience significant variation in pre-versus-post succession financial performance and risk, defined as the presence of a leadership legacy.

These findings also imply that overall financial riskiness increases more pervasively as tenure increases. Conversely, Allgood and Farrell (2000) noted diminished standard deviations in stock returns as tenure increased. Results herein with respect to volatility of the beta index conflict with this prior finding for sampled firms. In addition, although Clayton et al. (2005) had a unique perspective in confining the interval under
study, from the expansion of the interval, a moderating factor did not emerge delimiting significant statistical change in financial metrics for the sampled firms. This outcome indicates less sensitivity among investors overall the results for Collins’s (2001) selected firms as compared to outcomes typically characterized of an empirical event study. Furthermore, a salient corollary may emerge from the contemplation of these consequences: as CEO tenure increases, executive approaches to achieving sustained exceptional financial performance continue to mirror past approaches, and may not fully address risk as it increases by identifying novel approaches toward mitigation. However, Puffer and Weintrop (2001) articulated that “inconsistent findings [in empirical research on turnover events] may be due to insufficient attention to the performance indicators used by the individuals responsible for CEO turnover decisions, namely, the board of directors” (p. 1). These findings are miscible as well as explanatory in that there is less attention directed to indicators of financial performance, sustainability of results, and mitigating risk as tenure increases. In addition, more pervasive entrenchment, complacency, compensation levels, and agency effects also play a role in the realization of a greater increase in financial risk as tenure increases. This consequence substantiates a general theory of organizational inertia as delineated by Shen and Canella Jr. (2002), as well as Shen and Cho (2005). A further consequential inference may be deduced: executive skill defies portability to an extent, and despite the auspice and prescience of deliberate succession planning, ubiquitous amongst the firms under study (i.e., under the assumption that nearly all successors were internally sourced), the risk mitigation of an
aleatory domain of exogenous financial and operational influences is not viable within a continuum.

Collins (2001) codified a taxonomy, utilizing qualitative and quantitative assessments, to measure the effectiveness of leaders within the entity. The limitation of the analysis herein, and indeed Collins’s analyses (2001, 2009) are that such analyses are demonstrative of a post hoc appraisal. However, greater sensitivity was evidenced through longer time intervals as experience of the CEO is assessed, particularly with respect to market-based measures of performance. This finding provides additional edification that fundamental analysis is an effective indicator of performance; accuracy translates not only into market based, but also accounting based metrics. Additionally, echoing the conclusions of Cannella, Jr. and Lubatkin (1993), Allgood and Farrell (2000, 2003), and Bower (2007), Collins (2009) acknowledged the potential source of comparative change in performance:

…one of the most significant indicators of decline is the relocation of power into the hands of leaders who fail to comprehend and/or lack the will to do what must be done—and equally, what must not be done—to sustain greatness…A domineering leader fails to develop strong successors (or drives successors away) and thereby creates a leadership vacuum when he or she steps away…Or perhaps legendary leaders pick successors less capable in a subconscious (or maybe even conscious) strategy to increase their own status by comparison. (pp. 60-61)
The outcomes of this research endeavor must be carefully interpreted to acknowledge limitations of generalizability. The highly performing firms as detailed by Collins (2001) were selected as of a point in time, and acknowledgement of unsustained performance was offered by Collins (2009) in a future work. However, the evaluative framework provided in the original selection process (2001) was of robust derivation, and offered extensive revelations regarding firm performance and effective leadership.

Additional factors are offered for consideration below, which may enhance qualitative evaluation offered by Collins with respect to Level 5 Leadership; expansion of this approach to a prosaic and quantitative inclusion of governance and leadership variables noted through validated empirical instruments may prove instrumental in screening the future performance of firms and their leaders. Collins (2009) later elaborated on a more comprehensive approach to developing a litmus of evaluation for leadership, which may also be complemented by analysis of governance variables.

**Recommendations for Future Study**

Collins (2001, p. 238) utilized stock returns and other accounting metrics such as profitability, liquidity, and activity ratios which contributed to a litmus of leadership performance; had some of the metrics been expanded to include certain market-based financial metrics, research outcomes may have differed. Within the analysis prescribed, some of the sampled comparison firms were dismissed due to non-sustainability of performance (p. 8; pp. 237-238). As the population of years under scrutiny was increased to extend Collins’s original census, an observed number of firms were not able to sustain
performance through the extended interval, which included the 2008 financial reporting year for each firm.

Although some of the pre-and-post interval test results were indicative of statistical insignificance with respect to the regression analysis conducted, individual tests of variance yielded a pivotal incidence of tests of significance for extended intervals as compared to intervals suggested by Clayton et al. (2005) surrounding the CEO turnover event. This was evidenced through the observation of all five financial metrics (i.e., Tobin’s $q$, beta, ROA, EVA®, and MVA) conducted within this study. Certain qualitative factors have been observed with respect to this analysis, for example, the incidence of the CEO/Chairman position held by the same individual among the sampled firms. Other qualitative governance assessments such as those implicated by Anderson et al. (2000) and DeFond and Hung (2004) – e.g., diversification and investor protection, respectively – provided further evidence that such qualitative variables may be effectively considered to enhance the predictability of occurrence between changes in qualitative governance variables and deteriorating performance, ultimately related to CEO turnover or dismissal. Suggested is consideration of the inclusion of such variables among highly performing firms as a benchmark to test performance of firms potentially exhibiting decline. Coles et al. (2001) pursued a similar model, but confined the financials under investigation to EVA® and MVA.

**Governance Ratings and CEO Turnover**

Recommendations for future study include the development of a fundamental factor model which incorporates governance ratings and the resultant correlation with
financial performance given executive departure. Gompers, Ishii, and Metrick (2003) constructed a factor model on the premise of a shareholder-return linked governance index which was a departure from prior studies as, commonly, the inherent methodology applied by past authors was that of event studies. Gompers et al. argued that event study methodology is inappropriately applied in the measurement of governance effectiveness, especially in corporate takeovers and proxy fights (p. 108). Hence, these authors “combine[d] a large set of governance provisions into an index which proxies for the strength of shareholder rights, and then stu[died] the empirical relationship between this index and corporate performance” (p. 108).

After attributing firm leadership and governance style with a “Democracy” rating versus a “Dictatorship” rating, which included observations of “compensation plans…bylaws…charter…cumulative voting…pension parachutes…poison pill…antigreenmail law” (p. 112) relating to state of incorporation, Gompers et al. (2003) concluded that portfolios constructed of equities of firms characterized by Democratic governance ratings outperformed those characterized by Dictatorship ratings by 8.5 % per year (p. 109). Additionally, the authors conveyed: “by 1999, a one-point difference in the index was negatively associated with an 11.4 percentage difference in Tobin’s Q…firms with weak shareholders rights were less profitable…than other firms in their industry,” (p. 110); they further noted and elucidated this linkage as correlation between “weak shareholder rights…[and] additional agency costs” (p. 110). None of the firms which comprised Collins’s (2001) esteemed group of highly performing firms were part of Gompers’s et al. (2003) Democracy or Dictatorship portfolio.
The research model proposed by Gompers et al. (2003) may be extended to incorporate a time-series analysis of similar dynamics with respect to the devised governance rating system, applied prior and subsequent to an executive turnover event. In addition, a qualitative dummy variable indicating replacement by an insider or outsider may also be incorporated to reflect the source perspective of the successor, aligning with the assertions of Bower (2007). This approach may be applied to the census identified in Collins’s (2001) original analysis. In turn, a portfolio constructed of various firms’ equity held during the time-series interval aligning with executive tenure would indicate the presence of higher of lower stock returns achievable under a particular CEO’s term. As an extension of the measurement of risk and return relevant during a CEO’s tenure, an examination of the Sharpe ratio (i.e., the return on the portfolio less the risk free rate divided by the portfolio standard deviation) of this constructed portfolio will provide a relative measure of the standard deviation of the return per unit of risk identified. The greater level of return achieved under each respective CEO given the level of risk may then be identified. This approach aligns with a development of a return specific measurement which would incorporate the effect of governance changes as well as the assertions of Gordon et al. (2000) with respect to strategic organizational change.

An integral portion of features traceable to a successful governance framework would presumably include whether the presence of an active succession plan exists within the context of the firm; conceptually, this would support the posits of Bower (2007): “we are assessing people who have developed an intellectual framework for thinking successfully about the company’s environment and dealing with that
environment…a ‘cognitive groove’…” (p. 132). A variable developed to capture the degree to which a particular succession plan was supportive to an organization may be one of the qualitative variables integrated into a model which would determine a degree of sustainability among those firms implementing such plans. Gompers’ et al. (2003) model included the tracking of “classified board[s]…[and] directors’ duties…” (pp. 147-148); this approach did not specifically acknowledge succession planning. Gompers et al. (2003) did not include an independent dummy variable capturing the effect upon governance, if any, derived from firms employing CEOs to simultaneously assume the role of Chairman. Within Collins’s (2001) sample extended through 2008 for all reporting years as indicated within the census population, across all firms, for approximately 88.45 % of firm years, the same executive simultaneously occupied both CEO and Chairman position.

Following the work of Gompers et al. (2003), Bauer, Guenster, and Otter (2004) analyzed the relationship between governance ratings for European firms, originating from Deminor (p. 92), net profit margin, and return on equity. Deminor’s governance ratings include the consideration of “300 different governance criteria per firm” (p. 92). Utilizing the Deminor governance rating as an independent variable to test its relationship to other financial variables, Bauer et al. noted a significant relationship between governance ratings and the Tobin’s q metric for European firms from the years 2000-2001 (p. 99). The examination of other metrics in addition to the incidence of turnover linked to such governance variables could enhance predictive value of financial
performance and assist in the identification and comprehension of factors contributing to a culmination of the ethical creation of increased shareholder value.

**Leadership Assessment Criteria and Qualitative Variables**

As an epilogue to prior work, Collins (2009) suggested an improved, indexed classification schema indicating the robustness of company policy leading to “success-contrast selection criteria” (p. 135). This approach was primarily instituted to determine intrasector competitor vantage point which differentiated performance from that of peer firms; SIC codes were utilized to aid classification of diversified firms. The observation and classification resulted in a “quantitative scoring framework built around six criteria” (p. 136). These were identified as: “business fit, size fit, age fit, performance divergence, and greatness test” (pp. 136-138).

The “greatness test” (Collins, 2009, p. 138) was based on continued “perform[ance] from the contrast-selection year to ten years out” (p. 158). This resulted in a scoring methodology which, when applied, provided indexed comparability for firm performance in years subsequent to the development of the original sampling process employed for the *Good to Great* (2001) research endeavor. Collins (2009) identified the need to continue tracking those firms which and leaders who sustained high performance beyond the original observation period. This effort hence captured the essence of tracking performance of the highly performing firms in the *Good to Great* (2001) census, however, the differentiation in financial results correlating with an executive turnover were not explored; the comparison was focalized upon financial performance. Hence, the
schematic approach devised may also be measured pre-and post-turnover to determine whether there is a statistically significant difference in the results achieved under tenure.

With respect to leader performance, however, Collins (2001) took a qualitative approach and assessed CEO commitment to an organization through observation of evidence of a level of “professional will [and] personal humility” (p. 36). Documentation of these qualitative leader behavioral characteristics of leaders was evidenced through a blend of field research techniques, primarily interviews, and archival research techniques, which included observations of news articles. Incorporating a documentable and more objective assessment of leadership success and/or suitability may be achieved with the addition of a qualitative leadership index, which would optimally result in the assessment of a correlation between excellence in firm financial performance and leader commitment to individuals within an organization. Further, incorporating a governance variable would provide evidence, within a single discriminant model, of the effectiveness of the leader to influence qualitative ethical compliance, financial performance outcomes, and leadership behavior. The incidence of turnover as compared to the level of governance ratings of ethical organizations combined with leadership behavior surveys and financial performance may further edify executive effectiveness.

Although Waldman et al. (2001) completed a survey which indicated the perception of transactional leadership and charisma, and delineated a correlation between firm financial performance and leadership, the survey instrument was condensed and not as comprehensive as other validated survey instruments. An assessment model from the Ohio State scales series such as the Leader Behavior Description Questionnaire (LBDQ)
devised by Halpin (1957, as cited in Szilagyi & Keller, 1976) may be instrumental in assessing leader effectiveness within the organization, as well as documenting personal and behavioral traits. “Two of the dimensions inherent...are leader consideration and leader initiating structure” (Szilagyi & Keller, 1976, p. 642). LBDQ questionnaires are typically completed by subordinates and are perception based, resulting in an indexed score computed on a Likert-type scale. Accuracy of the assessment is enhanced by the prior demonstrated validity of the instrument as compared to field research methods (e.g., interviews, etc.) which may be subject to carrying degrees of validity and result in more subjective assessments when applied.

A limitation to this approach may be one of privacy. As the effectiveness of performance and indeed aspects of behavior are often assessed, administered, and retained through the efforts of the human resources department of an organization, such information is typically not disseminated. However, such information would edify the assessments of Collins (2001) with respect to distinguishing Level 5 leader traits.

**Consideration of Financial Restatements and CEO Turnover**

Consideration of accounting restatements may provide further evidence of leader ethical behavior, and may be indicative of the effectiveness of the governance structure of an organization, and the accuracy of the governance rating as pertaining to financial reporting. The inclusion of a qualitative variable indicating the presence of an accounting restatement and assessing the strength of the correlation to leadership behavior and governance rating would provide shareholders with an increased level of information
with respect to the accuracy of reported performance, the presence of errors in reporting, whether aberrations or intentional misstatements, and the pre-and-post turnover performance of CEOs. Hennes, Leone, and Miller (2008) reported that the General Accounting Office (GAO) database “does not contain a variable that differentiates between errors and irregularities” (p. 1488); consequently, it is difficult to discern whether restatements are the result of egregious intent or random error. An examination conducted by Hennes et al. revealed that, utilizing SEC 8-K filings as support of observed restatements occurring between 2002 and 2005, 76% of accounting restatements were errors in application of GAAP, while 24% were intentional misstatements (p. 1489). Hennes et al. further hypothesized that the incidence rate of CEO turnover would be higher for firms experiencing restatements; upon completing empirical research to support this conjecture, they imparted that “both CEO and CFO turnover are significantly more likely if the restatement relates to an irregularity rather than to an error” (p. 1490). Provided was empirical substantiation of a near 50% CEO turnover rate within two years subsequent to an intentional misstatement (p. 1506).

Notably, a sample firm of Collins’s (2001) census, Fannie Mae, experienced an investigation in 2004 resulting in a significant financial restatement (OHFEO, 2004) and subsequent CEO turnover within a year of the inception of the investigation and restatement, although the organization “neither admitted or denied any wrongdoing” (Collins, 2009, p. 146). Optimally, a correlation may be established between the incidence rate of restatements, deterioration in financial metrics, leader behavior, and governance ratings, to predict the incidence of CEO turnover among highly performing
firms. Correlation between financial restatements and governance ratings would optimally be minimal or negative.

**Implications for Practice**

This research project was endeavored to determine the extent of an applicable leadership legacy among firms comprising the group of highly performing entities analyzed in Collins’s (2001) work, as defined by statistical non-significance of the variance of financial market and accounting based metrics. Although Collins (2001, 2009) presented constructs regarding leadership primarily rooted in content analysis, this study departed from that approach by operationalizing the observation of financial performance consequences correlated with executive change through quantitative financial analysis.

Practitioners of financial analysis, particularly managers of investment portfolios adhering to a particular style, will find this research endeavor informative. Consideration is typically given to financial performance dynamics which correlate to style strategies such as value or growth. As executive succession may lead, as demonstrated within, to statistically significant volatility in beta, rebalancing and/or asset reallocation may be required as a response tactic. Such corollaries are also true of individual investors managing their own portfolios.

Volatility of beta, utilized as an input for the calculation of the weighted average cost of capital, may be incorporated into the assessment of risk with respect to endeavoring capital investment projects. A risk adjustment may be applied to beta in order to capture the effect of the probability of CEO succession. Similar considerations
are also relevant to the employment of EVA® as a decision analysis litmus for capital investment.

Executives following their predecessors perhaps do not provide focused consideration to the implications of financial volatility of risk-based market metrics derived from the stock price at the point of succession, especially if the succession is forced or unexpected. However, executives should acknowledge the potential effect of amplified risk, earnings volatility, and heightened cost of capital that may be applicable as the entity becomes a conduit for unique strategic style dynamics applicable to the firm given the advent of a successor.

**Implications for Social Change**

Investors, depending on their personal investment objective, often entrust assets to entities with the provision that individuals in executive leadership positions will instinctively spearhead the growth of selected organizations to eventually produce superior returns. The assurance that the firm will be a maintained as a viable going concern inherently is built upon this premise. If superior profitability, or profitability in general, occurs merely for an ephemeral interval, has the CEO identified a sustainable framework that will likely produce future profitable returns, as investors anticipate?

This research endeavor has revealed that among the firms comprising Collins’s (2001) analytical framework that were highly performing, the passage of time and succession of chief executives has been invariably associated with greater return and risk volatility as measured through both accounting and financial metrics. For each metric under analysis in Hypotheses 2 through 6, the incidence rate of statistically significant
volatility was greater for the extended interval of measurement under full tenure than for the five year interval surrounding the event. The expansion herein of the framework proposed by Collins enhanced transparency of firm accounting and financial performance and risk for market participants invested in the firm. Investors are able to ascertain the incidence of volatility relative to CEO change, and generally associate executive turnover among highly performing firms with less volatility at the onset of the event, and greater volatility of financial performance metrics as tenure persists. This finding may be applied to an investment selection process or portfolio construction strategy. Mitigated or intercepted volatility through active intervention, rebalancing, and diversification will affect investors’ realization of expected return. The resultant implication for social change is the preservation of investor capital; social change implications regarding preservation of capital are the optimal realignment and redistribution of wealth to investors who in turn fund other deserving corporate entities, remit appropriate levied taxes, and hence contribute to the stability of the economy.

Firms’ leaders may seek diversification for the purpose of competitive advantage or bootstrapping earnings. However, sound financial and investment practice is frequently exemplified by opposite actions. Seeking orthogonalized diversification does not necessarily enhance earnings potential for every firm. If diversification occurs for the sake of earnings enhancement alone rather than strategic change, then it is potentially more optimally left to investors to develop a personalized portfolio strategy. In addition, it may imperil the individual shareholder’s strategy of investing based on managerial progress.
The efficient market hypothesis applied is predictive in that if a firm is not valued by the market as a standalone entity, unless there is surety in finding further value that the management team will extricate through the exploitation of potential synergies, the diversification sought in the combination of two firms in disparate sectors may be less than likely optimal. A review of qualitative views which affect perception of external stakeholders and therefore through the EMH affect market share price—all are drivers of externally (validated) valuation.

In establishing an investment objective, market participants may utilize a performance litmus or index with respect to the outcome of a CEO leadership/financial performance rating in order to select equities for inclusion in a portfolio of their own construction. The investor criteria for inclusion may be specific based on a tolerance scale of their own choosing, which would indicate the level of ethical or competent leadership within the organization. A potential portfolio construction may be tested through application of the Sharpe ratio, which denotes the level of return associated with the level of risk; the higher the level of the Sharpe ratio, the greater the return per unit of risk endeavored.

The problem statement and sample addressed the findings of authors of prior studies (i.e., Dahya, Lonie, & Power, 2001) who sampled groups which are heterogeneous in terms of return; the problem of variability of returns as CEO transitions occur will potentially be solved if the observed approaches and metrics indicative of superior management performance are modeled. Firms may mirror this performance and expand upon metrics (with proper consideration afforded to privacy issues). Managerial
performance disclosures based on the results and suggestions herein may be utilized as a litmus by investors and creditors, resulting in more equitable resource allocations among firms vying for capital in global financial markets. The equitable distribution of investor-supplied capital in financial markets is integral to optimal market functioning. Thus, a social change implication for fair distribution of capital among firms vying for equity within financial markets is the augmentation of returns for companies that are well managed, and the resultant return of wealth to the entities’ shareholders. As mentioned, these shareholders in turn may reinvest in the firm, or seek to provide capital to other firms, enhancing financial and economic growth for society.

In an equity market characterized by amplified volatility of returns, investor capital is invariably subject to risk of loss; market participants may accept this risk as a requisite of investing. However, investor demographics may affect the preference to maintain a particular tolerance level of risk in order to support the investor’s life cycle. Although higher levels of volatility may be associated with increased levels of return in some instances, less predictable returns may significantly impact the safety of investor capital as well as security of investors’ financial futures. Investors may, in response, be reticent to provide capital to firms. Pervasive equity volatility also has the potential to significantly impact domestic economic stability as well as market financial stability when investor reaction is pronounced. To the extent that corporate executives have the ability to mitigate short and long term risk as a result of assessments of endogenous and exogenous effects on the firm and decisively react, such actions bode favorably for investors seeking returns on capital. It is therefore critical that, from a strategic
perspective, successor CEOs maintain a continuous focus toward strategy when warranted and feasible.

The market sensitivity of investor perception of changes in value which align with equity volatility is evident. Executive succession may augur strategic change, the outcomes of which are reflected in the amplitude of financial metrics indicative of performance dynamics. The auspice of firm performance is exemplified through leaders who maintain a strategic legacy of sustainable performance.
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Management, 5*, 91-104. doi:10.1057/palgrave.jam.2240131


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Curriculum Vitae

Susan F. Weiss CMA CFM

EDUCATION

*Walden University, Minneapolis, MN/Baltimore, MD*
Ph.D., Applied Management and Decision Sciences, Finance 2011

*Bryant University, Smithfield, RI*
C.A.G.S., Finance, with Honors 2005
M.B.A., International Business 2004

*Rhode Island College, Providence, RI*
B.S., Accounting 1988
Areas of Concentration: Managerial/Cost Accounting
Minor: Mathematics

General Education Honors Program Graduate; Bacon-Ballinger Scholarship Winner 1983;
Alumni Scholarship Winner 1983 and 1987

Accounting Tutor to undergraduate students, recommended by Faculty, 1987-1988

AWARDS & CERTIFICATIONS

Alumni Honor Roll Award, Rhode Island College 2003
Certified Management Accountant, IMA Certificate # 23519 2001
Certified Financial Manager, IMA Certificate # 3339 2004
Candidate in the Chartered Financial Analyst (CFA) program
Candidate in the Certified Public Accountant (CPA) program

TEACHING & LECTURING EXPERIENCE

Adjunct Instructor
*Bryant University, Smithfield, RI* 2006-present

Instructed Graduate/MBA Managerial Analysis and Control/Cost Analysis (SP 2006),

Developed and graded exams, research projects, presented research articles, demonstrated Excel models for financial statements and managerial accounting applications including capital project decision making, demonstrated general ledger and financials, and refereed discussions.
Served as mentor for student orientation, Masters of Professional Accountancy Program,
January 2010.
Lead Affiliate Online Faculty, Accounting  
Regis University, Denver, CO  
2009-present


Graded exams, homework, and refereed online discussions. Developed accompanying narratives for textbook chapter powerpoint presentations. Mentored students through development of research projects for senior thesis requirement. Conducted peer review, trained, and mentored newly assigned staff. Developed training materials for faculty.

Adjunct Online Instructor  
Colorado Technical University, Colorado Springs, CO  
2010-present

Instructed MBA level Graduate Applied Managerial Decision Making (2010-2011); Undergraduate level Financial Institutions (2011); average class size 25-30 students, online learning environment.

Graded assignments and refereed online discussions. Developed accompanying powerpoint presentations for curriculum and accompanying software demonstrations, presented synchronously in a web video broadcast format.

Adjunct Instructor  
Rhode Island College, Providence, RI  
2010-present

Instructed undergraduate Managerial Accounting (SP 2010), two sections; Cost Accounting (FA 2010, SP 2011, FA 2011) average class size 18-30 students, live classroom instruction.

Developed and graded exams, presented research articles, demonstrated Excel models for financial statements and managerial accounting applications, demonstrated preparation of financial statements, and conducted learning laboratories.
Linking International Trade Education (LITE) Program (Volunteer)
World Trade Center, Bryant University, Smithfield, RI 2002-2004

Participated in Math Accelerating Professionals/Linking International Trade Education/Meet the Professionals Day in May 2002, 2003, and 2004. Developed presentation and taught CVP analysis to high school students visiting Bryant campus.

Coordinated and presented, with Vice President of Supply Chain Management, Math Accelerating Professionals/LITE Program Forecasting Module for students from Tolman High School in Spring 2002 at FGX International.

Hosted visit for students participating in the Bryant University/Lloyd G. Balfour Leadership Institute in June 2003, lectured on business aspects of inventory management, and coordinated presentation efforts of design team leaders at FGX International.

Hosted Jobshadow for Barrington High School teacher through Northern Rhode Island Chamber of Commerce in August 2003 at FGX International, and for accounting students through Bryant University Office of Career Services in December 2004 at Lincoln-Mercury of Raynham.

PROFESSIONAL ACCOUNTING & FINANCE EXPERIENCE

Accounting Manager
Oracle Lens Manufacturing, a division of Carl Zeiss Vision 2006-2009

Performed multi-year international strategic analysis, forecasting, and budgeting for $15 million manufacturing subdivision; developed extensive financial modeling scenarios to evaluate product migration, process costing standards, formulation, and new product development ventures; prepared and presented results of evaluation to senior executives at monthly performance meetings in domestic and international locations.

Evaluated feasibility of capital investment for new product development and efficiency improvements through utilization of NPV, IRR, and EVA® analysis; analyzed and recommended vendor contracts for operational savings; prepared annual audit workpapers and coordinated physical inventory.

Prepared, analyzed, and presented monthly financial results in MAS200, SAP, and Hyperion/Oracle formats; performed complex manufacturing variance analysis of all elements of standard costing; managed staff; served as interim human resources generalist.
**Comptroller-Office Manager**  
**Lincoln-Mercury of Raynham, Inc., Raynham, MA**  
**2004-2006**

Managed all financial and operational administration of $20 million enterprise, and staff of four direct reports.

Coordinated and supervised annual audit including all relevant workpapers and analyses; complied with all relevant state, government, and franchise reporting regulations to ensure accurate documentation and execution of financial institution contracts and customer agreements.

Restructured financial reporting of the dealership and streamlined closing calendar for financial reporting from eighteen to ten days, employing greater accuracy and increased detail in dissemination.

**Manager of Cost Accounting**  
**FGX International, a subsidiary of Essilor, Smithfield, RI**  
**1998-2004**

Coordinated and supervised physical inventory of four company-owned facilities, constituting the largest women’s accessory inventory in the world; completed all audit workpapers and performed variance analysis on all components of inventory including materials, labor, and overhead.

Prepared all pertinent cost of sales and inventory-related journal entries and schedules in an international, multi-company environment; contributed to external SEC reporting.

Supervised Cost Engineering department, audited gross margin of all product lines, and provided estimates for target pricing of outsourced product, position reported to Vice Chairman; set gross margin objectives by product line, and created profitability reporting system analyzing budget to actual performance to emphasize divisions requiring further operational focus; prepared $57 million cost of sales budget which included inventory metrics and inbound logistics costs.

Prepared stratified analysis of aged and obsolete inventory to identify opportunities for more efficient working capital utilization; partnered with Supply Chain Management and Merchandising teams to realize aggressive $16 million inventory reduction objective through down channel substitution and obsolescence reduction.
Cost Accountant/MRP Implementation Manager  
Union Industries/Admiral Packaging/Union Paper, Providence, RI  
1998

Project Manager of MRP implementation; conducted training sessions, guided installation process and addressed all pertinent re-engineering and operational issue necessary for company acclimation; responsible for receiving, accounts payable, general ledger, purchasing, and parts master modules; successful implementation occurred in three months.

Conducted physical inventories and prepared all relevant maintenance, workpapers for internal company, external audit, and customer services.

Performed profitability analyses, set direct and overhead cost standards; evaluated feasibility of equipment purchases via capital budgeting.

Senior Cost Accountant  
QuebecorWorld (Providence RI Rotogravure division)  
1988-1998

Compiled daily production information profitability analyses, labor and material variances; prepared all pertinent journal entries, calculated material consumption and efficiency variances versus standard costs; set standards and operational performance standards.

Prepared financial packages in Lotus and Hyperion software formats; devised Lotus plant budget model to coincide with corporate package; conducted and reconciled physical inventories, and compiled all audit workpapers; prepared plant budgets, including operational and capital.

Consolidated customer profitability report for twelve plants encompassing quarterly results for over sixty customers.

Assisted in implementation of financial software in Quebecor’s Franklin, Kentucky plant, acquired in October 1997.

ACCOUNTING CONFERENCE PRESENTATIONS  
Educational Foundation for Women in Accounting Leadership Training Series:


  Conflict Management: Coordinated, sponsored, and co-presented session at IMA National Conference, Denver, CO, 2009.
MEMBERSHIPS, BOARD, & VOLUNTEER SERVICE
American Society of Women Accountants, Chapter 109, Rhode Island 1998-present
  Chapter Secretary, 1999-2000
  Chapter President Elect, 2000-2001
  Chapter President, 2001-2002
  Chapter achieved second highest growth rate in US, 2002
  Coordinated Student Night attended by over eighty professionals and students
  hailing from Rhode Island College and other local universities, Oct. 2001
  Received potential members at Bryant University’s Women’s Summit, 2002
National Scholarship Committee, 2003
Regional Director, Northeast, 2003-2005
ASWA/People to People National Delegate to Beijing and Shanghai, China,
November 2005, program of cultural exchange and research of issues faced by
women in the accounting profession.

Institute of Management Accountants, Chapter 008, Providence 1998-present
  Member, (National) Committee on Academic Relations (CAR), 2005-2006
    Reviewed articles for inclusion in Strategic Finance magazine.
  Director, (National) Foundation for Applied Research (FAR), 2007-present
    Reviewed Academic Research Proposals for funding.
    Reviewed Doctoral Dissertation Proposals for funding.
    Panelist and Contributor to Management Accounting Definition
    Chair of Emerging Scholar Manuscript Award Winner Selection
    Committee/Task Force, 2011 and 2012.
  Member, Stuart Cameron McLeod Society, inducted 2008.
  Faculty Member, IMA Leadership Academy, 2010-present.

Educational Foundation for Women in Accounting 2006-present
  Trustee, 2006-present
  Vice President of Training, 2007-present
  Directed Revision of EFWA Leadership Training Series, established business
  plan for Webinar implementation, composed funding grant proposals, coordinated
  speakers and presentations at regional and national conferences, established
  liaison relationship with Institute of Management Accountants for webinar
  presentation.
  Scholarship selection committee, 2008-present

CFA Institute/ Providence Society of Financial Analysts 2007-present

American Accounting Association, Doctoral Student Member 2008-present