

CEO Characteristics and the Decision to Include Non-Financial Performance Measures in Compensation Contracts

Melloney C. Simerly
Western Kentucky University

Huiqi Gan
School of Business
University of Massachusetts Lowell

This study examines how CEO characteristics influence the decision to use non-financial performance measures (NFPM) in compensation contracts. Using logistic and OLS regression methods, we examine the CEO characteristics: gender, age, and tenure. We provide limited evidence that female CEOs are positively associated with the use of NFPM and CEO tenure is negatively associated. We also document descriptive information indicating industries that are more likely to use NFPM, and the most common types of NFPM employed. The results of this study further the understanding for the use of NFPM and provide information regarding specific managerial characteristics that influence CEO compensation decisions.

INTRODUCTION

The use of non-financial performance measures (NFPM) in compensation contracts has been gaining popularity among firms. NFPM include performance indicators such as market share ratios, efficiency and productivity metrics, quality indicators, and innovation measures along with customer and employee satisfaction scores (Ittner, Larcker, & Rajan, 1997). These performance indicators include constructs not incorporated in traditional financial performance measures such as revenue, earnings, or some form of net income (Murphy, 1999; Kaplan & Atkinson, 1998). Kaplan and Atkinson (1998) argue that adopting both financial and non-financial measures for the design of compensation contracts engenders decisions that are based on a long-term perspective, thus decreasing short-term incentives that are not aligned with shareholder interests. The extant literature provides evidence that using NFPM can lead to several benefits that include: better strategic alignment (Kaplan & Norton, 1996; Ittner et al. 1997; Ittner & Larcker, 1998a, 1998b; Banker, Potter, & Srinivasan, 2000; Chenhall, 2003; Ittner, Larcker, & Randall, 2003b), improved performance (Amir & Lev, 1996; Ittner & Larcker, 1998a; Banker et al. 2000; Maines et al. 2002; Said, HassabElnaby, & Wier, 2003; HassabElnaby, Mohammad, & Said, 2010; Van der Stede, Chowand, & Lin, 2006; Hauser, Simester, & Wernerfelt, 1994; Sedatole, 2003), expanded opportunity to assess managerial ability (Kaplan & Norton, 1996; Johnson & Kaplan, 1987; Eccles, 1991), increased robustness in performance measurement (Singleton-Green, 1993; HassabElnaby et al., 2010), and more timely feedback, as well as reduction of risk and noise inherent in financial measures (Lambert & Larcker, 1987; Bruns & McKinnon, 1993; Bushman, Indjejikian, & Smith, 1996; Feltham &

Xie, 1994; Hemmer, 1996; Davila & Venkatachalam 2004). However, many companies do not use NFPM in the design of chief executive officer (CEO) compensation contracts (Ittner & Larcker, 1998b, 2003). Thus, it is important to understand the factors that lead to the decision to use NFPM.

Prior literature highlights the importance of managerial characteristics in firm decisions regarding compensation. Bertrand and Schoar (2003) use panel data to investigate firm level effects resulting from the characteristics of individual managers by using manager mobility across firms. They identify patterns that signal differences in managerial styles and substantiate that managerial fixed effects make a difference in firm level compensation and governance outcomes. Alternatively, by using fixed effects regression methods to separate time invariant effects from the influence of individual managers, Graham, Li, and Qiu (2012) find that manager fixed effects explain a major portion of the variation in levels of executive pay, and they quantify the importance of the influence of managerial characteristics on total executive compensation. This research provides evidence that individual CEOs matter regarding executive pay decisions. In addition, specific CEO traits can affect firm pay structures and corporate governance decisions (Bertrand & Schoar, 2003; Graham et al. 2012). However, this body of literature does not identify what particular CEO characteristics are germane. After reviewing the extant literature pertaining to CEO characteristics in relation to CEO pay structure, we speculate that gender, age, and tenure may influence the decision to use NFPM. The purpose of this study is to provide empirical evidence regarding this supposition.

Research using trait theory suggests that the characteristics of leaders and the resultant attributions have repercussions for leadership roles (DeRue, Nahrgang, Wellman, & Humphrey, 2011). In relation to gender, DeRue et al. (2011) contend that attributions made based on perceived differences between men and women can affect leadership outcomes (DeRue et al., 2011). The management literature provides evidence in support of this premise documenting a more negative abnormal stock return after the announcement of a new female CEO compared to the announcement of a new male CEO (Lee & James, 2007). Moreover, prior literature provides evidence that women tend to be more risk averse than men when making financial decisions (Cullis, Jones, & Lewis, 2006; Barber & Odean, 2001; Barua, Davidson, Rama, & Thiruvadi, 2010). Since NFPM can reduce the risk inherent in financial measures (Bruns & Mckinnon, 1993; Feltham & Xie, 1994) we predict that female CEOs will be more positively associated with firms that adopt NFPM.

Age and tenure are also consequential to leadership roles and are both influential in the context of compensation structure (Lewellen, Loderer, & Martin, 1987; Finkelstein & Hambrick, 1989; Mehran, 1995; Ryan & Wiggins, 2001). Prior studies regarding CEO age and compensation suggests that both younger and older CEOs have a short-term horizon perspective (Finkelstein & Hambrick, 1989; Ryan & Wiggins, 2001). Younger CEOs are motivated to build their reputation with projects that provide expedient results and older CEOs want to experience the benefits of their labor before they retire. Alternatively, the mixed evidence concerning CEO age and equity compensation suggests that managerial power may impede the optimal contracting environment as CEOs progress through their career (Mehran, 1995; Lewellen et al., 1987; Yermack, 1995). We agree that firms have incentive to include NFPM in CEO contracts for younger and older CEOs due to their short-term horizon perspective. However, we contend that managerial power theory impedes the optimal contracting environment for older and more tenured CEOs (Bebchuk, Fried, & Walker, 2002). This may result in the failure of contracts to include NFPM that engender a long-term horizon perspective. As a consequence, we conclude that CEO age and tenure may be negatively associated with the adoption of NFPM.

In addition to hypothesis testing concerning the association of CEO characteristics to the inclusion of NFPM in CEO compensation, we provide data summaries describe the increasing popularity of NFPM and weights applied to NFPM, the industries that are more likely to use NFPM, and the popularity of specific types of NFPM. We test the hypotheses concerning CEO characteristics and the use of NFPM using logistic regression with a dichotomous variable for the inclusion of NFPM as our main dependent variable and ordinary least squares (OLS) regression methods using the weight applied to NFPM as an alternative variable. We offer limited evidence that female CEOs are more likely to opt into compensation

contracts that include NFPM. In addition, we document evidence that CEOs may increasingly adopt a short-term perspective as they age and we find that tenure has a negative relation to NFPM.

This study makes several contributions. First, it extends prior literature on NFPM (e.g., Kaplan & Norton, 1996; Ittner et al., 1997; Ittner & Larcker, 1998a, 1998b; Banker et al., 2000; Ittner et al., 2003b; Amir & Lev, 1996; Said et al., 2003; HassabElnaby, Said, & Wier, 2005; Van der Stede et al., 2006; Hauser et al., 1994; Sedatole, 2003) by showing that managerial characteristics and preferences can impact firms' choice of using NFPM. In addition, this research is valuable to those who hire CEOs and to those who design compensation contracts such as the board of directors (BOD) and compensation committee members by demonstrating that CEO power may impede the optimal contracting environment for more tenured CEOs. BODs may want to insist on the inclusion of NFPM to motivate more tenured CEOs to make decisions based on a more forward-looking perspective in order to better align manager and shareholder interests. Furthermore, this investigation assists stakeholders in providing more information about the true nature and focus of a firm.

The remainder of this paper is organized as follows. In the next section (section II), we discuss previous literature and develop our hypotheses. We discuss the research design in Section III and empirical results in Section IV. We conclude the paper in Section VI.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Prior literature offers insight on many key managerial traits and characteristics that may influence executive compensation decisions. These characteristics emerge in the extant literature as linked to various risk preferences or differences in managerial horizon perspectives that may be associated with decisions to use NFPM. In our study, we focus on three demographic CEO descriptors: gender, age, and tenure.

Gender

Byrnes, Miller, and Schafer (1999) conduct a meta-analysis of both self-reported and observed data in the psychology literature and provide evidence that men are less risk-averse than women. Specifically, they find that women are less likely to engage in risky behaviors associated with smoking, using drugs or alcohol, driving, and gambling. Additionally, psychology researchers contribute insight on differences between men and women regarding leadership. In a meta-analysis conducted by DeRue et al. (2011), they conclude that leadership styles differ between men and women, however, gender effects seem to disappear once intelligence and personality differences are considered. Nonetheless, DeRue et al. (2011) contend that the attributions others make about the perceived differences between genders may affect leadership outcomes. Consistent with this premise, the management literature documents a larger negative abnormal stock return after the announcing a new female CEO compared to the announcement of a new male CEO (Lee & James, 2007).

The behavioral economics literature offers further insight on decision-making and risk tolerance for men and women. In a computerized laboratory experiment, Powell and Ansic (1997) examine gender differences pertaining to risk preferences and strategic choices in making financial decisions. They manipulate task framing and task familiarity by using an insurance coverage decision (familiar task) and a currency market decision (unfamiliar task). They also vary the amount of money participants can earn as a result of managing costs and the ambiguity associated with the tasks. Powell and Ansic (1997) demonstrate that women are less likely to take risks, irrespective of task framing or the amount of uncertainty associated with the task. This study supports the notion that men and women adopt different strategies for financial decisions. However, these differences do not necessarily affect performance.

The behavioral economics literature also offers evidence that men and women adopt different strategies in the financial decision context. Barber and Odean (2001) find that, on average, men trade stock more than women. Although this behavior did not affect performance, they conclude that the increased trading behavior for men may be the result of overconfidence and/or differences in risk tolerance. Additionally, in the accounting literature, Barua et al. (2010) report that CFO gender leads to

differences in accrual accounting decisions. Their analysis provides evidence that companies with female CFOs have lower performance-matched absolute discretionary accruals and lower absolute accrual estimation errors. Barua et al. (2010) argue that this is likely due to different risk preferences based on gender. This study indicates that not only are women more risk-averse than men, but they are also less likely to engage in earnings manipulation, a consequence of a short-term perspective.

NFPM promote a long-term managerial perspective, thereby decreasing short-term actions that are not aligned with shareholder interest (Johnson & Kaplan, 1987; Kaplan & Atkinson, 1998; Singleton-Green, 1993; Kaplan & Norton, 1996, 2001; Bushman et al., 1996; Hemmer, 1996). In addition, NFPM can decrease risk inherent in noisy financial measures and can be a safeguard for managers against circumstances beyond their control (Bruns & Mckinnon, 1993; Feltham & Xie, 1994). Given the evidence that women are more risk-averse than men and exhibit a more long-term perspective when making accounting decisions (Byrnes et al., 1999; Powell & Ansic, 1997; Barber & Odean, 2001; Cullis et al., 2006; Barua et al., 2010), it follows that women may be more likely to be associated with the use of NFPM in compensation contracts. Furthermore, the compensation structure offered may differ depending on the attributions made for female CEOs versus male CEOs (Lee & James, 2007; DeRue et al., 2011). Based on the preceding arguments, we propose the following hypothesis:

H1: Female CEOs will be more positively associated with the firms that adopt NFPM for compensation contracts than male CEOs.

Age and Tenure

Prior literature suggests that CEO age and tenure are also underlying factors in determining CEO remuneration. Finkelstein and Hambrick (1989) investigate the effect of age and tenure on CEO pay levels and find an inverted U-shaped relationship. They explain that this is likely due to changes in the CEO's personal circumstances. Younger and newer CEOs may have more need for current cash incentives (e.g., mortgage obligations, child rearing expenses, etc.) and this grows as they attain tenure up to a point, then they begin to prefer other types of compensation. Firms also respond to the diverse CEO motivations related to age and tenure. Based on the premise that younger CEOs have an incentive to choose projects with short-term payoffs in order to bolster their reputations and older CEOs have incentive to choose projects that pay off before they retire, Ryan and Wiggins (2001) document that firms pay fewer bonuses to the youngest and oldest managers. They argue that this occurs in order to encourage a long-term decision making for these executives.

The results for the relationship between CEO age and equity compensation are mixed. Mehran (1995) finds that older CEOs have less equity pay while, Lewellen et al. (1987) document the opposite. Yermack (1995) specifically tests the relationship between CEO age and the number of stock options awarded. Using agency theory and incorporating horizon problem explanations, he contends that CEOs approaching retirement will avoid investment in long-horizon projects that will only reward their successor. To mitigate this issue, firms increase the amount of performance-based compensation for older CEOs in order to align their interests with firm value maximization. Contrary to theory, Yermack (1995) finds no specific relationship between CEO age and the number of stock options awarded. We contend that this may be due to increasing CEO power. Bebchuk et al. (2002) point out that CEOs often have considerable influence over the appointment of directors and frequently serve on the compensations committee giving them substantial influence over compensation structure decisions and impeding the optimal contracting process.

The extant literature reports that CEO tenure is accompanied by competing forces. On one hand, tenure can be an indication of managerial quality. Bushman et al. (1996) document evidence regarding the impact of CEO tenure on performance incentives by examining the relationship between individual performance evaluation and several explanatory variables, including tenure. They find that the importance of individual performance evaluation is positively associated with tenure. Moreover, Davila and Venkatachalam (2004) investigate the role of NFPM in compensation contracts for the airline industry using CEO tenure as a proxy for quality. Their results indicate that passenger load factor (a non-financial

performance measure) is an important determinant for CEO pay and that CEO tenure is associated with higher levels of both cash and total compensation. On the other hand, tenured CEOs can become entrenched and compensation packages may increasingly reflect CEO influence rather than stockholder interests. CEOs can gain control over boards by replacing board members with new directors (Finkelstein & Hambrick, 1989) or by controlling the flow of information to compensation committees (Coughlan & Schmidt, 1985). Hill and Phan (1991) argue that CEO tenure may act as a proxy for the CEO's ability to exert influence over the BOD in making compensation decisions. They report that both the absolute levels of and changes in CEO cash compensation are decreasingly associated with abnormal stock returns as CEO tenure increases.

Considering that prior literature predicts that both CEO age and tenure are associated with a short-term horizon perspective (Finkelstein & Hambrick, 1989; Ryan & Wiggins, 2001) and there are opposing forces (entrenchment and quality) at play concerning CEO tenure (Ryan & Wiggins, 2001). We consider managerial power for the prediction concerning the relation of both age and tenure with the use of NFPM (Bebchuk et al., 2002). We argue that CEO power increases with both age and tenure resulting in compensation structure that reflects a short-term horizon perspective for older and more tenured CEOs. As a result, we offer the following hypothesis concerning CEO tenure and age:

H2: CEO age and tenure will be negatively associated with the firms that adopt NFPM for compensation contracts.

METHODOLOGY

Data and Sample Selection

The firms included in the analyses are comprised of 1,017 firms listed on the Standard and Poor's 500 index (S&P 500) at least once from 1991-2012. The S&P 500 is a valid indicator of firm behavior and performance for the U.S. economy (Fama & French, 2002). We then hand collect the NFPM information by reviewing proxy statement disclosures listed in the U.S. Securities and Exchange Commission Electronic Data-Gathering, Analysis, and Retrieval (EDGAR) database for the years 2000-2014. This results in 9,734 firm-year observations. We then obtain data for the independent variables of interest and control variables using the Execucomp, Risk Metrics Directors and Compustat databases. Missing data reduce the sample to 5,909 firm-year observations.

Empirical Model

To test the link between the adoption of NFPM and CEO characteristics, we use the following logistic regression model to test the relation of CEO characteristics to the adoption of NFPM.

$$P(NFPM_{i,t} = 1) = \alpha_0 + \alpha_1 CEOGender_{i,t} + \alpha_2 CEOAge_{i,t} + \alpha_3 CEOTenure_{i,t} + \alpha_4 ROA_{i,t} + \alpha_5 Leverage_{i,t} + \alpha_6 Size_{i,t} + \alpha_7 Distress_{i,t} + \alpha_8 Strategy_{i,t} + \alpha_9 Quality_{i,t} + \alpha_{10} MktNoise_{i,t-1 \text{ thru } t-5} + \alpha_{11} PercInsBOD_{i,t} + \alpha_{12} BODSize_{i,t} + \mu_i + \nu_t + \varepsilon_{i,t} \quad (1)$$

Where:

i = observation for each firm;

μ = indicator variables for each industry;

ν = indicator variables for each year;

$NFPM$ = binary variable coded as 1 if the firm indicates the use of NFPM in the CEO compensation contract for the year and 0 otherwise;

$CEOGender$ = a binary variable coded as 1 for female CEOs and 0 for male CEOs;

$CEOAge$ = the age of the CEO in years

$CEOTenure$ = the current year minus the year an individual assumed the CEO position;

ROA = income before extraordinary items divided by lagged total assets;
Leverage = ratio of total debt divided by total stockholder equity;
Size = natural logarithm of net firm sales;
Distress = probability of bankruptcy computed for the previous five years using Ohlson's (1980) model;
Strategy = composite score for organizational strategy using three variables: ratio of research and development to sales, market-to-book ratio, and ratio of number of employees to sales averaged over previous five years;
Quality = indicator variable coded as 1 if a firm is a quality award winner listed on Fortune World's Most Admired list, and 0 otherwise;
MktNoise = composite measure using Fisher z-scores for the correlations between return on assets, return on equity, and return on sales, with stock market returns for the five years prior to each proxy date;
PerInsBOD = percentage of the board with insider affiliation (employee of the firm or one of the firm affiliates);
BODSize = number of directors.

Measures

Dependent Variable

The information for the dependent variable was collected by reviewing proxy statements listed on EDGAR for each firm year. Following Ittner et al. (1997), firms are identified as using NFPM by searching for the keywords: "non-financial," "nonfinancial," "customer satisfaction," "employee satisfaction," "employee morale," "employee motivation," "quality process," "improvement," "individual objectives," "reengineering," "new product development," "diversity," "market share," "productivity," "efficiency," "safety," "innovation," "operational," "measure," "operational performance," "strategic objectives," "individual performance," and "individual goals." Then, the CEO compensation report was reviewed to ensure that the keyword(s) is used in the appropriate context as a part of CEO remuneration. Firms using both financial and NFPM are coded as one. Firms disclosing only the use of financial performance measures are coded as zero. In addition, the data for the weights placed on NFPM was collected to use as an alternative dependent variable.

Independent Variables of Interest

The information on CEO gender is available in the Risk Metrics Directors database. Female CEOs are coded as one and male CEOs are coded as zero. CEO age and tenure are obtained from the Execucomp database. The computation for the tenure variable is the difference between the current year and the year the CEO position was assumed.

Control Variables

We include several firm level controls highlighted by prior research to be associated with the use of NFPM. Firm performance, leverage and size are key determinants for the use and retention of NFPM (Said et al., 2003; HassabElnaby et al., 2005). Moreover, financial distress results in a lower likelihood that a firm will adopt NFPM (HassabElnaby et al., 2005). As a result, we include ROA to represent performance, a leverage ratio and net firm sales as a proxy for size. Additionally, we include Ohlson's (1980) bankruptcy probability measure as an indicator of financial distress.

Previous studies offer evidence that firm decisions to retain NFPM are significantly associated with a prospector firm strategy and firms with strong quality initiatives (Ittner et al., 1997; Said et al., 2003; HassabElnaby et al., 2005). To account for these factors we follow Ittner et al. (1997) in computing a composite score to represent firm strategy and include an indicator variable for firms that are listed on Fortune World's Most Admired list for the sample period.

Davila and Venkatachalam (2004) document that the noise in financial performance measures influences the association between NFPM and CEO compensation. Moreover, the use of NFPM are

positively related to the amount of noise inherent in financial measures (Feltham & Xie, 1994; Ittner et al., 1997). Consequently, we follow Ittner et al. (1997) by including a variable to account for market noise by using the firm level correlations between accounting returns and stock market returns (Ittner et al., 1997; Lambert & Larcker, 1987). This measure is constructed by obtaining the Fisher z-score for the correlation between return on assets and stock market returns for the five years prior to each proxy date

Core, Holthausen, and Larcker (1999) use CEO compensation as a proxy for assessing board effectiveness because it is observable. Moreover, the BOD has significant power over the level and structure of CEO compensation. Specifically, Core et al. (1999) find that the percentage of inside board members has a negative relation with CEO total compensation, a signal for optimal compensation contracting. Accordingly, the proportion of inside directors may influence whether the BOD approves a CEO compensation package that includes or excludes NFPM. Core et al. (1999) also document that total CEO compensation is positively related to board size. Thus, we include a measure for the percentage of inside board members and board size obtained from the Risk Metrics Directors database.

Alternative Dependent Variable

Prior research concerning the use of NFPM demonstrates that firms introducing NFPM will need to reduce the weight placed on accounting income for compensation contracts (Hemmer, 1996). This is consistent with predictions made by Kaplan and Atkinson (1998), that firms may come to rely more on long-term indicators of performance (i.e., NFPM) and less on short-term financial measures. Following other studies that investigate the use of NFPM, we also collected information from the firm sample proxy statements concerning the weights applied to NFPM, and then used these as an alternative dependent variable in an analysis examining the relation of the weighted NFPM to CEO characteristics (Ittner et al., 1997; Said et al., 2003; HassabElnaby et al., 2005; HassabElnaby et al., 2010).

This analysis is conducted using the following OLS regression model:

$$\begin{aligned} WeightNFPM_{i,t} = & \alpha_0 + \alpha_1 CEOGender_{i,t} + \alpha_2 CEOAge_{i,t} + \alpha_3 CEOTenure_{i,t} + \alpha_4 ROA_{i,t} + \alpha_5 Leverage_{i,t} + \\ & \alpha_6 Size_{i,t} + \alpha_7 Distress_{i,t} + \alpha_8 Strategy_{i,t} + \alpha_9 Quality_{i,t} + \alpha_{10} MktNoise_{i,t-1 \text{ thru } t-5} + \alpha_{11} PercInsBOD_{i,t} + \\ & \alpha_{12} BODSize_{i,t} + \mu_i + \nu_t + \varepsilon_{i,t} \end{aligned} \quad (2)$$

where,

WeightNFPM = weight placed on the NPFM if used in CEO compensation contracts.

The independent variables for Model (2) are the same as defined for Model (1).

RESULTS

Descriptives

Table 1 contains the 9,734 observations for the full sample collected from the EDGAR database by year (2000-2014), comparing the number of firms that have adopted and the number of firms that have not adopted NFPM for CEO contracting. The graph in figure 1 supports our assertion that the use of NFPM is on the rise, demonstrating that the percentage of firms adopting NFPM has increased since the early 2000s from less than 250 firms in the sample to over 400 firms in 2014.

TABLE 1
NFPM DISTRIBUTION BY YEAR

Year	Non-adopters	Adopters	% of NFPM Adopters	Total Firms
2000	455	232	33.77%	687
2001	435	251	36.59%	686
2002	436	250	36.44%	686
2003	408	282	40.87%	690
2004	388	293	43.02%	681
2005	358	324	47.51%	682
2006	322	342	51.51%	664
2007	249	402	61.75%	651
2008	215	428	66.56%	643
2009	192	438	69.52%	630
2010	162	460	73.95%	622
2011	152	465	75.36%	617
2012	149	454	75.29%	603
2013	155	447	74.25%	602
2014	159	431	73.05%	590
Total	4,235	5,500	56.50%	9,734

FIGURE 1
FREQUENCY OF NFPM ADOPTERS BY YEAR

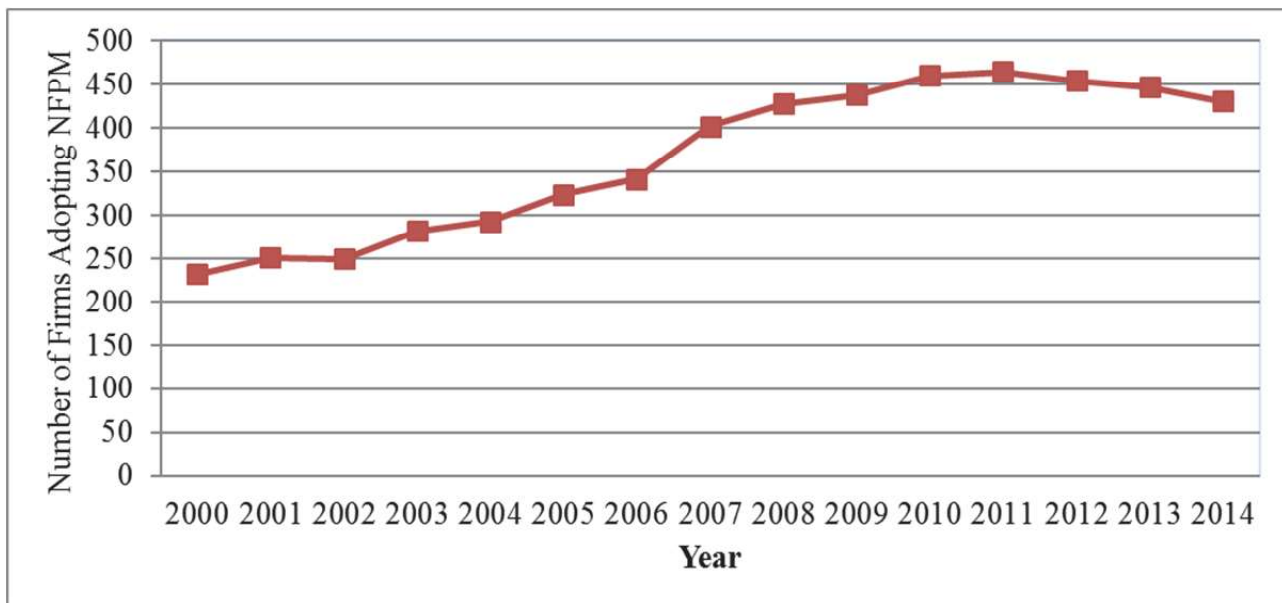


Table 2 lists the distribution of the full sample for adopters of NFPM and non-adopters in each industry identified by two-digit SIC code. There are several industries in which all firms in the sample

have adopted NFPM. These include Agricultural Production (SIC code 1) and Mining and Quarrying of Nonmetallic Minerals (SIC code 14). However, the number of firms in our sample representing these industries is small. Among industries with more than 500 firms represented, Electric, Gas and Sanitary Services (SIC code 49) is the industry in which the adoption of NFPM is most popular with almost 74% of firms adopting NFPM followed by Chemicals and Allied Products (SIC code 28) where almost 61% of firms in the sample have adopted NFPM.

TABLE 2
SAMPLE DISTRIBUTION FOR THE USE OF NFPM BY INDUSTRY

2-digit SIC code	Industry	NFPM			Total Firms
		Non-adopters	Adopters	% of NFPM Adopters	
1	Agricultural Production		14	100.00%	14
10	Metal Mining	19	31	62.00%	50
12	Coal Mining	13	49	79.03%	62
13	Oil and Gas Extraction	178	260	59.36%	438
14	Mining and Quarrying of Nonmetallic Minerals		7	100.00%	7
15	Building Cnstrctn - General Contractors & Operative Builders	25	44	63.77%	69
16	Heavy Cnstrctn, Except Building Construction - Contractors	23	19	45.24%	42
17	Construction - Special Trade Contractors		11	36.67%	30
20	Food, Beverage	158	221	58.31%	379
21	Tobacco Products	10	41	80.39%	51
22	Textile Mill Products	5	3	37.50%	8
23	Apparel and Other Textile Products	54	34	38.64%	88
24	Lumber and Wood Products	33	36	52.17%	69
25	Furniture and Fixtures	34	11	24.44%	45
26	Paper and Allied Products	47	80	62.99%	127
27	Printing and Publishing	51	49	49.00%	100
28	Chemicals and Allied Products	274	422	60.63%	696
29	Petroleum	14	70	83.33%	84
30	Rubber	45	35	43.75%	80
31	Leather and Leather Products	17	20	54.05%	37
32	Stone, Clay, & Glass Products	24	14	36.84%	38
33	Primary Metal Industries	62	58	48.33%	120
34	Fabricated Metal Products	61	32	34.41%	93
35	Industrial Machinery and Computer Equipment	262	390	59.82%	652
36	Electronic and Other Electric Equipment	249	373	59.97%	622
37	Transportation Equipment	91	184	66.91%	275
38	Instruments and Related Products	144	280	66.04%	424
39	Miscellaneous Manufacturing	38	7	15.56%	45
40	Railroad Transportation	30	40	57.14%	70
41	Local, Suburban Transit & Interurbn Hgwy Passenger Transpo	3	1	25.00%	4
42	Motor Freight Transportation	26	19	42.22%	45
44	Water Transportation	8	7	46.67%	15
45	Transportation by Air	7	60	89.55%	67
47	Transportation Services		8	17.78%	45
48	Communication	134	184	57.86%	318
49	Electric, Gas and Sanitary Services	180	507	73.80%	687

TABLE 2 (continued)
SAMPLE DISTRIBUTION FOR THE USE OF NFPM BY INDUSTRY

2-digit SIC code	Industry	Non- adopters	Adopters	% of NFPM Adopters	Total Firms
50	Wholesale—Durable Goods	50	26	34.21%	76
51	Wholesale—Non-Durable Goods	30	47	61.04%	77
52	Building Materials, Hrdwr, Garden Supply & Mobile Home De	17	27	61.36%	44
53	General Merchandise Store	90	86	48.86%	176
54	Food Stores		20	22.47%	89
55	Automotive Dealers and Gasoline Service Stations	38	34	47.22%	72
56	Apparel and Accessory Stores	105	42	28.57%	147
57	Home Furniture, Furnishings and Equipment Stores	44	24	35.29%	68
58	Eating and Drinking	56	43	43.43%	99
59	Miscellaneous Retail	106	47	30.72%	153
60	Depository Institutions	220	249	53.09%	469
61	Nondepository Credit Institutions		59	60.82%	97
62	Security & Commodity Brokers, Dealers, Exchanges & Service	102	132	56.41%	234
63	Insurance Carriers	217	208	48.94%	425
64	Insurance Agents, Brokers and Service	15	15	50.00%	30
65	Real Estate	2	18	90.00%	20
67	Holding and Other Investment Offices	140	135	49.09%	275
70	Hotels, Rooming Houses, Camps, and Other Lodging Places	9	29	76.32%	38
72	Personal Services	25	9	26.47%	34
73	Business Services	343	451	56.80%	794
75	Automotive Repair, Services and Parking	18	12	40.00%	30
78	Motion Pictures	4	9	69.23%	13
79	Amusement and Recreation Services	24	14	36.84%	38
80	Health Services	41	73	64.04%	114
82	Educational Services	16	23	58.97%	39
87	Engineering and Management Services	12	30	71.43%	42
99	Nonclassifiable Establishments	29	16	35.56%	45
Total		4,235	5,500	56.50%	9,734

Table 3 tabulates the distribution for the number of NFPM adopted for each firm observation collected from EDGAR. Most firms adopt one or two NFPM for CEO compensation.

TABLE 3
YEARLY DISTRIBUTION FOR THE NUMBER OF NFPM ADOPTED

Year	Number of NFPM Adopted					Total
	0	1	2	3	4	
2000	454	145	48	26	14	687
2001	435	157	52	26	16	686
2002	436	151	49	29	21	686
2003	408	165	51	36	30	690
2004	388	162	63	42	26	681
2005	357	165	82	48	30	682
2006	320	173	87	54	30	664
2007	248	172	127	56	48	651
2008	215	185	110	78	55	643
2009	190	180	107	84	69	630
2010	161	184	121	94	62	622
2011	152	161	144	91	69	617
2012	149	150	137	95	72	603
2013	155	149	133	101	64	602
2014	159	166	131	78	56	590
Total	4,227	2,465	1,442	938	662	9,734

Table 4 contains the distribution for the types of NFPM adopted for the full sample of 9,734 firm year observations. The most popular NFPM is strategic objectives, consistent with numerous studies highlighting strategic alignment as a benefit of using NFPM (Kaplan & Norton, 1996; Ittner et al., 1997; Ittner & Larcker, 1998a, 1998b; Banker et al., 2000; Chenhall, 2003; Ittner et al., 2003b). The second most popular type of NFPM is operational performance, followed by safety and customer satisfaction. Figure 2 is a graphical display of this information.

TABLE 4
TYPES OF NFPM ADOPTED BY FIRMS

<u>NFPM Type</u>	<u>Number of Firms</u>
Customer satisfaction	1070
Employee satisfaction	219
Quality process	108
Re-engineering or reengineering	3
New product development	136
Diversity	754
Market share	952
Productivity	574
Efficiency	618
Safety	1169
Innovation	713
Operational measure	113
Operational performance	1352
Strategic objectives	2029
<u>Nonfinancial goals (unspecified)</u>	<u>988</u>

**FIGURE 2
TYPES OF NFPM ADOPTED BY FIRMS**

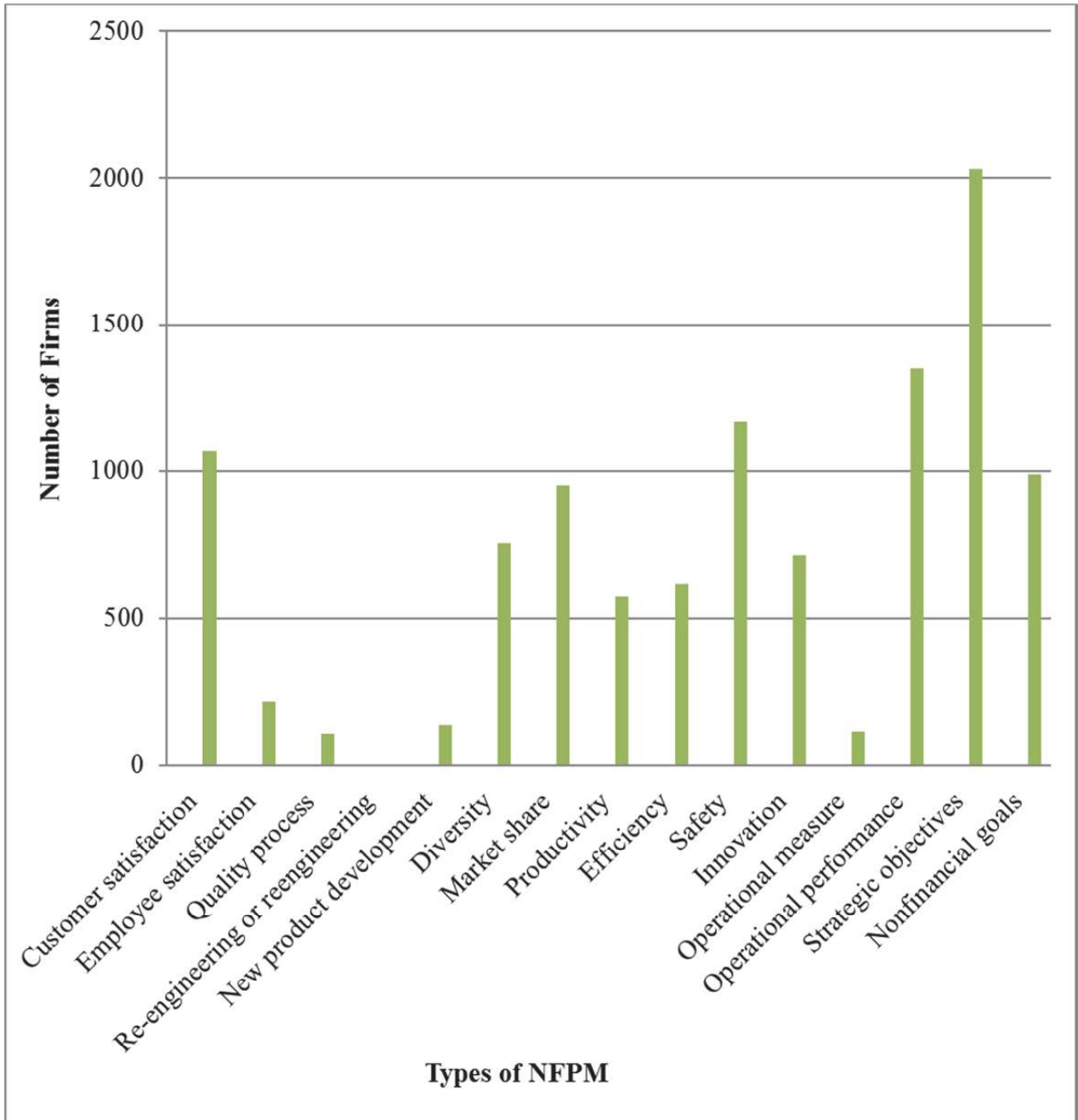


Table 5 describes that data collected for our alternative dependent variable, the weight placed on NFPM. The percentage of the weight applied to NFPM is tabulated by year. Given the descriptive results presented in Table 1 and Table 5, the data collected demonstrate not only an increase in the adoption of NFPM among firms listed on the S&P 500 but also an increase in the relative weight applied to these measures.

TABLE 5
NFPM WEIGHT DISTRIBUTION BY YEAR

Year	Non-adopters	Adopters	% for Weight NFPM Adopters	Total Firms
2000	667	20	2.91%	687
2001	662	24	3.50%	686
2002	665	21	3.06%	686
2003	663	27	3.91%	690
2004	646	35	5.14%	681
2005	634	48	7.04%	682
2006	607	57	8.58%	664
2007	558	93	14.29%	651
2008	539	104	16.17%	643
2009	517	113	17.94%	630
2010	507	115	18.49%	622
2011	502	115	18.64%	617
2012	486	117	19.40%	603
2013	484	118	19.60%	602
2014	500	90	15.25%	590
Total	8,637	1,097	11.27%	9,734

Hypotheses Testing

We begin our analysis of the relation between NFPM and CEO characteristics by examining the descriptive statistics for the available sample after matching the data collected from proxy statements (9,734 observations) to the Execucomp, Risk Metrics Directors and Compustat databases leading to a sample of 5,909 firm-year observations for our regression analyses. Table 6 Panel A contains the descriptive statistics. The mean for *NFPM* is 0.609; consequently, over half of the firm year observations report the use of both financial and NFPM for CEO remuneration. With respect to the independent variables of interest, 2.2 percent of the sample are female CEOs. The median for age is 56 years and average CEO tenure is slightly more than 7 years.

Panel B of Table 6 contains the difference tests and descriptive statistics for the variables of interest and the control variables comparing firms that have adopted NFPM with firms that do not include NFPM in CEO compensation structure. According to the univariate tests, more women are associated with firms that use NFPM ($p < 0.001$). The two groups of firms have CEOs with relatively the same age, however, firms that use NFPM employ CEOs that have significantly less tenure.

Panels C, D and E of Table 6 contain the frequency of using NFPM by gender, by the median of age, and by the median of tenure. We also test the mean difference and median difference using t-tests and Wilcoxon tests. These analyses show that the female group is significantly more likely to be associated with adopters of NFPM and the weights applied to NFPM compared to the male group. However, there are no significant differences for age for both the mean and median groups that are either above or below the mean/median. The difference in the frequency of using NFPM between the tenure below median group and the tenure above median group for the frequency of NFPM adoption and the weights assigned to NFPM for CEO compensation is significant. According to these comparisons, more tenured CEOs are less likely to opt into contracts that include NFPM.

Panel F of Table 6 contains the correlations for the dependent variable (*NFPM*), the variables representing CEO characteristics, and the control variables. As expected, *NFPM* is significantly and positively related to *CEOGender*, indicating the women are more risk-averse than men (Byrnes et al., 1999; Powell & Ansic, 1997; Barber & Odean, 2001; Cullis et al., 2006; Barua et al., 2010). Age is not significantly correlated with *NFPM*. Alternatively, *NFPM* is negatively correlated with tenure, indicating that as CEOs gain tenure they may begin to take on a short-term perspective.

TABLE 6
PANEL A: DESCRIPTIVE STATISTICS FOR REGRESSION SAMPLE

Variable	N	Mean	Std. Dev.	25th Percentile	Median	75th Percentile	Min	Max
NFPM	5909	0.609	0.488	0.000	1.000	1.000	0.000	1.000
NFPMWeight	5909	0.038	0.113	0.000	0.000	0.000	0.000	1.000
Gender	5909	0.022	0.148	0.000	0.000	0.000	0.000	1.000
Age	5909	55.847	6.620	51.000	56.000	60.000	34.000	82.000
Tenure	5909	7.060	6.094	3.000	5.000	9.000	1.000	51.000
ROA	5909	0.070	0.095	0.031	0.066	0.110	-1.747	0.610
Leverage	5909	0.570	0.199	0.443	0.576	0.697	0.032	1.800
Size	5909	8.856	1.261	7.934	8.784	9.754	4.873	12.757
Distress	5909	0.165	0.146	0.049	0.125	0.241	0.000	0.983
Strategy	5909	0.004	0.169	-0.081	-0.040	0.032	-0.140	6.164
Quality	5909	0.189	0.392	0.000	0.000	0.000	0.000	1.000
MktNoise	5909	-0.042	0.923	-0.636	-0.049	0.529	-3.793	4.575
PercInsBOD	5909	0.754	0.148	0.667	0.786	0.875	0.000	1.000
BODSize	5909	10.246	2.393	9.000	10.000	12.000	4.000	34.000

NFPM = binary variable coded as 1 if the firm indicates the use of *NFPM* in the CEO compensation contract for the year and 0 otherwise;

WeightNFPM = weight placed on the *NFPM* if used in CEO compensation contracts;

CEOGender = a binary variable coded as 1 for female CEOs and 0 for male CEOs;

CEOAge = the age of the CEO in years

CEOTenure = the current year minus the year an individual assumed the CEO position;

ROA = income before extraordinary items divided by lagged total assets;

Leverage = ratio of total debt divided by total stockholder equity;

Size = natural logarithm of net firm sales;

Distress = probability of bankruptcy computed for the previous five years using Ohlson's (1980) model;

Strategy = composite score for organizational strategy using three variables: ratio of research and development to sales, market-to-book ratio, and ratio of number of employees to sales averaged over previous five years;

Quality = indicator variable coded as 1 if a firm is a quality award winner listed on Fortune World's Most Admired list, and 0 otherwise;

MktNoise = composite measure using Fisher z-scores for the correlations between return on assets, return on equity, and return on sales, with stock market returns for the five years prior to each proxy date;

PercInsBOD = percentage of the board with insider affiliation (employee of the firm or one of the firm affiliates);
BODSize = number of directors.

TABLE 6 (continued)
PANEL B: DESCRIPTIVE STATISTICS FOR NFPM ADOPTERS (NON-ADOPTERS)

	Non-adopters			Adopters			Difference Tests	
	N	Mean	Median	N	Mean	Median	t-test	Wilcoxon
Gender	2312	0.013	0.000	3597	0.028	0.000	0.000	0.000
Age	2312	55.812	56.000	3597	55.870	56.000	0.745	0.451
Tenure	2312	7.850	6.000	3597	6.552	5.000	0.000	0.000
ROA	2312	0.065	0.066	3597	0.074	0.066	0.001	0.371
Leverage	2312	0.548	0.558	3597	0.583	0.589	0.000	0.000
Size	2312	8.408	8.354	3597	9.144	9.105	0.000	0.000
Distress	2312	0.167	0.126	3597	0.164	0.124	0.439	0.104
Strategy	2312	0.024	-0.033	3597	-0.008	-0.046	0.000	0.000
Quality	2312	0.151	0.000	3597	0.214	0.000	0.000	0.000
MktNoise	2312	-0.017	0.006	3597	-0.058	-0.080	0.090	0.020
PercInsBOD	2312	0.711	0.750	3597	0.782	0.818	0.000	0.000
BODSize	2312	9.881	10.000	3597	10.480	10.000	0.000	0.000

The variable definitions are the same as those defined in Panel A.

TABLE 6 (continued)

Panel C: Frequencies of NFPM use by Gender

	Male		Female		Difference Tests	
	Mean	Median	Mean	Median	t-test	Wilcoxon
Frequencies of NFPM Use	0.605	1.000	0.773	1.000	0.000	0.000
WeightNFPM	0.037	0.000	0.058	0.000	0.038	0.000

Panel D: Frequencies of NFPM use by Below v.s. Above Median Age

	Low		High		Difference Tests	
	Mean	Median	Mean	Median	t-test	Wilcoxon
Frequencies of NFPM Use	0.604	1.000	0.613	1.000	0.453	0.453
WeightNFPM	0.038	0.000	0.038	0.000	0.919	0.951

Panel E: Frequencies of NFPM use by Below v.s. Above Median Tenure

	Low		High		Difference Tests	
	Mean	Median	Mean	Median	t-test	Wilcoxon
Frequencies of NFPM Use	0.651	1.000	0.576	1.000	0.000	0.000
WeightNFPM	0.044	0.000	0.033	0.000	0.000	0.000

TABLE 6 (continued)

PANEL F: CORRELATION MATRIX FOR DEPENDENT VARIABLES, INDEPENDENT VARIABLES OF INTEREST AND CONTROL VARIABLES

NFPM	1																		
WeightNFPM	0.2681*	1																	
Gender	0.0508*	0.0270*	1																
Age	0.0042	0.0001	-0.0636*	1															
Tenure	-0.1039*	-0.0490*	-0.0596*	0.3839*	1														
ROA	0.0438*	-0.0243*	0.0005	0.0596*	0.0802*	1													
Leverage	0.0851*	0.0231*	0.0890*	0.0392*	-0.1304*	-0.1790*	1												
Size	0.2849*	0.1291*	0.0526*	0.1214*	-0.0598*	-0.0914*	0.2492*	1											
Distress	-0.0101	-0.0166	0.0672*	-0.0144	-0.1141*	-0.2176*	0.7792*	-0.0806*	1										
Strategy	-0.0911*	-0.0601*	0.0132	-0.1206*	0.0558*	0.1860*	-0.2837*	-0.2459*	-0.1782*	1									
Quality	0.0777*	0.0441*	0.0614*	0.0627*	-0.0199	0.0229*	0.0165	0.3678*	-0.1061*	-0.0400*	1								
MktNoise	-0.0221*	-0.0096	0.0086	-0.0391*	-0.0273*	-0.1209*	-0.0088	-0.0445*	-0.0199	0.0277*	0.0063	1							
PercInsBOD	0.2329*	0.1386*	0.0571*	0.0345*	-0.0646*	-0.0388*	0.2025*	0.2741*	0.0954*	-0.1818*	0.0844*	-0.0291*	1						
BODSize	0.1222*	0.0511*	0.0199	0.1003*	-0.0995*	-0.0638*	0.2284*	0.4802*	0.0539*	-0.2203*	0.1845*	-0.0196	0.1134*	1					

*, **, *** indicates significance at the .10, .05, .01 levels respectively. The variable definitions are the same as those defined in Panel A.

Tests of H1 and H2

Hypothesis 1 states that female CEOs will be more positively associated with the use of NFPM in compensation contracts than male CEOs while hypothesis 2 predicts that both age and tenure will be negatively associated with the adoption of NFPM. Using model 1 and including gender, age and tenure as independent variables of interest, the estimated coefficient for gender is not compelling. Thus, hypothesis 1 is not supported. Additionally, the coefficient for age is also not significant. However, the coefficient for tenure is negative and significant ($p < 0.01$). Therefore, more tenured CEOs are less likely to opt into compensation contracts that include NFPM and firms are less likely to include these measures for after controlling for gender and age. Table 7 contains the results.

TABLE 7
LOGISTIC REGRESSION ANALYSIS FOR THE RELATION OF CEO GENDER, AGE
AND TENURE TO THE USE OF NFPM IN CEO COMPENSATION

	Prob(NFPM) Coeff. (z-stat)	WeightNFPM Coeff. (t-stat)
Gender	0.348 (1.38)	-0.001 (-0.09)
Age	-0.001 (-0.14)	0.000 (0.46)
Tenure	-0.038*** (-5.87)	-0.001*** (-3.54)
ROA	2.038*** (5.32)	-0.018 (-1.45)
Leverage	-0.162 (-0.54)	-0.025* (-1.92)
Size	0.338*** (8.52)	0.003* (1.73)
Distress	0.739* (1.83)	0.010 (0.55)
Strategy	0.034 (0.20)	-0.016*** (-2.72)
Quality	0.061 (0.66)	0.014*** (2.98)
MktNoise	0.019 (0.54)	0.000 (0.12)
PercInsBOD	0.708*** (2.79)	0.024** (2.49)
BODSize	0.044*** (-2.6)	-0.000 (-0.14)
Constant	-4.539*** (-7.71)	-0.074*** (-3.69)
Industry indicators included	Yes	Yes
Year indicators included	Yes	Yes
N	5,813	5,909
Pseudo R2/R2	0.18	0.092

*, **, *** indicates significance at the .10, .05, .01 levels respectively. The variable definitions are the same as defined in Table 6 Panel A. Taking the log of tenure and age produces similar results.

The analysis retains 5,813 firm year observations. The proxy for performance (*ROA*) and *Size* are both positively associated with *NFPM* (Core et al., 1999; Said et al., 2003). Contrary to prior literature *Distress* is positively associated with the use of *NFPM* (Said et al., 2003). Although the coefficient is only marginally significant, this may indicate that firms are beginning to use these beneficial measures to improve their future performance. Additionally, *PercInsBOD* and *BODSize* is positively and significantly associated with the use of *NFPM* ($p < 0.01$), suggesting that greater BOD independence and larger boards seek to offer the most optimal compensation contracting.

The results for the independent variables of interest using model (2) employing the alternative dependent variable *NFPMWeight* are consistent with model (1). Tenure is negative and significantly associated with weights applied to *NFPM*, while gender and age are not. Regarding the control variables, the results are consistent with expectations with the exception of the proxy for strategy. Our analysis implies that firms with a prospector strategy and less likely to apply weights to *NFPM*. The results are tabulated in table 7.

Given the small number of observations that are female and the correlation between age and tenure, we then analyze the independent variables of interest individually in separate models. Consistent with hypothesis 1, female CEOs are positively associated with the use of *NFPM* in compensation contracts. Alternatively, age and tenure are both negatively associated with the adoption of *NFPM* for compensation contracting. We conduct a similar analysis using the alternative dependent variable, *NFPMWeight* and find that tenure is negatively associated with the adoption of *NFPM* while outcomes for gender and age are inconclusive. The results are contained in table 8.

TABLE 8
LOGISTIC REGRESSION ANALYSIS FOR THE RELATION OF CEO GENDER, AGE, AND
TENURE TO THE USE OF NFPM IN CEO COMPENSATION ANALYZED INDIVIDUALLY
USING SEPARATE MODELS

	Prob(NFPM) Coeff. (z-stat)	NFMP_WEIGHT Coeff. (t-stat)	Prob(NFPM) Coeff. (z-stat)	NFMP_WEIGHT Coeff. (t-stat)	Prob(NFPM) Coeff. (z-stat)	NFMP_WEIGHT Coeff. (t-stat)
Gender	0.428* (1.73)	0.000 (0.04)				
Age			-0.016*** (-3.28)	-0.000 (-1.01)		
Tenure					-0.038*** (-6.53)	-0.001*** (-4.02)
ROA	2.032*** (5.30)	-0.018 (-1.42)	1.947*** (5.14)	-0.020 (-1.54)	1.869*** (4.91)	-0.021* (-1.65)
Leverage	-0.158 (-0.53)	-0.025* (-1.91)	-0.110 (-0.38)	-0.024* (-1.81)	-0.102 (-0.35)	-0.024* (-1.81)
Size	0.339*** (8.54)	0.003* (1.75)	0.340*** (8.53)	0.003* (1.77)	0.333*** (8.42)	0.003* (1.74)
Distress	0.761* (1.89)	0.010 (0.54)	0.811** (2.04)	0.010 (0.59)	0.775* (1.95)	0.010 (0.60)
Strategy	0.046 (0.27)	-0.016*** (-2.73)	-0.026 (-0.16)	-0.018*** (-2.83)	0.009 (0.05)	-0.017*** (-2.81)
Quality	0.072 (0.78)	0.014*** (2.98)	0.082 (0.91)	0.014*** (3.01)	0.068 (0.75)	0.014*** (2.99)
MktNoise	0.019 (0.54)	0.000 (0.11)	0.020 (0.56)	0.000 (0.13)	0.021 (0.60)	0.000 (0.13)
PercInsBOD	0.717*** (2.82)	0.024** (2.49)	0.759*** (3.01)	0.025*** (2.62)	0.750*** (2.99)	0.025*** (2.63)
BODSize	0.043** (2.57)	-0.000 (-0.11)	0.053*** (3.15)	0.000 (0.17)	0.052*** (3.07)	0.000 (0.14)
Constant	-4.608*** (-8.67)	-0.069*** (-4.03)	-3.961*** (-6.89)	-0.066*** (-3.37)	-4.729*** (-8.98)	-0.076*** (-4.41)
Industry indicators included	Yes	Yes	Yes	Yes	Yes	Yes
Year indicators included	Yes	Yes	Yes	Yes	Yes	Yes
N	5,813	5,909	5,813	5,909	5,813	5,909
Pseudo R2/R2	0.180	0.092	0.174	0.090	0.173	0.090

*, **, *** indicates significance at the .10, .05, .01 levels respectively. The variable definitions are the same as defined in Table 6 Panel A.

CONCLUSIONS

This study provides empirical evidence regarding whether particular CEO characteristics lead to a greater likelihood of using NFPM. Specifically, we provide limited evidence that female CEOs are positively associated with the use of both financial and NFPM in CEO remuneration. Given that NFPM provide a tool for mitigating risk inherent in using only financial performance measures (Bruns & McKinnon, 1993; Feltham & Xie, 1994), this result is consistent with prior literature suggesting that women are more risk-averse than men (Byrnes et al., 1999; Powell & Ansic, 1997; Barber & Odean, 2001). There are two distinct elements to consider regarding gender and executive compensation. First, the CEO must accept or opt into an agreed-upon contract with the types of performance measures specified. Secondly, those in authority over the structure of compensation contracting (i.e. BOD, compensation committee) include certain types of performance measures. The particular performance measures included could be the consequence of attributions made to the executive based on their gender (Lee & James, 2007; DeRue et al., 2011). The results presented by this study complement the evidence provided by Barua et al. (2010) that female CEOs make decisions based on a more long-term perspective than their male counterparts. We postulate that our results concerning gender are weak due to the small number of female CEOs in the sample.

The results for CEO age and tenure support the existence of an entrenchment issue (Ryan & Wiggins, 2001) and an increasingly short-term horizon perspective (Finkelstein & Hambrick, 1989) as CEOs get older and gain tenure. When controlling for gender and tenure, CEO age has no relation to the adoption of NFPM for compensation contracting. However, when gender and tenure are not considered, age is negatively associated with the use of NFPM suggesting that as CEOs get older they may begin to have a short-term horizon perspective (Yermack, 1995). Consistent throughout our analyses, CEO tenure is negatively and significantly associated with the use of NFPM. This suggests that CEO power may increase with tenure. Although the board should include NFPM to combat the CEO's increasingly short-term perspective, CEOs may use their influence to structure compensation contracts that fail to engender a long-term perspective because they prefer to avoid measures that may only reward their successors.

Many studies show that the fixed effects of managers matter in firm level compensation and governance outcomes (Bertrand & Schoar, 2003). Further, prior research has documented that several firm characteristics including strategic orientation, industry norms, and performance effects are associated with the use of NFPM (Ittner et al., 1997; Said et al., 2003; HassabElnaby et al., 2005). However, previous research does not address what particular CEO characteristics lead to the adoption of NFPM. The evidence presented in this study demonstrates that gender, age, and tenure are affiliated with the use of NFPM in CEO remuneration. This research is valuable to those who hire CEOs and to those who design compensation contracts (i.e., boards of directors and compensation committee members). Moreover, given that controls for corporate governance were considered, the results of this study suggests that executives may play a larger role in the compensation package compromise (between the CEO and the BOD) than do firm directors. The contributions are also informative to investors who want to ensure they are providing support to firms with a leader whose focus is aligned with their investment strategy. Finally, this investigation may assist stakeholders by contributing additional information about the true nature and focus of a firm, based on the characteristics of the CEO.

ACKNOWLEDGEMENT

This paper is a collaboration born out of Melloney Simerly's dissertation at Virginia Commonwealth University. We would like to thank the committee members who provided valuable guidance throughout her time there: Dr. Benson Wier (Chair), Dr. Myung Park, Dr. Leslie Stratton and Dr. Jean Zhang. We would also like to express our appreciation to Thomas Lewis, Taylor Bennett, Lewis Rogers and Rachel Hanks for assisting in the data collection process. Additionally, we are grateful to anonymous reviewers and the participants in the Virginia Commonwealth University research workshop, Dr. Lindsey Andiola, Brent Roberts, and Ed Lynch for their helpful comments as well as Mario Schabus for his feedback given at the American Accounting Association managerial section conference.

REFERENCES

- Amir, E. & Lev, B. (1996). Value-relevance of nonfinancial information: The wireless communications industry. *Journal of Accounting and Economics*, 22, (1), 3-30.
- Banker, R. D., Potter, G. & Srinivasan, D. (2000). An empirical investigation of an incentive plan that includes nonfinancial performance measures. *The Accounting Review*, 75, (1), 65-92.
- Barber, B. M. & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The Quarterly Journal of Economics*, 116, (1), 261-292.
- Barua, A., Davidson, L. F., Rama, D. V., & Thiruvadi, S. (2010). CFO gender and accruals quality. *Accounting Horizons*, 24, (1), 25-39.
- Bebchuk, L. A., Fried, J. M., & Walker, D. I. (2002). Managerial power and rent extraction in the design of executive compensation. *National Bureau of Economic Research*, Working Paper No. 9068.
- Bertrand, M. & Schoar, A. (2003). Managing with style: The effect of managers on firm policies. *The Quarterly Journal of Economics*, 118, (4), 1169-1208.
- Bruns Jr, W. J., McKinnon, S. M. (1993). Information and managers: A field study. *Journal of Management Accounting Research*, (5), 84-108.
- Bushman, R. M., Indjejikian, R. J., & Smith, A. (1996). CEO compensation: The role of individual performance evaluation. *Journal of Accounting and Economics*, 21, (2), 161-193.
- Byrnes, J. P., Miller, D. C., & Schafer, W. D. (1999). Gender differences in risk taking: A meta-analysis. *Psychological Bulletin*, 125, (3), 367-383.
- Chenhall, R. H. (2003). Management control systems design within its organizational context: Findings from contingency-based research and directions for the future. *Accounting, Organizations and Society*, 28, (2), 127-168.
- Core, J. E., Holthausen, R. W., & Larcker, D. F. (1999). Corporate governance, chief executive officer compensation, and firm performance. *Journal of Financial Economics*, 51, (3), 371-406.
- Coughlin, A. T. & Schmidt, R. M. (1985). Executive compensation, management turnover, and firm performance. *Journal of Accounting and Economics*, 7, (1985), 43-66.
- Cullis, J., Jones P., & Lewis, A. (2006). Tax framing, instrumentality and individual differences: Are there two different cultures? *Journal of Economic Psychology*, 27, (2), 304-320.
- Davila, A. & Venkatachalam, M. (2004). The relevance of non-financial performance measures for CEO compensation: Evidence from the airline industry. *Review of Accounting Studies*, 9, (4), 443-464.
- DeRue, D. S., Nahrgang, J. D., Wellman, N. E. D., & Humphrey, S. E. (2011). Trait and behavioral theories of leadership: An integration and meta-analytic test of their relative validity. *Personnel Psychology*, 64, (1), 7-52.
- Eccles, R. G. (1991). The performance measurement manifesto. *Harvard Business Review*, 69, (1), 131-137.
- Fama, E. F. & French, K. R. (2002). The equity premium. *The Journal of Finance*, 57, (2), 637-659.
- Feltham, G. A., & Xie, J. (1994). Performance measure congruity and diversity in multi-task principal, agent relations. *The Accounting Review*, 69, (3), 429-453.

- Finkelstein, S. & Hambrick, D. C. (1989). Chief executive compensation: A study of the intersection of markets and political processes. *Strategic Management Journal*, 10, (2), 121-134.
- Graham, J. R., Li, S., & Qiu, J. (2012). Managerial attributes and executive compensation. *Review of Financial Studies*, 25, (1), 144-186.
- HassabElnaby, H. R., Mohammad, E. & Said, A. A. (2010). Nonfinancial performance measures and earnings management. *Advances in Management Accounting*, 18, 55-79.
- HassabElnaby, H. R., Said, A. A., & Wier, B. (2005). The retention of nonfinancial performance measures in compensation contracts. *Journal of Management Accounting Research*, 17, (1), 23-42.
- Hauser, J. R., Simester, D. I., & Wernerfelt, B. (1994). Customer satisfaction incentives. *Marketing Science*, 13, (4), 327-350.
- Hemmer, T. (1996). On the design and choice of "modern" management accounting measures. *Journal of Management Accounting Research*, 8, 87-116.
- Hill, C. W. & Phan, P. (1991). CEO tenure as a determinant of CEO pay. *Academy of Management Journal*, 34, (3), 707-717.
- Ittner, C. D. & Larcker, D. F. (1998a). Are nonfinancial measures leading indicators of financial performance? An analysis of customer satisfaction. *Journal of Accounting Research*, 36, 1-35.
- Ittner, C. D. & Larcker, D. F. (1998b). Innovations in performance measurement: trends and research implications. *Journal of Management Accounting Research*, 10, 205-238.
- Ittner, C. D. & Larcker, D. F. (2003). Coming up short on nonfinancial performance measurement. *Harvard Business Review*, 81, (11), 88-95.
- Ittner, C. D., Larcker, D. F., & Rajan, M. V. (1997). The choice of performance measures in annual bonus contracts. *The Accounting Review*, 72, (2), 231-255.
- Ittner, C. D., Larcker, D. F., & Randall, T. (2003). Performance implications of strategic performance measurement in financial services firms. *Accounting, Organizations and Society*, 28, (7), 715-741.
- Johnson, H. T. & Kaplan, R. S. (1987). *Relevance lost: The rise and fall of managerial accounting*. Harvard Business School.
- Kaplan, R. S. & Atkinson, A. A. (1998). *Advanced Management Accounting* (Vol. 3). Upper Saddle River, NJ: Prentice Hall.
- Kaplan, R. S. & Norton, D. P. (1996). Using the balanced scorecard as a strategic management system. *Harvard Business Review*, 74, (1), 75-85.
- Kaplan, R. S. & Norton, D. P. (2001). *The Strategy Focused Organization: How Balanced Scorecard Companies Thrive in the New Business Environment* (pp. 1-190). Boston, MA: Harvard Business Press.
- Lambert, R. A. & Larcker, D. F. (1987). An analysis of the use of accounting and market measures of performance in executive compensation contracts. *Journal of Accounting Research*, 25, 85-125.
- Lee, P. M. & James, E. H. (2007). She'-e-os: gender effects and investor reactions to the announcements of top executive appointments. *Strategic Management Journal*, 28, (3), 227-241.
- Lewellen, W., Loderer, C. & Martin, K. (1987). Executive compensation and executive incentive problems: An empirical analysis. *Journal of Accounting and Economics*, 9, (3), 287-310.
- Maines, L. A. Bartov, E., Fairfield, P. M., Hirst, D. E., Iannaconi, T. E., Mallett, R., Schrand, C. M., Skinner, D. J., & Vincent, L. (2002). Recommendations on disclosure of nonfinancial performance measures. *Accounting Horizons*, 16, (4), 353-362.
- Mehran, H. (1995). Executive compensation structure, ownership, and firm performance. *Journal of Financial Economics*, 38, (2), 163-184.
- Murphy, K. J. (1999). Executive Compensation. *Handbook of Labor Economics*, 3, 2485-2563. Amsterdam, The Netherlands: Elsevier.
- Ohlson, J. A. (1980). Financial Ratios and the Probabilistic Prediction of Bankruptcy. *Journal of Accounting Research*, 18, (1), 109-131.

- Powell, M. & Ansic, D. (1997). Gender differences in risk behaviour in financial decision-making: An experimental analysis. *Journal of Economic Psychology*, 18, (6), 605-628.
- Ryan, H. E. & Wiggins, R. A. (2001). The influence of firm-and manager-specific characteristics on the structure of executive compensation. *Journal of Corporate Finance*, 7, (2), 101-123.
- Said, A. A., HassabElnaby, H. R., & Wier, B. (2003). An empirical investigation of the performance consequences of nonfinancial measures. *Journal of Management Accounting Research*, 15, (1), 193-223.
- Sedatole, K. L. (2003). The effect of measurement alternatives on a nonfinancial quality measure's forward-looking properties. *The Accounting Review*, 78, (2), 555-580.
- Singleton-Green, B. (1993). If it matters, measure it! *Accountancy* (May), 52-53.
- Van der Stede, W. A., Chowand, C. W., & Lin, T. W. (2006). Strategy, choice of performance measures, and performance. *Behavioral Research in Accounting*, 18, (1), 185-205.
- Yermack, D. (1995). Do corporations award CEO stock options effectively? *Journal of Financial Economics*, 39, (2), 237-269.