Managerial Reputation and the Quality of Non-GAAP Earnings Disclosures

Yun Cheng
University of West Georgia

Motivated by the efficient contracting theory and managerial reputation incentives, this study examines how managerial reputation affects the quality of non-GAAP earnings disclosures. Using empirical models, the study finds that reputable managers are less likely to disclose non-GAAP earnings, which is consistent with the efficient contracting explanation. The study also finds that reputable managers exclude more recurring items that are related to future operating earnings when they disclose non-GAAP earnings, which is consistent with the rent extraction explanation. The study contributes to both non-GAAP earnings disclosures literature and managerial incentives literature. It also has implications for investors, managers, and regulators.

INTRODUCTION

Non-GAAP financial measures (GAAP is defined as Generally Accepted Accounting Principles), frequently called ''pro forma'' earnings, are performance measures voluntarily disclosed by managers[1]. These earnings performance measures are estimated by excluding nonrecurring items, such as asset impairments, amortization of intangibles, restructuring charges, mark-to-market charges and realized gains or losses on sales of assets. The Securities and Exchange Commission (SEC) requires firms to disclose the reconciliation of non-GAAP earnings to the relevant GAAP earnings if firms disclose non-GAAP earnings (SEC, 2003). Research in this area focuses on the attributes of non-GAAP earnings disclosures, the strategies that managers use to disclose non-GAAP earnings and the value relevance of non-GAAP earnings information. However, research that examines managerial incentives behind disclosing non-GAAP earnings is limited.

It is important to understand managerial incentives of non-GAAP earnings disclosures because they determine whether and how managers disclose non-GAAP earnings. Specifically, managerial incentives might affect the attributes, the quality and the consequences of non-GAAP earnings disclosures. Therefore, I investigate how managerial reputation, a form of managerial incentive, affects the quality of non-GAAP earnings disclosures.

Consistent with voluntary disclosure literature, I assume that managers have superior private information relative to outside investors about firms' current and expected future performance. Further, I assume that managers have the choice of whether to disclose such private information based on their self-serving incentives. When managers have strong incentives to mislead investors, their disclosures may be less credible. Therefore, managers' incentives can influence the quality of voluntary disclosures (Mercer, 2004). As a voluntary disclosure, the quality of non-GAAP earnings might also be affected by managerial incentives, which results in two opposing opinions on the non-GAAP earnings disclosure: the information hypothesis and the opportunism hypothesis (Bradshaw and Sloan, 2002). Although both hypotheses are

examined by prior research, the quality of non-GAAP earnings reporting is inconclusive because the disclosure is discretionary and unaudited. To better understand the two different opinions and assess the quality of non-GAAP earnings disclosures, it is important to understand managerial incentives behind these disclosures.

Generally, managers' incentives include both an implicit incentive (reputation concern) and an explicit incentive (compensation concern). Although both managerial incentives are important, in this study I focus on the effect of the managerial reputation incentive on non-GAAP earnings disclosures, which has not been explored by prior studies. I use relative efficiency of decision making units (DMUs) (Demerjian, Lev, and McVay, 2012) to measure managerial reputation. First, I predict and find that there is a negative relationship between managerial reputation and the likelihood and frequency of non-GAAP earnings disclosures, which suggests that the non-GAAP earnings measure might be a tool that managers use to manipulate reported earnings. Next, I find that non-GAAP exclusions are negatively related to future GAAP operating earnings, which is consistent with prior research (Kolev, Marquardt, and McVay, 2008; Frankel, McVay, and Soliman, 2011). I also find that the interaction term between managerial reputation and non-GAAP exclusions is negatively and significantly related to future GAAP operating earnings, which is consistent with the Rent Extraction perspective (Malmendier and Tate, 2009) and suggests that managers with higher reputations exclude more recurring items that are related to the future operating earnings.

The study has several contributions. First, it contributes to the non-GAAP earnings disclosures literature by providing empirical evidence that the managerial reputation incentive is an important concern when managers disclose non-GAAP earnings. Second, the study contributes to the literature by showing how the managerial reputation incentive has differential effects on income-increasing (transitory gains) and income-decreasing (non-recurring expenses) non-GAAP adjustments. It provides some evidence that although reputable managers may disclose poor quality income-decreasing non-GAAP earnings, they are more likely to disclose higher quality income-increasing non-GAAP earnings, which is consistent with the Efficient Contracting explanation in the reputation literature and the informative explanation in the non-GAAP earnings disclosure literature (Curtis, McVay, and Whipple, 2013).

The remainder of this paper is organized as follows. Section 2 reviews prior research and develops the hypotheses. Section 3 outlines the research design. Section 4 describes the sample selected. Section 5 presents empirical results and discussions of the results. Section 6 summarizes the results and concludes.

THEORY and HYPOTHESES DEVELOPMENT

The Likelihood and Frequency of Non-GAAP Earnings Disclosures

Although Agency Theory recognizes the role of managerial discretion on firm decisions, it attributes firm decisions or firm characteristics to the firm's ability to mitigate managers' personal incentives (Jensen and Meckling, 1976). The theory ignores the role of managers' personal characteristics on corporate practice and the effect of the labor market on a manager's behavior. Fama (1980) explains the importance of the role of the labor market and argues that managers in the firm face both discipline and opportunities provided by the labor market. Although the labor market initially might not know a manager's true ability or reputation, the market can update its belief about the manager's ability through the release of information related to the firm's current and past performance and therefore forms opinions about the manager's reputation. As more related performance information is updated, the labor market can assess the manager's ability or reputation more precisely and accurately and reward reputable managers with higher compensation and penalize managers who have shirking intentions.

Therefore, the Efficient Contracting Hypothesis predicts that reputable managers are more likely to align their actions with shareholders' interest to build and maintain their reputations because of the dual roles of the labor market (Koh, 2011). One way to achieve such alignment is to improve companies' information environment by providing more value relevant information. Managers have superior private information relative to outside shareholders about firms' current and expected future performance (information asymmetry). If managers disclose more private value relevant information, investors can

have a more complete picture about a firm's performance and make a better decision on their investments. Baik, Brockman, and Lee (2010) find that managerial reputation is negatively associated with companies' financial reporting asymmetry, which suggests that reputable managers try to build and maintain their reputations by increasing the flow of information to the market.

Moreover, given Signaling Theory, reputable managers have strong incentives to disclose their private information to distinguish themselves as superior decision-makers and build good reputations. Therefore, providing value relevant information can not only align managers with shareholders' interest, it can also signal managers' competence of predicting the future performance of companies, which leads shareholders and investors to update their beliefs about managers' reputations and reflect their beliefs on the firm's equity value. Overall, managers have incentives to provide more value-relevant information to build and maintain their reputations. If non-GAAP earnings is value-relevant and informative, reputable managers will be more likely to disclose the information to align their interest with shareholders and signal their abilities to build up their reputations.

However, some research finds that the non-GAAP earnings measure is a tool that managers use to manipulate reported earnings to achieve their performance benchmarks. For instance, managers try to meet earnings benchmarks by excluding from GAAP earnings the effect of some negative events that are likely to occur in the future (Doyle, Lundholm, and Soliman, 2003, Kolev et al., 2008). Managers strategically disclose non-GAAP earnings by emphasizing the non-GAAP earnings number (Marques, 2010) or disclose it catering to investors' expectations (Brown, Christensen, Elliott, and Mergenthaler, 2012). In this case, given the dual roles of the labor market, managers with higher reputations are less likely to disclose non-GAAP earnings since the opportunistic disclosure behavior can hurt their reputations once it is detected by the market. In the long run, the loss of reputation can affect their human capital in the labor market. Therefore, reputable managers are more likely to avoid any perceived opportunistic behavior.

I focus on the role of managerial reputation in the managers' decisions to disclose non-GAAP earnings (both likelihood and frequency). Given the Efficient Contracting Theory and the opportunism perspective on the non-GAAP earnings disclosure documented in prior research, I expect that reputable managers are less likely to disclose non-GAAP earnings. I formally state my first hypothesis as:

H1: There is a negative relationship between managerial reputation and the likelihood and frequency of non-GAAP earnings disclosures.

The Quality of Non-GAAP Earnings Disclosures

Consistent with the first hypothesis, non-GAAP earnings could be perceived as an earnings management tool and reputable managers might be less likely to disclose non-GAAP earnings. However, if reputable managers do disclose non-GAAP earnings, the Efficient Contracting Theory and dual roles of the labor market suggest that the managers have strong incentives to make these disclosures credible to build and maintain their reputations.

First, credible information signals managers' good reputations, helps current or potential employers update their beliefs about the managers' ability and makes managers more competitive in the human capital market. If reputable managers opportunistically disclose poor quality non-GAAP earnings, they will have more to lose in terms of their own human capital. Francis, Huang, Rajgopal, and Zang (2008) find that CEOs who report poor quality earnings are more likely to be replaced with reputable CEOs. Desai, Hogan, and Wilkins (2006) provide evidence that firms which are required to restate their financial statements due to GAAP violations experience a higher turnover of top managers. Moreover, because of the reputation damage, the subsequent employment prospects of the displaced managers of restatement firms are poorer than those of managers from other firms.

Managerial reputation can also affect managers' compensation. Milbourn (2003) provides initial evidence that reputable managers are provided with stronger stock-based compensation. Rajopal, Shevlin, and Zamora (2006) suggest that the sensitivity of CEO pay to systematic market-wide factors is an increasing function of CEO reputations when they control for the Rent Extraction explanation. Therefore,

reputable managers have more advantages regarding their career opportunities and compensation. These reputation concerns make managers less inclined to abuse their reputations for the pursuit of private benefits. On the contrary, the dual roles of the labor market motivate them to keep and maintain their reputations.

Graham, Harvey, and Rajgopal (2005) provide evidence that managers are motivated to develop their reputations for transparent and accurate voluntary disclosures. Koh (2011) finds evidence that reputable managers are more likely to engage in conservative accounting practices and are less likely to engage in opportunistic earnings management to meet short-term benchmarks. Baik, Farber, and Lee (2011) find that managers with higher ability release more accurate management earnings forecasts so as to signal their ability than do managers with lower ability. Demerjian, Lewis, Lev, and McVay (2013) find that managerial ability positively affects the companies' earnings quality and their results suggest that capable managers are better able to estimate accruals and thus achieve a more precise measure of earnings. Overall, these prior studies suggest that although managers have incentives to make opportunistic disclosures of non-GAAP earnings, managers' reputation concerns can discourage this opportunistic behavior. Moreover, managers have strong incentives to disclose credible and high quality financial information.

Additionally, Bansal, Seetharaman, and Wang (2013) find that managers with high stock wealth risk-taking incentives are more likely to make frequent and high quality non-GAAP earnings disclosures because the reputation effect dominates the trade-off for risk-taking managers and they can benefit incrementally from a reputation for credible disclosures. However, no direct test is provided in their study. Therefore, I focus on the effect of managerial reputation on the quality of non-GAAP earnings disclosures and predict that reputable managers have stronger incentives to make their disclosures more credible so as to build and maintain their reputations. Formally stated:

H2: Managers with higher reputations make higher quality non-GAAP earnings disclosures than do managers with lower reputations.

RESEARCH DESIGN

Managerial Reputation Measure

There is no uniform definition of managerial reputation. In this study, I use the relative efficiency of decision making units (DMUs) to proxy for managerial reputation, which is a performance-based measure of innate managerial reputation from Demerjian et al. (2012)[ii]. They use data envelope analysis (DEA) to create a measure of manager-specific efficiency. It is a statistical procedure used to evaluate the relative efficiency of decision making units and is defined as the ratio of outputs over inputs. DMUs convert certain inputs such as labor and capital into outputs (revenue, income, etc.). They separate the firms' characteristics and managers' abilities. In their validity checks, Demerjian et al. (2012) find that this manager's ability measure is positively related to CEO pay, earnings growth and sales growth. Demerjian et al. (2013) find that this measure is positively related to earnings quality, which indicates that this measure captures some dimension of managers' abilities and their impact on the estimate and disclosure of financial information. The strength of this measure is that it captures a manager's ability by separating managers' characteristics and firms' characteristics. However, there might be a host of firm-specific characteristics that are not captured by the model, which makes the measure noisy as a result of measurement error. Therefore, I follow Demerjian et al. (2012) and cluster standard errors by firm and year and include year and industry fixed effects to mitigate the measurement error.

Empirical Test of Managerial Reputation Effect on the Decision of Non-GAAP Disclosures

To investigate the effect of managerial reputation on managers' decisions to disclose non-GAAP earnings, I focus on how managerial reputation affects the likelihood and the frequency of non-GAAP earnings disclosures. I adopt and modify models from Brown et al. (2012) and Bansal et al. (2013) and estimate a logistic regression equation and an ordinal logistic regression equation as follows:

$$NONGAAPEXIST = \alpha_0 + \beta_1 REP + \beta_2 COMP + \beta_3 TENURE + \beta_4 EARVOL + \beta_5 POST + \beta_6 ACCR + \beta_7 SALES + \beta_8 SIZE + \beta_9 LEV + \beta_{10} LOSS + \beta_{11} AUD + \beta_{12} GOV + \beta_{13} MBE + \beta_{14} MTB + \beta_{15} LAGDISC + \varepsilon \quad (1)$$

$$NONGAAPFREQ = \alpha_0 + \beta_1 REP + \beta_2 COMP + \beta_3 TENURE + \beta_4 EARVOL + \beta_5 POST + \beta_6 ACCR + \beta_7 SALES + \beta_8 SIZE + \beta_9 LEV + \beta_{10} LOSS + \beta_{11} AUD + \beta_{12} GOV + \beta_{13} MBE + \beta_{14} MTB + \beta_{15} LAGDISC + \varepsilon \quad (2)$$

Following Bansal et al. (2013) and Brown et al. (2012), I use an indicator variable NONGAAPEXIST to capture managers' decisions to disclose non-GAAP earnings. It is equal to one if non-GAAP exclusions are positive or negative, and zero otherwise. The non-GAAP exclusions are calculated as the absolute value of the difference between non-GAAP earnings and GAAP earnings in the fiscal quarter. NONGAAPFREQ captures the frequency of non-GAAP earnings disclosures, which is measured as the number of quarters in a fiscal year where non-GAAP exclusions are non-zero. The value is from zero to four.

REP is the test variable measured by managerial ability scores. I expect that the coefficient β_1 is negative because reputable managers are more concerned about their reputations and are less likely to disclose any information that is perceived to be earnings management, consistent with H1.

I include managers' characteristics as control variables. Bansal et al. (2013) indicate that managers' cash compensation is negatively related to the disclosure of non-GAAP earnings. Therefore, I include cash compensation (COMP) as a control variable to capture the explicit incentive that affects managers' disclosure of non-GAAP earnings. I expect the coefficient of cash compensation to be negative because managers with lower compensation have more motivation to disclose a higher earnings performance to extract more compensation. TENURE captures the number of years an executive served as CEO in a company and I expect that the coefficient of tenure is negative.

I also control for the characteristics of firms that can affect the disclosure of non-GAAP earnings. EARVOL is included to control for a firm's earnings volatility because firms with high earnings volatility may have less earnings persistence and are more likely to make non-GAAP exclusions (Lougee and Marquardt, 2004). Jennings and Wang (2011) suggest that accounting conservatism is positively associated with the non-GAAP disclosure. Therefore, I include accruals as a control variable and expect it to be positive, consistent with Jennings and Wang (2011). I include GOV variable to control for the corporate governance effect. I also include Big Four auditors (AUD) as a control variable. I expect both GOV and AUD to be negative because Big Four firms and a company with strong corporate governance are more likely to constrain earnings manipulation behaviors.

MBE is an indicator variable to control for the effect of the meeting and beating earnings benchmarks incentive. Prior research finds that managers are more likely to make non-GAAP exclusion adjustments to meet earnings benchmarks when their GAAP earnings miss the benchmark (Black and Christensen, 2009, Isidro and Marques, 2009). Therefore, I include MBE as a control variable and expect the coefficient to be positive. I include market to book ratios (MTB) as a control variable because Bhattacharya, Black, Christensen, and Mergenthaler (2004) find that firms with higher book to market ratios are more likely to disclose non-GAAP earnings since their equities are undervalued. I expect the coefficient to be negative.

Prior research documents that the disclosure policy in the prior period can affect the disclosure policy in the current period (Dye, 1985). I include an indicator variable LAGDISC to control for the effect of past non-GAAP earnings disclosures and I expect the coefficient to be positive (Brown et al., 2012). I include post-SOX to control for the effect of the regulatory environment on non-GAAP earnings disclosures. I also include SALES, SIZE and LOSS as control variables.

Empirical Test of Managerial Reputation Effect on the Quality of Non-GAAP Disclosures

Investors can validate non-GAAP earnings quality based on the predictive ability of non-GAAP earnings exclusions in the subsequent period because transitory items excluded from GAAP earnings should not recur in future GAAP earnings (Doyle et al., 2003; Kolev et al., 2008). To test the extent to which the managerial reputation incentive affects the quality of non-GAAP earnings disclosures, I adopt

and modify the model from Doyle et al. (2003) and Kolev et al. (2008) and regress one year ahead GAAP operating earnings on the interaction term between managerial reputation and the associated non-GAAP exclusions as follows:

$$OI_{t+1} = \alpha_0 + \beta_1 TOTALEXCL + \beta_2 REP + \beta_3 TOTALEXCL*REP + \beta_4 NONGAAPEARN + \beta_5 EARVOL + \beta_6 POST + \beta_7 ACCR + \beta_8 SALES + \beta_9 SIZE + \beta_{10} LEV + \beta_{11} LOSS + \beta_{12} AUD + \beta_{13} GOV + \beta_{14} MBE + \beta_{15} MTB + \varepsilon \quad (3)$$

OI_{t+1} represents the earnings per share from operations one year ahead. Future GAAP earnings include expenses (such as special items) that are mechanically related to the non-GAAP exclusions in the current period and are not appropriate as a proxy for permanent earnings (Kolev et al., 2008; Frankel et al., 2011). Following Kolev et al. (2008), I use future operating earnings as a proxy for permanent earnings because future operating earnings excludes nonrecurring special items, but includes recurring items that might be excluded by managers as non-recurring items.

The coefficient β_1 represents the quality of non-GAAP earnings exclusions (TOTALEXCL) and is expected to be negative, which suggests that non-GAAP exclusions are not perfectly transitory (Doyle et al., 2003; Kolev et al., 2008). The coefficient β_2 represents the effect of managerial reputation on a company's future performance and is expected to be positive since managers with higher reputations may achieve better performance for a company than do managers with lower reputations.

My main focus is β_3, the interaction term between non-GAAP exclusions and managerial reputation. If managerial reputation incentive can prevent managers from opportunistically disclosing non-GAAP earnings, then the incremental effect of managerial reputation should be positive. Therefore, I examine the interaction between managerial reputation and non-GAAP exclusions to shed light on H2 and expect the coefficient of interaction term β_3 to be positive, consistent with H2.

I include non-GAAP earnings (NONGAAPEARN) as a control variable and the expected coefficient β_4 should be positive because prior research shows that non-GAAP earnings is value relevant and investors use it to predict a firm's future operating earnings (Lougee and Marquardt, 2004; Entwistle, Feltham, and Mbagwu, 2010; Frankel et al., 2011; Kolev et al., 2008). I also include some other control variables that may affect both the quality of non-GAAP exclusions and future operating earnings.

SAMPLE SELECTION AND DESCRIPTION

Sample Selection

I obtain quarterly earnings data over the 1997-2012 periods from the unadjusted detail *I/B/E/S* database, my source for non-GAAP earnings. I begin my sample in 1998 because pro forma earnings were not widely reported prior to 1998 (Black et al., 2011; Bhattacharya et al., 2004). The non-GAAP earnings data from 1997 are included for calculating non-GAAP disclosures in the prior year. The initial sample starts with 357,198 quarterly non-GAAP earnings observations over the 1997 to 2012 periods. To examine the effect of managerial reputation, I obtain CEO information from *Execucomp* and eliminate 37,377 firm-year observations missing from *Execucomp*. I exclude 4,361 observations from the utilities industry (SIC codes 4900-4999) and the financial service industry (SIC codes 6000-6999). The final sample for quality of non-GAAP earnings hypotheses tests includes 12,754 firm-year observations.

Sample Description

Table 1 presents the descriptive statistics for all variables. All continuous variables are winsorized at the 1% and 99% levels to mitigate the effect of outliers. If earnings per share is reported on the primary basis, I convert it to the diluted basis since all companies are required to report diluted earnings per share since 1998. Following Doyle et al. (2003) and Kolev et al. (2008), I scale the GAAPEARN, NONGAAPEARN, and TOTALEXCL variables by total assets per share. Therefore, the interpretation of these variables is based on the one dollar scale.

TABLE 1
PANEL A: DESCRIPTIVE STATISTICS for the TOTAL SAMPLE

Variable	Mean	Standard Deviation	25th Percentile	Median	75th Percentile
NonGAAPEXIST	0.744	0.436	0.000	1.000	1.000
NonGAAPFREQ	2.030	1.585	0.000	2.000	4.000
NONGAAP	0.064	0.066	0.033	0.061	0.097
GAAP	0.047	0.096	0.021	0.054	0.092
TOTALEXCL	0.024	0.050	0.000	0.006	0.022
OI	0.059	0.074	0.029	0.058	0.094
MA_SCORE	0.018	0.136	-0.072	0.006	0.095
COMP	6.848	0.708	6.402	6.819	7.251
TENURE	7.994	7.289	2.751	5.671	10.838
EARVOL	0.016	0.022	0.005	0.008	0.017
POST	0.743	0.437	0.000	1.000	1.000
ACCR	0.010	0.033	-0.007	0.005	0.021
SALES	0.102	0.221	-0.005	0.080	0.178
SIZE	7.432	1.472	6.364	7.284	8.356
LEV	0.207	0.168	0.047	0.199	0.320
LOSS	0.108	0.311	0.000	0.000	0.000
AUD	0.907	0.290	1.000	1.000	1.000
GOV	0.703	0.187	0.600	0.750	0.846
MBE	0.640	0.480	0.000	1.000	1.000
MTB	3.151	3.163	1.494	2.286	3.693
LAGDISC	0.737	0.440	0.000	1.000	1.000

Notes:
This table provides descriptive statistics for the sample. The final sample includes 12,754 observations. Variables are defined as following:

NONGAAPEXIST = an indicator variable equal to 1 if the quarterly non-GAAP exclusion is positive or negative, and 0 otherwise;
NONGAAPFREQ = the frequency of non-GAAP earnings disclosure measured as the number of quarters in a year where non-GAAP exclusions are non-zero;
TOTALEXCL = total non-GAAP exclusions calculated as the absolute value of the difference between non-GAAP earnings and GAAP earnings;
NONGAAPEARN = non-GAAP earnings per share from the I/B/E/S database;
GAAPEARN = GAAP earnings before extraordinary items from Compustat;
OI = Earnings per share from operations;
REP = manager's reputation measurement as defined in section 4.1;
COMP = manager's total cash compensation measured as salary and bonus;
TENURE = tenure measured as the number of years an executive served as CEO;
EARVOL = earnings volatility measured as the standard deviation of return on assets over at least six of the preceding eight quarters;

ACCR	=	accounting conservatism measured as the average total accruals scaled by total assets over a 6-year period;
SALES	=	the percentage change in the sales revenue;
SIZE	=	the natural log of total assets;
LEV	=	the ratio of debt to total assets;
LOSS	=	an indicator variable equal to 1 if the company's current operating earnings is negative, and 0 otherwise;
AUD	=	an indicator variable equal to 1 if the company is audited by the Big 4, and 0 otherwise;
GOV	=	corporate governance measured as the percent of board members that are independent in the fiscal year;
MBE	=	an indicator variable equal to 1 if non-GAAP earnings meet or beat analysts' forecasts and GAAP operating earnings miss the benchmark, and 0 otherwise;
MTB	=	the ratio of market value of equity divided by book value of equity;
LAGDISC	=	an indicator variable equal to 1 if a company discloses non-GAAP earnings in the prior year, and 0 otherwise;

PANEL B: DESCRIPTIVE STATISTICS for the SAMPLE by NONGAAPEXIST

	Firms with NonGAAPFREQ = 0			Firms with NonGAAPFREQ > 0						
Variable	(N = 3,263)			(N =9,491)			Test of difference [a]			
	Mean	Median	SD	Mean	Median	SD	t value		z value	
NONGAAPFREQ	0.000	0.000	0.000	2.728	3.000	1.214	-218.84	***	-87.69	***
NONGAAPEARN	0.078	0.075	0.072	0.060	0.056	0.063	13.00	***	17.50	***
GAAPEARN	0.076	0.075	0.083	0.037	0.047	0.098	21.91	***	26.25	***
TOTALEXCL	0.000	0.000	0.000	0.032	0.012	0.056	-55.33	***	-86.07	***
OI	0.078	0.075	0.074	0.052	0.053	0.074	17.56	***	21.69	***
MA_SCORE	0.038	0.028	0.132	0.011	-0.001	0.136	9.81	***	10.97	***
COMP	6.782	6.746	0.753	6.870	6.843	0.691	-5.89	***	-7.18	***
TENURE	9.364	6.753	8.189	7.523	5.337	6.890	11.52	***	11.12	***
EARVOL	0.013	0.007	0.019	0.017	0.009	0.024	-9.39	***	-10.01	***
POST	0.734	1.000	0.442	0.746	1.000	0.435	-1.43		-1.43	
ACCR	0.005	0.003	0.030	0.012	0.006	0.034	-10.51	***	-10.48	***
SALES	0.123	0.100	0.197	0.094	0.072	0.228	6.82	***	10.32	***
SIZE	7.017	6.808	1.408	7.575	7.438	1.467	-19.31	***	-19.43	***
LEV	0.174	0.154	0.164	0.219	0.214	0.168	-13.44	***	-14.11	***
LOSS	0.066	0.000	0.248	0.123	0.000	0.328	-10.41	***	-9.07	***
AUD	0.875	1.000	0.331	0.918	1.000	0.274	-6.75	***	-7.38	***
GOV	0.674	0.714	0.193	0.713	0.750	0.184	-9.96	***	-11.55	***
MBE	0.673	1.000	0.469	0.629	1.000	0.483	4.60	***	4.53	***
MTB	3.522	2.583	3.372	3.023	2.195	3.078	7.45	***	10.56	***
LAGDISC	0.481	0.000	0.500	0.825	1.000	0.380	-35.93	***	-38.50	***

Notes:

a. This table presents descriptive statistics for firms with non-GAAP disclosures and for firms without non-GAAP disclosures separately.

b. Differences in means tests are Student t-tests; differences in medians tests are Wilcoxon rank-sum tests. Two-tailed p-values are presented.
c. *, **, *** indicate 0.10, 0.05, and 0.01 significance levels.

Table 1 Panel A presents the summary statistics for all variables. In the sample, 74.4% of the 12,754 firm-year observations are non-GAAP earnings exclusions observations, with a frequency of 2.03 non-GAAP disclosures per year. The mean of NONGAAPEARN (6.40% of the asset per share) is higher than the mean of GAAPEARN (4.70% of the asset per share), indicating that managers, on average, make income-decreasing non-GAAP earnings adjustments. Regarding managerial reputation variables, the mean (median) of MA_SCORE is 0.018 (0.006) and is highly skewed. To make the residual value of MA_SCORE more comparable within industries across time, I report my results using the decile rank of the managerial ability score by year and industry in my regression analysis.

Table 1 Panel B presents the descriptive statistics of sample firms by NONGAAPEXIST. It shows that firms without non-GAAP earnings disclosures have a statistically higher MA_SCORE, consistent with the first hypothesis. Regarding control variables, firms with non-GAAP disclosures have shorter CEO tenures and higher CEO compensation. These are larger firms with lower GAAP earnings, higher earnings volatility, higher leverage ratios, lower market-to-book value and they are more likely to have losses and miss earnings benchmarks. These characteristics are consistent with prior research related to non-GAAP earnings disclosures.

EMPIRICAL RESULTS

The Likelihood and Frequency of Non-GAAP Earnings Disclosures

Table 2 Panel A reports logistic regression results for the association between managerial reputation and the likelihood of non-GAAP earnings disclosures. The regression results of the MA_SCORE measure support the hypothesis that there is a negative relationship between managerial reputation and the likelihood of non-GAAP earnings disclosures. The overall estimated logistic regression model is significant with the Max-rescaled R^2 = 23.19 %. The coefficient of MA_SCORE is negative and significant (β_1 = -0.317, $p < 0.01$), suggesting that when MA_SCORE decreases by one rank, the odds of a firm disclosing non-GAAP earnings increase by 37.36%.

TABLE 2
PANEL A: LOGISTIC REGRESSION of NON-GAAP EXCLUSIONS

		MA_SCORE		
Variable	Expected Sign	Coefficient	Chisq-statistics	
Intercept		-0.651	1.83	
REP	H1: -	-0.317	7.91	***
COMP	-	-0.092	3.20	*
TENURE	-	-0.015	21.76	***
EARVOL	+	4.538	9.91	***
POST	-	-0.143	1.33	
ACCR	+	2.651	7.28	***
SALES	+	-0.353	11.01	***
SIZE	+	0.263	70.77	***
LEV	+	0.849	21.10	***
LOSS	+	0.494	23.30	***
AUD	-	0.189	5.20	**
GOV	-	0.540	14.44	***
MBE	+	0.130	2.51	
MTB	-	-0.057	46.96	***
LAGDISC	+	1.349	621.56	***
Industry and Year		Yes		
Log Likelihood		2186.167		
Max-rescaled Rsq		23.19%		
N		12,754		

PANEL B: ORDINAL LOGISTIC REGRESSION of NON-GAAP EXCLUSIONS

		MA_SCORE		
Variable	Expected Sign	Coefficient	Chisq-statistics	
Intercept				
REP	H1: -	-0.180	3.43	*
COMP	-	-0.056	1.90	
TENURE	-	-0.012	13.11	***
EARVOL	+	2.441	5.27	**
POST	-	0.216	6.15	**
ACCR	+	4.583	32.65	***
SALES	+	-0.026	0.09	
SIZE	+	0.264	104.70	***
LEV	+	0.762	23.06	***
LOSS	+	0.543	41.37	***
AUD	-	0.205	7.81	***

GOV	-	0.504	17.23	***
MBE	+	0.181	5.42	**
MTB	-	-0.049	41.91	***
LAGDISC	+	1.436	884.86	***
Industry and Year		Yes		
Log Likelihood		3746.4947		
Max-rescaled Rsq		26.63%		
N		12,754		

Notes:

a. This table presents logistic regressions and ordinary logistic regressions of non-GAAP disclosures on managerial reputation.
b. *, **, *** indicate 0.10, 0.05, and 0.01 significance levels.

Regarding control variables, the signs of most control variables are consistent with the prediction. Cash compensation, tenure, sales growth, and market-to-book value are negatively related to the non-GAAP earnings disclosure. The coefficient of earnings volatility, accrual, size, leverage, auditor, and government control are positive. The coefficient of LAGDISC is positive and significant, suggesting that firms disclose non-GAAP earnings in the prior year are more likely to disclose it in the current year. No significant relationship is found for POST and MBE.

Table 2 Panel B reports ordinal logistic regression results for the association between managerial reputation and the frequency of non-GAAP earnings disclosures. The regression result of the MA_SCORE measure supports the hypothesis that there is a negative significant relationship between managerial reputation and the frequency of non-GAAP earnings disclosures. The overall estimated logistic regression model is significant with the Max-rescaled R^2 = 26.63 %. The coefficient of MA_SCORE is negative and marginally significant (β_1= -0.180, $p < 0.10$), suggesting that when MA_SCORE decreases by one rank, the odds of a firm disclosing non-GAAP earnings increase by 19.62%.

Regarding control variables, the results of most control variables are consistent with the prediction. The coefficient of POST is positive and significant ($\beta_5 = 0.216$, $p<0.01$), suggesting that companies make more frequent non-GAAP earnings disclosures although there was an initial dip after Regulation G.

Overall, the results using the MA_SCORE measure for reputation in Table 2 support H1 and suggest that managers with higher reputations are less likely to disclose non-GAAP earnings. It also indicates that the non-GAAP earnings measure might be a tool that managers use to manipulate reported earnings to meet performance benchmarks. Managers with higher reputations are more concerned about their reputations and try to avoid any perceived opportunistic behavior.

The Quality of Non-GAAP Earnings Disclosures

The result of hypothesis 1 indicates that the non-GAAP earnings measure might be a tool that managers use to manipulate reported earnings to meet performance benchmarks. If so, there should be a negative relationship between non-GAAP exclusions and future operating earnings. To confirm the negative relationship between non-GAAP exclusions and future operating earnings documented in prior research (Kolev et al., 2008; and Brown et al., 2012), I first estimate a model similar to equation (3) without managerial reputation variables. The result (untabulated) is consistent with prior research with the coefficient of TOTALEXCL equal to -0.134, $p<0.01$, suggesting that some items excluded from GAAP earnings are recurring items. One dollar of non-GAAP exclusions in the current year is associated with 14 cents of expenses in the next year.

TABLE 3
REGRESSION of FUTURE OI ON NON-GAAP EXCLUSIONS

		MA_SCORE		
Variable	Expected Sign	Coefficient	t-statistics	
Intercept	?	-0.005	-0.78	
TOTALEXCL	-	-0.055	-1.29	
REP	+	0.008	3.32	***
TOTALEXCL* REP	H2: +	-0.151	-2.23	**
NONGAAPEARN	+	0.702	33.17	***
EARVOL	-	-0.148	-3.81	***
POST	?	0.007	2.72	***
ACCR	+	0.075	2.70	***
SALES	+	-0.019	-5.37	***
SIZE	+	0.001	1.97	*
LEV	-	-0.004	-1.03	
LOSS	-	-0.016	-5.08	***
AUD	+	-0.001	-0.52	
GOV	+	-0.004	-1.36	
MBE	+	0.008	7.65	***
MTB	+	0.002	6.69	***
Industry and Year		Yes		
Adj Rsq		55.32%		
N		12,754		

Notes:

a. This table presents regressions of future operating earnings on the non-GAAP exclusions associated with managerial reputation.
b. *, **, *** indicate 0.10, 0.05, and 0.01 significance levels.

Table 3 reports main results for the association among managerial reputation, non-GAAP exclusions and future operating earnings. The overall estimated regression model using the MA_SCORE measure in the first column is significant with the adjusted $R^2 = 55.32\%$. The coefficient of TOTALEXCL is negative and marginally significant, suggesting that excluded items are associated with future operating earnings. Managers exclude some recurring expense items that should not be excluded, consistent with the opportunistic perspective on non-GAAP earnings disclosures (Doyle et al., 2003; Kolev et al., 2008; and Brown et al., 2012). The coefficient of MA_SCORE is positive and significant ($\beta_2 = 0.008$, $p<0.01$), which suggests that managers with higher reputations achieve better earnings performance.

The coefficient of non-GAAP exclusions interacted with MA_SCORE is also negative and significant ($\beta_3 = -0.151$, $p<0.05$), which is opposite to my prediction[iii]. The result suggests that although reputable managers are less likely to disclose non-GAAP earnings, when they disclose non-GAAP earnings, the total negative effect is significant ($\beta_1 + \beta_3 = 0$, F test: p-value < 0.001).

The coefficient of NONGAAP earnings is positive and significant ($\beta_4 = 0.702$, $p<0.01$), suggesting that non-GAAP earnings is value relevant and one dollar of non-GAAP earnings in the current period is associated with 70 cents of future operating earnings. Regarding other control variables, most results are consistent with the prediction.

Overall, the main result is contrary to my prediction and managers with higher reputations exclude more recurring items that are related to future earnings to meet performance benchmarks. The results are consistent with the Rent Extraction Hypothesis and consistent with Malmendier and Tate (2009) that reputable managers may have more pressure to keep expected good performance. To maintain their reputations, they may manipulate financial information to meet earnings benchmarks. Another reason might be that managers' wealth incentives dominate their reputation incentives. For the additional test, I include the compensation variable interacted with the non-GAAP exclusions and estimate the model again. The coefficient of interaction between non-GAAP exclusions and compensation is marginally significant of -0.050 ($p<0.10$). However, the total net effect is not significant. Therefore, the compensation incentive may not explain the result.

ADDITIONAL ANALYSIS

Income Increasing and Income Decreasing Non-GAAP Exclusions

In the main analysis, I examine how managerial reputation affects the total non-GAAP exclusions. However, managerial reputation may have different effects on income-increasing (transitory gains) and income-decreasing (non-recurring expenses) non-GAAP adjustments. Excluding income-increasing items will decrease non-GAAP earnings. Thus, the motivation to exclude these items is more likely to be a desire to be informative rather than a desire to be opportunistic (Curtis et al., 2013). Then given Efficient Contracting Theory, I expect that managers with higher reputations make higher quality income-increasing adjusted non-GAAP earnings disclosures than do managers with lower reputations. To examine whether managerial reputation affects income-increasing and income-decreasing disclosures differently, I split the sample to estimate separate models. In the sample of non-GAAP disclosures, 19.70% of the disclosures are income-increasing adjustments and 80.3% of the disclosures are income-decreasing adjustments. Table 4 Panel A presents the results of income-decreasing adjusted non-GAAP earnings disclosures. The results of the MA_SCORE measure are consistent with the main findings that reputable managers exclude more recurring items that are related to future operating earnings.

TABLE 4
PANEL A: REGRESSION of FUTURE OI ON INCOME-DECREASING NON-GAAP EXCLUSIONS

Income-decreasing		MA_SCORE		
Variable	Expected Sign	Coefficient	t-statistics	
Intercept	?	-0.022	-2.75	***
NONGAAPEXCL	-	-0.084	-1.92	*
REP	+	0.009	3.04	***
NONGAAPEXCL*REP	H2: +	-0.142	-1.98	*
NONGAAPEARN	+	0.754	25.38	***
EARVOL	-	-0.200	-4.08	***
POST	?	0.007	2.09	**
ACCR	+	0.084	2.24	**
SALES	+	-0.026	-5.44	***
SIZE	+	0.002	3.18	***
LEV	-	0.002	0.32	
LOSS	-	-0.002	-0.69	
AUD	+	-0.002	-0.56	

GOV	+	0.000	0.03	
MBE	+	0.010	6.88	***
MTB	+	0.002	4.20	***
Industry and Year		Yes		
Adj Rsq		53.20%		
N		7,003		

PANEL B: REGRESSION of FUTURE OI ON INCOME-INCREASING NON-GAAP EXCLUSIONS

Income-increasing		MA_SCORE		
Variable	Expected Sign	Coefficient	t-statistics	
Intercept	?	0.001	0.07	
NONGAAPEXCL	-	-0.479	-1.96	*
REP	+	0.019	3.29	***
NONGAAPEXCL*REP	H2: +	0.759	2.17	**
NONGAAPEARN	+	0.655	19.59	***
EARVOL	-	-0.214	-2.44	**
POST	?	0.006	1.02	
ACCR	+	0.063	1.21	
SALES	+	-0.017	-2.24	**
SIZE	+	-0.001	-0.94	
LEV	-	-0.002	-0.27	
LOSS	-	0.010	1.64	
AUD	+	0.000	-0.10	
GOV	+	-0.004	-0.60	
MBE	+	0.007	3.14	***
MTB	+	0.002	3.83	***
Industry and Year		Yes		
Adj Rsq		52.12%		
N		2,513		

Notes:

a. This table presents regressions of future operating earnings on the income-decreasing exclusions and income-increasing exclusions associated with managerial reputation separately.
b. *, **, *** indicate 0.10, 0.05, and 0.01 significance levels.

Table 4 Panel B presents the results of income-increasing adjustments. There is some support for the Efficient Contracting explanation from the result of the MA_SCORE measure. The overall estimated regression model is significant with the adjusted R^2 = 52.12%. The coefficient of TOTALEXCL is negative and significant (β_1= -0. 479, $p<0.10$), which suggests that the transitory gains excluded by managers are not non-recurring items. These excluded items are negatively related to future operating earnings and one dollar of income-increasing exclusions is associated with 48 cents of the future operating earnings. The coefficient of the interaction term between MA_SCORE and TOTALEXCL is positive and significant (β_3= 0.759, $p<0.05$), suggesting that managerial reputation can mitigate the negative effect of income-increasing non-GAAP adjustments. Therefore, when managers disclose

income-increasing non-GAAP earnings, reputable managers are more likely to disclose higher quality income-increasing non-GAAP earnings, which is consistent with the Efficient Contracting explanation.

Overall, the results suggest that reputable managers may have different incentives when they disclose income-increasing and income-decreasing non-GAAP earnings. The results of income-decreasing disclosures are consistent with the rent extraction explanation and the results of income-increasing disclosures are consistent with the Efficient Contracting explanation.

Special Items and Other Exclusions

Doyle et al. (2003) find that only other exclusions are related to future performance and special items are not related to future performance. McVay (2006) finds that special items excluded are negatively related to future core earnings. Therefore, managerial reputation may have a different effect on special items exclusions and other exclusions. I decompose total exclusions into special items exclusions and other exclusions to estimate the same model. The results in Table 5 show that the special items exclusions variable is positively and marginally significantly related to future operating earnings. However, when the special items exclusions variable is interacted with managerial reputation, it is not significantly related to future operating earnings. The results for other exclusions are consistent with the main findings. Coefficients of both other exclusions and the interaction term are negatively and significantly related to future operating earnings. Therefore, the main results may be driven by other exclusions.

TABLE 5
REGRESSION of FUTURE OI ON SPECIAL ITEMS and OTHER EXCLUSIONS

		MA_SCORE		
Variable	Expected Sign	Coefficient	t-statistics	
Intercept	?	-0.011	-1.84	*
SPECIAL	-	0.086	1.68	*
OTHERS	-	-0.420	-5.89	***
REP	+	0.004	2.21	**
SPECIAL*REP	+	-0.112	-1.44	
OTHERS*REP	H2: +	-0.227	-1.84	*
NONGAAPEARN	+	0.741	37.31	***
EARVOL	-	-0.146	-3.93	***
POST	?	0.008	3.01	***
ACCR	+	0.082	3.11	***
SALES	+	-0.018	-5.21	***
SIZE	+	0.001	2.68	***
LEV	-	-0.003	-0.78	
LOSS	-	-0.005	-2.23	**
AUD	+	-0.001	-0.50	
GOV	+	-0.004	-1.49	
MBE	+	0.010	9.90	***
MTB	+	0.002	6.36	***
Industry and Year		Yes		
Adj Rsq		56.70%		
N		12,754		

Notes:

a. This table presents regressions of future operating earnings on the special items exclusions and other exclusions associated with managerial reputation separately.
b. *, **, *** indicate 0.10, 0.05, and 0.01 significance levels.

Self-selection Bias and Endogeneity Issue

Since non-GAAP earnings disclosures are voluntary disclosures, managers can choose to disclose non-GAAP earnings or not. Therefore, the sample may suffer from self-selection bias because of some unobservable factors that could affect the managers' decision to disclose non-GAAP earnings. To correct the self-selection bias, I estimate a two-stage Heckman (1979) model and the result is consistent with the main findings. In addition, there may be some omitted variables that can jointly affect managerial reputation and managers' decision to disclose non-GAAP earnings, which could bias the coefficient of managerial reputation upward or downward. To examine whether the endogeneity issue exists, I conduct a Hausman test and the result is consistent with the main findings.

CONCLUSION

Motivated by the efficient contracting theory and the credibility issue of non-GAAP earnings disclosures documented in prior research, I examine how managerial reputation, a managerial incentive, affects the quality of non-GAAP earnings disclosures. I find evidence that managers with higher reputations are less likely to disclose non-GAAP earnings because the non-GAAP earnings measure is perceived to be an earnings management tool, which is consistent with the Efficient Contracting Theory. I also find that when managers disclose non-GAAP earnings, managers with higher reputations exclude more recurring items related to future operating performance in order to meet performance benchmarks, which is consistent with the Rent Extraction explanation. Further analysis shows that the main results are driven by income-decreasing adjustments and exclusions of other items. The results of income-increasing adjustments are consistent with the Efficient Contracting Theory.

The study contributes to the non-GAAP earnings literature by providing evidence that managerial reputation is an important concern when managers make non-GAAP earnings disclosures. However, when a company's earnings performance misses benchmarks, reputable managers opportunistically exclude more recurring items to meet benchmarks so as to protect their reputations. Second, the study provides evidence that managerial reputation has different effects on income-increasing and income-decreasing non-GAAP adjustments. Income-decreasing adjustments are consistent with the Rent Extraction explanation and income-increasing adjustments are consistent with the Efficient Contracting explanation.

I acknowledge some limitations in this study. First, the study uses I/B/E/S actual earnings instead of pro forma earnings to conduct empirical tests. Although the I/B/E/S actual earnings are from companies' press releases, these earnings numbers have been adjusted by analysts[iv]. Therefore, the I/B/E/S actual earnings might include analysts' biases, which could affect my results. Second, the measure of managerial reputation is not perfect. Although Demerjian et al. (2012) test the validity of this measure and show that it is a better measure in comparison with other measures, the residual value of the firm efficiency regression model might capture some other omitted factors.

END NOTES

1. Generally, pro forma earnings refer to adjusted earnings metrics disclosed by managers in press releases, and Street earnings refer to adjusted earnings numbers disclosed by analyst forecast tracking services like I/B/E/S or First Call. The non-GAAP earnings measure is a more generic term and can refer to either source of adjusted earnings. I use Street earnings in this paper.
2. Managerial ability data are obtained from Demerjian et al. (2012).
3. I re-estimate the models by including the sign of total exclusions. The results are consistent with the main findings.
4. Bhattacharya et al. (2003) compare the Street earnings number and hand collected pro forma earnings number and find that 65% of hand-collected pro forma earnings coincide with the number from the I/B/E/S database.

REFERENCES

Baik, B., Farber, D. B., & Lee, S. (2011). CEO ability and management earnings forecasts. *Contemporary Accounting Research,* 28(5), 1645-1668.

Baik, B., Brockman,P. Farber, D. B., & Lee, S. (2010). CEO reputation and corporate opacity. Working paper, Seoul National University, Seoul.

Bansal, N., A., Seetharaman, & Wang, F. (2013). Managerial risk-taking incentives and non-GAAP earnings disclosures. *Journal of Contemporary Accounting & Economics,* 9(1), 100-121.

Bhattacharya, N., Black, E. L., Christensen, T. E., & Larson, C. R. (2003). Assessing the relative informativeness and permanence of pro forma earnings and GAAP operating earnings. *Journal of Accounting and Economics,* 36(1–3), 285-319.

Bhattacharya, N., Black, E. L., Christensen, T. E., & Mergenthaler, R. D. (2004). Empirical evidence on recent trends in pro forma reporting. *Accounting Horizons,* 18(1), 27-43.

Black, D. E. and Christensen, T. E. (2009), US Managers' Use of 'Pro Forma' Adjustments to Meet Strategic Earnings Targets. *Journal of Business Finance & Accounting*, 36(3-4), 297–326.

Bradshaw, M. T., & Sloan, R. G. (2002). GAAP versus the street: An empirical assessment of two alternative definitions of earnings. *Journal of Accounting Research,* 40(1), 41-66.

Brown, N. C., Christensen, T. E., & Elliott, W. B. (2012). The timing of quarterly pro forma earnings announcements. *Journal of Business Finance & Accounting,* 39(3-4), 315-359.

Brown, N. C., Christensen, T. E., Elliott, W. B., & Mergenthaler, R. D. (2012). Investor sentiment and pro forma earnings disclosures. *Journal of Accounting Research,* 50(1), 1-40.

Curtis, A., McVay, S.E., & Whipple, B.C., (2013). The disclosure of non-GAAP earnings information in the presence of transitory gains. *The Accounting Review*, 89(3), 933-958.

Demerjian, P., B. Lev, & McVay S. (2012). Quantifying managerial ability: A new measure and validity tests. *Management Science*, 58(7), 1229-1248.

Demerjian, P., M. Lewis, B. Lev, & McVay S. (2013). Managerial ability and earnings quality. *The Accounting Review*, 88 (2): 463–498

Desai, H., Hogan, C. E., & Wilkins, M. S. (2006). The reputational penalty for aggressive accounting: Earnings restatements and management turnover. *The Accounting Review,* 81(1), 83-112.

Doyle, J., R. Lundholm, & Soliman, M. (2003). The predictive value of expenses excluded from 'pro forma' earnings. *Review of Accounting Studies,* 8(2), 145-174.

Dye, R. (1985). Disclosure of Nonproprietary Information. *Journal of Accounting Research,* 23(1), 123-145.

Entwistle, G., Feltham, G., & Mbagwu, C., (2010). The value relevance of alternative earnings measures: A comparison of pro forma, GAAP, and I/B/E/S earnings. *Journal of Accounting, Auditing & Finance,* 25(2), 261-288.

Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy,* 88(2), 288-307.

Francis, J., Huang, A. H., Rajgopal, S., & Zang, A. Y. (2008). CEO reputation and earnings quality. *Contemporary Accounting Research,* 25(1), 109-147.
Frankel, R., McVay, S., & Soliman, M. (2011). Non-GAAP earnings and board independence. *Review of Accounting Studies*, 16(4), 719-744.
Graham, J. R., Harvey, C. R., & Rajgopal, S. (2005). The economic implications of corporate financial reporting. *Journal of Accounting and Economics,* 40(1–3), 3-73.
Heckman, J. J. 1979. Sample selection bias as a specification error. *Econometrica*, 47(1), 153-161.
Isidro, H., & Marques, A. (2009). Beating strategic earnings benchmarks with non-GAAP figures: International evidence. Retrieved September 1, 2009, from http://ssrn.com/abstract=1465677.
Jennings, R. & Wang, X. (2011). Does Accounting conservatism affect capital market demand for value relevant information? Evidence from voluntary disclosure of non- GAAP earnings. Working paper, University of Texas at Austin, Texas.
Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics,* 3(4), 305-360.
Koh, K. (2011). Value or glamour? An empirical investigation of the effect of celebrity CEOs on financial reporting practices and firm performance. *Accounting & Finance,* 51(2), 517-547.
Kolev, K., C. Marquardt, & McVay, S. E. (2008). SEC scrutiny and the evolution of non-GAAP reporting. *The Accounting Review,* 83(1), 157-184.
Lougee, B. A., & Marquardt, C. A. (2004). Earnings informativeness and strategic disclosure: An empirical examination of "pro forma" earnings. *The Accounting Review, 79*(3), 769-795.
Malmendier, U., & Tate, G. (2009). Superstar CEOs. *The Quarterly Journal of Economics,* 124(4), 1593-1638.
Marques, A. (2010). Disclosure strategies among S&P 500 firms: Evidence on the disclosure of non-GAAP financial measures and financial statements in earnings press releases. *The British Accounting Review,* 42(2), 119-131.
McVay, S. E. (2006). Earnings management using classification shifting: An examination of core earnings and special items. *The Accounting Review,* 81(3), 501-531.
Mercer, M. (2004). How do investors assess the credibility of management disclosures? *Accounting Horizons,* 18(3), 185-196.
Milbourn, T. T. (2003). CEO reputation and stock-based compensation. *Journal of Financial Economics,* 68(2), 233-262.
Rajgopal, S., Shevlin, T., & Zamora, V. (2006). CEOs' outside employment opportunities and the lack of relative performance evaluation in compensation contracts. *The Journal of Finance*, 61(4), 1813-1844.
Securities and Exchange Commission (SEC). 2003. Final Rule: Conditions for Use of Non-GAAP Financial Measures. Release No 33-8176. Retrieved September, 2013, from https://www.sec.gov/rules/final/33-8176.htm.

Corresponding Author
Yun Cheng
Department of Accounting and Finance
Richards College of Business
University of West Georgia
1601 Maple Street
Carrollton, GA 30118
678-602-1231