

# **An Examination of Industry Leadership Reputation and Meeting or Beating Analysts' Expectations**

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*This study examines whether industry leaders, which have greater pressure to meet financial goals in order to maintain their competitive advantage in the market, exercise efficient or opportunistic behavior to meet or beat analysts' expectations (MBE). Specifically, we explore the association between reputation as industry leaders and MBE, and whether industry leaders MBE due to firm performance or through strategically managing earnings and expectations. We find that most industry leaders do not use strategies to habitually MBE, habitual MBE firms are less likely to strategically MBE, and industry leaders are more likely to habitually MBE than non-industry leaders.*

## **INTRODUCTION**

The ethics of financial reporting has been a long-standing issue in the accounting profession. A major component of this issue stems from the discretion in generally accepted accounting principles, which allows managers to use judgment in preparing financial statements. Many believe that this discretion contributes to misleading financial reporting and a decline in business ethics. Over the years, a focus of positive accounting research has been whether managers exercise efficient or opportunistic behavior (Watts and Zimmerman, 1978; Christie and Zimmerman, 1994) when faced with accounting discretion. Do managers use discretion in GAAP opportunistically to meet financial goals or do they use accounting discretion efficiently to ensure financial reporting quality? The numerous accounting scandals in the early 2000s and the financial crisis that began in the late 2000s are suggestive of the common use of opportunistic behavior and unethical reporting practices.

No longer is it acceptable for businesses simply to satisfy shareholders while complying with laws and regulations. Research suggests that rules alone do not encourage ethical behavior but corporate culture has more impact on behavior (Brief, Dukerich, Brown and Brett, 1996; Bowen, 2004; Carpenter and Reimers, 2005; Ethics Resource Center, 2005). Accordingly, corporate social responsibility is calling upon firms to consider ethical and social consequences of their actions beyond the requirements of laws and regulations. This call shines light on a stream of literature that examines the incentives and opportunistic behavior of managers in various financial settings.<sup>1</sup> A specific financial setting that has received much attention is meeting or beating analysts' expectations. Investors' immediate reaction to the phenomena of meeting or beating analysts' expectations has increased managers' incentives to use

controversial practices such as income smoothing, earnings management and expectations management to maintain and improve market valuations.

There is high demand for corporate social responsibility in the financial reporting area. Financial reporting is an important newsworthy event. Stock prices quickly incorporate the news associated with earnings and meeting or beating analyst forecasts, which can significantly impact market share. In an attempt to signal future financial performance and increase market capital, firms are pressured to meet or beat analyst forecasts. This pressure is even greater for firms that have reputations as industry leaders. As industry leaders maintain their reputational status by outperforming competitors, they are exposed to greater analysts following, institutional ownership and media exposure. Repeatedly, or habitually, meeting or beating analyst forecasts can further enhance a firm's reputation and form a competitive advantage that makes it more difficult for other firms to compete. While industry leaders compete to remain at the top, it is important that they set standards for the industry and maintain a balance between financial gain and corporate social responsibility.

Empirical management research confirms a positive relation between reputation and firm performance. The literature, however, suggests that this relation may occur in both directions - reputation can affect firm performance and firm performance can affect reputation (McGuire et al., 1990; Fombrun and Shanley, 1990; Roberts and Dowling, 2002). Research studies also reveal that reputation concerns affect the behavior of financial analysts, auditors and directors (Larcker and Richardson, 2004; Jackson, 2005; Fich and Shivdasani, 2007). This leads to question whether reputation concerns also affect the behavior of industry leaders that outperformed and are expected to continue outperforming other firms in their industry. Do firms characterized as industry leaders habitually meet or beat analysts' expectations (HMBE) due to their financial performance or to protect their reputation? Do industry leaders use strategies more to HMBE than their non-industry leader counterparts? Which strategy is used by industry leaders to HMBE?

This study is motivated by the ethical responsibility that managers have to report high quality earnings to shareholders and the public. Studies report, however, that earnings and expectations management strategies are continuing to be used subsequent to the enactment of SOX. The use of these strategies raises questions about management's ethics. A survey of 649 managers reveals that many managers believe that if a practice is not explicitly prohibited or is only a slight deviation from the rules, it is ethical regardless of who is affected (Bruns and Merchant, 1990). A study by Grasso, Tilley and White (2009) reports that earnings management is viewed more questionable and less ethical in the post-SOX period than in the pre-SOX period. While the use of earnings management has been characterized as prevalent in the accounting profession, the premise is that firms that are performing poorly are more likely to engage in opportunistic behavior. Moreover, managers are interested in meeting or beating analysts' expectations primarily to influence stock prices and protect their careers and external reputation (Graham, Harvey and Rajgopal, 2005). Thus, industry leaders may experience greater pressure to use unethical practices when they risk missing analysts' expectations and losing market share.

While there is a significant amount of research on meeting or beating analysts' expectations (Payne and Robb, 2000; Brown, 2001; Bartov, Givoly and Hayn, 2002; Matsumoto, 2002; Burgstahler and Eames, 2003; Brown and Pinello, 2007; Koh, Matsumoto and Rajgopal, 2008), these studies have typically focused on actions taken by managers to avoid missing analysts' forecasts and characteristics associated with meeting or beating analysts' expectations. Most of the industry leadership research is grounded in the management and industrial-organization economics literature. To date, we are not aware of any studies that have examined the association of industry leadership reputation and meeting or beating analysts' expectations. Specifically, we explore whether reputation as an industry leader is associated with greater incentives to MBE. We find that industry leaders have greater incentives to MBE and are more likely to HMBE.

This study is also among one of the first to document the association between reputation and financial reporting quality. While there is an established stream of literature that explores reputation and financial performance in the management literature, we are only aware of one other study that explores the affect of reputation on financial reporting quality in the accounting literature. That study reports a positive

association between reputation and financial reporting quality in the context of restatements (Cao, Myers and Omer, 2012). We document that most industry leaders do not appear to engage in opportunistic behavior in order to habitually MBE. However, among the habitual MBE firms, it appears that industry leaders use strategies more to MBE than their non-industry leader counterparts. Furthermore, when they strategically MBE, they are more likely to manage earnings than expectations. Our study provides documentation in a newly emerging literature that financial reporting quality may still be compromised in particular settings (see Jones, 1991; Teoh, Welch and Wong, 1998; Shivakumar, 2000; Erickson and Wang, 1999).

The paper is structured as follows. The next section discusses background reputation literature. Section 3 presents our hypotheses. Section 4 describes the data sample and methodology used in the empirical analysis. Section 5 reports the results, and Section 6 provides concluding remarks.

## **BACKGROUND ON REPUTATION LITERATURE**

Reputation is an intangible asset that is used to predict future behavior based on past performance. Corporate reputations are critical due to their potential for value creation. A firm's good reputation can form a competitive advantage and signal good prospects for long-term financial performance. It is vital in influencing investor decisions (Milgrom and Roberts, 1986a), generating higher returns (Wilson, 1985), charging premium prices (Klein and Leffler, 1981; Milgrom and Roberts, 1986b) and attracting quality management.

The empirical reputation and management strategy literature report a positive relation between reputation and financial performance. Fombrun and Shanley (1990) report that accounting profitability significantly affects a firm's reputation. A study by McGuire, Schneeweiss and Branch (1990) reveals that the reputation and firm performance may occur in both directions - a firm's financial performance affects its reputation while reputation also affects its financial performance. A more recent study by Roberts and Dowling (2002) reports that a good corporate reputation contributes to sustained superior financial performance over time.

Empirical research suggests that reputation concerns affect the behavior of financial professionals, such as analysts, auditors and management. It has been documented that analysts issue less optimistic forecasts to protect their reputation (Jackson, 2005). Likewise, auditors behave in a manner consistent with building their reputation when there are rewards for future services (Mayhew, 2001). Reputation concerns also appear to be the primary determinant of auditor behavior with respect to preventing clients from making abnormal accrual choices (Reynolds and Francis, 2001; Chung and Kallapur, 2003; Larcker and Richardson, 2004). Furthermore, it appears that firms with higher reputation scores are less likely to misstate their financial statements (Cao et al., 2012).

While there is an emerging body of reputation research in accounting, no studies to date have explored how reputation impacts managers' behavior relating to MBE. Prior research commonly uses a reputation score as a proxy for reputation. This score, published in *Fortune in America's Most Admired Corporations*, is calculated from responses received from analysts and company executives and directors in an annual survey. Our study, however, uses industry leadership as a proxy for reputation. Just as firms compete for customers, firms also compete for reputational status as industry leaders (Fombrun and Shanley, 1990). Industry leadership is an objective measure of reputation rather than a perceived measure that may be bias based on the opinion of executives at competing firms.

## **HYPOTHESIS DEVELOPMENT**

A firm's financial performance is relative to the financial performance of its competitors. External financial statement users often compare the financial performance of competing firms when considering investment opportunities. In order to achieve increased market capital, firms seek to outperform their competitors. By MBE, firms can increase market capital and possibly achieve a competitive edge among their industry rivals that do not MBE. For many firms, sustaining industry leadership, outperforming

current industry leaders and mitigating the market share gap between themselves and industry leaders are key organizational goals (Ferrier et al., 1999).

Firms that repeatedly MBE experience even greater benefits, such as higher market returns and earnings response coefficients (Bartov et al., 2002; Kasznik and McNichols, 2002; Lopez and Rees, 2002). In order to increase market share and maintain a reputation as an industry leader, industry leaders will strive not only to MBE but to HMBE. The cross-sectional relation between reputation and firm performance, stated above, suggests that firms that have good reputations should be able to outperform other firms due to their sustained financial performance over time. Thus, we hypothesize the following:

*H1: There is a positive relation between industry leadership and the probability of habitually MBE.*

The act of MBE has gained increasing importance in our society, and the related pressure to achieve this threshold has resulted in creative financial reporting. Firms take actions, such as managing earnings upward or expectations downward to MBE (see Payne and Robb, 2000; Brown, 2001; Bartov et al., 2002; Matsumoto, 2002; Burgstahler and Eames, 2003; Brown and Pinello, 2007; Koh et al., 2008). Financial statement preparers have pressure to satisfy company executives and shareholders while also trying to create images of the organization and themselves as leaders (Davidson, Jiraporn, Kim and Nemeč, 2004).

As discussed above, reputation concerns can impact the behavior of financial professionals. Studies show that industry leaders are not particularly concerned with suffering peer rejection due to their non-conforming and illegitimate behavior (Deephouse, 1999; Phillips and Zuckerman, 2001), while low-status firms are more concerned with the legitimacy of their actions and conforming with acceptable practices (Phillips and Zuckerman, 2001). If industry leaders risk missing analysts' thresholds in a given quarter, they may manage earnings upward or expectations downward to prevent missing the threshold. While industry leaders are considered financially sound firms, they have strong economic incentives to maintain their reputation in the industry. These reputation concerns can result in industry leaders being more prone to engage in strategic reporting due to the high cost associated with not MBE. Accordingly, we predict the following:

*H2: Industry leaders are more likely to engage in strategic MBE than non-industry leaders.*

Earnings management and expectations management are two strategies frequently used to MBE. Studies report that firms still experience rewards to MBE when it is likely to have been achieved through earnings or expectations management (Bartov et al., 2002; Koh et al., 2008). Williams et al. (2006) suggest that this market reward to MBE may be the result of the market's inability to recognize strategies used by firms to MBE. If firms rely on strategies to MBE, they must consider the costs associated with the use of the strategies. While expectations management is the less costly strategy, it is also the more transparent strategy.<sup>2</sup> Due to the scrutiny of large firms by investors and the media, industry leaders will be less likely to repeatedly manage expectations as a strategy to MBE without being penalized. On the other hand, earnings management is the more costly but less transparent strategy.<sup>3</sup> It is difficult to detect earnings management due to manager discretion inherent in accrual accounting and the numerous methods that can be used to manage or smooth earnings. If industry leaders must rely on strategies to MBE and are not particularly concerned with peer rejection due to their actions (as discussed above), they will use the strategy that is less transparent to the market even though it may be more risky. Furthermore, firms may "exaggerate their earnings in a world driven by multi-firm-comparisons simply because they expect other firms to do so" (Bagnoli and Watts, 2000). As such, we hypothesize the following:

*H3: Industry leaders are more likely to manage earnings than expectations to MBE.*

## SAMPLE AND METHODOLOGY

### Sample

The initial sample for this study consists of firms with reported earnings equal to or greater than analyst forecasts at the earnings announcement date from 1996 to 2006.<sup>4</sup> From this sample, we obtain habitual and non-habitual firms. Consistent with Bartov et al. (2002), firms that MBE in at least 75% of the quarters in the sample period are categorized as habitual MBE firms. We obtain a matched sample of firms to investigate the differences in industry leadership among habitual and non-habitual (sporadic) MBE firms. The matched firms are obtained from a pool of firms that sporadically MBE (less than 50% of the quarters) during the sample period. The non-habitual firms are matched with habitual firms based on MBE quarter, industry and closest in size, according to total assets. Our original sample of analyst forecasts and reported earnings are obtained from the I/B/E/S database. Following Bartov et al. (2002) we eliminate stale and contaminated forecasts. Accounting data is obtained from Compustat. Firm-quarter observations with insufficient accounting data are eliminated from the sample. The final sample includes 2,512 firm-quarter observations that MBE.

To categorize firms as industry or non-industry leaders, we use the Herfindahl index. The Herfindahl index is used commonly in the economics literature to measure firm size and degree of competition within an industry. Following Xu, Najand and Ziegenfuss (2006) we calculate the Herfindahl index as the sum of the squared market shares of all firms in the industry at the end of the year preceding the announcement. Firms in the top three (3) of an industry are categorized as industry leaders and all other firms are categorized as non-industry leaders.

Table 1 provides descriptive statistics based on industry leadership of the sample. Approximately 43% of the firms in the sample are industry leaders. The descriptive statistics show that industry leaders are significantly different than non-industry leaders. Specifically, industry leaders are more profitable and larger than non-industry leaders according to sales, total assets and market value. Average profitability, measured as net income, is \$131.15 million for industry leaders compared to \$59.64 million for non-industry leaders. The average market value is \$14,989 million for industry leaders and \$7,060 million for non-industry leaders. On average, industry leaders are 7.61 years older than their non-industry leader counterparts and have more complex operations. Additionally, industry leaders have significantly lower book to market ratios and MBE more in the 4<sup>th</sup> quarter. Non-industry leaders, on the other hand, beat expectations by an average of \$0.05 per quarter, \$0.01 more than industry leaders. There is no significant difference between firms that just meet analysts' expectations in the two categories.

### Earnings Management Model

To determine whether firms manage earnings upward to MBE, we use the modified-Jones model adopted by Kothari, Leone, and Wasley (2005). Accordingly, parameters for the model are estimated using all non-MBE firm quarter observations in the same 2-digit SIC codes as the sample firms. Abnormal accruals (*ABACC*) are calculated as the difference between actual total accruals for the MBE firm and the predicted nondiscretionary accruals estimated using the parameters from the model. We adopt the convention that abnormal accruals proxy for earnings management and we categorize firm-quarter observations with positive abnormal accruals as evidence of earnings management. Next, we further examine the firm-quarter observations with positive abnormal accruals to determine which firms would not have been able to MBE without managing earnings upward. Following Koh et al. (2008), we compute abnormal accruals per share as  $ABACCPS_q = (ABACC_{i,q} \times ASSET_{i,q-1}) / SHARES_q$ , where  $SHARES_q$  is the shares used to calculate EPS (Compustat #15).<sup>5</sup> If (EPS-ABACCPS) is less than the last analyst forecast, the firm quarter observation is considered to have managed earnings upward to MBE.

**TABLE 1**  
**DESCRIPTIVE STATISTICS FOR FIRM CHARACTERISTICS OF INDUSTRY LEADERSHIP**

	<b>Industry Leaders (n=1,081)</b>	<b>Non-Industry Leaders (n=1,431)</b>	<b>Difference (t-value)</b>
Sales	2213.80	898.92	1314.88 (10.57***)
Total Assets	9229.90	3986.80	5243.10 (9.93***)
Market Value	14989.00	7060.00	7930 (6.56***)
Profitability	131.15	59.64	71.51 (5.00***)
Surprise	0.04	0.05	-0.01 (5.69***)
Book-to-Mkt	0.35	0.42	0.07 (6.06***)
Complexity	0.64	0.48	0.16 (6.20***)
Age	29.02	21.41	7.61 (15.45***)
Quarter	0.32	0.23	0.08 (4.61***)
Meet	0.13	0.15	-0.02 (-1.57)

The sample consists of 2,512 firm quarter observations that MBE from 1996 to 2006. *Industry leaders* are firms that are in the top 3 of their industry based on the Herfindahl index. *Surprise* equals actual earnings minus latest consensus analyst forecast scaled by beginning of the quarter's stock price. *Complexity* is a complexity score where a dichotomous variable equals 1 if the firm reported restructuring costs, and 0 otherwise plus a dichotomous variable equal to 1 if the firm reported a foreign currency adjustment, and 0 otherwise. *Quarter* is a dichotomous variable equal to 1 if 4<sup>th</sup> quarter of the year, and 0 otherwise. *Meet* is a dichotomous variable equal to 1 if firm earnings equal analyst forecast, and 0 otherwise. \*\*\*, \*\*, and \* represent significance at the 1%, 5% and 10% levels, respectively.

### **Expectations Management Model**

To determine whether firms engage in expectations management to MBE, we use the directional path model of Bartov, Givoly, and Hayn (2002) and Bartov and Cohen (2007). We compare the actual sign of the earnings surprise<sup>6</sup> with the sign of the earnings surprise that would have occurred if there were no interim forecast revisions. Given that the sample consists of all firms that MBE, earnings surprise is positive for all firms. If forecast error<sup>7</sup> is negative, it means that analysts' expectations were higher earlier in the quarter, and have been guided downward before the earnings announcement. Accordingly, firm-quarter observations with negative forecast errors are considered to have managed expectations downward to MBE.

### *Regression Models*

To test the pattern of MBE associated with industry leadership, we use the following logistic regression:

$$MBE_{type_{iqt}} = \alpha_0 + \beta_1 IndLeader_{iqt} + \beta_2 Strategy_{iqt} + \beta_3 IndLeader * Strategy_{iqt} + \beta_4 Profit_{iqt} + \beta_5 Size_{iqt} + \beta_6 BTM_{iqt} + \beta_7 Qtr_{iqt} + \beta_8 Meet_{iqt} \quad (1)$$

*MBEtype* is a dichotomous variable equal to 1 if the firm HMBE and 0, otherwise. *IndLeader* is a dichotomous variable equal to 1 if the firm is in the top 3 of its industry and 0, otherwise. *Strategy* is a dichotomous variable equal to 1 if the firm uses a strategy to MBE and 0, otherwise. Additionally, we estimate this model separately for the use of each strategy. For example, in model 2, strategy is earnings management; in model 3, strategy is expectations management; and in model 4, strategy is the combined use of earnings and expectations management. If industry leaders HMBE, as predicted, the *IndLeader* coefficient will be significantly positive. If industry leaders use strategies to HMBE, the *IndLeader\*Strategy* interactive variables will be significantly positive.

We include several control variables in the regression. Industry leaders are categorized as being large, profitable, and mature firms. Also, prior research suggests that large firms have greater analysts following, and greater incentives to MBE. To control for these effects we include a *Size* variable (log of total assets), *Profit* variable (net income) and *BTM* variable (book-to-market ratio). Since the year-end financial audit constrains firms' use of strategies and the ability to MBE in the 4<sup>th</sup> quarter (Brown and Pinello 2007), we include a *Qtr* variable to control for this effect. The *Qtr* variable takes the value of 1 if the firm-quarter observation is in the 4<sup>th</sup> quarter, and 0 otherwise. Prior research also indicates firms close to meeting analyst forecasts manage earnings upward in order to MBE. We, therefore, add a *Meet* variable that takes the value of 1 if the firm exactly meets expectations (i.e., earnings surprise equals zero), and 0 otherwise.

To test industry leaders' use of strategies to MBE, we estimate the following logit regression:

$$Strategy_{iqt} = \alpha_0 + \beta_1 IndLeader_{iqt} + \beta_2 MBE_{type_{iqt}} + \beta_3 Profit_{iqt} + \beta_4 Size_{iqt} + \beta_5 BTM_{iqt} + \beta_6 Qtr_{iqt} + \beta_7 Meet_{iqt} + \beta_8 Complexity_{iqt} \quad (2)$$

To further investigate if specific strategies are used by industry leaders, we model the regression separately for the use of earnings management, expectations management and the combined use of both strategies to MBE. In each regression model, the number of observations included in the model is based upon firms that only use that strategy (strategy=1) and firms that used no strategy (strategy=0) to MBE.<sup>8</sup> If industry leaders use strategies to MBE, the *IndLeader* coefficient will be significantly positive in the models.

We add an additional control variable to this regression. Prior research suggests that greater complexity of operations facilitates earnings management (Ge and McVay 2005; and Doyle, Ge, and McVay 2007) and decreases the likelihood of detection of earnings management by outsiders (Cooper 2008). Thus, we include a variable to control for complexity. To measure the complexity of the firm, we first determine whether it had restructuring charges or foreign currency adjustments on their income statements in the prior year. Consistent with Ashbaugh-Skaife et al. (2007) non-zero values of Compustat data items 376, 377, 378 or 379 are used to identify sample firms involved in restructurings. We use foreign currency adjustments (Compustat #150) to identify firms operating in international markets (Doyle et al. 2007).<sup>9</sup> The *Complexity* variable takes the value of 1 if the firm has either restructuring charges or foreign currency adjustments, 2 if it has both, or 0 if neither.<sup>10</sup> All other variables are defined as in the previous regression.

## RESULTS

Common stock market wisdom holds that earnings announcements by industry leaders are important events releasing new information to investors about the future performance of the industry. To investigate whether reputation concerns affect the financial reporting of industry leaders, we first examine the strategies used by industry and non-industry leaders to HMBE. Results of our analysis are reported in Table 2. We find that 62% of industry leaders in the sample do not appear to use strategies to HMBE.

However, industry leaders appear to use strategies more to HMBE than non-industry leaders (38% vs. 31%). When industry leaders strategically MBE, they choose to manage earnings upward rather than guiding expectations downward. Our findings are consistent with research by Pfarrer et al. (2008) that the industry leaders, which are the largest and most influential firms, are impacted less by fear of punishment because of their history of success and status in the industry. Thus, compared with non-industry leaders, a greater percentage of industry leaders use strategies to HMBE.

**TABLE 2**  
**STRATEGIES USED BY INDUSTRY LEADERS AND NON-INDUSTRY LEADERS THAT HMBE**

	Strategies Used					Use of Strategy (%)	
	Earnings Management	Expectation Management	Both Strategies	No Strategies	Total	Yes	No
Industry Leaders (a)	199	38	22	425	684	37.9	62.1
Non-Industry Leaders (b)	134	29	15	394	572	31.1	68.9
Difference (a-b)	65***	9	7	31	112	6.8**	-6.8**

The sample consists of 1,256 firm quarter observations that HMBE from 1996 to 2006. *Industry leaders* are firms that are first in their industry based on the Herfindahl index. *Top 3 in Industry* are firms that are in the top 3 of their industry based on the Herfindahl index. *Non-Industry Leaders* are the remaining firms, which are not in the top 3 of their industry. \*\*\*, \*\*, and \* represent significance at the 1%, 5% and 10% levels, respectively.

In Table 3, we report the results of the logit regression modeling the probability that industry leaders HMBE. To determine the pattern of MBE of industry leaders, we examine the *IndLeader* and *Strategy* coefficients. The *IndLeader* coefficient is significantly positive in all 4 models, suggesting that industry leaders are more likely to HMBE than non-industry leaders. The *Strategy* coefficient is significantly negative in models 1 and 2, revealing that firms that use strategies, and more specifically ones that manage earnings, are less likely to HMBE. This is consistent with firms not being able to manage earnings consistently to HMBE due to the reversing nature of accruals in subsequent periods. However, the significantly positive *IndLeader\*EMStrategy* coefficient in model 2 suggests that industry leaders which manage earnings are more likely to HMBE. This finding can be reflective of income smoothing. Research documents that firms shift income across periods when they have the flexibility and incentives to do so. Moses (1987) documents a significant association between income smoothing and firm size while Trueman (1988) documents a significant association between income smoothing and firm market value. Industry leaders are motivated to HMBE to increase market capital, and therefore, have an incentive to smooth earnings in order to build reserves for future periods when MBE may not otherwise be attainable. This behavior is consistent with industry leaders, which are larger and more profitable firms, having smaller earnings surprise than non-industry leaders (see the discussion in the sample section above).

**TABLE 3**  
**LOGIT REGRESSION ANALYSIS BETWEEN INDUSTRY LEADERSHIP AND HMBE**

$$MBE_{type_{iqt}} = \alpha_0 + \beta_1 IndLeader_{iqt} + \beta_2 Strategy_{iqt} + \beta_3 IndLeader * Strategy_{iqt} + \beta_4 Profit_{iqt} + \beta_5 Size_{iqt} + \beta_6 BTM_{iqt} + \beta_7 Qtr_{iqt} + \beta_8 Meet_{iqt}$$

	Regression Coefficients (Wald Chi-Square)			
	Model 1 All	Model 2 EM	Model 3 XM	Model 4 Both
Intercept	-4.62 ( 182.21***)	-4.61 ( 180.44***)	-4.81 ( 203.03***)	-4.81 ( 202.93***)
IndLeader	0.42 ( 19.89***)	0.28 ( 6.07**)	0.41 ( 17.24***)	0.39 ( 16.30***)
Strategy	-0.31 (11.19***)	-0.48 (13.57***)	-0.06 (0.08)	-0.19 (0.29)
IndLeader*EMstrategy		0.41 (4.45**)		
IndLeader*XMstrategy			-0.10 (0.09)	-0.10 (0.09)
IndLeader*Bothstrategies				0.40 (0.58)
Profit	0.00 (6.37**)	0.00 (6.41**)	0.00 (6.42**)	0.00 (6.48**)
Size	0.64 ( 228.73***)	0.65 ( 229.39***)	0.65 ( 232.07***)	0.65 ( 232.13***)
BTM	-0.58 ( 16.78***)	-0.59 ( 16.76***)	-0.60 ( 17.40***)	-0.60 ( 17.68***)
Qtr	-0.08 ( 4.25**)	-0.08 ( 3.89**)	-0.06 ( 2.04)	-0.06 ( 2.01)
Meet	-0.17 ( 1.76)	-0.20 ( 2.37)	-0.19 ( 2.00)	-0.20 ( 2.42)
Chi-Square p-value	387.29 <0.0001	387.94 <0.0001	382.49 <0.0001	382.17 <0.0001

The sample consists of 2,512 firm quarter observations that MBE from 1996 to 2006. *MBEtype* is a dichotomous variable equal to 1 if the firm habitually MBE in at least 75% of the quarters in the sample period, and 0 otherwise. *IndLeader* is a dichotomous variable equal to 1 if the firm is one of the top three firms in its industry, and 0 otherwise. *Strategy* is a dichotomous variable equal to 1 if the firm appears to manage earnings and/or expectations to MBE, and 0 otherwise. *EMStrategy* represents firms that manage earnings upward to MBE. *XMStrategy* represents firms that manage expectations downward to MBE. *BothStrategies* represents firms that appear to manage both earnings and expectations to MBE. *Profit* is net income. *Size* is the log of total assets. *BTM* is book-to-market value. *Qtr* is a dichotomous variable equal to 1 if 4<sup>th</sup> quarter of the year, and 0 otherwise. *Meet* is a dichotomous variable equal to 1 if firm earnings equal analyst forecast, and 0 otherwise. \*\*\*, \*\*, and \* represent significance at the 1%, 5% and 10% levels, respectively.

In addition to industry leaders, we document that large, profitable firms with low book-to-market ratios are more likely to HMBE. Firms are less likely to HMBE in the 4<sup>th</sup> quarter by managing earnings

while firms that just meet analysts' expectations are less likely to HMBE. Overall, the results in Table 3 provide support for our hypothesis 1 - there is a positive association between industry leaders and HMBE.

**TABLE 4**  
**LOGIT REGRESSION ANALYSIS BETWEEN INDUSTRY**  
**LEADERSHIP AND STRATEGIES TO MBE**

$$Strategy_{iqt} = \alpha_0 + \beta_1 IndLeader_{iqt} + \beta_2 MBetype_{iqt} + \beta_3 Profit_{iqt} + \beta_4 Size_{iqt} + \beta_5 BTM_{iqt} + \beta_6 Qtr_{iqt} + \beta_7 Meet_{iqt} + \beta_8 Complex_{iqt}$$

	Regression Coefficients (Wald Chi-Square)			
	Model 1 Any Strategy	Model 2 EM Strategy	Model 3 XM Strategy	Model 4 Both Strategies
Intercept	0.22 (0.65)	0.26 (0.81)	-2.41 (16.63***)	-3.51 (20.27***)
IndLeader	0.31 (11.33***)	0.33 (10.77***)	0.25 (1.72)	0.22 (0.75)
MBetype	-0.30 (10.69***)	-0.32 (10.15***)	-0.27 (1.88)	-0.12 (0.22)
Profit	-0.00 (1.76)	-0.00 (1.78)	0.00 (0.05)	-0.00 (1.37)
Size	-0.08 (4.25**)	-0.10 (6.18**)	-0.04 (0.24)	0.03 (0.08)
BTM	0.07 (0.29)	-0.02 (0.02)	0.10 (0.12)	0.57 (2.88*)
Qtr	-0.73 (53.49***)	-0.87 (59.35***)	-0.21 (1.18)	-0.63 (4.72**)
Meet	0.40 (11.12***)	-0.06 (0.16)	1.47 (59.67***)	1.05 (15.12***)
Complex	0.10 (2.42)	0.11 (2.21)	0.13 (0.88)	0.01 (0.00)
Chi-Square p-value	96.76 <0.0001	90.55 <0.0001	69.19 <0.0001	28.04 0.0005

The sample consists of 2,512 firm quarter observations that MBE from 1996 to 2006. *Strategy* is a dichotomous variable equal to 1 if the firm used a strategy to MBE, and 0 otherwise. *IndLeader* is a dichotomous variable equal to 1 if the firm is one of the top three firms in its industry, and 0 otherwise. *MBetype* is a dichotomous variable equal to 1 if the firm habitually MBE in at least 75% of the quarters in the sample period, and 0 otherwise. *Profit* is net income. *Size* is the log of total assets. *BTM* is book-to-market value. *Qtr* is a dichotomous variable equal to 1 if 4<sup>th</sup> quarter of the year, and 0 otherwise. *Meet* is a dichotomous variable equal to 1 if firm earnings equal analyst forecast, and 0 otherwise. *Complex* is a complexity score where a dichotomous variable equals 1 if the firm reported restructuring costs, and 0 otherwise plus a dichotomous variable equal to 1 if the firm reported a foreign currency adjustment, and 0 otherwise. \*\*\*, \*\*, and \* represent significance at the 1%, 5% and 10% levels, respectively.

In Table 4, we report the results of the logit regression modeling the probability of the use of strategies by industry leaders to MBE. Consistent with the results of our univariate analysis, model 1 shows a significantly positive relation between industry leaders and the use of strategies to MBE at the 1% level. This association exists even after controlling for size, which has a significantly negative relation with the use of strategies. Also, consistent with the results in Table 3, HMBE firms are less likely to strategically MBE. The significant positive *Meet* variable and significantly negative *Qtr* variable suggest that firms are more likely to strategically MBE in order to just meet analysts' expectations but are less likely to strategically MBE in the 4<sup>th</sup> quarter, respectively. These findings provide support for our hypothesis 2 – industry leaders are more likely to engage in strategic MBE than non-industry leaders.

To investigate the specific strategies used by industry leaders to MBE, we report results of the logit regression of models 2, 3 and 4 in Table 4. Model 2 shows a significantly positive relation between industry leaders and earnings management at the 1% level. The *IndLeader* coefficient, however, is not significant for expectations management or both strategies in models 3 and 4. This reveals that industry leaders are more likely to manage earnings to MBE. The *Size* coefficient is significantly negative at the 1% level. While industry leaders are characterized as large firms, large firms are less likely to use strategies to MBE. The *Qtr* coefficient is significantly negative in the earnings management and both strategies models but not in the expectations management model. This is consistent with the study by Brown and Pinello (2007) which finds that the year-end financial audit is effective in constraining the use of earnings management in the 4<sup>th</sup> quarter, and that firms manage expectations in the 4<sup>th</sup> quarter instead of earnings to MBE. The *Meet* coefficient in models 3 and 4 suggests that firms will manage expectations in order to reach analysts' thresholds. As predicted, these results provide evidence to support our hypothesis 3 – industry leaders are more likely to manage earnings than expectations in order to MBE. Overall, our results suggest that the majority of industry leaders do not use strategies to HMBE. However, industry leaders may succumb to the pressure of MBE and manage earnings when they may not otherwise achieve this goal.

## CONCLUSION

Meeting or beating analysts' expectations is a leading indicator of future performance. The highly publicized nature of this event and the quick incorporation of this news into stock prices result in pressure for firms to MBE. This pressure is greater for firms that strive to maintain their competitive edge and reputation as industry leaders, while being closely scrutinized by corporate audiences. The discretion inherent in accrual accounting and the ability to guide analysts' expectations downward, however, provide opportunities for firms to MBE when their financial performance is not adequate to otherwise achieve this threshold.

The reputation literature in management suggests that a firm's financial performance affects its reputation and its reputation also affects its financial performance. Little research has been performed to date in accounting related to reputation and financial reporting. In this study, we explore the association between reputation as an industry leader and MBE. Specifically, we examine whether industry leaders are more likely to HMBE and whether they use strategies to do so. The empirical results of this study reveal that industry leaders are more likely to HMBE. Also, while the majority of industry leaders do not appear to use strategies to HMBE, industry leaders are more likely to engage in opportunistic behavior than non-industry leaders. These findings suggest that industry leaders generally MBE based on their financial performance but appear to succumb to the pressure associated with HMBE when there is a gap between earnings and analysts' expectations. Inconsistent with the findings of a previous study which reports a positive association between reputation and financial reporting quality, as it relates to financial statement restatements (Cao et al., 2012), the findings in this study indicate that reputation concerns may negatively impact financial reporting quality in the setting of MBE.

The use of discretion has been a long debated issue in accounting. Some believe it is ethical to opportunistically use discretion to manage earnings in order to mitigate the volatility in the market and sustain market efficiency while others believe the pervasive practice is manipulative, problematic and

harmful to financial reporting quality. Based on the characteristics of industry leaders, we find that it is easier for these firms to smooth earnings because they are larger and more profitable firms. The effects of income smoothing are also reflective in industry leaders having smaller earnings surprises than non-industry leaders, and managing earnings more to HMBE than non-industry leaders. The question remains, is it unethical to manage earnings and expectations? Given that the market continues to reward firms which strategically MBE, managers are likely to behave opportunistically.

Future research in this area can further determine the direction of the association between industry leadership and MBE - are firms industry leaders because they HMBE or do firms that HMBE become industry leaders? Additional research can also develop an emerging body of literature that documents the effect of reputation concerns in various financial reporting settings.

## ENDNOTES

1. See such studies as Jones, 1991; Burgstahler and Dichev, 1997; Teoh, Welch and Wong, 1998; Erickson and Wang, 1999; DeGeorge, Patel and Zeckhauser, 1999; Shivakumar, 2000; Matsumoto, 2002; Burgstahler and Eames, 2006.
2. Regulation Fair Disclosure Act of 2000 requires that public companies make public disclosures whenever they disclose any material nonpublic information that could affect their stock price. This regulation terminated companies from selectively releasing material information to analysts before it became publicly available.
3. Earnings management is costly due to the reversal of accruals in subsequent periods, sanctions by the SEC and possible prosecution and penalties for executives as established by SOX.
4. To avoid the noise inherent in the market due to the financial crisis in the late 2000s, we end the sample at 2006.
5. Abnormal accruals are multiplied by assets since abnormal accruals were scaled by assets in the model.
6. Earnings surprise equals actual earnings less the latest analyst forecasts.
7. Forecast error equals actual earnings less the earliest analyst forecasts.
8. This methodology is used to focus on the strategy being examined and to eradicate any confounding effects that may result due to the inclusion of other strategies.
9. Ashbaugh-Skaife et al. (2007) and Doyle et al. (2007) also include the number of business segments as a proxy for complexity in their studies. The samples for these studies are subsequent to 2000, when this information became available on Compustat. We do not include business segments in this study because our sample begins prior to time that this data became available on Compustat.
10. A complexity score is used rather than individual measures for restructuring and foreign currency translation due to the small number of observations in the sample with both measures.

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