

# **HAS REGULATION CHANGED THE MARKET'S REWARD FOR MEETING OR BEATING EXPECTATIONS?**

**Jan L. Williams\***

**Peter J. DaDalt\*\***

**Huey-Lian Sun\*\*\***

**Varda Yaari\*\*\***

## **Abstract**

A firm “meets or beats expectations” when it reports earnings that are at or above the consensus analysts’ forecast. We argue that two types of firms MBE: strong firms who commit to future performance and signal future earnings by MBE, and weak firms who attempt to mimic strong firms by managing either expectations or earnings. Using a sample of 4,152 earnings announcements for firms that habitually MBE between 1999 and 2004, we find that the incidence of expectations (earnings) management decreased following the enactment of Regulation FD (Sarbanes Oxley). In addition, we find that the market reactions to MBE achieved through managing expectations declined significantly following the enactment of Regulation FD, but not to MBE achieved by managing earnings following the enactment of the Sarbanes-Oxley Act.

\* University of Baltimore, Merrick School of Business, 1420 North Charles St., Baltimore, MD, 21201.

\*\* University of Rhode Island. College of Business Administration, 7 Lippitt Rd., Kingston, RI, 02881.

\*\*\*Morgan State University, ,Graves School of Business and Management, 1700 E. Cold Spring Ln., Baltimore, 21251.

## 1. INTRODUCTION

U.S. firms are under great pressure to meet or beat market expectations when announcing earnings. Failure to do so carries significant costs, and is often followed by sharp decreases in the firm's stock price. As an example, consider the following excerpt from the New-York Times, June 14, 2006, reported by Jenny Anderson: "Goldman Sachs more than doubled its second-quarter profit from a year ago, fueled by strong results in each of its divisions, ... Like Lehman Brothers a day earlier, when it too reported strong earnings, Goldman failed to impress Wall Street with its good results and its stock fell nearly 4 percent." As this anecdote indicates, failure to meet expectations is taken as a signal of firms' future prospects.

A surprising percentage of firms either exactly meet the consensus analysts' forecasts or exceed them by only a penny: approximately 40% of all public firms fall in this group, and for firms in the S&P 500 this percentage almost doubles (Williams, 2006, Ronen and Yaari, forthcoming). This pattern is not surprising, since failing to meet or beat analyst expectations (henceforth, MBE) generates unfavorable media attention, often followed by significant price declines.<sup>1</sup> Market expectations are driven in large part by analysts.

Firms can MBE through several strategies. They can manage expectations by providing guidance to analysts prior to earnings announcements. In addition, they can manage earnings by deferring them when performance is strong and inflating them when they are weak. This raises the question of market rationality: if MBE is sometimes achieved by manipulation, then why is it rewarded by the market (Bartov, Givoly, and

---

<sup>1</sup> As anecdotal evidence, Dan Reingold (2006) reports that MCI was very much concerned with price fall at the announcement date because it generates negative publicity that drives customers away to the competitor, the established AT&T (p.20).

Hayn, 2002; Dopuch, Seethamraju, and Xu, 2003)? Furthermore, while the market might be fooled on a one-time basis, it is less likely to be so in repeated occurrences.

We argue that *habitual* MBE firms (i.e. firms that consistently MBE) fall into one of two groups: strong or weak. Strong firms, such as Microsoft, General Electric, or Cisco, MBE as a signal of continuing superior performance. Consequently, they are rewarded by the market with higher stock prices. Others, like Fannie Mae, attempt to present similar performance in order to reap similar rewards. In equilibrium both types MBE: the strong firms and the weak ones that attempt to mimic them.

We show theoretically and empirically that the reward to MBE results from the market's inability to distinguish between the strong firms and the pretenders. The enactment of Regulation Fair Disclosure (henceforth Regulation FD) limited the firms' private access to analysts and therefore increased the cost of managing expectations. The passage of the Sarbanes-Oxley Act of 2002 (henceforth SOX) likewise, increased the costs associated with managing earnings.

We hypothesize that these regulatory changes affected both the use of these strategies by habitual MBE firms and the market's reaction to their earnings announcements. We examine these hypotheses using a sample of 4,152 earnings announcements of habitual MBE firms in the six years period surrounding the enactments of Regulation FD and SOX. We find results that are largely supportive of our hypotheses: the use of these strategies dropped sharply in the year of enactment of the relevant regulation. In addition, the market reactions to expectation management dropped significantly following the passage of Regulation FD (there was, however, little change in market reactions surrounding the enactment of SOX).

The remainder of the chapter proceeds as follows: Section 2 presents background information. Section 3 develops the theoretical underpinnings for this study. Section 4 addresses empirical methods and data. Section 5 presents results, while Section 6 concludes.

## 2. BACKGROUND: THE MEETING AND BEATING PHENOMENON

Financial analysts collect information on firm performance and publicly issue earnings forecasts and buy/sell recommendations. Their forecasts and recommendations affect market prices (e.g., Francis and Soffer, 1997; and Shroff, Venkataraman, and Xin, 2004), which are important to firms. In return, management cultivates relationships with analysts by issuing guidance (Graham, Campbell, and Rajgopal, 2004). When firms are dissatisfied with analysts' recommendations, they restrict access to information, which reduces subsequent forecast accuracy (Frankel, Kothari and Weber, 2004; Ronen and Yaari, forthcoming).

### 2.1. Historical Background

In the twentieth century, an "expectations game" developed between firms and analysts, in which forecast revisions during a given quarter behave in a predictable fashion. Historically, forecasts have been optimistic at the beginning of the quarter and systematically revised downward as the quarter progressed (Richardson, Teoh and Wysocki, 2004). As a result, firms MBE more easily than they would otherwise have (Bartov, Givoly, and Hayn, 2002).

The strategies used by firms to manage market expectations prior to the enactment of Regulation FD are illustrated in the following description by MCI employee Dan

Reingold (2006):

I quickly learned that investor relations was more of an art than a science – especially when it came to managing analysts’ earnings expectations (p. 19).

...If it had been a bad quarter, we needed to leak that information slowly and quietly, so that the stock would drop during the week or two before the earnings announcement, but without generating any media attention. That was a lot better than the stock plummeting at the earnings day, when the world was focused on it. Positive news also would be leaked out but downplayed a bit, so that the stock would still see a decent bounce when the better-than-expected news hit. It was common practice, so common that I didn’t even take note of it at the time (p.20).

Earnings management provides another strategy with which to MBE. The formal definition of earnings management is (Ronen and Yaari, forthcoming, Chapter 2):

Earnings management is a collection of managerial decisions that result in not reporting the short-term, true earnings as known to management.

Earnings management can be—

Beneficial: it signals long-term value;

Pernicious: it conceals short- or long-term value;

Neutral: it reveals the short-term truth.

Managed earnings result either from taking production/investment actions before earnings are realized or from making accounting choices that affect earnings numbers and their interpretation after the true earnings are realized. Techniques to manage earnings include structuring transactions (e.g., deferring the signing of a lucrative contract), timing the recognition of revenues and expenses, and timing the adoption of a new standard (Francis, 2001).<sup>2</sup>

---

<sup>2</sup> Levitt (1998) reports the five most frequent techniques: big-bath restructuring charges (the firm removes operating losses by recording a large one-time charge); acquisition charges (the firm avoids recording depreciable assets); cookie jar reserves (the firm dips into reserves that have no other purpose, e.g., Zerox, 2000; Nortel, 2002); abusive materiality (the firm omits charges that reduce its income on the ground that it is not material); and improper revenue recognition (the firm records revenues before it earns them).

For this chapter, however, the most important component of this definition is the distinction between beneficial and pernicious earnings management. Habitual firms that engage in beneficial earnings management signal value by smoothing earnings. In contrast, others manage earnings in order to mislead market participants. Mortgage giant Fannie Mae provides a recent example of this group. Without admitting wrong doing, it has already paid civil penalties of \$400 million for managing earnings in order to MBE over a five-year period.<sup>3</sup>

In sum, the dynamics of MBE are depicted in the following table.

**Figure 1: The Dynamics of MBE**

<b>Event</b>	Earnings announcement	Analyst issue the first forecast for the quarter	Analyst revise forecast	Earnings announcement
<b>Known facts</b>	Firms MBE	Early forecast are more optimistic than later forecasts	Analyst revise forecast downwards	Firms MBE

## 2.2. Literature Review

Habitual MBE firms were examined in Kasznik and McNichols (2002), Skinner and Sloan (2002), Bartov, Givoly, and Hayn (2002), and Kim (2002). However, all are concerned with MBE prior to the enactment of Regulation FD and SOX. Kim (2002), for example, analyzes a sample of 126,826 firm-quarter observations over the 1982-2000 period. These studies show that habitual beaters are rewarded more than sporadic ones (Kasznik and McNichols, 2002; Bartov, Givoly, and Hayn, 2002; Kim, 2002), that a firm

---

<sup>3</sup> For further discussion and a review of the earnings management literature, see Williams (2006) and Ronen and Yaari (forthcoming).

ending a long string of MBE is penalized by significant declines in stock price (Skinner and Sloan, 2002), and that the negative reaction is proportional to the length of the string of the MBE (Kim, 2002). This indicates that the market is more willing to trust firms that habitually MBE than those that MBE only occasionally.

### 2.3. The Changes in the Twenty-First Century

In the twenty first century the analyst industry has undergone many regulatory changes. In this chapter, we focus on two: Regulation FD and SOX.

In August 2000, the SEC passed Regulation FD in order to limit selective disclosure. The regulation, which went into effect on October 23, 2000, requires that public companies make public disclosures whenever they disclose any material nonpublic information that could affect the price of their stock. Prior to Regulation FD, public companies were able to selectively release information on forthcoming earnings in what came to be known as the “whispers and winks” game (Levitt, 1998).

Along with the adoption of Regulation FD came controversy regarding the impact that Regulation FD would have on the flow of earnings-related information to investors prior to earnings announcements. Supporters of the new law argued that Regulation FD would provide more and faster information to investors, and thus, level the playing field. Opponents of the law, however, argued that Regulation FD would limit the flow of information because management would be more cautious about the information released to analysts, and thus to the public. This would, therefore, result in less accurate analysts’ forecasts and more volatility in stock prices surrounding earnings announcements.

In July 2002, Congress passed SOX in order to restore investor confidence of investors in the wake of high profile accounting scandals such as Enron. While section 501 deals with analysts, we focus primarily on provisions that directly affect earnings management. Specifically, managers are now required to certify that the financial information is accurate (section 302). This in turn increases the penalties associated with misrepresentation (sections 906 and 1001). Management is also now held responsible for internal controls and assessment of their quality (section 404). This is expected to increase the cost of earnings management, as management can no longer claim ignorance (as did Denny Ebbers of Worldcom and Kenneth Lay of Enron). Finally, if earnings management is detected, the bonus gained by earnings management in the 12 months preceding it is disgorged (section 304). In total, these changes are expected to increase the cost of earnings management.<sup>4</sup>

As with Regulation FD, the adoption of SOX was controversial. Supporters of the new law argued that SOX reduced the ability of managers to manipulate earnings by weakening the influence of CEOs on accounting “gatekeepers” (i.e., boards of directors and auditors). Opponents of the law, however, argued that section 404 imposed unnecessary costs on public firms, as evidenced by the dramatic decline of young firms seeking to raise capital in the U.S. markets and the increased willingness of public firms to “go dark.”

---

<sup>4</sup> Sox contains additional measures that might curb incentives and opportunities to manage earnings, such as shifting responsibility for hiring auditors from management to the audit committee, disallowing managers to take loans, and encouraging whistle blowing.



### 3. THEORY

We next model the link between expectations management, earnings management, and analysts' behavior. We present a parsimonious model that nonetheless highlights key features of the MBE "game".

The MBE game is a two-period model with two analysts who issue forecasts,  $F$ , and firms who publicize accounting earnings,  $X$ . Firms are one of two types, strong or weak, denoted by  $s, w$ , respectively. The strong firms earn  $H$  in both periods. The weak firms earn  $L$  in both periods,  $L < H$ , but a proportion of  $1 - \pi$  (with  $0 < \pi < 1$ ) are able to manage earnings and report  $H$  without being discovered before the second period,  $0 < 1 - \pi < 1$ . The prior probability of type  $H$  is  $\gamma$ ,  $0 < \gamma < 1$ . We will elaborate on the connection between  $\gamma$  and the forecast of the analyst below. Figure 2 depicts the model's time line.

**Figure 2: Time-Line**

<b>Date 1</b>	<b>Date 2</b>	<b>Date 3</b>	<b>Date 4</b>
At the beginning of the first period, analysts issue forecasts, $F_1$ .	Nature chooses firms' types and the chance of misrepresentation, $1 - \pi$ .	Firms issue guidance and analysts revise their forecasts, $F_2$ .	Firms announce first-period earnings.

Analysts are rewarded based on their ranking in the monthly bulletin, *Institutional Investor*, in which their biggest clients, the institutional analysts rank analysts. While the ranking is based on a multi-part questionnaire to assess the satisfaction of their customers, we will assume for simplicity that analysts have incentives to do an honest job and learn the truth. We denote the analyst's payoff when he is correct (incorrect) by  $a$  ( $b$ ), where  $a > b$ .

Firms' objective is to maximize their stock price. So, when an analyst issues an opinion that the firm is weak,  $F=w$ , they pressure the analysts to "walk the line" and upgrade his forecast (see Ronen and Yaari, forthcoming). For example, the star telecommunication analyst of Citigroup, Mr. J. Grubman was barred from working as an analyst in the 2003 agreement between regulators and the ten largest Wall-Street firms, because he succumbed to pressure to upgrade his rating of AT&T stock from "neutral" to "buy" in November 1999. The consensus interpretation is that Mr. Grubman compromised research in favor of obtaining investment banking business: In February 2000, Salomon Smith Barney, the investment banking division of Citigroup, was named a book runner for AT&T's public offering of its wireless company, earning \$63 million in fees.

Thomas Landon, New York Times (April 29, 2003) writes:

Mr. Grubman symbolized this inherent conflict: as a research analyst, his primary responsibility was to provide objective research to the firm's institutional and retail clients.

But Mr. Grubman was not paid \$48 million over three years in the 1990's to provide investment advice to individual investors.

Instead, it was his ability to corral the banking business of a new wave of telecommunications companies - many of which were competitors of AT&T, like WorldCom – by publishing positive research on them that made him a meal ticket for Mr. Weill.

Following this reasoning, we assume that the analyst incurs costs if he issues an opinion that the firm is "weak" when the firm reports  $H$ .<sup>5</sup> Specifically, if both analysts issue a "weak" opinion each incurs cost of  $c$ , while if they issue different opinions, the analyst with a unfavorable forecast incurs a higher cost due to his firm losing investment

---

<sup>5</sup> We assume that if a weak firm reports truthfully as  $L$  the analyst has no incentive to report  $H$

banking business: The analyst issuing a favorable forecast incurs no cost while the analyst issuing an unfavorable forecast incurs the full cost of  $2c$ . We assume that  $a > b > 0 > a - c$ . Note that the costs are imposed on the forecast of the firm's type, since by assumption, the type dictates the earnings.

The following tables present analysts' payoffs for the cases where they expect earnings of H (strong firms) and L (weak firms). We denote by  $F_{2i}$  the second forecast by analyst  $i$ , where  $i = 1, 2$ .

**Figure 3a: Analysts' Payoffs When the Firm is Strong**

Analyst 1	Analyst 2		
		$F_{22}=s$	$F_{22}=w$
	$F_{21}=s$	a,a	a,b-2c
	$F_{21}=w$	b-2c,a	b-c,b-c

**Figure 3b: Analysts' Payoffs When a Weak Firm Reports H**

Analyst 1	Analyst 2		
		$F_{22}=s$	$F_{22}=w$
	$F_{21}=s$	b,b	b,a-2c
	$F_{21}=w$	a-2c,b	a-c,a-c

### First-Best Equilibrium

For ease of presentation, we suppress the forecast of earnings. In a first-best world, where analysts freely disclose the truth and firms do not manage earnings, the

equilibrium is straightforward: both strong and weak firms report truthfully and prices,  $P$ , are as follows:

$$P(s, X=H, F_{21}=F_{22}=s)=2H, \quad P(w, X=L, F_{21}=F_{22}=w) = 2L.$$

The analysis of the first-best equilibrium indicates the price of a firm that reports H is higher than the price of a firm that reports L. Hence, weak firms have incentives to pass themselves off as strong.

#### Second-Best Equilibrium:

Table 2b demonstrates that in the case where the firm is weak, analysts face a “prisoners’ dilemma” in which both tout the firms as strong. Hence, since the market cannot distinguish between firms that are genuinely type H and those that are type L, the market prices are as follows:

$$P(s, X=H, F_{21}=F_{22}=s) = \frac{\gamma}{\gamma + (1-\pi)(1-\gamma)} H + \frac{(1-\pi)(1-\gamma)}{\gamma + (1-\pi)(1-\gamma)} L > L,$$

$$P(s, X=L, F_{21}=F_{22}=s) = 2L.$$

The first price is determined by the posterior probability that a firm that announces H is strong. The assumption of market rationality therefore implies that the market discounts a report of H. Consequently, strong firms are penalized with a market price lower than their economic value. This gives them incentives to signal value through habitually MBE. In contrast, weak firms have incentives to manage earnings in

order to obtain a higher price. The equilibrium is therefore characterized by the market rewarding misleading earnings management: weak firms reporting H benefit from a higher price because the market cannot distinguish between types.

We have thus far restricted our attention to the forecast preceding the announcement,  $F_2$ . We now direct our attention to  $F_1$ . Assume that the probability of a firm being of strong (type H) depends on analysts' initial recommendations. In particular, firms with a strong recommendation have higher chance of being strong than those with a weak one. Clearly then, analysts will be pressured to issue a forecast of strong firm,  $F_{1i}=s$ ,  $i=1,2$ . In addition, analysts will revise forecasts downward for weak firms that report L due to their inability to manage earnings,  $F_{1i}=w$ ,  $i=1,2$ .

#### 4. EMPIRICAL METHODS

##### 4.1. Hypotheses Development

Our hypotheses, data selection, and tests recognize that managers can habitually MBE by managing expectations, managing earnings, or both. We first discuss how regulatory changes could result in changes in the composition of MBE firms over time. We then develop hypotheses relating the incidence of and market reactions to MBE via expectations management to changes introduced by Regulation FD. Finally, we develop similar hypotheses relating earnings management to the enactment of SOX.

While we associate habitually MBE with strong firms, it is likely that some of the habitual MBE firms are actually weak firms attempting to mimic the strong ones. Over the time frame studied, regulation changes have increased the costs associated with both managing expectations (i.e. Regulation FD) and with managing earnings (i.e. SOX). As a

result, fewer weak firms will be willing to bear the costs associated with these strategies, and the incidence of MBE should decline following these regulatory changes.

Prior research has established that the incidence of expectations management through pre-announcements increased following the enactment of Regulation FD (McCarthy, 2003). However, it is not clear that this same pattern will hold for habitual MBE firms. On the one hand, if habitual MBE firms are similar to non-habitual MBE firms, the same pattern might hold in this group as in the general population of firms. On the other, the enactment of Regulation FD might cause market participants to view expectations management from a more skeptical perspective. In this case, in the post Regulation FD regime, the market will perceive expectations management as a sign that the firm is a weak one, and will penalize it accordingly. This should result in a decreased use of this strategy over time by habitual MBE firms. This leads to our first two hypotheses:

- H1a: Fewer habitual MBE firms will manage expectations following the enactment of Regulation FD.
- H1b: The market will react less positively to expectations management following the enactment of Regulation FD.

The enactment of SOX reduced the overall extent of earnings management (see e.g., Cohen, Dey and Lys, 2005). It is unclear whether this pattern might also hold for habitual MBE firms. While earnings management might allow firms to exceed expectations in any given year, the self-correcting nature of accruals makes it unlikely that a significant number of habitual MBE firms achieved this through earnings

management. If this is in fact the case, there should be little change post-SOX in either the extent of earnings management among habitual MBE firms or the market reaction for these firms. On the other hand, if there was a significant percentage of weak firms in the pre-SOX habitual MBE sample, the increased costs associated with the enactment of SOX could drive these firms out and result in a more positive market reaction for post-SOX habitual MBE firms. Since the actual fraction of weak firms within the pre-SOX habitual MBE firm sample is unknown, the effect of the adoption of SOX on habitual MBE firms remains an empirical question. This leads to our final two hypotheses:

H2a: Fewer habitual MBE firms manage earnings following the adoption of SOX.

H2b: The market reacts differently to earnings management among habitual MBE firms following the adoption of SOX.

#### 4.2. Data

We first identify all firms with quarterly earnings forecasts on the Institutional Brokers' Estimate System (I/B/E/S) Detail History database for quarters ending between March 31, 1999 and December 31, 2004. We next identify the last forecast of the quarter for each firm/analyst/quarter combination. We define the consensus forecast for each firm/quarter as the mean of all "final" forecasts for the firm in that period. We keep only those firms with actual earnings for the quarter exceeding the consensus forecast in 75% (18 out of 24) of the quarters in our sample, and define these as habitual MBE firms. Bhojraj, Hribar and Picconi (2003) show that firms that do not manage earnings and fail to MBE perform better in the long-term than firms that manage earnings in order to MBE. Hence, we identify habitual firms, not as firms with a string of MBE, but rather

firms with repeated occurrences of MBE. This, therefore, increases the credibility of MBE as an indication of strong performance. In other words, if a firm did not MBE in quarters 3 and 15 but MBE in all other quarters, the credibility of its MBE is higher.

For these firms, we then screen for the availability of data on CRSP and Compustat. Firm-quarter observations with insufficient data are excluded from the sample. Also, to ensure sufficient data for the estimations of earnings management and abnormal returns, we restrict our sample to firms having at least 10 other firms in its industry-quarter cohort. Following these steps, our sample consists of 4,152 firm-quarter observations.

#### 4.3. Methodology

We employ the directional path algorithm developed by Bartov, Givoly, and Hayn (2002) to determine whether firms manage expectations downward to MBE. In doing so, we compare the sign of the actual earnings surprise (defined as actual earnings less the consensus forecast immediately prior to the earnings) with the sign of the earnings surprise that would have occurred in the absence of subsequent forecast revisions. Since our sample only includes firms that MBE, firms managing expectations downward would have had negative earnings surprise in the absence of expectations management.<sup>6</sup>

We next use the modified-linear performance matched Jones model by Kothari, Leone, and Wasley (2005) to determine whether firms manage earnings upward. For

---

<sup>6</sup> In calculating our measure of expectations management, we follow Bartov, Givoly, and Hayn (2002) and eliminate stale and contaminated forecasts. Specifically, all forecasts must be made at least three trading days following the release of the previous quarter's earnings and three trading days prior to the release of the current quarter's earnings.



each MBE firm, we first estimate the following regression model using all non-MBE firms in the same 2-digit industry as of the date of the earnings announcement:

$$ACC_{ijtq}/A_{ijtq-1} = \beta_1 (1/A_{ijtq-1}) + \beta_2 (\Delta REV_{ijtq} - \Delta REC_{ijtq})/A_{ijtq-1} + \beta_3 (PPE_{ijtq}/A_{ijtq-1}) + \beta_4 (ROA_{ijtq-1})$$

where:

- $ACC_{ijtq}$  = total accruals is defined as earnings minus cash flow for firm  $i$  in two-digit SIC code  $j$  in quarter  $q$  of year  $t$ ;
- $A_{ijtq-1}$  = total assets at the end of period for firm  $i$  in two-digit SIC code  $j$  in quarter  $q$  of year  $t$ ;
- $\Delta REV_{ijtq}$  = change in revenues for firm  $i$  in two-digit SIC code  $j$  in quarter  $q$  of year  $t$ ;
- $\Delta REC_{ijtq}$  = change in accounts receivables for firm  $i$  in two-digit SIC code  $j$  in quarter  $q$  of year  $t$ ;
- $PPE_{ijtq}$  = gross property plant and equipment for firm  $i$  in two-digit SIC code  $j$  in quarter  $q$  of year  $t$ ;
- $ROA_{ijtq-1}$  = return on assets for firm  $i$  in two-digit SIC code  $j$  in quarter  $q$  of year  $t$ ;

We use the estimated coefficients from the regression to calculate predicted or “normal” accruals (i.e. those that would have occurred in the absence of earnings manipulation). Actual accruals in excess of predicted accruals are assumed to be the result of manager’s actions and/or choices and are seen (following Matsumoto, 2002) as evidence that managers have managed earnings upwards to MBE. Table 1 presents the distribution of habitual MBE firms by year and strategy.

**Table 1**  
**Distribution of Habitual MBE Firms By Year and Strategy**

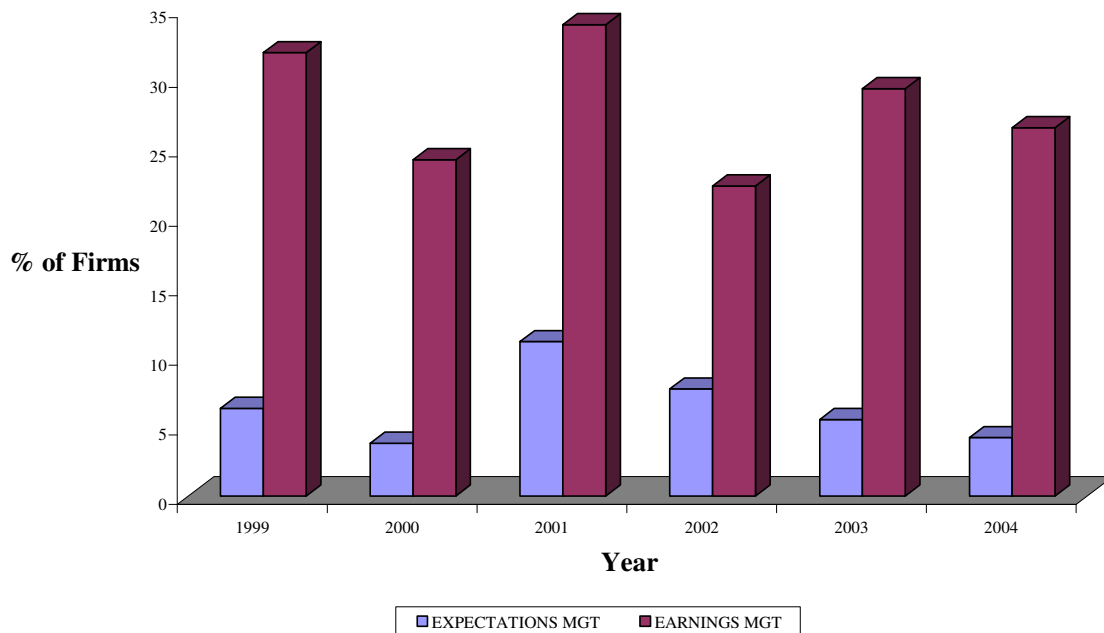
Year	Both Strategies	Expectations Mgmt Only	Earnings Mgmt Only	Neither Strategy	Total
1999	16	30	217	468	731
2000	5	22	168	521	716
2001	27	48	201	398	674
2002	14	40	143	508	705
2003	10	28	191	458	687
2004	8	19	161	451	639
Total	80	187	1081	2804	4152

## 5. RESULTS

Figure 4 presents the percentages of habitual MBE firms that engage in expectations or earnings management in each year. The results are largely supportive of Hypotheses 1a and 2a.

Approximately 6.3% of habitual MBE firms managed expectations in 1999. In 2000, there was much uncertainty regarding the specifics of Regulations FD prior to its enactment; following its enactment, there was uncertainty regarding its enforcement. This greatly increased the expected costs associated with expectations management. Figure 4 is consistent with this pattern, as the percentage of firms managing expectations decreased almost 40% from 1999 to 2000 (from 6.3% to 3.8%). The percentage of firms managing expectations rebounded in 2001, and exhibits a consistent decline thereafter.

**Figure 4**  
**% of Firms Using Earnings or Expectations Management**



The percentage of firms managing earnings exhibits a similar pattern centered around the enactment of SOX: the percentage of firms managing earnings decreased by approximately a third in 2002 (from 33.9% to 22.3), rebounded in 2003, and then declined again in 2004.

Table 2 presents mean abnormal returns (defined as the return for the three days surrounding the earnings announcement less the average return for all firms in the same 4-digit SIC code during the same time) for firms using various management strategies to MBE. Panel A presents results for subsamples based on whether or not the firm managed expectations in the pre or post Regulation FD regimes.

**Table 2**  
**Mean Abnormal Returns Around Earnings Announcements**

**Panel A: Expectations management**

<b>Time Period</b>	<b>Firms Using Strategy</b>	<b>Firms Not Using Strategy</b>	<b>Difference</b>
Pre Reg FD	0.0085 (0.80)	0.0180 (5.05)*	-0.0095 (0.86)
Post Reg FD	-0.0042 (-0.82)	0.0126 (8.74)*	-0.0166 (3.12)*

\* significant at the 1% level

**Panel B: Earnings management**

<b>Time Period</b>	<b>Firms Using Strategy</b>	<b>Firms Not Using Strategy</b>	<b>Difference</b>
Pre SOX	0.0183 (5.05)*	0.0117 (4.97)*	0.0066 (1.51)
Post SOX	0.0135 (3.88)*	0.0119 (5.61)*	0.0016 (0.41)

\* significant at the 1% level

The results are supportive of Hypothesis 2b. The market reaction for firms managing expectations in the pre Regulation FD period is not significantly different from their non-expectations managing peers (difference = -0.0095, t=0.86). In contrast, the two groups exhibit significant differences in returns in the post Regulation FD period (difference = -0.0166, t=3.12). The change in the differential reaction is driven primarily by a decrease in returns for firms managing expectations in the post Regulation FD regime. While firms managing expectations experience positive announcement period returns in the pre Regulation FD period, they experienced negative returns following Regulation FD. This pattern is consistent with increased transparency subsequent to Regulation FD.

Panel B presents results for similar subsamples based on whether or not the firm managed earnings in the pre and post SOX regimes. In contrast to the pattern

surrounding Regulation FD, the enactment of SOX appears to have little effect of the market's perceptions of earnings management by MBE firms. The market reaction for firms managing earnings in the pre SOX period is not significantly different from those firms that do not manage earnings in the same period (difference=0.0066,  $t=1.51$ ). The difference between the two samples (earnings managing and non-earnings managing firms) is also insignificant following the passage of SOX (difference=-0.0167,  $t=0.41$ ). This lack of change could be driven by the relatively short (three day) window used in our analysis: it is possible that the complexity and variety of earnings management strategies makes it difficult for market participants to distinguish between strong and weak firms except over longer periods of time.

## 6. SUMMARY AND CONCLUSIONS

We have examined firm's use of strategies to MBE during a period spanning two significant regulatory changes. Our results demonstrate how increases in the costs associated with earnings and expectation management change both management's choice of and capital markets' reaction to different MBE strategies. Specifically, we find that the number of firms that MBE via managing expectations sharply declined in the year Regulation FD was enacted, with a similar pattern for firms that MBE via managing earnings around the enactment of SOX. This pattern is consistent with regulatory changes resulting in increases in the costs associated with using these strategies

We argue that there are two types of firms that MBE: strong firms and weak firms. Using a sample of firms that habitually MBE, we find evidence that the market's ability to distinguish between the two groups has improved over time. While we find

significant changes in the market reactions to expectations management around the enactment of Regulation FD, we find a statistically insignificant change in the reaction to earnings management following the passage of SOX.

## REFERENCES

- Bartov, E., D. Givoly and C. Hayn. 2002. The Rewards to meeting or beating earnings expectations. *Journal of Accounting and Economics*. 33(2): 173-204.
- Bhojraj, S., P. Hribar, and M. Picconi. 2003. Making sense of cents: An examination of firms that marginally miss or beat analysts forecasts. Working Paper, Cornell University.
- Cohen, D., A. Dey, and T. Lys. 2005. Trends in earnings management and informativeness of earnings announcements in the pre- and post-Sarbanes Oxley periods. Working Paper, New York University.
- Dopuch N., C. Seethamraju, and W. Xu. 2003. An empirical assessment of the credibility premium associated with meeting or beating both time-series earnings expectations and analysts' forecasts. Working Paper, Washington University.
- Francis, J. and L. Soffer. 1997. The relative informativeness of analysts stocks' recommendations and earnings forecast revisions. *Journal of Accounting Research* 35(2): 193-211.
- Francis J. 2001. Discussion of empirical research on accounting choice. *Journal of Accounting and Economics* 31(3): 309-319.
- Frankel, R., S.P. Kothari, and J. Weber. 2004. Determinants of the informativeness of analyst research. Working paper, Massachusetts Institute of Technology.
- Graham, J., H. Campbell, and S. Rajgopal. 2004. The economic implications of corporate financial reporting. Working paper, Purdue University.
- Kasznik, R. and M. McNichols. 2002. Does meeting earnings expectations matter? Evidence from analyst forecast revisions and share prices. *Journal of Accounting Research* 40 (3): 727-59.
- Kim, I. 2002. An analysis of the market reward and torpedo effect of firms that consistently meet expectations. Working Paper, Duke University.
- Kothari, S.P., A. Leone, and C. Wasley. 2005. Performance matched discretionary accruals measures. *Journal of Accounting and Economics* 39(1): 163-197.
- Levitt, A. 1998. Corporate governance: Integrity in the information age. A speech given in Tulane University, New Orleans, Louisiana.
- Matsumoto, D. 2002. Management's incentives to avoid negative earnings surprises.

- The Accounting Review* 77(3): 483-514.
- McCarthy, E. 2003. Regulation FD: Coping in the trenches. *Journal of Accountancy* 195 (6): 53-59.
- Reingold, D. and J. Reingold. 2006. Confessions of a wall street analyst. New York, NY: HarperCollins.
- Richardson, S., S. Teoh, and P. Wysocki. 2004. The walk-down to beatable analyst forecasts: The role of equity issuance and insider trading incentives. *Contemporary Accounting Research*, 21(4): 885-924.
- Ronen, J. and V. Yaari. 2006. Earnings management in the 21<sup>st</sup> century. Springer Series in Accounting Scholarship, Volume 3 (Forthcoming).
- Shroff, P., R. Venkataraman, and B. Xin. 2004. Leaders and followers among security analysts: Analysis of impact and accuracy. Working paper, University of Minnesota.
- Skinner, D. and R. Sloan. 2002. Earnings surprises, growth expectations, and stock returns or don't let an earnings torpedo sink your portfolio. *Review of Accounting Studies* 7: 289-312.
- Williams, J. 2006. An empirical examination of the management strategies used by firms To meet or beat analysts' forecasts: Pre and post regulation fair disclosure and Sarbanes Oxley act. Ph.D. Dissertation, Morgan State University.