EARNINGS MANAGEMENT TO JUST MEET ANALYSTS' FORECAST

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ABSTRACT

My study seeks to answer the following research question: given the strong emphasis on meeting or beating earnings targets, do firms "manage" earnings to meet these targets? I focus my attention particularly on firms that have a strong motivation to meet these targets, that is, firms which have intrinsic earnings that nearly meet earnings targets and therefore more likely to manage their earnings upwards in order to meet these objectives. My results provide some support that these firms may have managed earnings upwards to meet earnings expectations, but that do not imply that firms that just meet forecasts experience inferior future firm and stock performance. I posit that this may be the case because firms that just meet forecasts have the ability to do so as they are inherently financially healthy firms, and the capital markets accept this fact and reward these firms accordingly for meeting earnings targets.

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1. INTRODUCTION

There has been an increased interest among corporations about meeting or beating analysts' expectations (MBE), especially beginning in the 1990s. In a recent survey study by Graham, Harvey and Rajgopal (2005) where the authors interview more than 400 CFOs to determine the factors that drive reported earnings and disclosure decisions, they find that 73.5% of the respondents agree or strongly agree that analysts' consensus forecast of earnings per share (EPS) for current quarter is an important benchmark for their company when they report a quarterly earnings number. In another article published in Fortune, the author claims that during the 1990s, "matching or beating the First Call consensus number came to be the *single* most watched measure of corporate success (emphasis added)"(Fortune, 2003). Most recently, Yahoo! Inc saw their share price slide as much as 21% on the day when they reported their second-quarter earnings failed to meet analysts' revenue estimates (Bloomberg, 2006). Given the importance of MBE as a performance benchmark and the consequences of failing to meet this benchmark, it is not surprising that top corporate executives place such a strong emphasis on MBE.

My study seeks to answer the following research question: given the strong emphasis on meeting or beating earnings targets, do firms "manage" earnings to meet these targets? I focus my attention particularly on firms that have a strong motivation to meet these targets, that is, firms which have intrinsic earnings that nearly meet earnings targets and therefore more likely to manage their earnings upwards in order to meet these objectives.

The strong corporate concern in MBE has caught the attention of academic researchers in recent years (Graham, Harvey and Rajgopal (2005), Bartov, Givoly and Hayn (2002), Richardson, Teoh and Wysocki (2004), Matsumoto (2002), among others). Bartov et. al. (2002) examine the capital market rewards to meeting or beating earnings expectations. In their study, they document a stock market premium to MBE of 2.3% in quarterly returns after controlling for the magnitude of the positive earnings surprise, and an additional 0.5% returns premium for every 1% in earnings surprise to firms that MBE. This premium is economically significant considering the average quarterly return of their sample firms is about 3%.

In the same survey study mentioned above, Graham et. al. (2005) found that 80.7% of the interviewed CFOs guide analysts to some degree to manage earnings benchmarks linked to

analyst forecasts. They also find that managers take a mix of accounting and economic actions to ensure that their earnings benchmarks are met. This study indicates that managers, instead of being mere observers of this MBE game, are active participants and are willing to sacrifice firm value and manage earnings or analyst expectations to guarantee that their earnings objectives are met.

Richardson et. al. (2004) document that managers of firms that are having new equity issuance or selling stocks from their personal accounts (through option exercises and stock sales) guide analysts' forecasts downwards prior to earnings announcement so that they can beat these forecasts at the announcement. In another study, Skinner and Sloan (2002) document an asymmetrically large negative price response to negative earnings surprise associated with growth stocks and they found evidence that this phenomenon is the result of expectational errors about future earnings performance. Kasznik and McNichols (2001) also find that firms that meet expectations in one or two years do not command a market premium over and above their market fundamentals; however, firms that consistently meet market expectations do receive a higher valuation.

All in all, earlier academic research studies the benefits of MBE and the costs and consequences of failing to do so, and researchers generally found evidence consistent with their hypotheses that warrant the strong emphasis among capital market participants and managers to MBE. My study extends the existing research by focusing on a subset of these market participants that possibly have strong motivation to MBE – firms that just meet analysts' forecasts. The study of capital markets and managerial incentives to just meet analysts' forecasts is interesting in its own right. Earlier, Bartov et. al (2002) document a stock market premium to MBE, and in the same study, the authors also document an increase from 9% to 15% (a 66.7% increase) in number of firms that just meet forecasts, and an increase from 40% to 52% (a 30% increase) in number of firms that beat forecasts in the period 1994 – 1997. Given the additional premium of beating forecasts, and possibly other capital markets and managerial incentives to beat forecasts, the optimal strategy for firms appears to at least beat forecasts, rather than just meet forecasts, holding costs constant. Assuming that managers have the willingness and ability to manage earnings and the benefits of beating expectations exceed the costs of earnings and/or expectation management, an interesting question arise as to why firms that just meet expectations not manage earnings slightly upwards, even by a penny, to beat expectations and reap the additional rewards of doing so. In this study, I predict that these firms that just meet forecasts do not go one step

further to beat forecasts because they have already exhausted their accounting reserves to meet the forecasts or face increasing costs of managing earnings and/or expectations that exceed the benefits of beating forecasts. I also hypothesize that firms that just meet forecasts manage accruals upwards to meet earnings expectations, and suffer worse future earnings and market performance as compared to other firms.

In the next section, I will explore the benefits of beating expectations further and in section 3, I develop formal hypotheses to answer my research questions. In section 4, I will explain the research design to test these hypotheses and in Section 5, I analyze and present my research findings. In section 6, I conduct further tests and the final section concludes and suggests future research.

2. REASONS FOR BEATING EARNINGS EXPECTATIONS

There are various capital markets and managerial incentives for firms to beat earnings expectations. First, there is a market premium to beat earnings expectations. As documented in Bartov et. al. (2002), firms that meet or beat earnings expectations receive a market premium of 2.3% in quarterly returns, an additional 0.5% returns premium for every 1% in earnings surprise, and firms that beat forecasts have an added 3.4% returns premium above firms that do not meet forecasts, that is not enjoyed by firms that just meet forecasts. This evidence shows that the stock market rewards firms that exceed earnings expectations, and certainly provides firms with the added incentive to not just meet, but to beat, expectations.

Second, managers would want to beat earnings expectations to maximize the present value of their compensation or stock options. Healy (1985) finds evidence that when reported income is between the bogey (the minimum reported income to receive the bonus) and the cap (the maximum reported income to receive the bonus), managers may want to maximize reported income to maximize their executive compensation. In a similar vein, since exceeding earnings expectations will lead to higher stock prices as compared to just meeting expectations, and managers' compensation/bonuses are usually tied to stock price performance or they may have received employee stock options that have its value tied to stock price performance, managers have the incentive to beat expectations to maximize their payoffs. Also, given that the executives' decision horizon is shorter than that of firms', this provides risk-averse managers the incentive to

beat earnings expectations now to boost stock prices in order to maximize the present value of their executive compensation.

Third, managers of firms prior to new equity issuance or selling stocks on their personal accounts (received from earlier stock-based compensation) have an incentive to guide analysts' expectations downwards before earnings announcement, and later beat these "walked-down" expectations at earnings announcement in order to obtain the highest possible share price during equity issuance or stock sale on their personal accounts (Richardson et. al. (2004)). As evidenced in Bartov et. al.(2002), the market rewards firms for the magnitude above which expectations are met, hence managers of firms have the incentive to beat expectations to obtain the highest share price after earnings announcement.

Lastly, firms may receive additional market premium from having a track record of consistently beating earnings expectations. As documented by Kasznik and McNichols (2001), firms that consistently meet market expectations command a higher market premium over and above their market fundamentals. In another study, Barth, Elliot and Finn (1999) find evidence consistent with their hypothesis that earnings multiples (price-earnings ratio) are monotonically increasing with the length of the increasing earnings patterns and the market penalizes firms that break such a pattern. Also, Bartov et.al. (2002) find that firms that habitually beat earnings expectations (firms that MBE in at least nine of the most recent twelve quarters) receive an additional premium over those firms that occasionally MBE. From these studies, it follows that firms that consistently beat earnings expectations may receive an additional premium and command higher stock prices for doing so.

3. HYPOTHESIS DEVELOPMENT

For firms and managers, there are two tools available for them to meet their objective of either meet or beat earnings expectations. As highlighted in Richardson et. al. (2004), managers can intentionally dampen or "walk-down" earlier optimistic earnings forecasts of analysts so that they have a higher chance of meeting or beating expectations at earnings announcement. As reported in Graham et. al. (2005), 80.7% of the interviewed CFOs guide analysts to some degree to manage earning benchmarks linked to analyst forecasts. This method of managing earnings expectations is termed as "expectations management".

The second tool available to management as highlighted in earlier literature (e.g., Jones (1991), Burgstahler and Dichev (1997), Teoh, Welch and Wong (1998), among others) is earnings management. Managers can take a mix of accounting or economic actions to ensure that earnings expectations are met. Accounting actions taken by management to manage earnings usually involve managing accruals, including drawing down on LIFO reserve, postponing accounting charge and changing assumptions regarding collectibility of debts or calculation of pension obligations. On the other hand, economic or real actions taken by management usually involve sacrificing firm value to manage earnings, including decreasing discretionary spending (e.g., Research and Development (R&D), advertising, maintenance, etc.), sacrificing or postponing positive net present value (NPV) projects, selling inventory at a discount to book the revenue in the current period (channel stuffing), and selling profitable investments to recognize the profits in the current period. One or both expectation and earnings management may be used by managers to achieve their goal of MBE.

Abarbanell and Lehavy (2002) find evidence that analysts are unable or unmotivated to anticipate fully firms' earnings management in forecasts, and as a result, firms may have the incentive to manage earnings to meet their objectives. In this study, I predict the following earnings management paths of firms that beat, meet or miss earnings expectations, *holding expectations management constant* (see Fig.1).

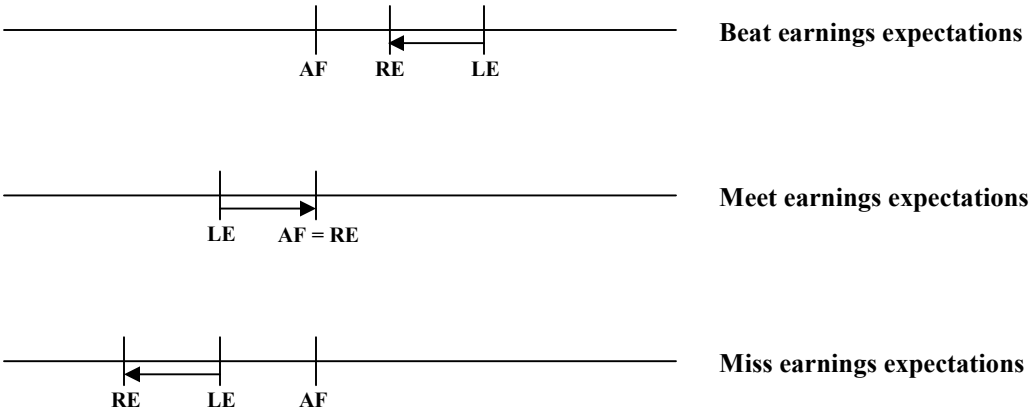

Fig 1: Predicted earnings management paths of firms that beat, meet or miss earnings expectations

AF = Analyst forecasts

LE = Latent/true earnings

RE = Reported earnings

For firms that beat earnings expectations, I expect these firms that manage earnings manage it downwards. As documented in Abarbanell and Lehavy (2002), there are greater returns associated with zero or slightly positive earnings surprise and decreasing gains to larger good news surprises. Also, firms that report earnings that are in excess of earnings expectations may be faced with a higher earnings expectations in the subsequent year, making it possibly more difficult for firms to meet or beat earnings expectations in the following year. As such, firms with latent earnings in excess of earnings expectations may want to manage earnings downwards so that they have a higher probability of meeting subsequent year's earnings expectation and to "bank in" the excess earnings.

For firms that just meet earnings expectations, I expect these firms that manage earnings manage it upwards. As documented in earlier research (e.g., Skinner and Sloan (2002), Bartov et. al. (2002)), the capital markets penalize firms asymmetrically for failing to MBE, hence firms have very strong incentives to at least meet earnings expectations, especially for growth firms. Also, Degeorge, Patel and Zeckhauser (1999) find evidence that firms face a hierarchy of thresholds that help drive earnings management: most important threshold being to report profits, then to meet or beat performance relative to the prior comparable period and lastly, to meet or beat analysts' earnings expectations. As such, I expect firms that meet earnings expectations manage earnings upwards to meet these thresholds and to avoid negative capital markets repercussions, and the incentive to manage earnings upwards is even stronger for firms that already met the first two thresholds.

For firms that miss earnings expectations, I expect these firms that manage earnings manage it downwards. Earlier evidence by Burgstahler and Dichev (1997) and Hayn (1995) indicates that there are too few firms with small decreases in earnings and small losses and too many firms with small increase in earnings and small positive income. In other words, there appears to be a discontinuity around the point of no change in earnings and the point of zero income. I interpret their findings as evidence consistent with Healy's (1985) finding that managers minimize income when performance is below the threshold for receiving bonuses (assumed here to be either the point of no change in income or zero income). As such, I expect that when managers know that they cannot meet earnings expectation even with earnings management, they will not manage earnings upwards so that they have a higher chance of MBE in future periods by "banking in" current income. This practice of managing earnings downwards when earnings are below the threshold is well known in the literature as "taking a bath".

Based on the above predictions, I propose the following hypothesis (expressed in its alternative form):

H_1: Firms that just meet earnings expectations manage earnings *upwards* more than other firms.

Since firms that just meet analysts' forecasts are likely to achieve this result through income increasing earnings management and/or expectation management, I would expect these firms to have a poorer future earnings performance and lower future returns as compared to other firms. Assuming that firms manage their earnings through accrual management, these hypotheses (expressed in its alternative form) is consistent with Sloan (1996)'s finding that higher accruals (as a result of earnings management) is associated with lower earnings persistence and lower future returns:

H_2: Firms that just meet earnings expectations have *lower* future earnings performance as compared to other firms.

H_3: Firms that just meet earnings expectations have *lower* future returns as compared to other firms.

4. RESEARCH DESIGN

My sample period spans from 1994-2003 as the period beginning 1994 marks the increase in the emphasis on meeting or beating analyst expectations. In a study of firms from 1984-1999, Brown (2001) documented a significant temporal shift in median earnings surprise from small negative (1984-1990) to small positive in the period 1994-1999. My sample selection follows closely to that of Bartov et. al. (2002), and consists of firm-quarter observations from First Call database that satisfy the following criteria:

1. There are at least two individual earnings forecasts (not necessarily by the same analyst) for the quarter, which are at least 20 days apart;
2. The release date of the earliest forecast for the coming quarter occurs at least 3 trading days after the release of the previous quarter's earnings; and

3. The release date of the latest forecast precedes the earnings release by at least 3 trading days.

The first criterion ensures that there are at least two individual earnings forecasts that are separated by at least 20 days in order to measure the presence of expectation management. The second criterion ensures that the forecast for the coming quarter is obtained after the release of previous quarter's earnings and therefore not "stale" and the last criterion ensures that the latest forecasts are not revision after the release of actual earnings.

For this study, I define earnings surprise for quarter t as the actual earnings for the quarter (ACT_t) less the latest analyst forecast for the quarter ($F_{latest,\ t}$), forecast error as the actual earnings for the quarter less the earliest analyst forecast for the quarter ($F_{earliest,\ t}$), firms that do not meet or beat earnings expectations as firms that have negative earnings surprise for quarter t, firms that just meet earnings expectations as firms that have a zero earnings surprise for quarter t, and firms that beat earnings expectations as firms that have positive earnings surprise for quarter t.

Test of H_1:

For H_1, I measure the extent of earnings management using two methods. The first method is the modified Jones Model (Jones (1991), Dechow, Sloan and Sweeney (1995), Barton and Simko (2002)), and I estimate the level of discretionary accruals using the residual from the following regression, estimated for every two-digit SIC code (DNUM) excluding utilities and financial services firms (two-digit SIC codes 49 and 60-67) and fiscal year using data from the entire sample period 1994-2003 from COMPUSTAT Industrial Quarterly files. In addition, I require at least 15 observations for each SIC fiscal year for my estimation:[2]

$$TAC_{it}/TA_{it-1} = \gamma_0 + \gamma_1(1/TA_{it-1}) + \gamma_2[(\Delta REV_{it} - \Delta REC_{it})/TA_{it-1}] + \gamma_3(PPE_{it}/TA_{it-1}) + \gamma_4 Q1_{it} + \gamma_5 Q2_{it} + \gamma_6 Q3_{it} + \varepsilon_{it} \quad (1)$$

where

TAC_{it} = total accruals in the event quarter t for firm i;

[2] I use the entire sample period from 1994-2003 for both estimation and prediction of discretionary accruals because I do not have *a priori* prediction about which quarter firms are more likely to manage accruals. This method of using the entire sample period for both estimation and prediction is similar to that used in Barton and Simko (2002) and Han and Wang (1998).

TA_{it-1} = total assets at quarter t-1 for firm i;

ΔREV_{it} = change in revenue in quarter t for firm i;

ΔREC_{it} = change in receivables in quarter t for firm i;

PPE_{it} = gross property plant and equipment in the event quarter t for firm i;

Q1-Q3 = fiscal quarter indicators in quarter t for firm i; and

ε_{it} = discretionary accruals in quarter t for firm i

To test my first hypothesis using the first method, I estimate the following regression:

$$\begin{aligned} DA_{it} = {} & \alpha_0 + \alpha_1 DMEET_{it}^{(+)} + \alpha_2 (NOA_{it}/SALES_{it-1})^{(-)} + \alpha_3 DMEET_{it}^{(+)} * (NOA_{it}/SALES_{it-1}) \\ & + \alpha_4 GROWTH_{it}^{(+)} + \alpha_5 DMEET_{it} * GROWTH_{it}^{(+)} \\ & + \alpha_6 EXPECT_{it}^{(-)} + \alpha_7 DMEET_{it} * EXPECT_{it}^{(+)} \\ & + \alpha_8 DMBE_{it-1}^{(+)} + \alpha_9 DMEET_{it} * DMBE_{it-1}^{(+)} \\ & + \alpha_{10} SIZE_{it} + \sum \xi SIC_{it} + \sum \psi YEAR_{it} \varepsilon_{it} \end{aligned} \quad (2)$$

where

DA_{it} = discretionary accruals in quarter t for firm i;

$DMEET_{it}$ = indicator variable for firms that just meet earnings expectations in quarter t for firm i;

$NOA_{it}/SALES_{it-1}$= Net operating assets in the beginning of period t divided by sale in quarter t-1 for firm i;

$GROWTH_{it}$ = market value of equity divided by book value of equity in quarter t for firm i;

$EXPECT_{it}$ = the earliest forecast less the latest forecast, or $F_{earliest} - F_{latest}$;

$DMBE_{it-1}$ = indicator variable for firm i if it MBE in quarter t-1;

$SIZE_{it}$ = log market value of equity at quarter t;

SIC_{it}= indicator variable for firm i's 2-digit Standard Industrial Classification (SIC) code;

$YEAR_{it}$ = indicator variable for firm i's year observation

In this regression model, I control for variables that could potentially impact the level of discretionary accruals. Following Barton and Simko (2002), I use NOA/SALES to control for the extent to which the balance sheet is overstated. In other words, this variable measures the capacity or flexibility to which management can manage earnings this period. If the balance sheet is overstated in the past, management has less ability to manage accruals this period. As such, I

predict α_2 to be negative. For the interaction variable, since I expect firms that just meet earnings expectations to have a large incentive to manage earnings upwards, I predict that NOA/SALES to have a less impact on discretionary accruals. As such, I expect α_3 to be positive. Since this variable is scaled by sales in the previous quarter, I additionally impose the requirement that firms have sales greater than $1 million in the previous quarter to prevent this variable from being arbitrarily large because of the scaling.

Following Skinner and Sloan (2000), I use GROWTH to control for the greater incentive of growth firms to manage accruals upwards to meet or beat forecasts, since growth firms face large negative price response to negative earnings surprise. As such, I predict α_4 to be positive. For the interaction variable, since I expect firms that just meet earnings expectations to have a large incentive to manage earnings upwards, I expect this incentive for growth firms to be magnified, hence I expect α_5 to be positive.

I use EXPECT to measure the extent of expectation management. A positive EXPECT seems to indicate that the firm is able to "walk down" or dampen analysts' optimism. Since firms which are able to manage expectations downwards to meet their objectives are less likely to use earnings management, and I expect α_6 to be negative. For the interaction variable, since I expect firms that just meet earnings expectations to have a large incentive to manage earnings upwards, I expect α_7 to be positive.

Following Kasznik and McNichols (2002), I use DMBE to proxy for the greater incentive to manage earnings upwards after the firm has MBE last period. As Kasznik and McNichols document, firms experience the greatest negative returns when the firm fails to MBE in the current year after MBE in the prior year. As such, I expect α_8 to be positive, and more positive for firms that just meet earnings expectations (α_9 to be positive). SIZE is included as a control variable in the estimation model since it is correlated with other explanatory variables. Lastly, SIC and YEAR indicator variables are included to control for industry and year effects.

The second method I used to test H_1, is similar to that employed in Han and Wang (1998)'s equation 1. I regress total accruals on all variables in the modified Jones Model, as well as other control variables in (2), with similar predictions on the coefficients:

$$TACC_{it} = \alpha_0 + \alpha_1 DMEET_{it}^{(+)} + \alpha_2 (NOA_{it}/SALES_{it-1})^{(-)} + \alpha_3 DMEET_{it}^{(+)} * (NOA_{it}/SALES_{it-1})$$
$$+ \alpha_4 GROWTH_{it}^{(+)} + \alpha_5 DMEET_{it}^{(+)} * GROWTH_{it}$$
$$+ \alpha_6 EXPECT_{it}^{(-)} + \alpha_7 DMEET_{it}^{(+)} * EXPECT_{it}$$
$$+ \alpha_8 DMBE_{it-1}^{(+)} + \alpha_9 DMEET_{it}^{(+)} * DMBE_{it-1} + \alpha_{10} SIZE_{it}$$
$$+ \varsigma_1 1/TA_{it} + \varsigma_2 (\Delta REV_{it} - \Delta REC_{it})/TA_{it} + \varsigma_3 PPE_{it}/TA_{it}$$
$$+ \sum \varsigma Q_{it} + \sum \xi SIC_{it} + \sum \psi YEAR_{it} + \varepsilon_{it} \quad (3)$$

Test of H_2 and H_3:

To estimate the difference in future earnings performance and returns (short and long window) between firms that just meet earnings expectations and other firms, I estimate the following models:

$$EPS_{it+1} = \beta_0 + \beta_1 DMEET_{it}^{(-)} + \beta_2 AF_{t+1}^{(+)} + \beta_3 DMEET_{it}^{(-)} * AF_{t+1}$$
$$+ \beta_4 ERROR_{it}^{(+)} + \beta_5 DMEET_{it}^{(-)} * ERROR_{it} + \varepsilon_{it} \quad (4)$$

$$CAR_{it} = \varphi_0 + \varphi_1 DMEET_{it}^{(-)} + \varphi_2 SURP_{it}^{(+)} + \varphi_3 ERROR_{it}^{(+)} + \varphi_4 DMEET_{it}^{(-)} * ERROR_{it} + \varepsilon_{it} \quad (5)$$

where

EPS_{it+1}= earnings per share in quarter t+1 for firm i;

$DMEET_{it}$ = indicator variable for firms that just meet earnings expectations in quarter t for firm i;

AF_{t+1} = earliest analyst forecast for earnings per share in quarter t+1 for firm i, made in quarter t;

$ERROR_{it}$ = forecast error for quarter t for firm i or ACT - $F_{earliest}$;

CAR_{it} = market-adjusted cumulative abnormal returns for 3 days surrounding current quarter earnings announcement (short window) and beginning two days after the earliest analyst's forecast is released and ending 90/180/360 days later (long window);

$SURP_{it}$ = earnings surprise for quarter t for firm i or ACT - F_{latest};

Since I expect firms that just meet earnings expectations to have a higher incentive to manage earnings and thus have higher managed accruals and lower persistence and quality of earnings, I expect these firms to have lower future earnings performance, after controlling for

current earnings and lower future abnormal returns, after controlling for earnings surprise. Hence, according to my hypothesis, I expect β_1, β_3 and β_5 to be negative and β_2 and β_4 to be positive in (3), and φ_1 and φ_4 to be negative and φ_2 and φ_3 to be positive in (4).

All returns data and analyst data are obtained from CRSP and FIRSTCALL respectively. Other information are obtained from COMPUSTAT Industrial Quarterly files. To maximize the power of the test, I analyze H_1 on the maximum sample of 21,490 where observations from all required variables are available and test H_2 and H_3 on the maximum sample of 31,791. Results are qualitatively similar regardless of whether I restrict my sample to be the same for all three tests.

5. RESULTS

[FIGURE 2 HERE]

5.1 Time Trend of Firms that Miss, Meet, Just Beat and Beat Analysts' Forecasts

In Figure 2a, I plot the time trend of firms that miss, meet and beat analysts' forecasts. As observed from that figure, there is an upward trend of firms beating analysts' forecasts, from 49.2% in 1994 to about 59.2% in 2003. There is also a decrease in firms that miss forecasts, from about 28.1% in 1994 to a low of 18.4% in 1999 and increasing slightly to about 24.4% in 2003. Together, firms that meet or beat forecasts increase from 71.9% in 1994 to 76.6% in 2003.

In Figure 2b, I partition the firms that beat analysts' forecasts into two categories: firms that just beat forecasts (earnings surprise between 0 and 1 cent per share) and firms that beat forecasts (earnings surprise greater than 1 cent per share). The reason for this partition is to observe if there is a shift in tendency of firms to not just meet forecasts, but beat it slightly over time. As observed in Figure 2b, we do not observe a significant increase in firms that just beat forecasts from 1994 to 2003. However, there is a marked increase in firms having earnings surprise of greater than 1 cent per share, from 32.5% in 1994 to 41.3% in 2003. The result is somewhat surprising since there is an increase in managerial disclosure over time and we would expect analysts to be more accurate in their forecasts and less "surprised" at the earnings announcement. This may provide preliminary evidence that firms are better able to dampen or "walk down" analysts' forecasts, resulting in more firms beating analysts' forecasts from 1994-2003.

[TABLE 1 HERE]

5.2 Descriptive Statistics

Table 1 presents descriptive statistics comparing the firm characteristics between firms that just meet forecasts and other firms. The mean total assets (TA) of firms that just meet forecasts and other firms are $2,452m and $2,702m respectively. This shows that firm size as measured by total assets is relatively similar between the two groups. However, the mean market value of equity (MVE) of firms that just meet forecasts is much higher at $5,242m as compared to other firms' at $4,280m. This probably suggest that firms that just meet forecasts are more likely to be growth firms, with higher market-to-book ratios, and this is also evidenced by the higher mean market-to-book (GROWTH) of firms that just meet forecasts (4.15) as compared to other firms (3.84).

Mean discretionary accruals scaled by total assets (DA) for firms that just meet forecasts is lower than other firms (0.0083 versus 0.0098), total accruals (TACC) is higher than other firms (-0.0196 versus -0.0360) and mean net operating assets divided by sales (NOA/SALES) is also lower than other firms (4.01 versus 5.25). Together, both DA and NOA/SALES provide initial evidence that firms that just meet forecasts may have a lower DA because it has less accounting flexibility to manage accruals as indicated by their lower NOA/SALES (Barton and Simko (2002)).

Firms that just meet forecasts also have a lower tendency to "walk-down" or manage expectations, as evidenced by their lower mean EXPECT (0.0208 versus 0.0301). The less tendency or inability to manage expectations may lead to firms that just meet forecasts resorting to manage earnings to meet or beat earnings expectation. Firms that just meet forecasts are also more likely to meet or beat analysts' forecasts in the previous quarter (DMBE) as compared to other firms (0.8107 versus 0.7511), which may increase their incentive to meet or beat expectations this period, since firms that consistently meet market expectations command a higher market premium over and above their market fundamentals (Kasznik and McNichols (2001)), and hence more reluctant to break this pattern.

As for future firm performance indicators, firms that just meet forecasts have higher mean earnings per share (EPS) in the next quarter (0.1818 versus 0.1638), but lower

announcement period cumulative abnormal returns (CAR0) and lower cumulative 90 and 180-day abnormal returns (CAR1 and CAR2) as compared to other firms. Cumulative 360-day abnormal returns for firms that just meet forecast is much higher than other firms (0.0291 vs 0.0163), showing that lower cumulative abnormal returns in shorter window may be temporary. As indicated by the earliest analyst forecast for earnings per share made in the current period for the following period (AF), analysts may have anticipated the better future firm performance of the firms that just meet forecasts, resulting in a slightly higher mean AF as compared to other firms (0.2326 versus 0.2300).

[TABLE 2 HERE]

5.3 Correlation Table for Hypothesis 1

In Table 2, I present the correlation tables for the non-interacted variables in H_1. One notable observation is that DA is not significantly correlated with any explanatory variables, whereas TACC is significantly correlated with all variables except GROWTH. Since this is only partial correlation, I reserve my analysis for the multivariate tests in Table 3. Also, none of the explanatory variables are highly correlated with other explanatory variables, providing evidence that multicollinearity is not a problem in this regression.

[TABLE 3 HERE]

5.4 Test of Hypothesis 1:

To test my first hypothesis that firms that just meet earnings expectations manage earnings *upwards* more than other firms, I run the estimation model based on equation 2 and 3 (see section 4) for all firms in my sample. From the regression of DA on the explanatory variables, we observe that none of the explanatory variables are significant, a result consistent with the correlation table in Table 2. The adjusted R-square is also very low at 2.29%, showing that large variation of the dependent variable is not explained by the model. This may be due to model misspecification, non-linearity of the relationship between the dependent and independent variables, or low power of the test.

From the regression result using alternative model similar to that used in Han and Wang (1998) with TACC as the dependent variable, all of the control variables load in the predicted sign, and only GROWTH is insignificant at 10% level or better. Our variable of interest, DMEET has a regression coefficient 0.019 and is significant at 5% level. This indicates that firms that just meet forecasts have an average 1.9% higher in discretionary accruals. This amount is both statistically and economically significant since the dependent variable is scaled by total assets.

NOA/SALES has a predicted negative significant coefficient of -0.000, and it provides evidence that firms with less accounting flexibility as proxied by NOA/SALES have lower discretionary accruals. However, the interaction variable DMEET*NOA/SALES has a weakly negative significant coefficient of -0.001, which is contrary to my prediction. This may be interpreted as firms that just meet forecasts may have less ability to manage accruals since their balance sheet is already "inflated" and do not have the accounting flexibility to do so. This is corroborated by the lower mean and median NOA/SALES of firms that just meet forecasts as compared to other firms (4.01 versus 5.25 (mean), 2.89 versus 3.25 (median)).

GROWTH has a predicted positive coefficient of 0.000 but this is not significant at conventional level. The interaction variable DMEET*GROWTH has a negative significant coefficient of -0.000 and it is not in the predicted sign. However, since the coefficient is not economically significant, I do not offer explanation for this variable.

EXPECT is highly negative significant with a coefficient of -0.270, and it is the largest coefficient among all the explanatory variables. This provides some evidence that the usage of accrual management and expectation management may be substitutes for one another, and firms that managed to "walk-down" analysts' forecasts uses less accrual management to meet or beat forecasts. However, we are not able to determine from this estimation whether firms manage accruals and/or expectations sequentially or simultaneously to meet or beat earnings expectations.

DMBE has a positive significant coefficient of 0.007, and it shows that firms that meet or beat earnings expectations in the previous quarter have higher discretionary accruals. However, the interaction variable DMEET*DMBE has a negative significant coefficient of -0.009, which is contrary to my prediction. This result is surprising, considering the fact that since these firms that just meet forecast have already meet or beat earnings expectations in the previous quarter, they should have a greater incentive to manage accruals in the current quarter to ensure the consistent

pattern of meeting and beating expectations and enjoy higher stock premium. I am not able to provide explanation for this phenomenon.

In summary, there is some evidence to support the hypothesis that firms that just meet forecast manage earnings *upwards* more than other firms in the sample, after controlling for other incentives. Next, we examine if these firms which manage earnings upwards more than other firms lead to poorer future firm and stock performance.

[TABLE 4 HERE]

5.5 Correlation Table for Hypothesis 2 and 3

Table 4 presents the correlation table of the variables used to test hypotheses 2 and 3. Most of the explanatory variables are significantly correlated with the explained variables: Earning per share for the following quarter (EPS) and cumulative abnormal returns (CAR0-CAR3). However, one notable correlation is the correlation between forecast error (ERROR) and earnings surprise (SURP). The partial correlation between the two variables is almost close to unity at 0.9141. By construction, ERROR is the difference between actual earnings and the first analyst's forecast and SURP is the difference between actual earnings and the last analyst's forecast. In my sample, I require the difference between the first and last analyst's forecast to be at least 20 days, and the average length between the two forecasts is 56.54 days. This is consistent with that documented in Bartov et. al (2002). Their sample spans from 1983-1997 and they reported an average length between the two forecasts of 55 trading days.

One possible explanation for such high correlation is analysts' herd behavior that results in clustering of forecasts issued by different analysts, despite being issued on different dates. Another possible reason is that not much new information is released during the first and last forecast, leading to high correlation between ERROR and SURP. The exact reason is an empirical question and will not be pursued here and left for future research. However, in the presence of multicollinearity, the exact coefficient of either variable cannot be estimated and often leads to large standard errors. Since my variable of interest is not ERROR or SURP, I choose to follow prior study (e.g. Bartov et. al. (2002)) and truncate my sample at 1% level for all my independent variables in my test of hypothesis 3 where SURP and ERROR appears in the same regression equation. This reduces the sample size for test of hypothesis 3 from 31,791 to 30,340. This

problem does not affect test of hypothesis 2 as *a priori*, there is no reason to believe that SURP should be included in equation (4) in explaining future earnings. It is noted that after truncation, correlation between ERROR and SURP decreased to 0.5182 and thus partially solves the multicollinearity problem. Also, in my test of hypothesis 3, I will present regression results for both full and truncated sample, but I offer analysis for the truncated sample only.

[TABLE 5 HERE]

5.6 Test of Hypothesis 2:

To test my second hypothesis that firms that just meet earnings expectations have *lower* future earnings performance as compared to other firms, I estimated equation 4 (see section 4) for the firms in the full sample. From Table 5, firms that just meet forecast have an *increase* of $0.033 in earnings per share in the following period as compared to other firms, and it is statistically significant at 1% level. However, interaction variables between DMEET and other variables (AF and ERROR) indicates that firms that just meet forecasts have a lower positive coefficient for AF (-0.053) and a much higher coefficient for ERROR (4.255), and these interaction variables are statistically significant at 1% level. The large coefficient for DMEET*ERROR of 4.255 should be interpreted with caution. Since ERROR is scaled by share price at the beginning of the quarter, and the mean ERROR for firms that just meet forecast is -0.0014, the average association between firms that just meet forecast and future earnings is only -$0.006 per share (-0.0014*4.255) as a result of ERROR. Similarly, the mean AF for firms that just meet forecast is 0.2326, the average association between firms that just meet forecast and future earnings is -$0.012 per share (0.2326*-0.053) as a result of AF. These two examples show that on average, firms that just meet forecasts do not have lower future earnings as compared to other firms, even after accounting for interaction variables.

Overall, these results provide evidence that even though firms that just meet forecasts do not have lower earnings per share in the following period, there is a weaker association between earnings per share in the following period and analysts' forecasts for the following period. This provides some evidence that future earnings for firms that just meet forecasts are less predictable, which is possibly attributed to earnings management. Also, since we only examine earnings in the following quarter, even if these firms have managed earnings upwards, accruals may not have reversed in the following period to result in lower earnings.

[TABLE 6 AND 7 HERE]

5.7 Test of Hypothesis 3:

To test my third hypothesis that firms that just meet earnings expectations have *lower* future returns as compared to other firms, I estimated equation 5 (see section 4) for the firms in the full and truncated sample. I run these tests of future cumulative abnormal returns (CAR) using a short window of 3 days surrounding earnings announcement (Table 6) and long windows of 90/180/360 days cumulated 2 days after the earliest analyst's forecast (Table 7).[3]

For the short window test, we observe a similar premium documented in prior study to beating analysts' forecasts as evidenced by the positive and significant coefficient of 2.959 for SURP. We also observe significant and negative coefficients for DMEET and DMEET*ERROR of -0.009 and -0.304 respectively. Collectively at the mean ERROR, firms that just meet forecasts have a lower 3-day CAR of -0.86% (-0.009 + -0.304*-0.0013) as compared to other firms.

For the 90-day size-adjusted cumulative abnormal returns (CAR1), firms that just meet forecasts have lower abnormal returns as compared to other firms (coefficient of -0.018). This means that on average, firms that just meet forecasts have a lower 1.8% in cumulative abnormal returns as compared to other firms in the 90-day period. However, the interaction term between DMEET and ERROR (DMEET*ERROR) is significantly positive at 3.168, indicating that for every 1% increase in forecast error scaled by share price, firms that just meet forecasts enjoy an additional 3.2% over other firms. However, if we evaluate at the mean ERROR, firms that just meet forecasts have a lower 90-day CAR of -2.21% (-0.018 + 3.168*-0.0013) as compared to other firms.

For 180-day cumulating period, the results are qualitatively similar to that in the 90-day period, with firms that just meet forecasts having a lower 1.3% in CAR, but that is mitigated as these firms enjoy an additional 3.8% CAR for every 1% increase in forecast error scaled by share price. Similarly, if we evaluate at the mean ERROR, firms that just meet forecasts have a lower 180-day CAR of -1.79% (-0.013 + 3.751*-0.0013) as compared to other firms.

[3] The results are qualitatively similar when I use buy-and-hold abnormal returns instead of CAR

For 360-day cumulating period, firms that just meet forecasts enjoy a *higher* 1.9% in CAR, and additional 3.7% cumulative abnormal returns for every 1% increase in forecast error scaled by share price. If we evaluate at the mean ERROR, firms that just meet forecasts have a higher 360-day CAR of 1.41% (0.019 + 3.744*-0.0013) as compared to other firms.

Overall, the evidence provide support that firms that just meet forecasts have a lower announcement period CAR, and 90 and 180-day long window CAR. However this is mitigated for firms with positive forecast errors. The lower future return is reversed for the 360-day CAR where firms that just meet forecasts enjoy a higher CAR of 1.41%. This result may provide some evidence that the market is able to see through the accruals management and does not reward firms that just meet forecasts accordingly.

6. ADDITIONAL ANALYSIS

[TABLE 8 HERE]

6.1 Test of Hypothesis 1 including Indicator Variables for Firms that Just Beat and Beat Forecasts:

As documented in Skinner and Sloan (2002), they observe the greatest abnormal returns around earnings surprise of zero. As such, firms enjoy the greatest abnormal returns per unit of earnings surprise when they beat forecasts slightly. It will be interesting to know if the incentive to just meet earnings forecast or avoid missing forecast is greater than the incentive to reap additional stock premium by managing earnings upwards. I investigate this differential incentive by testing hypothesis 1 by including indicator variables for firms with earnings surprise between zero and one cent per share (DJBEAT) and firms with earnings surprise greater than one cent per share (DBEAT)[4].

The regression coefficients are qualitatively similar to that reported in Table 3 without the additional indicator variables. After including DJBEAT and DBEAT, the coefficient for DMEET is higher at 0.022. However, the comparison group for this test is firms that miss forecasts, since we include indicator variables for firms that just meet and beat forecasts in this regression. We can instead interpret the difference by comparing the size of the coefficient

[4] The results are qualitatively similar if I define my group of firms that just beat forecasts (MJBEAT) to be firms with earnings surprise scaled by price between zero and 0.01.

between groups. Among DMEET, DJBEAT and DBEAT, DMEET has the most positive and significant coefficient of 0.022, compared to DJBEAT's positive and significant coefficient of 0.008 and DBEAT's coefficient of 0.002, which is not significant at conventional levels. This provides some evidence that the incentive to manage earnings upwards to avoid missing forecasts and just meet forecasts is greater than the incentive to manage earnings upwards to gain additional stock premium from beating forecasts.

[TABLE 9 HERE]

6.2 Test of Hypothesis 2 including Indicator Variables for Firms that Just Beat and Beat Forecasts:

In this section, we investigate if firms that just meet forecasts have lower future earnings as compared to firms that just beat and beat forecasts. Based on earlier results, we observe some evidence that firms that just meet forecasts manage earnings more than the other groups and firms that just beat forecasts manage earnings more than firms that beat forecasts, I therefore predict the following relationships:

Coef.(DMEET) < Coef. (DJBEAT) < Coef.(DBEAT)

Coef.(DMEET*AF) < Coef. (DJBEAT*AF) < Coef. (DBEAT)

I do not offer prediction for interaction terms with ERROR since the sign of the interaction term in Table 5 is not as predicted. Base on the result in Table 9, the relationship is almost as predicted. Coefficient of DJBEAT is higher (0.119) as compared to DMEET (0.111). However, coefficient of DBEAT is surprisingly the lowest at 0.102. With regard to the interaction terms, the relationship is as predicted: coefficient of DBEAT*AF (0.064) is the highest, followed by DJBEAT*AF (-0.018) and lastly DMEET*AF (-0.022). This result provides some evidence that firms that manage earnings to meet forecasts do in fact have lower future earnings as compared to firms that beat forecasts. The positive coefficient (0.033) observed in Table 5 may be due to a different comparison group: in Table 5, the comparison group is all other firms, which include firms that miss forecasts and in Table 9, it is evident that firms that just meet forecasts have higher future earnings as compared to firms that miss forecasts, with a coefficient of 0.111.

However, they have lower future earnings as compared to firms that just beat forecasts, arguably because of greater accruals management.

[TABLE 10 AND 11 HERE]

6.3 Test of Hypothesis 3 including Indicator Variables for Firms that Just Beat and Beat Forecasts:

From Table 6 and 7, we observe that firms that just meet forecasts have poorer CAR during earnings announcement period and 90 and 180-day cumulative period as compared to other firms. I provided explanation that possibly the capital market is able to see through the earnings management and does not reward these firms accordingly. As such, an interesting question arises as to why firms have the incentives to manage earnings to just meet forecasts when they are not rewarded by the capital markets. I predict that they are willing to do so to avoid the "punishment" associated with missing analysts' expectations. I will test this hypothesis in this section. Since the comparison group is now firms that miss forecasts, I expect all coefficients to be positive.

Based on Table 10 and 11, after including indicator variables DJBEAT and DBEAT, the coefficient for DMEET in the short window test is positive and significant at 0.013 as compared to firms that miss forecasts. Also, this coefficient is lower as compared to DJBEAT (0.028) and DBEAT (0.035), which is consistent with Bartov et. al. (2002)'s finding that firms enjoy additional stock premium from beating analysts' forecast, over and above just meeting forecast.

The results are consistently similar for the long window test for 90 and 180-day CAR. Coefficient for DMEET in the 90-day (180-day) regression is now positive and significant at 0.039 (0.056), and this is monotonically lower as compared to firms that just beat forecasts with coefficient of 0.048 (0.066) and firms that beat forecasts with coefficient of 0.076 (0.088). For the 360-day CAR test, firms that just meet forecasts have the highest coefficient of 0.086, and this is consistent with that reported in Table 7. Overall, the result suggests that firms that just meet forecast have a higher CAR than firms that miss forecast, but lower than firms that just beat and beat forecasts. This may provide evidence why firms are willing to manage earnings to just meet forecasts to avoid capital markets repercussion.

7. DISCUSSION AND CONCLUSIONS

7.1 Discussion

The result of the first hypothesis to examine if firms that just meet analysts' forecast managed earnings upwards to meet earnings expectations provides some support that these firms do manage discretionary accruals upwards to achieve their objective. However, the results of the second and third hypothesis indicate that these firms do not experience inferior future firm and stock performance as compared to firms that miss forecasts. There are several possible reasons why this may be so. Firstly, the practice to manage earnings upwards may just be a temporary measure by managers to ensure that firms continue their tradition of meeting or beating analysts' forecasts and not a sign of corporate weakness per se, resulting in these firms not having a lower earnings per share in the following period. Also, this may be interpreted from the fact that 81.1% of firms that just meet forecasts meet or beat analysts' expectation in the previous quarter, and may indicate that these firms have strong corporate performance, but just need a "quick-fix" to ensure that the ritual of meeting or beating forecast is strictly adhered to.

Secondly, the capital markets may have accepted the fact that these firms had tried hard enough to make sure that earnings expectations are met through earnings management, and rewarded them accordingly. As reported in the interview of CFOs in Graham et. al. (2005) study, one CFO noted that "if you see one cockroach, you immediately assume that there are hundreds behind the walls, even though you may have no proof that this is the case". This indicates that capital markets are forgiving of firms managing earnings, so long as their earnings expectations are met.

The downside of such earnings management practice among firms that manage earnings to meet forecast is that their earnings number is less informative. This is substantiated from the results in the test of second hypothesis that analysts' forecasts and forecast error is less predictive of future period firm performance for these firms.

7.2 Conclusion

As studied in earlier research, managers are active players in this game of meeting and beating earnings expectations, and a majority of executives would use expectations or earnings

management to help them get to the top of this game. This area of research is interesting in its own right due to the dynamic interaction between the various players in this game - the managers representing the firms and the capital markets. In this study, I specifically focus on the firms that just meet earnings expectations for analysis, because firms at this threshold face tremendous pressure to manage earnings upwards to meet earnings expectations. My results provide some support that these firms may have managed earnings upwards to meet earnings expectations, but that do not imply that firms that just meet forecasts experience inferior future firm and stock performance. I posit that this may be the case because firms that just meet forecasts have the ability to do so as they are inherently financially healthy firms, and the capital markets accept this fact and reward these firms accordingly for meeting earnings targets.

Some interesting questions remain from this study. It is not obvious from my study whether firms use earnings and expectations management as complements or substitutes, and whether they use these tools sequentially or simultaneously. It is also interesting to find out why capital markets are fixated on the earnings target, and assume that firms that meet or beat forecasts are in good shape and condemn other firms to poor stock performance. Assuming that markets are efficient, the capital markets should be able to see through cosmetic earnings management accordingly, and reward financially strong firms even though they miss earnings target by a penny. Also, with more firms using real earnings management as opposed to just accounting manipulations to manage earnings in recent years, it is interesting to find out whether firms that just meet forecasts using real earnings management would have the same consequence as the firms that just meet forecasts in my study.

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FIGURE 2

Time Trend of Firms that Miss, Just Meet, Just Beat and Beat Analysts' Forecasts

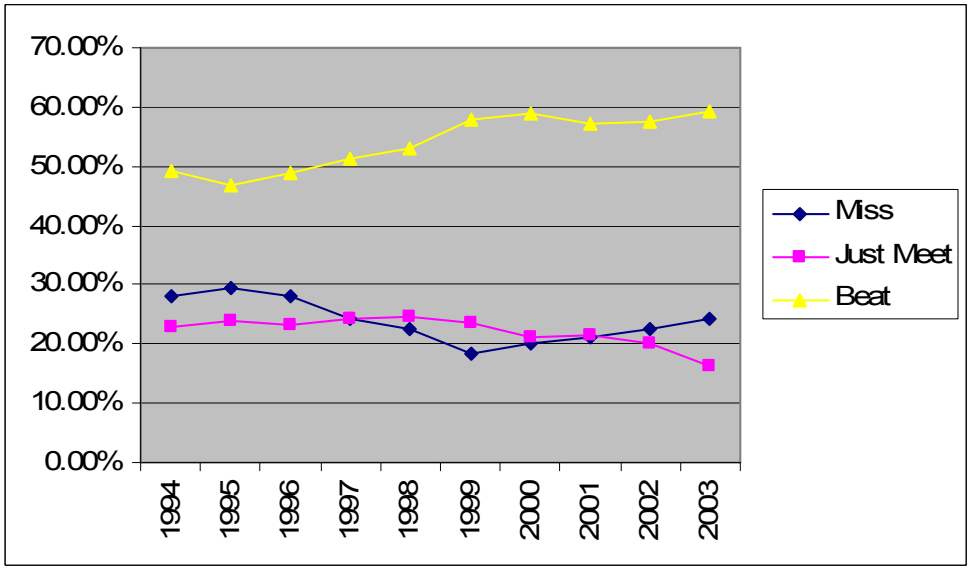

Figure 2a: Percentage of firms that miss, just meet and beat analysts' forecasts in 1994-2003

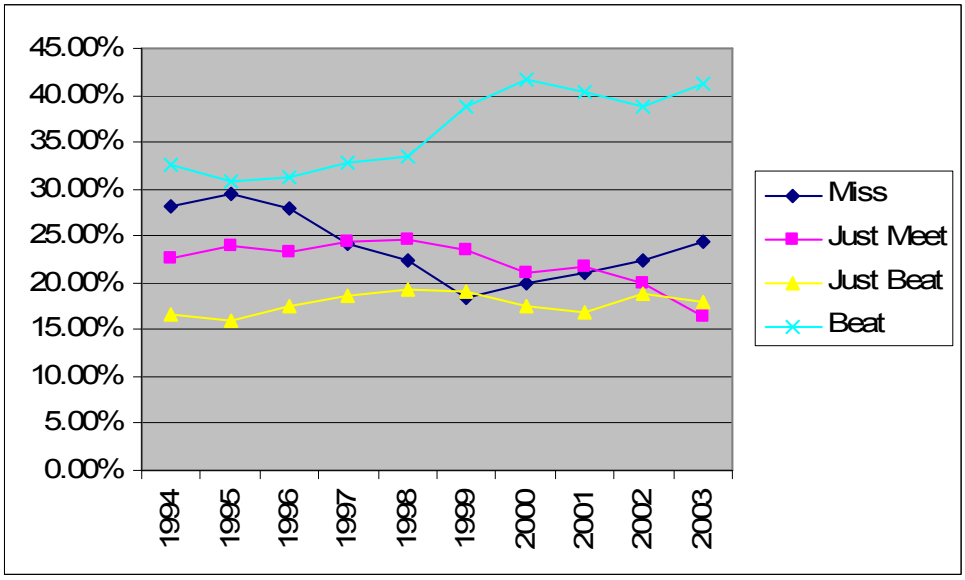

Figure 2b: Percentage of firms that miss, just meet, just beat and beat analysts' forecasts in 1994-2003. Firms that just beat are defined as firms with earnings surprise between 0 and 1 cent/share. Firms that beat are defined here as firms with earnings surprise greater than 1 cent/share.

TABLE 1

Descriptive Statistics – Just Meet Forecast

	Mean	Std. Dev.	Median	Min	Max
Panel A: Sub-sample of 4,822 firm quarters that just meet forecast					
TA	**2,451.80**	**6992.49**	**598.83**	**4.98**	**110,012.00**
MVE	**5,242.24**	**18,643.53**	**831.01**	**4.16**	**441,858.70**
DA	**0.0083**	**0.7072**	**0.0113**	**-10.44**	**7.57**
TACC	**-0.0191**	**0.0962**	**-0.0167**	**-1.73**	**2.50**
NOA/SALES	**4.01**	**4.53**	**2.89**	**0.0407**	**108.04**
GROWTH	**4.15**	**15.59**	**2.79**	**-321.17**	**915.30**
EXPECT	**0.0208**	**0.0831**	**0.00**	**-0.70**	**1.19**
DMBE	**0.8107**	**0.3918**	**1**	**0**	**1**
Panel B: Full sample of 7,219 firm quarters that just meet forecast					
EPS	**0.1818**	**0.2833**	**0.1500**	**-5.04**	**5.96**
AF	**0.2326**	**0.2782**	**0.1900**	**-7.02**	**5.78**
ERROR	**-0.0196**	**0.0784**	**0.0000**	**-1.19**	**1.26**
SURP	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
CAR0	**-0.0037**	**0.0829**	**-0.0020**	**-0.5878**	**0.5880**
CAR1	**-0.0189**	**0.2382**	**-0.0036**	**-1.87**	**1.45**
CAR2	**-0.0096**	**0.3596**	**0.0008**	**-1.91**	**3.85**
CAR3	**0.0291**	**0.5121**	**0.0289**	**-2.64**	**3.27**

The sub-sample and full sample is chosen from *Compustat* Industrial Quarterly files, *Firstcall* and *CRSP* and spans from 1994-2003 where observations from all required variables are available. Firms from regulated industries (utilities and financial services: SIC codes 49 and 60-67) and sales from the previous quarter of less than $1 million are excluded from the sample.

The variables are defined as follows:

TA = total assets in millions at the beginning of the quarter (COMPUSTAT item #44)

MVE = market value of equity in millions (COMPUSTAT item #14*item #61)

DA = discretionary accruals, scaled by total assets at the beginning of the quarter, and estimated from the modified Jones (1995) model, where at least 15 observations are available for each two-digit SIC year estimation

TACC = total accuals, scaled by total assets at the beginning of the quarter (COMPUSTAT (item #76 – item #108)/item #44)

NOA/SALES = net operating assets at the beginning of the quarter, divided by sales from the previous quarter (COMPUSTAT (item #44 – item #36)/(item #2))

GROWTH = market to book ratio (COMPUSTAT item #14/(item #59/item #61))

EXPECT = the earliest forecast for the quarter less the latest forecast for the quarter, per share

TABLE 1 (continued)

Descriptive Statistics – Rest of the Sample

Panel C: Sub-sample of 16,668 firm quarters					
	Mean	**Std. Dev.**	**Median**	**Min**	**Max**
TA	**2,701.67**	**7,734.37**	**597.47**	**4.44**	**216,048.00**
MVE	**4,280.29**	**18,465.78**	**709.58**	**5.18**	**556,962.50**
DA	**0.0098**	**0.8758**	**0.0087**	**-12.67**	**15.07**
TAC	**-0.0360**	**0.1070**	**-0.0273**	**-4.06**	**1.54**
NOA/SALES	**5.25**	**10.01**	**3.25**	**0.1183**	**661.05**
GROWTH	**3.84**	**34.52**	**2.39**	**-1,368.35**	**2,279.29**
EXPECT	**0.0301**	**0.1786**	**0.01**	**-10.39**	**6.91**
DMBE	**0.7511**	**0.4324**	**1**	**0**	**1**
Panel D: Sub-sample of 24,572 firm quarters					
EPS	**0.1638**	**0.5264**	**0.1700**	**-18.77**	**8.90**
AF	**0.2300**	**0.4238**	**0.2100**	**-5.73**	**7.52**
ERROR	**-0.0206**	**0.2201**	**0.010**	**-12.11**	**3.67**
SURP	**0.0077**	**0.1786**	**0.010**	**-10.37**	**3.73**
CAR0	**0.0052**	**0.0924**	**0.0041**	**-0.9610**	**1.53**
CAR1	**0.0042**	**0.2592**	**0.0093**	**-1.99**	**2.51**
CAR2	**0.0090**	**0.3834**	**0.0138**	**-2.97**	**3.36**
CAR3	**0.0163**	**0.5531**	**0.0292**	**-3.91**	**4.84**

The variables are defined as follows (continued):

DMBE = indicator variable equals to 1 if the firm meet or beat analysts' forecast for the previous quarter

EPS = earnings per share for the following quarter

AF = earliest analyst forecast for earnings per share in the following quarter, estimated in the current quarter

ERROR = analysts' forecast error per share

SURP = analysts' earnings surprise per share

CAR0 = size-adjusted cumulative abnormal returns, cumulated 3 days (-1,1) around earnings announcement in the current quarter

CAR1,2,3 = size-adjusted cumulative abnormal returns, cumulated 2 days after the earliest analysts' forecast is released and ending 90/180/360 days later

TABLE 2

Correlation Table for Hypothesis 1

	DA	TACC	DMEET	NOA/ SALES	GROWTH	EXPECT	DMBE	SIZE
DA	1.0000							
TACC	0.0529**	1.0000						
DMEET	-0.0007	0.0671**	1.0000					
NOA/SALES	-0.0010	-0.0888**	-0.0568**	1.0000				
GROWTH	0.0060	0.0024	0.0042	-0.0082	1.0000			
EXPECT	-0.0048	-0.0367**	-0.0192**	-0.0190**	-0.0074	1.0000		
DMBE	-0.0028	0.0322**	0.0586**	-0.0402**	-0.0151**	-0.0594**	1.0000	
SIZE	0.0113*	-0.0541**	-0.0121*	0.1102**	-0.0069	-0.0581**	0.0478**	1.0000

*/**/*** represent statistical significance at the 10%/5%/1% level respectively

The sub-sample of 21,490 is chosen from *Compustat* Industrial Quarterly files, *Firstcall* and *CRSP* and spans from 1994-2003 where observations from all required variables are available. Firms from regulated industries (utilities and financial services: SIC codes 49 and 60-67) and sales from the previous quarter of less than $1 million are excluded from the sample.

The variables are defined as follows:

DA = discretionary accruals, scaled by total assets at the beginning of the quarter, and estimated from the modified Jones (1995) model, where at least 15 observations are available for each two-digit SIC year estimation

TACC = total accuals, scaled by total assets at the beginning of the quarter (COMPUSTAT (item #76 – item #108)/item #44)

DMEET = indicator variable equals to 1 if the firm just meet analysts' forecast

NOA/SALES = net operating assets at the beginning of the quarter, divided by sales from the previous quarter (COMPUSTAT (item #44 – item #36)/(item #2))

GROWTH = market to book ratio (COMPUSTAT item #14/(item #59/item #61))

EXPECT = the earliest forecast for the quarter less the latest forecast for the quarter, scaled by price at the beginning of the quarter

DMBE = indicator variable equals to 1 if the firm meet or beat analysts' forecast for the previous quarter

SIZE = log market value of equity

TABLE 3

Cross-Sectional Regression for Test of Hypothesis 1

$$DA_{it}/TACC_{it} = \alpha_0 + \alpha_1 DMEET_{it} + \alpha_2(NOA_{it}/SALES_{it-1}) + \alpha_3 DMEET_{it}*(NOA_{it}/SALES_{it-1}) + \alpha_4 GROWTH_{it} + \alpha_5 DMEET_{it}*GROWTH_{it} + \alpha_6 EXPECT_{it} + \alpha_7 DMEET_{it}*EXPECT_{it} + \alpha_8 DMBE_{it-1} + \alpha_9 DMEET_{it}*DMBE_{it-1} + \alpha_{10} SIZE_{it} + \varsigma_1 1/TA_{it} + \varsigma_2(\Delta REV_{it} - \Delta REC_{it})/TA_{it} + \varsigma_3 PPE_{it}/TA_{it} + \sum\varsigma Q_{it} + \sum\xi SIC_{it} + \sum\psi YEAR_{it} + \varepsilon_{it}$$

Variables	Pred. Sign	Dependent Variable			
		DA_{it}		$TACC_{it}$	
		Coefficient	t-statistics	Coefficient	t-statistics
DMEET	+	**-0.040**	**1.22**	**0.019**	**3.97*****
NOA/SALES	-	**-0.001**	**-0.50**	**-0.000**	**-2.33*****
DMEET*NOA/SALES	+	**-0.004**	**-1.14**	**-0.001**	**-1.73***
GROWTH	+	**0.000**	**1.27**	**0.000**	**0.81**
DMEET*GROWTH	+	**0.000**	**0.05**	**-0.000**	**-2.28*****
EXPECT	-	**-0.195**	**-0.76**	**-0.270**	**-3.80*****
DMEET*EXPECT	+	**0.880**	**1.00**	**0.140**	**0.98**
DMBE	+	**0.003**	**0.22**	**0.007**	**3.11*****
DMEET*DMBE	+	**-0.023**	**-0.72**	**-0.009**	**-2.17*****
SIZE	?	**-0.000**	**-0.08**	**0.002**	**2.60*****
INTERCEPT	?	**0.008**	**0.25**	**0.007**	**0.42**
Modified Jones Variables		**Not Included**		**Included**	
Industry/Year Variables		**Included**		**Included**	
N		**21,490**		**21,490**	
Adjusted R^2		**2.29%**		**17.65%**	

*/**/*** represent statistical significance at the 10%/5%/1% level respectively. T-statistics are based on robust standard errors. The sub-sample of 21,490 is chosen from *Compustat* Industrial Quarterly files, *Firstcall* and *CRSP* and spans from 1994-2003 where observations from all required variables are available. Firms from regulated industries (utilities and financial services: SIC codes 49 and 60-67) and sales from the previous quarter of less than $1 million are excluded from the sample. . Modified Jones variables are variables in the above equation with coefficients ς.

The variables are defined as follows:

DA = discretionary accruals, scaled by total assets at the beginning of the quarter, and estimated from the modified Jones (1995) model, where at least 15 observations are available for each two-digit SIC year estimation

TACC = total accuals, scaled by total assets at the beginning of the quarter (COMPUSTAT (item #76 –

item #108)/item #44)

DMEET = indicator variable equals to 1 if the firm just meet analysts' forecast

NOA/SALES = net operating assets at the beginning of the quarter, divided by sales from the previous quarter (COMPUSTAT (item #44 – item #36)/(item #2))

GROWTH = market to book ratio (COMPUSTAT item #14/(item #59/item #61))

EXPECT = the earliest forecast for the quarter less the latest forecast for the quarter, scaled by price at the beginning of the quarter

DMBE = indicator variable equals to 1 if the firm meet or beat analysts' forecast for the previous quarter

SIZE = log market value of equity

TA = total assets in millions at the beginning of the quarter (COMPUSTAT item #44)

ΔREV = change in total sales in millions for the quarter (COMPUSTAT item #2)

ΔREC = change in total receivables in millions for the quarter (COMPUSTAT item #103)

PPE = gross property, plant and equipment in millions at the end of the quarter (COMPUSTAT item #118)

Q = indicator variables for quarters 1 to 3

SIC = indicator variable for 2-digit Standard Industrial Classification (SIC) code

YEAR = indicator variable for year observation

TABLE 4

Correlation Table for Hypothesis 2 & 3

	EPS	DMEET	AF	ERROR	SURP	CAR0	CAR1	CAR2	CAR3
EPS	1.0000								
DMEET	0.0156**	1.0000							
AF	0.7711***	0.0028	1.0000						
ERROR	0.1044***	0.0134***	0.0149***	1.0000					
SURP	0.0589***	0.0056	0.0200***	0.9141***	1.0000				
CAR0	0.0717***	-0.0416***	0.0012	0.0433***	0.0376***	1.0000			
CAR1	0.1076***	-0.0379***	-0.0289***	0.1068***	0.0518***	0.3245***	1.0000		
CAR2	0.1243***	-0.0207***	-0.0295***	0.0550***	0.0191***	0.2307***	0.6646***	1.0000	
CAR3	0.0988***	0.0098*	-0.0169***	0.0378***	0.0122***	0.1642***	0.4788***	0.7129***	1.0000

*/**/*** represent statistical significance at the 10%/5%/1% level respectively

The full sample of 31,791 is chosen from *Compustat* Industrial Quarterly files, *Firstcall* and *CRSP* and spans from 1994-2003 where observations from all required variables are available. Firms from regulated industries (utilities and financial services: SIC codes 49 and 60-67) and sales from the previous quarter of less than $1 million are excluded from the sample.

The variables are defined as follows:

EPS = earnings per share for the following quarter

DMEET = indicator variable equals to 1 if the firm just meet analysts' forecast

AF = earliest analyst forecast for earnings per share in the following quarter, estimated in the current quarter

ERROR = analysts' forecast error, scaled by price at the beginning of the quarter

SURP = analysts' earnings surprise, scaled by price at the beginning of the quarter

CAR0 = size-adjusted cumulative abnormal returns, cumulated 3 days (-1,1) around earnings announcement in the current quarter

CAR1,2,3 = size-adjusted cumulative abnormal returns, cumulated 2 days after the earliest analysts' forecast is released and ending 90/180/360 days later

TABLE 5

Cross-Sectional Regression for Test of Hypothesis 2

$$EPS_{it+1} = \beta_0 + \beta_1 DMEET_{it} + \beta_2 AF_{t+1} + \beta_3 DMEET_{it} * AF_{t+1} + \beta_4 ERROR_{it} + \beta_5 DMEET_{it} * ERROR_{it} + \varepsilon_{it}$$

Variable	Pred. Sign	Dependent Variable (EPS_{it+1})	
		Coefficient	t-statistics
DMEET	**-**	**0.033**	**5.61*****
AF	**+**	**0.946**	**58.23*****
DMEET*AF	**-**	**-0.053**	**-2.44*****
ERROR	**+**	**1.309**	**2.69*****
DMEET*ERROR	**-**	**4.255**	**4.43*****
INTERCEPT	**?**	**-0.050**	**-10.58*****
N		**31,791**	
Adjusted R^2		**60.49%**	

*/**/*** represent statistical significance at the 10%/5%/1% level respectively. T-statistics are based on robust standard errors. The full sample of 31,791 is chosen from *Compustat* Industrial Quarterly files, *Firstcall* and *CRSP* and spans from 1994-2003 where observations from all required variables are available. Firms from regulated industries (utilities and financial services: SIC codes 49 and 60-67) and sales from the previous quarter of less than $1 million are excluded from the sample.

The variables are defined as follows:

EPS = earnings per share for the following quarter

DMEET = indicator variable equals to 1 if the firm just meet analysts' forecast

AF = earliest analyst forecast for earnings per share in the following quarter, estimated in the current quarter

ERROR = analysts' forecast error, scaled by price at the beginning of the quarter

TABLE 6

Cross-Sectional Regression for Test of Hypothesis 3 (Short Window)

$$CAR0_{it} = \varphi_0 + \varphi_1 DMEET_{it} + \varphi_2 SURP_{it} + \varphi_3 ERROR_{it} + \varphi_4 DMEET_{it} * ERROR_{it} + \varepsilon_{it}$$

		Full Sample		Truncated Sample	
		Coefficient	**t-statistics**	**Coefficient**	**t-statistics**
DMEET	**-**	**-0.009**	**-7.43*****	**-0.009**	**-7.39*****
SURP	**+**	**-0.040**	**-0.52**	**2.959**	**15.00*****
ERROR	**+**	**0.155**	**2.85*****	**0.650**	**5.99*****
DMEET*ERROR	**-**	**0.026**	**0.09**	**-0.304**	**-1.35**
INTERCEPT	**?**	**0.006**	**9.47*****	**0.005**	**8.67*****
N		**31,791**		**30,340**	
Adjusted R^2		**0.37%**		**2.64%**	

*/**/*** represent statistical significance at the 10%/5%/1% level respectively. T-statistics are based on robust standard errors. The full sample of 31,791 is chosen from *Compustat* Industrial Quarterly files, *Firstcall* and *CRSP* and spans from 1994-2003 where observations from all required variables are available. Firms from regulated industries (utilities and financial services: SIC codes 49 and 60-67) and sales from the previous quarter of less than $1 million are excluded from the sample. For the truncated sample, all independent variables are truncated at the 1% level.

The variables are defined as follows:

CAR0 = size-adjusted cumulative abnormal returns, cumulated 3 days (-1,1) around earnings announcement in the current quarter

DMEET = indicator variable equals to 1 if the firm just meet analysts' forecast

SURP = analysts' earnings surprise, scaled by price at the beginning of the quarter

ERROR = analysts' forecast error, scaled by price at the beginning of the quarter

TABLE 7

Cross-Sectional Regression for Test of Hypothesis 3 (Long Window)

$$CAR(1,2 \text{ or } 3)_{it} = \varphi_0 + \varphi_1 DMEET_{it} + \varphi_2 SURP_{it} + \varphi_3 ERROR_{it} + \varphi_4 DMEET_{it} * ERROR_{it} + \varepsilon_{it}$$

Panel A: Full sample of 31,791 firm quarters

Variable	Pred. Sign	CAR1 (90 days)		CAR2 (180 days)		CAR3 (360 days)	
		Coef.	t-stat.	Coef.	t-stat	Coef.	t-stat
DMEET	-	**-0.021**	**-5.76*****	**-0.017**	**-3.17*****	**0.014**	**1.98*****
SURP	+	**-2.147**	**-4.22*****	**-2.167**	**-4.61*****	**-2.250**	**-4.35*****
ERROR	+	**2.613**	**5.86*****	**2.431**	**5.83*****	**2.494**	**5.39*****
DMEET*ERROR	-	**2.514**	**1.91****	**2.601**	**1.81*****	**2.254**	**1.54**
INTERCEPT	?	**0.010**	**5.24*****	**0.014**	**5.54*****	**0.022**	**6.03*****
N		**31,791**					
Adjusted R^2		**2.73%**		**1.02%**		**0.48%**	

Panel B: Truncated sample of 30,340 firm quarters

Variable	Pred. Sign	CAR1 (90 days)		CAR2 (180 days)		CAR3 (360 days)	
		Coef.	t-stat.	Coef.	t-stat	Coef.	t-stat
DMEET	-	**-0.018**	**-5.57*****	**-0.013**	**-2.53*****	**0.019**	**2.62*****
SURP	+	**-0.260**	**-0.43**	**1.108**	**1.30**	**1.750**	**1.41**
ERROR	+	**9.216**	**26.17*****	**8.759**	**17.70*****	**7.893**	**10.77*****
DMEET*ERROR	-	**3.168**	**3.45*****	**3.751**	**3.06*****	**3.744**	**2.26*****
INTERCEPT	?	**0.016**	**9.56*****	**0.020**	**8.10*****	**0.027**	**7.50*****
N		**30,340**					
Adjusted R^2		**7.09%**		**3.22%**		**1.35%**	

*/**/*** represent statistical significance at the 10%/5%/1% level respectively. T-statistics are based on robust standard errors. The full sample of 31,791 is chosen from *Compustat* Industrial Quarterly files, *Firstcall* and *CRSP* and spans from 1994-2003 where observations from all required variables are available. Firms from regulated industries (utilities and financial services: SIC codes 49 and 60-67) and sales from the previous quarter of less than $1 million are excluded from the sample. For the truncated sample, all independent variables are truncated at the 1% level.

The variables are defined as follows:

CAR1,2,3 = size-adjusted cumulative abnormal earnings, cumulated 2 days after the earliest analysts' forecast is released and ending 90/180/360 days later

DMEET = indicator variable equals to 1 if the firm just meet analysts' forecast

SURP = analysts' earnings surprise, scaled by price at the beginning of the quarter

ERROR = analysts' forecast error, scaled by price at the beginning of the quarter

TABLE 8

Cross-Sectional Regression for Test of Hypothesis 1 including Indicator Variables for Firms that Just Beat and Beat Forecasts

$$TACC_{it} = \alpha_0 + \alpha_1 DMEET_{it} + \alpha_2 DJBEAT_{it} + \alpha_3 DBEAT_{it} + \alpha_4 (NOA_{it}/SALES_{it-1}) + \alpha_5 DMEET_{it}*(NOA_{it}/SALES_{it-1}) + \alpha_6 GROWTH_{it} + \alpha_7 DMEET_{it}*GROWTH_{it} + \alpha_8 EXPECT_{it} + \alpha_9 DMEET_{it}*EXPECT_{it} + \alpha_{10} DMBE_{it-1} + \alpha_{11} DMEET_{it}*DMBE_{it-1} + \alpha_{12} SIZE_{it} + \varsigma_1 1/TA_{it} + \varsigma_2 (\Delta REV_{it} - \Delta REC_{it})/TA_{it} + \varsigma_3 PPE_{it}/TA_{it} + \sum \varsigma Q_{it} + \sum \xi SIC_{it} + \sum \psi YEAR_{it} + \varepsilon_{it}$$

Variable	Pred. Sign	Dependent Variable ($TACC_{it}$)	
		Coefficient	t-statistics
DMEET	+	**0.022**	**4.39*** **
DJBEAT	+	**0.008**	**3.69*** **
DBEAT	-	**0.002**	**0.97**
NOA/SALES	-	**-0.000**	**-2.28*** **
DMEET*NOA/SALES	+	**-0.001**	**-1.79***
GROWTH	+	**0.000**	**0.82**
DMEET*GROWTH	+	**-0.000**	**-2.28*** **
EXPECT	-	**-0.264**	**-3.77*** **
DMEET*EXPECT	+	**0.133**	**0.93**
DMBE	+	**0.006**	**2.69*** **
DMEET*DMBE	+	**-0.009**	**-1.97*** **
SIZE	?	**0.002**	**2.50*** **
INTERCEPT	?	**0.006**	**0.35**
Modified Jones variables		**Included**	
Industry/Year Variables		**Included**	
N		**21,490**	
Adjusted R^2		**17.71%**	

*/**/*** represent statistical significance at the 10%/5%/1% level respectively. T-statistics are based on robust standard errors. The sub-sample of 21,490 is chosen from *Compustat* Industrial Quarterly files, *Firstcall* and *CRSP* and spans from 1994-2003 where observations from all required variables are available. Firms from regulated industries (utilities and financial services: SIC codes 49 and 60-67) and sales from the previous quarter of less than $1 million are excluded from the sample. Modified Jones variables are variables in the above equation with coefficients ς.

The variables are defined as follows:

TACC = total accuals, scaled by total assets at the beginning of the quarter (COMPUSTAT (item #76 – item #108)/item #44)

DMEET = indicator variable equals to 1 if the firm just meet analysts' forecast

DJBEAT = indicator variable equals to 1 if the firm has earnings surprise of between 0 and 1 cent per share

DBEAT = indicator variable equals to 1 if the firm has earnings surprise greater than 1 cent per share

NOA/SALES = net operating assets at the beginning of the quarter, divided by sales from the previous quarter (COMPUSTAT (item #44 – item #36)/(item #2))

GROWTH = market to book ratio (COMPUSTAT item #14/(item #59/item #61))

EXPECT = the earliest forecast for the quarter less the latest forecast for the quarter, scaled by price at the beginning of the quarter

DMBE = indicator variable equals to 1 if the firm meet or beat analysts' forecast for the previous quarter

SIZE = log market value of equity

TA = total assets in millions at the beginning of the quarter (COMPUSTAT item #44)

ΔREV = change in total sales in millions for the quarter (COMPUSTAT item #2)

ΔREC = change in total receivables in millions for the quarter (COMPUSTAT item #103)

PPE = gross property, plant and equipment in millions at the end of the quarter (COMPUSTAT item #118)

Q = indicator variables for quarters 1 to 3

SIC = indicator variable for 2-digit Standard Industrial Classification (SIC) code

YEAR = indicator variable for year observation

TABLE 9

Cross-Sectional Regression for Test of Hypothesis 2 including Indicator Variables for Firms that Just Beat and Beat Forecasts

$$EPS_{it+1} = \beta_0 + \beta_1 DMEET_{it} + \beta_2 DJBEAT_{it} + \beta_3 DBEAT_{it} + \beta_4 AF_{t+1} + \beta_5 DMEET_{it}*AF_{t+1} + \beta_6 DJBEAT_{it}*AF_{t+1} + \beta_7 DBEAT_{it}*AF_{t+1} + \beta_8 ERROR_{it} + \beta_9 DMEET_{it}*ERROR_{it} + + \beta_{10} DJBEAT_{it}*ERROR_{it} + \beta_{11} DBEAT_{it}*ERROR_{it} + \varepsilon_{it}$$

Variable	Pred. Sign	Dependent Variable (EPS_{it+1})	
		Coefficient	t-statistics
DMEET	+	**0.111**	**11.22*****
DJBEAT	+	**0.119**	**11.81*****
DBEAT	+	**0.102**	**8.97*****
AF	+	**0.914**	**31.48*****
DMEET*AF	+	**-0.022**	**-0.66**
DJBEAT*AF	+	**-0.018**	**-0.55**
DBEAT*AF	+	**0.064**	**1.76***
ERROR	+	**0.747**	**2.25*****
DMEET*ERROR	?	**4.817**	**5.40*****
DJBEAT*ERROR	?	**5.505**	**2.63*****
DBEAT*ERROR	?	**2.882**	**3.65*****
INTERCEPT	?	**-0.129**	**-13.82*****
N		**31,791**	
Adjusted R^2		**61.87%**	

*/**/*** represent statistical significance at the 10%/5%/1% level respectively. T-statistics are based on robust standard errors. The full sample of 31,791 is chosen from *Compustat* Industrial Quarterly files, *Firstcall* and *CRSP* and spans from 1994-2003 where observations from all required variables are available. Firms from regulated industries (utilities and financial services: SIC codes 49 and 60-67) and sales from the previous quarter of less than $1 million are excluded from the sample.

The variables are defined as follows:

EPS = earnings per share for the following quarter

DMEET = indicator variable equals to 1 if the firm just meet analysts' forecast

DJBEAT = indicator variable equals to 1 if the firm has earnings surprise of between 0 and 1 cent per share

DBEAT = indicator variable equals to 1 if the firm has earnings surprise greater than 1 cent per share

AF = earliest analyst forecast for earnings per share in the following quarter, estimated in the current quarter

ERROR = analysts' forecast error, scaled by price at the beginning of the quarter

TABLE 10

Cross-Sectional Regression for Test of Hypothesis 3 (Short Window) including Indicator Variables for Firms that Just Beat and Beat Forecasts

$$CAR0_{it} = \varphi_0 + \varphi_1 DMEET_{it} + \varphi_2 DJBEAT_{it} + + \varphi_3 DBEAT_{it} + \varphi_4 SURP_{it} + \varphi_5 DJBEAT_{it}*SURP_{it} + + \varphi_6 DBEAT_{it}*SURP_{it} + \varphi_7 ERROR_{it} + \varphi_8 DMEET_{it}*ERROR_{it} + + \varphi_9 DJBEAT_{it}*ERROR_{it} + + \varphi_{10} DBEAT_{it}*ERROR_{it} + \varepsilon_{it}$$

		Full Sample		Truncated Sample	
		Coefficient	t-statistics	Coefficient	t-statistics
DMEET	+	**0.020**	**12.77*** **	**0.013**	**7.88*** **
DJBEAT	+	**0.034**	**19.76*** **	**0.028**	**14.11*** **
DBEAT	+	**0.045**	**30.76*** **	**0.035**	**19.99*** **
SURP	+	**-0.038**	**-0.53**	**1.394**	**4.48*** **
DJBEAT*SURP	+	**-3.408**	**-2.34*** **	**-5.599**	**-2.80*** **
DBEAT*SURP	+	**-0.020**	**-0.15**	**-0.729**	**-1.60**
ERROR	+	**0.055**	**0.82**	**0.264**	**1.52**
DMEET*ERROR	+	**0.126**	**0.42**	**0.082**	**0.31**
DJBEAT*ERROR	+	**-0.742**	**-2.81*** **	**-0.463**	**-1.46**
DBEAT*ERROR	+	**0.185**	**1.57**	**0.563**	**2.37*** **
INTERCEPT	?	**-0.023**	**-20.54*** **	**-0.017**	**-12.47*** **
N		**31,791**		**30,340**	
Adjusted R^2		**3.84%**		**4.05%**	

*/**/*** represent statistical significance at the 10%/5%/1% level respectively. T-statistics are based on robust standard errors. The full sample of 31,791 is chosen from *Compustat* Industrial Quarterly files, *Firstcall* and *CRSP* and spans from 1994-2003 where observations from all required variables are available. Firms from regulated industries (utilities and financial services: SIC codes 49 and 60-67) and sales from the previous quarter of less than $1 million are excluded from the sample. For the truncated sample, all independent variables are truncated at the 1% level.

The variables are defined as follows:

CAR0 = size-adjusted cumulative abnormal returns, cumulated 3 days (-1,1) around earnings announcement in the current quarter

DMEET = indicator variable equals to 1 if the firm just meet analysts' forecast

DJBEAT = indicator variable equals to 1 if the firm has earnings surprise of between 0 and 1 cent per share

DBEAT = indicator variable equals to 1 if the firm has earnings surprise greater than 1 cent per share

SURP = analysts' earnings surprise, scaled by price at the beginning of the quarter

ERROR = analysts' forecast error, scaled by price at the beginning of the quarter

TABLE 11

Cross-Sectional Regression for Test of Hypothesis 3 (Long Window) including Indicator Variables for Firms that Just Beat and Beat Forecasts

$$CAR(1,2 \text{ or } 3)_{it} = \varphi_0 + \varphi_1 DMEET_{it} + \varphi_2 DJBEAT_{it} + + \varphi_3 DBEAT_{it} + \varphi_4 SURP_{it} + \varphi_5 DJBEAT_{it}*SURP_{it} + + \varphi_6 DBEAT_{it}*SURP_{it} + \varphi_7 ERROR_{it} + \varphi_8 DMEET_{it}*ERROR_{it} + + \varphi_9 DJBEAT_{it}*ERROR_{it} + + \varphi_{10} DBEAT_{it}*ERROR_{it} + \varepsilon_{it}$$

Panel A: Full sample of 31,791 firm quarters

Variable	Pred. Sign	CAR1 (90 days) Coef.	CAR1 (90 days) t-stat.	CAR2 (180 days) Coef.	CAR2 (180 days) t-stat	CAR3 (360 days) Coef.	CAR3 (360 days) t-stat
DMEET	+	**0.051**	**10.56*** **	**0.065**	**9.98*** **	**0.091**	**9.84*** **
DJBEAT	+	**0.069**	**12.48*** **	**0.081**	**9.91*** **	**0.077**	**6.67*** **
DBEAT	+	**0.105**	**22.61*** **	**0.112**	**17.90*** **	**0.090**	**9.85*** **
SURP	+	**-1.683**	**-2.54*** **	**-1.857**	**-3.08*** **	**-3.013**	**-3.91*** **
DJBEAT*SURP	+	**28.939**	**4.40*** **	**37.937**	**3.84*** **	**72.156**	**5.60*** **
DBEAT*SURP	+	**0.444**	**0.48**	**1.189**	**1.23**	**3.765**	**2.96*** **
ERROR	+	**1.839**	**3.00*** **	**1.728**	**3.02*** **	**2.797**	**3.75*** **
DMEET*ERROR	+	**3.288**	**2.38*** **	**3.304**	**2.21*** **	**1.950**	**1.23**
DJBEAT*ERROR	+	**6.300**	**2.87*** **	**4.930**	**1.87***	**2.455**	**1.12**
DBEAT*ERROR	+	**1.048**	**1.16**	**1.187**	**1.38*** **	**-0.308**	**-0.31**
INTERCEPT	?	**-0.062**	**-17.29*** **	**-0.067**	**-14.48*** **	**-0.055**	**-8.11*** **
N		**31,791**					
Adjusted R^2		**5.79%**		**2.78%**		**1.49%**	

*/**/*** represent statistical significance at the 10%/5%/1% level respectively. T-statistics are based on robust standard errors. The full sample of 31,791 is chosen from *Compustat* Industrial Quarterly files, *Firstcall* and *CRSP* and spans from 1994-2003 where observations from all required variables are available. Firms from regulated industries (utilities and financial services: SIC codes 49 and 60-67) and sales from the previous quarter of less than $1 million are excluded from the sample. For the truncated sample, all independent variables are truncated at the 1% level.

The variables are defined as follows:

CAR1,2,3 = size-adjusted cumulative abnormal earnings, cumulated 2 days after the earliest analysts' forecast is released and ending 90/180/360 days later

DMEET = indicator variable equals to 1 if the firm just meet analysts' forecast

DJBEAT = indicator variable equals to 1 if the firm has earnings surprise of between 0 and 1 cent per share

DBEAT = indicator variable equals to 1 if the firm has earnings surprise greater than 1 cent per share

SURP = analysts' earnings surprise, scaled by price at the beginning of the quarter

ERROR = analysts' forecast error, scaled by price at the beginning of the quarter

TABLE 11 (continued)

Panel B: Truncated sample of 30,340 firm quarters

Variable	Pred. Sign	CAR1 (90 days)		CAR2 (180 days)		CAR3 (360 days)	
		Coef.	t-stat.	Coef.	t-stat	Coef.	t-stat
DMEET	+	**0.039**	**8.49*****	**0.056**	**8.25*****	**0.086**	**8.79*****
DJBEAT	+	**0.048**	**8.17*****	**0.066**	**7.36*****	**0.064**	**4.99*****
DBEAT	+	**0.076**	**15.84*****	**0.088**	**12.26*****	**0.061**	**5.94*****
SURP	+	**-5.120**	**-4.94*****	**-3.818**	**-2.76*****	**-4.683**	**-2.29*****
DJBEAT*SURP	+	**37.129**	**5.12*****	**41.238**	**3.82*****	**76.931**	**4.71*****
DBEAT*SURP	+	**3.095**	**2.19*****	**2.690**	**1.33**	**8.422**	**2.88*****
ERROR	+	**7.493**	**13.90*****	**6.110**	**8.24*****	**5.791**	**5.07*****
DMEET*ERROR	+	**4.881**	**4.86*****	**6.399**	**4.76*****	**5.846**	**3.12*****
DJBEAT*ERROR	+	**5.698**	**5.38*****	**6.237**	**4.14*****	**4.458**	**1.99*****
DBEAT*ERROR	+	**2.169**	**2.81*****	**4.020**	**3.79*****	**4.257**	**2.70*****
INTERCEPT	?	**-0.041**	**-11.17*****	**-0.049**	**-9.22*****	**-0.040**	**-5.33*****
N		**30,340**					
Adjusted R^2		**8.23%**		**3.95%**		**1.85%**	