Accrual Based Earnings Management, Real Transactions Manipulation and Expectations Management: U.S. and International Evidence

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ABSTRACT

Managers face a number of incentives to report earnings that meet or exceed the consensus analyst forecast. If a firm’s results of operations are not sufficient to meet the analysts’ expectations for a given period, the manager may 1) use accrual based earnings management techniques or 2) structure actual transactions to achieve the desired financial reporting result. Additionally, the manager may attempt to guide the analyst’s forecast down to a “beatable level,” a phenomenon referred to as “expectations management.” This paper provides an overview of these three mechanisms and describes the interrelationships among them. Recent changes in the regulatory environment in the United States (e.g., Regulation Fair Disclosure and the Sarbanes Oxley Act) have changed managers’ use of these tools. This paper discusses these changes as well. Evidence of the existence of these practices in both the United States and in various countries throughout the world is discussed.

Keywords: Accrual based earnings management, real transactions manipulation, expectations management

INTRODUCTION

It is well known that managers use accrual based earnings management techniques to provide flexibility within the accounting rules to report an earnings number that meets or beats the consensus analyst forecast. The market rewards firms that meet or exceed earnings expectations, and penalizes firms whose earnings fall short. In the years following the passage of the Sarbanes-Oxley Act of 2002, research shows that accrual based earnings management appears to be decreasing. Managers presumably perceive the risks and costs of detection to be higher than the benefits of managing earnings in a heightened regulatory environment.

However, accrual based earnings management techniques are not the only tools available to managers to help them meet analysts’ forecasts. If a firm’s results of operations will not be sufficient to meet the analyst forecast for a given period, managers may also 1) structure actual transactions to achieve the desired accounting result, a phenomenon often referred to as “real transactions manipulation” or “real transactions based earnings management”, or 2) attempt to guide the analyst forecast down to a beatable level, a phenomenon referred to as “expectations management.”

The purpose of this paper is to provide a summary of the key issues related to firms’ propensities and incentives to meet analysts’ earnings expectations and the tools that managers can use to “make the number.” This paper will provide an overview of accrual based earnings management, real transactions based earnings management and expectations management, and highlight the interrelationships between these three phenomena. Additionally, the article will discuss how public policies such as Regulation FD and the Sarbanes-Oxley Act affect managers’ use of each of these tools. The discussion will provide examples of relevant research findings on these topics from both a U.S. and international perspective.

MANAGERS’ INCENTIVES TO MEET EARNINGS EXPECTATIONS

Managers have a number of incentives to report earnings that meet or exceed analysts’ earnings forecasts. Given that the market views the act of meeting or beating earnings forecasts as a signal of future profitability, investors reward
firms that meet or exceed analysts’ expectations. According to Bartov et al. (2002), firms that meet or exceed the forecast enjoy a higher stock return than firms that fall short of expectations. Additionally, investors penalize firms for reporting earnings below expectations. Skinner and Sloan (2001) document an asymmetric market response for missing the analyst forecast. Specifically, the market penalty for falling short of expectations by one cent is larger than the market reward for exceeding expectations by one cent.

In addition to the capital market considerations, managers have incentives to meet or exceed analysts’ expectations to 1) enhance their own reputations in the managerial labor market and 2) to enhance their firm’s reputation with external stakeholder groups such as suppliers, customers, and creditors, in order to earn better terms of trade. In a survey of financial executives, Graham et al. (2005) find that approximately 75% of respondents agree that a manager’s concern with his or her own reputation is a motivation to meet the earnings target. The same survey documents that approximately 60% of respondents agree that maintaining the firm’s reputation with stakeholders is a motivation to meet earnings targets. The survey went on to report that 80% of respondents believe that failing to meet earnings targets introduces uncertainty in the market with respect to the firm’s future prospects, and 60% of respondents reported that missing an earnings target introduces a concern that the firm may be having problems.

Standard setters and accounting regulators have expressed a great deal of concern over managers’ obsessions with meeting short-term earnings expectations. In 2000, then SEC Chairman Arthur Levitt stated “…corporate America's motivation to meet Wall Street earnings expectations could be overriding common sense business practices. The zeal to project smoother earnings from year to year cast a pall over the quality of the underlying numbers.”

THE USE OF ACCRUALS BASED EARNINGS MANAGEMENT TECHNIQUES TO MEET EARNINGS EXPECTATIONS

Earnings management can be defined as the selection of accounting policies to achieve a desired financial reporting result. Using accrual based earnings management techniques to meet analysts’ forecasts in the United States has been well documented in the literature (see for example Matsumoto 2002, Phillips et al. 2003, and Krull 2004). Accruals are the difference between net income and cash flows. For example, when companies sell items to others on credit during a growth period, the sale creates an accrual of revenue. When companies engage in earnings management, they can increase or decrease income by creating accruals; these are often referred to as non-discretionary accruals. However, it is the discretionary accruals, accruals created to manipulate changes in reported earnings, that are of concern. These types of accruals include using increasing or decreasing estimates of bad debt reserves, warranty costs, and inventory write-downs. Prior to the passage of the Sarbanes Oxley Act, research found extensive evidence of accrual based earnings management. For example, Robb (1998) shows that bank managers make greater use of the loan loss provision to manipulate earnings upward when analysts have reached a consensus in their earnings predictions. Payne and Robb (2000) find that firms with pre-managed earnings below analysts’ earnings expectations have greater positive abnormal, or discretionary accruals. Moehrle (2002) reports that firms use restructuring accrual reversals to manage earnings to beat analysts’ forecasts. Kaznik and McNichols (2002) and Bartov (2002) also provide evidence consistent with accruals manipulation to meet or beat analysts’ estimates.

The Sarbanes Oxley Act, passed in 2002 in response to the accounting scandals involving Enron, WorldCom, Arthur Andersen, and others, is considered to be one of the most significant pieces of securities legislation since the Securities Acts of 1933 and 1934.1 The Act contains a number of provisions aimed at reducing the instances of financial accounting fraud that plagued the late 1990s and early 2000s (e.g., Tyco, HealthSouth, Enron, WorldCom, Global Crossing). These provisions include 1) the establishment of the Public Company Accounting Oversight Board (PCAOB) as an oversight body of the public accounting industry, 2) the requirement that all CEOs and CFOs certify that to the best of their knowledge the financial statements are free of material misstatement, and 3) the prohibition of auditors from providing non-audit consulting services to their audit clients; to name just a few.

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1 The Securities Act of 1934 established the Securities and Exchange Commission after the stock market crash of 1929.
Koh et al. (2008) examine earnings management and the propensity of firms to meet or exceed analysts’ expectations in the periods following the Sarbanes Oxley Act. The study finds that managers are less likely to employ accrual based earnings management techniques in the periods following the accounting frauds of the late 1990s and early 2000s. Furthermore, the findings indicate that meeting or exceeding the analyst forecast in the post-Sarbanes Oxley period is more positively associated with future cash flows. This suggests that the decrease in accrual based earnings management techniques has improved the quality of firms’ earnings, as they are more reflective of future performance. Cohen et al. (2008) investigate the prevalence of earnings management before and after the Sarbanes Oxley Act. The results indicate that instances of earnings management were increasing in the pre-Sarbanes Oxley period, and decreasing in the periods following the Act, suggesting that the Act has effectively curbed accrual manipulation activities.

A number of studies also document instances of accrual based earnings management in various countries throughout the world. For example, Luez et al. (2006) examine earnings management practices in 31 countries and document that earnings management activities are lower in countries with large stock markets and strong investor protection laws. Burgstahler et al. (2006) analyze the earnings management activities of public and private firms in 13 European Union countries and document that earnings management is less pervasive in publicly traded firms and in countries with relatively stronger legal systems. Shuto et al. (2007) investigate the relationship between earnings management and executive compensation for a sample of Japanese firms and provide evidence that managers engage in earnings management activities in order to increase their compensation. Other studies that examine earnings management activities in international settings include Elaine and Negash (2007), LaFond et al. (2007) and Amat et al. (2005). Taken together, the results from these studies indicate that earnings management appears to be a universal phenomenon and deserves the attention of regulators, auditors, accountants, business professionals and accounting researchers around the world.

THE USE OF REAL TRANSACTIONS BASED EARNINGS MANAGEMENT TO MEET EARNINGS EXPECTATIONS

In contrast to accrual based earnings management techniques, in which managers adjust assumptions and estimates within the accounting system, real transactions based earnings management involves the timing and structuring of actual business activities in order to achieve a desired financial reporting result (e.g., timing the sale of equipment that will result in a gain in a quarter in which “extra” earnings are needed). In the survey piece mentioned above, Graham et al. (2005) document that managers are willing to make decisions that are not economically beneficial to the firm, if those actions assist the firm in meeting the analyst forecast. These decisions include delaying repair, advertising, and research and development expenses, and forgoing capital projects that have a positive net present value. Respondents indicated that they are more likely to employ these practices, which affect actual business activities, than they would be to use accrual based earnings management techniques to achieve a desired accounting result.

Other evidence of real transactions based earnings management can be found in Zang (2008) and Roychowdhury (2006). Zang documents that managers use both accrual based and real transactions based earnings management techniques, but make decisions regarding managing real business activities prior to making decisions regarding managing earnings with accrual based techniques. Furthermore, the study finds that firms change from accrual based earnings management techniques to real transactions based techniques after being named in a securities class action lawsuit. In a separate study, Roychowdhury (2006) documents that managers engage in the manipulation of actual business activities to avoid reporting a loss; and finds some evidence consistent with the notion that managers engage in real earnings management activities to meet analysts’ forecasts. Cohen et al. (2008) also investigate changes in the use of real transactions manipulation in the periods surrounding the Sarbanes Oxley Act. The study documents an increase in real transactions based earnings management in the periods following the Act. As mentioned above, this same study documents a decrease in accrual based earnings management techniques post Sarbanes Oxley. Taken together, Cohen et al. (2008) and Koh et al. (2008) provide consistent evidence of managers shifting away from accrual based earnings management techniques in the heightened regulatory environment.
Evidence of real transactions based earnings management to meet analysts’ forecasts in an international setting appears to be quite limited. As of this writing, the authors are unaware of a study that examines the use of real transaction manipulation to meet analyst expectations in an international setting.

**THE USE OF EXPECTATIONS MANAGEMENT TO MEET EARNINGS EXPECTATIONS**

As mentioned above, another technique managers can use to meet analysts’ forecasts is to attempt to guide the analyst into preparing a beatable forecast. Mitch Zacks of the Chicago Sun-Times describes how the game is played:

“The key is to guide analysts’ estimates lower, and then blow the lowered estimates out of the water. Essentially, chief executives and chief financial officers have learned that the secret to spinning earnings is to under-promise and over-deliver. Not just for one quarter, but all the time. The first step is to provide conservative earnings guidance to the market, causing analysts to lower their earnings expectations. This is done through press releases, interviews with financial media and meetings with analysts in groups. Next, the company reports earnings that are better than analysts' lowered earnings estimates.”

Table 1 provides an illustration of beating analyst expectations through earnings management techniques and through expectations management. In Panel A, the firm reports earnings that exceed the (static) analyst forecast by five cents per share by managing the reported EPS number upward from $1.00 to $1.10 per share through either accruals manipulation or real transactions manipulation. In Panel B, the firm still reports a positive earnings surprise of five cents per share, however, this is now achieved by guiding the analyst forecast downward from $1.05 to $0.95 per share.

Expectations management may be preferable to managers over accruals based earnings management techniques for at least two reasons. First, managed earnings are subject to auditing procedures, and the outside accountants may require adjustments before providing a clean opinion on the financial statements. Secondly, due to the fact that accruals reverse, it is increasingly difficult to continuously manage reported earnings in one direction. Given that expectations management is outside of the purview of the auditors, as it has no direct impact on the financial statements, guiding the analysts towards a beatable forecast may be a “safer” mechanism by which firms can meet or exceed analysts’ expectations.

Expectations management may be preferable to managers over real transactions based earnings management techniques as well. As mentioned above, in structuring a transaction to meet a desired earnings number, the manager may forgo value increasing projects or make other operational decisions that could negatively impact firm value. Managers are likely to attempt to guide analysts’ expectations before making decisions that are not economically beneficial to the firm.

The expectations management phenomenon caught the attention of accounting regulators long ago. Arthur Levitt expressed concerns over the earnings guidance “game” in his now famous speech made at New York University in 1998. He noted, “this process has evolved over the years into what can best be characterized as a game among market participants. A game that, if not addressed soon, will have adverse consequences for America’s financial reporting system.” In October 2000, the SEC passed Regulation Fair Disclosure (FD) which substantially changed the expectations management “game.” Prior to Regulation FD, companies were allowed to privately
disclose earnings projections to market analysts. The new disclosure rule requires companies to reveal any “material” information to all investors and analysts simultaneously, for all intentional disclosures, and within a 24-hour period in the event that any unintentional private disclosures are made to analysts. The SEC’s intention is to end selective disclosure, a practice in which companies provide analysts and certain large shareholders with earnings guidance prior to making that same information available to the general public. In a post-Regulation FD environment, the expectations management game is no longer played behind closed doors. Management must now issue public earnings forecasts in order to guide analysts’ expectations.

There is a growing body of work in the academic literature on expectations management in the United States. In one of the first studies on the topic, Bartov et al. (2002) document, for a given firm, patterns of decreasing analyst forecasts throughout the period, and the period ending with the firm’s reported earnings exceeding the dampened-down final analyst forecast. Furthermore, the findings indicate that firms that meet or exceed the forecast through expectations management earn a market premium, and firms that fail to meet are penalized, even after considering overall firm performance. Matsumoto (2002) also shows that managers use forecast guidance to avoid negative earning surprises. Other evidence that management’s public disclosures play an important role in leading analysts toward beatable earnings targets can be found in Cotter et al. (2006) and Baik and Jiang (2005).

Another stream of research investigates how public policies such as Regulation FD and the Sarbanes Oxley Act affect expectations management. Studies focusing on Regulation FD generally find that expectations guidance activities are decreasing in the post-Regulation FD period, indicating that a tightened regulatory environment can effectively reduce biased managerial guidance (Koh et al. 2008, Li 2008 and Williams et al. 2008). Studies focusing on the Sarbanes Oxley Act have provided mixed results. Koh et al. (2008) finds that in the years following the Act, managers are more likely to meet analysts’ forecasts by guiding the forecast down to a beatable level than they are to use accrual-based earnings management techniques to adjust the reported earnings number upward. Their findings show an increase in expectations management after the Act was passed while Bartov and Cohen (2007) find the opposite. The conflicting results may be due to the differences in their expectations management measures and their definition of the “post-Sarbanes Oxley period.” Therefore, the effect of the Sarbanes Oxley Act on expectations management is still unclear.

International evidence of expectations management exists as well. In particular, Brown and Higgins (2005) examine firms’ abilities to meet analysts’ forecasts through expectations management in the United States and across 20 other countries. The study documents tradeoffs in the use of expectations management and accrual-based earnings management techniques. Specifically, in countries with stronger regulatory environments and stricter investor protection laws, expectations management is more common than accrual-based earnings management techniques. Guiding the analyst towards a beatable forecast is less common than accrual-based earnings management in countries with relatively weaker regulatory environments.

Athanasakou, Strong and Walker (2007) examine a sample of U.K. companies and document that firms are more likely to engage in expectations management than accrual-based earnings management to meet the analyst forecast. A separate study by Athanasakou, Strong and Walker reports that in the U.K., the market rewards firms for meeting the analyst forecast only if it appears that the firm did not engage in expectations management and if the firm met expectations in the prior year (Athanasakou et. al 2008).

CONCLUSION

The purpose of this paper is to provide an overview of the issues surrounding firms’ propensities to meet analysts’ earnings expectations. The paper discusses three mechanisms that managers can use to assist the firm in meeting earnings forecasts: 1) accrual-based earnings management techniques, 2) real transactions manipulation, or 3) expectations management. Changes in managers’ use of these three mechanisms in the periods following the Sarbanes Oxley Act are addressed as well. The discussion includes examples of relevant research evidence of each of these techniques, as available, from both a U.S. and international perspective.
Overall, from a U.S. perspective, the research indicates that accruals based earnings management is decreasing in the U.S. in the periods following the Sarbanes Oxley Act. Hopefully, this will result in more transparent financial statements that more accurately reflect the underlying events and transactions of the firm. However, research also indicates that expectations management may be on the rise. This suggests that managers may be more likely to attempt to meet analysts’ expectations by intentionally providing pessimistic earnings news. Investors may want to consider this when revising their expectations of next period’s earnings based on potentially biased management guidance. Finally, research indicates that managers may be willing to trade real economic value simply to meet an earnings target. This is certainly of interest to investors, creditors, analysts and other capital market participants.

Taken together, the international evidence seems to indicate that managers’ use of earnings management techniques depends on the regulatory environment within the country of interest. Accruals based earnings management techniques are more common in countries with relatively weaker regulatory environments, whereas expectations management is more prevalent in countries with stronger investor protection laws.

This summary should help educate business professionals and students of accounting about the game played between managers, analysts and investors in the process of reporting periodic earnings. Given the prevalence of these activities and their potential value implications, it is important that users of accounting information be mindful of these activities.

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