

The Effects of Management's Preannouncement Strategies on Investors' Judgments of the Trustworthiness of Management

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ABSTRACT. This paper examines the role of management's earnings preannouncements on judgments about its trustworthiness by nonprofessional investors. We predict that management's preannouncement decision and the resulting direction (e.g., favorable vs. unfavorable) of the earnings surprise influence investors' ethical judgments about management's trustworthiness; these judgments, in turn, are associated with investors' other investment related judgments. We test our predictions in an experiment in which MBA students make investment-related judgments under four different preannouncement strategies. Consistent with our predictions, the results of our study show that managers' preannouncement decisions are significantly associated with investors' evaluations of management's trustworthiness. Specifically, holding the size of the earnings surprise constant, we find that judgments of management's trustworthiness are damaged more following (a) a negative as opposed to a positive earnings surprise, and (b) the release of a preannouncement compared to when management does not issue a preannouncement. Also consistent with our predictions, we find that evaluations of management's trustworthiness are significantly and positively associated

with judgments of the attractiveness of the firm's equity as an investment. Based on our findings, we encourage further research to explore whether managers understand the trust implications associated with their preannouncement decisions and the extent to which this understanding influences their disclosure decisions.

KEY WORDS: earnings, preannouncements, nonprofessional investor judgment, trustworthiness

In the wake of corporate collapses involving well-known companies such as Enron and World Com, there has been a renewed interest in understanding the ethical responsibilities of company management to their stakeholders. In this current ethically sensitive environment, management's fiduciary duty to its current and potential investors seems especially important since the former suffered substantial harm from these collapses and the latter were in danger of doing the same. Management has a fiduciary duty to provide timely and accurate financial statement information to investors and potential investors about the company's business activities. For our capital markets to function, these investors and potential investors must in turn trust that management does not intend to deceive them by manipulating the timing or contents of their financial statement disclosures.¹ "Markets do not function without trust. Capitalism depends on investor trust" (Jennings, 2005, p. 56). Trust is a necessary prerequisite for fluid market exchange (Arrow, 1974; Smith, 1981), a method of reducing agency and transaction costs (Frank, 1988; Hill, 1990; Jones, 1995), and a way in which firms can create a competitive advantage (Barney and Hansen, 1994; Jones, 1995; Wicks et al., 1999).

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The purpose of the current paper is to examine investors' judgments of management's trustworthiness in response to management's earnings preannouncements. Management's preannouncement decision is its discretionary disclosure of company earnings prior to the fiscal year end. We focus on management's preannouncement decisions because such decisions are ethically charged in that they impact a range of stakeholders such as current and potential shareholders. For example, when managers decide not to issue an earnings preannouncement, financial statement users will be informed about the company's unexpectedly poor performance in a less timely manner. Alternatively, managers may intentionally issue pessimistic earnings preannouncements with the expectation of subsequently reporting actual earnings above the preannouncement.

Management's earning preannouncement decision may undermine its fiduciary duty to its shareholders because truthful reporting may not be management's sole motivation in issuing a preannouncement. Prior research suggests that management's decisions to issue earnings guidance are associated with its self-interest (Matsumoto, 2002) and may reflect its motivation to affect the overall market reaction to earnings news (Baginski et al., 1994; Bartov et al., 2002; Soffer et al., 2000).² This evidence is consistent with concerns that have been raised that manager's preannouncement decisions are one of the earnings games managers consider in order to avoid reporting actual earnings below expected earnings (Brown and Pinello, 2005; Brown and Caylor, 2005; Levitt, 1998; Schonfeld, 1998; Staubus, 2005; Vickers, 1999). While the business ethics literature recognizes the ethically charged nature of earnings management (Elias, 2002; Kaplan, 2001; Merchant and Rockness, 1994; Kaplan and Ravenscroft, 2004), there has been less recognition or awareness of the ethical aspects of management's preannouncement decisions.

We specifically focus on the preannouncement decision in a situation where actual earnings are substantially below analysts' consensus earnings estimate because this situation "presents managers with a disclosure dilemma" (Kasznik and Lev, 1995, p. 114). In this situation, managers must decide on whether to disclose, and if disclosing, what to disclose (e.g., all of, more than or less than the expected bad news). Managers facing this disclosure dilemma realize that shortly after the accounting period ends,

they will be releasing actual earnings that are less than analysts' consensus estimate.

We contend that management's decision to preannounce earnings and the resulting impact on the news contained in the actual earnings report (e.g., favorable vs. unfavorable) inform investors' judgments about the trustworthiness of management. Thus, in our view, management's preannouncement decision in relation to the firm's actual reported earnings is treated as an antecedent to trustworthiness judgments about management. Specifically, following an event where management makes a preannouncement decision and subsequently reports actual earnings, investors make a judgment about management's trustworthiness. Based on management's preannouncement decision (e.g., whether to preannounce earnings and, if so, what level of earnings to preannounce), the actual earnings report will reflect "good" news, "bad" news, or no news (e.g., the actual reported earnings meet expectations). This judgment about management's trustworthiness, in turn, is expected to affect investors' other investment related judgments.

This study contributes to the literature in at least three ways. First, it increases our understanding of the relation between management's preannouncement and investors' judgments of the trustworthiness of management. Research examining this relation is scant (Mercer, 2004, 2005; Tan et al., 2002) and in several disciplines,³ trust is considered to be a construct separate from other potentially related constructs such as competence (Rousseau et al., 1998). In addition, while previous research has explored individuals' judgments of trustworthiness (Cvetkovich et al., 2002; Siegrist and Cvetkovich, 2001; Slovic, 1993), the setting we examine differs from those previously examined in two important ways. First, in our setting preannouncement decisions are discretionary and through these choices managers have the ability to influence the magnitude and the direction (i.e., positive or negative) of the "earnings surprise" (i.e., the difference between actual reported earnings and the most recent estimate of earnings) contained in the actual earnings report. Second, in our setting, regardless of whether actual earnings represents "good" or "bad" news relative to management's preannouncement decision, the actual earnings report is equally visible and noticeable. This setting differs from those considered by Slovic's (1993), who observes that negative events are generally more visible than positive events.

Second, our analysis extends the asymmetry principle (Slovic, 1993), in which bad news has a greater effect on trustworthiness judgments than good news. Consistent with the asymmetry principle, we predict that, holding the size of the earnings surprise constant, trustworthiness will be damaged more when actual earnings creates a negative rather than positive earnings surprise. We extend the asymmetry principle by predicting that, holding the size of the earnings surprise constant, trustworthiness will be damaged more when the negative earnings surprise occurs under a management that had previously issued a preannouncement than under a management that had not issued a preannouncement. Furthermore, in our view, investors' other investment related judgments will be associated with their assessment of management's trustworthiness.

Third, our study builds upon the work of Mercer (2005), who provides initial evidence on the relation between issuing an accurate preannouncement and not issuing a preannouncement, and its effects on the broader construct of management credibility. Management credibility includes both trustworthiness and competence. In contrast to Mercer (2005), we distinguish between assessments of management's trustworthiness and competence for two reasons. First, as discussed above, this distinction is common in this multidisciplinary literature. That is, trust is generally considered a separate construct from the construct of competence. In this regard, it is important to note that the asymmetry principle (Slovic, 1993) relates exclusively to beliefs about trust and not to beliefs about competence. Second, our study examines a broader range of preannouncement decisions, including accurate and two different forms of inaccurate preannouncement decisions. Since the asymmetry principle relates to beliefs about trust we do not expect nonprofessional investors to assess management's trustworthiness and competence similarly across a broader range of preannouncement decisions.

We conduct an experiment in which MBA students (i.e., nonprofessional investors) make investment-related judgments under different preannouncement strategies. Initially, participants were provided with financial and other background information about a company, including analysts' consensus forecast for current year's earnings per share (EPS) of \$2.00, and later were told that the actual earnings per share was \$1.70. Thus, in all cases actual earnings were below analysts' consensus forecast.

In order to test our predictions, we examine pre-announcements that forecast actual earnings accurately as well as inaccurately. Management's preannouncement decision strategy was manipulated between subjects at four levels: *none* (i.e., no preannouncement was provided), *above* (i.e., preannounced earnings are above actual earnings), *accurate* (i.e., preannounced earnings equal actual earnings), and *below* (i.e., preannounced earnings are below actual earnings). Participants rated the attractiveness of the company as an investment, estimated the expected change in the company's future EPS and assessed management's trustworthiness and competence.

Our results show that managers' preannouncement decisions are significantly associated with investors' evaluations of management's trustworthiness. Specifically, holding the size of the earnings surprise constant, we find that judgments of management's trustworthiness are damaged more following (a) a negative as opposed to a positive earnings surprise, and (b) the release of a preannouncement compared to when management does not issue a preannouncement. Also consistent with our predictions, we find that judgments of management's trustworthiness and judgments of the attractiveness of the firm's equity as an investment are significantly and positively associated.

The following section presents background on earnings preannouncement decisions and trust development. Subsequent sections present the hypotheses, the method, the results, and a discussion of the findings.

Background

Earnings preannouncement decisions

Kasznik and Lev (1995, p. 114) contend that situations where actual earnings are expected to be substantially below analysts' consensus earnings estimate "present managers with a disclosure dilemma." In this regard, managers have the discretion to preannounce earnings that will be substantially lower than the market's expectations. When managers decide not to issue a preannouncement, then the earnings report presumably will contain all the "bad" earnings news. In this situation, investors and potential investors will not be informed about the performance that is less than financial analysts and the stock market expects until the earnings report is released. Alternatively, for a firm

issuing an earnings preannouncement, the total “bad” earnings news is split between the preannouncement and the actual earnings announcement (Soffer et al., 2000; Tan et al., 2002). Further, managers’ preannouncement decisions influence whether actual earnings reports meet or beat current analysts’ earnings forecasts. This influence is referred to as expectations management (Bartov et al., 2002; Brown and Pinello, 2005; Kasznik and Lev, 1995; Shu, 2003). That is, to the extent that analysts use preannouncements to update their earnings forecasts, managers have the ability to issue preannouncements that increase the likelihood of issuing a positive earnings report (e.g., one that meets or beats current analysts’ earnings forecasts). Managers may be motivated to issue earnings preannouncements in order to affect the overall market reaction to earnings news (Baginski et al., 1994; Bartov et al., 2002; Soffer et al., 2000). Evidence consistent with this motivation is provided by Soffer et al. (2000), who find that the market reacts less negatively to bad news preannouncements than to bad news earnings announcements. Focusing on longer term benefits, Bartov et al. (2002) find that the returns for firms that meet or beat current analysts’ earnings expectations by issuing preannouncements are higher than the returns to firms that fail to meet analysts’ earnings expectations.

Recent evidence indicates that the number of firms issuing preannouncements is growing (Bamber and Cheon, 1998; Kile et al., 1998; Miller, 2000). For example, based on evidence collected by First Call Corporation, Miller (2000) reports that the number of companies preannouncing earnings increased from 449 in 1995 to 721 in 1997. In addition, more recent evidence based on information from 1994 to 2003 indicates that the proportion of firms issuing preannouncements has increased from less than 10% in the mid-1990s to around 25% in 2001–2003 (Anilowski et al., 2007). Initial evidence on the capital market benefits associated with preannouncing earnings surprises is reported by Soffer et al. (2000). Their evidence suggests “that the market reacts more to news released at the earnings announcement date than the preannouncement date” (Soffer et al., 2000, p. 12). That is, the market reacts less negatively to bad news when released as a preannouncement rather than as an earnings announcement. Similarly, Bartov et al. (2002, p. 189) find that “investors assign less weight to analysts’ forecast revisions made during the quarter than to earnings surprises occurring when earnings are announced.”

More recently, Shu (2003) develops a model of a manager’s preannouncement decision in which she tests firms with negative earnings surprises (e.g., actual earnings below analysts’ consensus estimate). She finds the preannouncement decision is significantly positively associated with firm size, previous preannouncing decisions, and securities litigation within the last five years. In addition, Shu (2003) also examines the stock returns for these firms. Using a self-selection analysis for firms with negative earnings surprises, she finds that mean returns within a short-window are not significantly associated with the decision to preannounce negative earnings. However, based on long windows, mean returns are significantly less negative for preannouncing firms than they are estimated to have been had they not issued a preannouncement.

While archival research provides evidence about capital market benefits to preannouncing earnings, its ability to determine why preannouncement strategies matter is limited. Experimental research, however, can provide additional insight and has begun to investigate the association between preannouncement strategies and investment-related judgments. Libby and Tan (1999), Tan et al. (2002), and Libby et al. (2006) examine the role of preannouncement decisions in the future earnings forecasts made by financial analysts. Generally, the results of these studies demonstrate that the sign of the earnings surprise (e.g., positive, negative, or none) following a preannouncement is systematically related to future earnings expectations among financial analysts. As discussed below, Tan et al. (2002) also provide information on the relation between the sign of the earnings surprise following a preannouncement and analysts’ perceptions of management’s forthcomingness and integrity.

Trust development

Researchers have defined trust in a variety of ways (Bigley and Pierce, 1998), including as a general disposition toward others (Rotter, 1971), a rational decision about cooperative behavior (Dasgupta, 1988), an affect-based evaluation about another person (McAllister, 1995), and a characteristic of social systems (Barber, 1983). Despite the plethora of definitions, Rousseau et al. (1998) contend that the

meaning of trust is generally similar across disciplines. Specifically, trust is a “psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another” (Rousseau et al., 1998, p. 395). Trust involves having expectations that what is trusted will act as expected or in a desired way that promotes or at least does not diminish the trustee’s well-being or the well-being of his investment (Brien, 1998). Trust relates to “the extent to which one person can expect predictability in the other’s behavior” (Gabarro, 1978, p. 294) and to feel secure that one’s expectations related to the trusted person or thing will be fulfilled. In this way, trust appears to overlap with predictability (Dasgupta, 1988; Gambetta, 1988; Good, 1988; Rotter, 1967). Consistent with these views, in our study, trustworthiness is considered to be a psychological state about a person’s expectations or beliefs that the future actions of a firm’s management “will be beneficial, favorable, or at least not detrimental to one’s interests” (Robinson, 1996, p. 576).

Rousseau et al. (1998) observes that there is general consensus on the conditions that are generally present for trust to develop. The first condition is risk. Only in situations presupposing risk can trust develop. Rousseau et al. (1998) characterizes risk in terms of a decision maker’s perceived probability of loss. In this regard, Lewis and Weigert (1985) contend that trust would be unnecessary in a world where actions occurred with complete certainty. The second condition for trust to develop is interdependence, which Rousseau et al. (1998, p. 395) define as “where the interests of one party cannot be achieved without the reliance upon another.” This condition presupposes a situation involving an asymmetry of power such that the trustee has power over the truster (Brien, 1998).

Generally, both of these conditions are present with respect to the relationship between investors and management. Investors clearly rely on the managers to run the business and to provide information disclosures on the firm’s performance. Further, investors face substantial risks. The earnings report that management discloses regarding the firm’s performance will influence the value of the firm and thereby investors’ net wealth (Ball and Brown, 1968). The examination of trust development in the setting explored in this paper and a variety of other settings is also suggested by Hosmer (1995). He contends that a trust relationship forms

when investors seek to purchase shares of stock. In addition, we suggest that this view of trust can be applied to the specific context in this paper.

Antecedents of trust have been considered repeatedly in the literature. Three trustee characteristics in particular have often appeared in the literature: benevolence, ability, and integrity. First, benevolence represents the extent to which a trustee is believed to want to do good on behalf of the truster aside from an egocentric profit motive. Benevolence presumably exists when the trustee has some specific attachment to or positive orientation towards the truster. Hovland et al. (1953) described high benevolence or trustworthiness as inversely related to the trustee’s motivation to lie. Similarly, others have considered intentions or motives as important to trust development (e.g., Cook and Wall, 1980; Deutsch, 1960; Giffin, 1967; Kee and Knox, 1970; Mishra, 1996). Second, ability represents a group of skills and characteristics that enable the trustee to have influence within some specific domain. Third, integrity involves the truster’s perception that the trustee adheres to a set of principles that the truster finds acceptable (Mayer et al., 1995).

Consistent with this prior research, we suggest that the relation of management’s preannouncement to the actual earnings report represents an antecedent to trust development. Specifically, accurate preannouncements by management would provide evidence for investors’ perceptions of management as benevolent (i.e., not having a motivation to lie). Similarly, accurate preannouncements by management are likely to contribute to investors’ view of management as having the ability to influence the success of the company (and their investment) and the integrity to do so in an ethical manner.

Hypothesis development

Slovic (1993) introduced the asymmetry principle to describe how information is used in forming and updating impressions of the trustworthiness of a trustee. This principle is based on the idea that trust is easier to destroy than to create (Barber, 1983; Janoff-Bulman, 1992; Meyerson et al., 1996). In this regard, Slovic (1993, p. 677) notes that “trust is fragile....it can be destroyed in an instant – by a single mishap or mistake.” Under the asymmetry principle, negative

(e.g., trust-destroying) information is more influential than positive (e.g., trust-building) information in shaping one's impressions of the trustworthiness of a trustee. In support of this principle, Slovic (1993) contends that negative information is more visible and subsequently receives greater weight than positive information when forming and updating trustworthiness impressions. Slovic (1993) also contends that sources reporting negative information are typically seen as more credible than a source reporting positive news. Slovic (1993) provides additional evidence consistent with the asymmetry principle in the context of news events related to the management of a large, local nuclear power plant. More recent evidence supports the asymmetry principle in the context of health dangers (Siegrist and Cvetkovich, 2001) and the food supply industry (Cvetkovich et al., 2002; White et al., 2003).

Keeping the asymmetry principle in mind, consider how a firm's earnings preannouncement decision and its relation to actual earnings will influence judgments of management's trustworthiness. Towards the end of the accounting period, Firm A decides to issue an earnings preannouncement. Subsequently, Firm A reports its actual earnings, which relative to the preannouncement, contains a positive surprise. That is, the actual earnings exceeded the earnings preannouncement and, thus, exceeded expectations. Presumably, even though, in hindsight, the earnings preannouncement was inaccurate, relatively little, if any, damage to trust related to Firm A's management would be expected. Alternatively, consider Firm B. Towards the end of the accounting period Firm B decides to issue an earnings preannouncement. Subsequently, Firm B reports its actual earnings, which relative to the preannouncement, contains a negative surprise. That is, the actual earnings were less than the earnings preannouncement and, thus, below expectations. Since the actual earnings report contained "negative" information, judgments about management's trustworthiness are expected to be damaged. Overall, consistent with the asymmetry principle (Slovic, 1993), this discussion indicates that when actual earnings are different from preannounced earnings, trust is eroded to a greater extent when actual earnings contains "bad" news rather than "good" news. This is because negative information is expected to be weighted more heavily than positive

information in trustworthiness assessments. In the setting here, both "good" and "bad" actual earnings will be equally visible and are from the same source.

The results from Tan et al. (2002) are in conflict with the discussion above. Using both a within and between subjects design, financial analysts judged management's forthcomingness and integrity after the firm issued an earnings report that contained either a positive or negative surprise relative to the preannouncement. Of particular relevance are the scenarios with negative total news (e.g., actual earnings below analysts' consensus estimate of earnings). Financial analysts judged management's forthcomingness and integrity less favorably when the earnings report contained a positive surprise in comparison to when the earnings report contained a negative surprise. We believe this reflects financial analysts' institutional knowledge about the earnings games allegedly played by managers (Brown and Pinello, 2005; Brown and Caylor, 2005; Levitt, 1998; Schonfeld, 1998; Vickers, 1999). That is, we believe that financial analysts are acutely aware of managers' incentives to produce positive earnings surprises and that certain managers engage in questionable behaviors (such as issuing a preannouncement that intentionally low-balls earnings) to produce positive earnings.

We believe that nonprofessional investors (relative to professional financial analysts) are less aware of managers' incentives or game playing behaviors. Results from archival studies by Bhattacharya (2001), Bhattacharya et al. (2005), Lee (1992), and Mikhail et al. (2005) are consistent with this belief. Of these, Mikhail et al. (2005) is most relevant. Mikhail et al. (2005) examine investors' reactions to changes in analysts' equity recommendations. Mikhail et al. (2005) contend that analysts are reluctant to issue negative reports and consequently a report containing an upgrade is less credible than a report containing a downgrade. In contrast to institutional investors who respond more strongly to a downgrade, nonprofessional investors appear to respond similarly to upgrades and downgrades. Mikhail et al. (2005) conclude that nonprofessional investors do not fully understand analysts' incentives to issue upgrades. Overall, archival findings support our belief that nonprofessional investors are less aware of reporting incentives than more sophisticated investors. Thus, we expect the effect of preannouncements

on nonprofessional investors' judgments of management's trustworthiness will differ from financial analysts. In particular, we propose that the trustworthiness judgments of nonprofessional investors will conform to the asymmetry principle. This discussion leads to our first hypothesis.

Hypothesis 1 Holding the size of the earnings surprise constant, nonprofessional investors' judgments of management's trustworthiness will be lower following the release of an actual earnings report that contains a negative surprise compared to an actual earnings report that contains a positive surprise.

Typically, when managers are making decisions about whether to issue an earnings preannouncement, some financial analysts have forecasted the firm's earnings for the period such that a consensus estimate already has been formed. On occasion, managers issue a preannouncement that confirms the consensus earnings estimate among analysts (Clement et al., 2003). That is, the amount of earnings in the preannouncement is equal to the financial analysts' consensus estimate of earnings. Unlike a typical (e.g., non-confirming) earnings preannouncement, managers issuing a confirming preannouncement are not dividing the earnings relevant information between the preannouncement and the earnings release. Thus, the earnings surprise should be identical for firms that do not issue a preannouncement compared to those firms that issue a confirming preannouncement. In this regard, Clements et al. (2003) report that the analysts' consensus estimate does not change after a firm issues a confirming preannouncement. Imagine that subsequently, a firm releases actual earnings that are substantially below the analysts' consensus estimate, creating a negative earnings surprise. Since actual earnings did not meet expectations, judgments about management's trustworthiness are expected to be damaged.

We contend, however, that even though the size of the negative earnings surprise is the same, trustworthiness will be damaged more when managers issue a confirming preannouncement than when managers do not issue a preannouncement. By releasing a preannouncement, management's role is explicit. Managers have actively participated in shaping the earnings expectations for the firm. As such, when the negative earnings surprise occurs,

investors are likely to believe that management played a central role in the "bad" news, and judgments about management's trustworthiness will be particularly damaged. In comparison, because management was silent prior to the release of earnings, investors will tend to associate the "bad" earnings news to a greater extent to financial analysts. Thus, when no preannouncement is released, management's role is more implicit (e.g., they chose not to issue a potentially more informative preannouncement), and judgments about management's trustworthiness will suffer to a lesser extent. This discussion leads to the following hypothesis.

Hypothesis 2 Holding the size of the negative earnings surprise constant, following the release of an actual earnings report that contains a negative earnings surprise, nonprofessional investors' judgments of management's trustworthiness will be lower when management had previously issued a confirming preannouncement compared to when management had not issued a preannouncement.

Next, we consider how the ex-post accuracy of the preannouncement is expected to influence judgments of management's trustworthiness. Specifically, management's earnings preannouncements that are inaccurate (e.g., different from the actual earnings report) are likely to lead to an erosion of investors' views of management's trustworthiness – i.e., to distrust. Distrust has been defined as a "lack of confidence in the other, a concern that the other may act so as to harm one, that he does not care about one's welfare or intends to act harmfully, or is hostile" (Grover, 1994, p. 240). Suspicion, a central cognitive component of distrust (Deutsch, 1958), can be triggered in situations where perceivers have forewarnings that another might be insincere or untrustworthy, and when they recognize situational cues or possess contextual information that suggests another might have ulterior motives (Fein and Hilton, 1994). Applied to the setting here, since management's preannouncements contribute to the formation of investors' earnings expectations of actual earnings, inaccurate preannouncements are inconsistent with investor's expectations. The damage to investors' expectations caused by inaccurate preannouncements will, in turn, diminish investors' trust in management. Thus, to increase

trust, management's preannouncements should match our expectations formed based on these preannouncements.

Recall that Mercer (2005) compares investors' management credibility judgments in a setting where management has issued an accurate preannouncement (e.g., the actual earnings equaled the preannounced earnings) to a setting where management did not issue a preannouncement, and thus, actual earnings contained a negative earnings surprise. She found that in the short-term, investors' judgments of management credibility were lower when management did not issue a preannouncement, particularly when the firm's actual earnings were below the analysts' consensus estimate. As discussed above, we expect management's trustworthiness will be damaged when management issues a preannouncement that results in a negative earnings surprise (e.g., the actual earnings are less than the preannounced earnings). That is, the actual outcome is below expectations, and management will be seen as less trustworthy. This situation differs from Mercer (2005) because the negative earnings surprise results in comparison to a preannouncement as opposed to a situation in which no preannouncement had been issued by management. Alternatively, when management issues an accurate preannouncement, the actual outcome met expectations, and management's trustworthiness should not suffer. This discussion leads to the following hypothesis.

Hypothesis 3 Following the release of an actual earnings report that contains a negative surprise relative to the preannouncement, investors' judgments of management's trustworthiness will be lower than those following the release of an actual earnings report that did not contain an earnings surprise relative to the preannouncement.

A preannouncement may also be inaccurate by creating a positive earnings surprise (e.g., the actual earnings are greater than the preannounced earnings). As discussed above, when management issued an ex-post inaccurate preannouncement that subsequently results in a positive earnings surprise, management's trustworthiness is expected to suffer little, if any, damage. Trust is expected to be damaged through negative outcomes. Similarly, no damage to management's trustworthiness is expected when

management issues an earnings report that does not contain an earnings surprise. This discussion leads to the following hypothesis.

Hypothesis 4 Nonprofessional investors' judgments of management's trustworthiness following the release of an actual earnings report will not differ between an earnings report that contains a positive surprise relative to the preannouncement and an actual earnings report that does not contain an earnings surprise relative to the preannouncement.

Lastly, we consider whether judgments of management's trustworthiness are consequential. In this regard, Mercer (2005) found that changes in management's reporting credibility, driven by management's preannouncement decision, were significantly associated with investors' willingness to rely on subsequent earnings forecast issued by management. We build on this work by exploring the role of trustworthiness judgments in judging the attractiveness of the firm's stock as an equity investment once actual earnings have been released. We chose this judgment because it is consequential, we can identify and control for other variables that are expected to influence this judgment (Tan et al., 2002), and it corresponds with previous archival research (Bartov et al., 2002; Shu, 2003; Soffer et al., 2000). As discussed previously, trust is essential for equity markets to operate. Consequently, we contend that judgments of management's trustworthiness are considered when judging the attractiveness of a firm's equity as an investment once actual earnings have been released.⁴ This leads to the following hypothesis.

Hypothesis 5 Once actual earnings have been released, nonprofessional investors' judgments of management's trustworthiness will be significantly associated with their judgments of the attractiveness of a firm's equity as an investment.

Method

Overview and task

An experiment was conducted using evening MBA students as participants. Participants initially

received background information about the financial reporting environment for publicly traded companies. This information described the role and, to some extent, the content of both required and voluntary financial disclosures. Next, information about a specific publicly traded company was presented. (see Appendix A). The company was described as a worldwide chemical company with sales over \$6.5 billion and more than 17,000 employees. Selected prior year financial information for the company was presented, and information about specific financial ratios for the chemical industry was also provided.

The next page indicated that at the beginning of the year the consensus forecast among financial analysts following the company for annual EPS was \$2.00. This was followed by management's earnings preannouncement near the end of the year or an indication that management did not issue a preannouncement before year end. As described below the content of management's preannouncement was manipulated between participants at four levels. Participants were asked to provide an initial judgment of the attractiveness of the stock as an investment.

All participants were next told that shortly after the year, the company announced actual annual EPS for the year to be \$1.70. Thus, actual annual EPS was below the consensus forecasted by financial analysts of \$2.00. Subsequent to the announcement of actual earnings, participants were asked to provide a series of judgments including a revised attractiveness of investment judgment, an EPS forecast, and judgments of the trustworthiness and competence of management.

To complete the study, participants responded to a manipulation check and some background questions. Participants responded anonymously.

Independent variable

The independent variable in the study was the earnings preannouncement by management. This variable was manipulated between participants at four levels: *above*, *below*, *accurate*, and *none*. The label refers to the relationship between the preannouncement and the company's actual EPS of \$1.70. The *above* condition indicated that three weeks

before the end of the current year management preannounced annual EPS to be \$2.00. This preannouncement represents a confirmation of analysts' consensus EPS forecast.⁵ In comparison to the preannouncement, the actual EPS reflected bad news. The *below* condition indicated that three weeks before the end of the current year management preannounced annual EPS to be \$1.40. In this case, in comparison with the preannouncement, the actual EPS reflected good news. In the *accurate* condition, actual annual EPS exactly matched the annual EPS preannounced by management – i.e., \$1.70. In comparison to the preannouncement, the actual EPS does not reflect either good or bad news. The *none* condition indicated that management did not issue an earnings preannouncement before the end of the year. For this group, the actual EPS of \$1.70, which was below the consensus EPS forecast among analysts of \$2.00, reflects bad news.

Dependent variables

As discussed above, participants were asked to provide a series of judgments about management and the company, which are discussed below.

Revised attractiveness of investment judgments

After receiving information about the firm's actual earnings participants were asked to provide a revised judgment about the attractiveness of investing in the company. Specifically, this item stated, in part, "please indicate the attractiveness of XYZ Company stock to you as an investment if the stock was selling for \$31.80 per share." The end-points on an eleven-point scale are "extremely unattractive investment" (1) and "extremely attractive investment" (10). The equity price included in the item was intended to reflect a relatively plausible price based on the company's price/earnings ratio for the prior year of \$19.00. Both the initial (e.g., after the preannouncement decision had been made) and revised attractiveness judgments (e.g., after actual earnings had been released) were obtained from participants before they were asked to provide other judgments. Thus, the attractiveness judgments should not have been influenced by requesting participants to make these subsequent judgments.

Management's trustworthiness

Participants were asked to indicate their impressions of management's trustworthiness. Specifically, after assessing the attractiveness of the firm as an investment, participants indicated their level of agreement to each of three items designed to measure "management's trustworthiness in financial reporting" (Mercer, 2005, p. 731). Mercer (2005) developed this three item measure from two widely accepted source credibility scales: McCroskey (1966) and Leathers (1992). The three items are perceptual measures of management's trustworthiness, honesty, and truthfulness in its financial disclosures. The items are shown in Appendix B. Items b, c, and f relate to trustworthiness. The end-points on a seven-point scale are "strongly disagree" (1) and "strongly agree" (7). Item f ("I believe that XYZ management may not be truthful in their financial disclosures") was reversed scored and then the three items related to trustworthiness were averaged to determine an overall trustworthiness score. Higher scores indicate that that management is judged to be more trustworthy. To ensure that these questions capture one underlying trust construct, we conducted a reliability analysis on participants' responses. The results of this analysis yielded a Cronbach's alpha of 0.88, suggesting that the scale is reliable (Nunnally, 1978). In addition, factor analysis was performed on these three measures. The results showed that the first factor had an eigenvalue of 2.5 and accounted for over 82% of the variation in the three measures. No other factor had an eigenvalue greater than 0.5. These results support grouping the three measures into a single factor for trustworthiness.⁶

Control variables

In order to examine the potential association between management's trustworthiness and the investment attractiveness of the firm, two control variables were included in the tests of Hypothesis 5.⁷ These are discussed below.

Forecasted EPS

Participants were asked to indicate the extent to which next year actual EPS would differ from the current year's actual EPS of \$1.70. Specifically, this

item stated, in part, "please indicate how much, if at all, you would expect actual EPS for 2003 to change from actual EPS for 2002 of \$1.70." The end-points on an eleven-point scale are "expect a substantial DECREASE in actual EPS for 2003" (1) and "expect a substantial INCREASE in actual EPS for 2003" (10).

Management's competence

Mercer (2005, p. 731) developed a three-item measure of "management's competence in financial reporting." These items are perceptual measures of management's competence, knowledge, and qualifications for providing financial disclosures. The items are shown in the Appendix B. Items a, d, and e related to competence. Participants indicated their level of agreement to each item using the same seven-point scale used to assess trustworthiness. Item d ("I believe XYZ's management has little knowledge of the factors involved in providing useful disclosures") was reversed scored and then the three items related to competence were averaged to determine an overall competence score. Higher scores indicate that management is judged to be more competent. To ensure that these questions capture one underlying competence construct, we conducted a reliability analysis on participants' responses. The results of this analysis yielded a Cronbach's alpha of 0.38, well below an acceptable level of reliability (Nunnally, 1978, p. 245). In addition, factor analysis was performed on these three measures. The results showed that the two factors had an eigenvalue greater than 1.0, each of which incrementally accounted for over 33% of the variation in the three measures. These results suggest that the three measures do not represent a single factor. Due to this lack of reliability, competence is not considered further in our analyses.

Participants

Participants in the study were second year MBA students enrolled at a major metropolitan state university. Participating students had completed both a course in financial and managerial accounting as part of their MBA program. One hundred and twenty-four students completed the

questionnaire. Background information on those participants satisfactorily responding to a manipulation check item, described below, is presented in Table I.⁸ As shown, the majority of participants is male, had taken several accounting and finance related courses, and had invested in common stock in the past. Thus, this group, while likely to be less acutely aware of managers' incentives and game playing behaviors than professional financial analysts, appears to be reasonably representative of nonprofessional investors' knowledgeable about financial statements. That is, we believe this sample of participants generally is able to read and understand the contents of financial statements similarly to nonprofessional investors. Consistent with Elliott et al. (2007) and other studies (e.g., Maines and McDaniel, 2000), we use second year MBA students to proxy for nonprofessional investors.

Results

Manipulation check and potential covariates

After completing the case, participants answered a manipulation check item about management's preannouncement strategy. Specifically, the item read: "Please indicate whether, in this experiment, management issued a preannouncement of EPS, and if so, was the preannounced EPS below or above the actual EPS announced by management." Four responses were listed. Each of the responses corresponded to one of the four preannouncement strategies. The first three stated that management's preannouncement of EPS was below, above, and equal to actual EPS, respectively. The fourth response stated that management did not provide a preannouncement of EPS. Of the 124 participants, 94 answered this question correctly. The statistical

TABLE I
Background information on participants ($N = 86-94$)

Panel A: Continuous variables		
Variable	Mean	SD
Age	30.85	4.16
Years of work experience	7.48	4.53
Number of credit hours taken in:		
Accounting	11.52	11.56
Finance	10.89	9.93
Ability to read and understand		
Financial statements ^a	4.98	1.19
Ethical Impressions ^b	5.63	2.29
Panel B: Dichotomous variables		
Variable	Percentage	Number
Gender		
Males	73%	69
Females	27%	25
Have you previously invested in the stock market?		
Yes	86%	81
No	14%	13

^a Participants responded to the request: "Please assess your ability to read and understand financial statements." Participants indicated their response using a seven point scale anchored by "very poor" (1) and "very strong" (7).

^b Participants responded to the following question: "To what extent, if any, did your ethical impressions of management influence the likelihood that you would buy the Company's stock at the specified price of \$31.80?" Participants indicated their response using a ten-point scale anchored by "ethical impressions had no influence" (1) and "ethical impressions had a very large influence" (10).

analysis that follows is based on the complete responses from 94 participants.⁹

To determine whether any background measures should be included as covariates in the hypothesis testing and related supplemental analyses, these measures were correlated with preannouncements and with participants' judgments (e.g., initial and revised attractiveness judgments, trustworthiness judgments, and forecasted EPS). These correlations are presented in Table II. As discussed below, background measures that are significantly correlated with a judgment that is used as a dependent measure are included as covariates in the statistical analysis of that judgment.

The association between preannouncement condition and participants' trustworthiness judgments

The first four hypotheses test relations between the preannouncement condition and participants' trustworthiness judgments. Table III provides descriptive information for participants' investment related judgments including the trustworthiness judgment for each preannouncement condition. As shown, mean trustworthiness judgments ranged from slightly over 3 to almost 5, which are below and above the scale midpoint of 4, respectively. These cell means may have been dampened, in part, because actual earnings were always substantially below the financial analysts' consensus estimate of EPS. Also, Table III shows, as reflected in the standard deviations, the presence of individual differences that are similar across cells.

As discussed above, an analysis was conducted to determine if any of the background measures were associated with participants' trustworthiness judgments. As shown in Table II, this analysis indicated that age and the number of credit hours taken in finance (e.g., finance hours) were each associated with trustworthiness judgments, and both were included as covariates in subsequent analysis of trustworthiness judgments. Analysis of covariance (ANCOVA) using trustworthiness judgments as the dependent variable and preannouncement condition at four levels as the independent variable and age and finance hours as covariates was conducted. The results are reported in Table IV Panel A. As shown, there is a significant effect for preannouncement

condition ($F = 9.34, p < 0.01$). This result indicates that mean trustworthiness judgments differed significantly across the four preannouncement conditions.¹⁰

Hypothesis one predicts that holding constant the size of the earnings surprise, in comparison to when actual earnings result in a positive surprise, trustworthiness judgments will be lower when the actual earnings results in a negative surprise. A contrast was conducted comparing the trustworthiness judgments of participants assigned to the *above* and *below* preannouncement conditions. As shown in Table IV Panel B, the F -statistic is significant ($F = 6.02, p < 0.05$) and the cell means are in the expected pattern. That is, mean trustworthiness judgments were less favorable when the preannouncement resulted in a negative earnings surprise compared to when the preannouncement resulted in a positive earnings surprise. These results support hypothesis one.

Hypothesis two predicts that when actual earnings results in a negative surprise, trustworthiness judgments will be lower when a confirming preannouncement has been issued than when one has not been issued. A contrast was conducted comparing the trustworthiness judgments of participants assigned to the *above* and *none* preannouncement conditions. The F -statistic is significant ($F = 8.95, p < 0.01$) and the cell means are in the expected pattern. That is, mean trustworthiness judgments were less favorable when a preannouncement had been issued than when one had not been issued. These results support hypothesis two.

Hypothesis three predicts that between firms issuing preannouncements, trustworthiness judgments will be lower when actual earnings result in a negative surprise than when actual earnings result in no earnings surprise. A contrast was conducted comparing the trustworthiness judgments of participants assigned to the *above* and *accurate* preannouncement conditions. The F -statistic is significant ($F = 27.34, p < 0.01$) and the cell means are in the expected pattern. That is, between firms that issued preannouncements, mean trustworthiness judgments were less favorable in response to an actual earning reporting containing a negative surprise rather than no earning surprise. These results support hypothesis three.

Hypothesis four predicts that trustworthiness judgments following actual earnings resulting in a

TABLE II
Correlations among investment related judgments and background measures ($n = 94$)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Initial Attractiveness ^a	-	0.386*** (0.000)	0.169	0.010	-0.025	0.055	-0.014	0.127	-0.39*** (.000)
(2) Revised Attractiveness ^b		-	0.301*** (0.003)	0.334*** (.001)	-0.104	0.158	0.019	0.212** (.04)	0.30*** (.003)
(3) Forecasted EPS ^c			-	0.091	-0.133	0.050	0.13	-0.018	0.081
(4) Trustworthiness rating ^d				-	0.181* (.082)	-0.037	-0.197* (.062)	-0.105	0.074
(5) Age ^e					-	-0.02	-0.195* (.07)	-0.079	0.002
(6) Financial Statement Ability ^f						-	0.385*** (.000)	0.059	-0.035
(7) Finance Hours ^g							-	-0.022	-0.071
(8) Ethical Impressions ^h								-	0.207** (0.045)
(9) Preannouncements ⁱ									-

*Significant at 0.10; **significant at 0.05; ***significant at 0.01.

^aParticipants responded to the request: Based on the available information, please indicate the attractiveness of XYZ Company stock to you as an investment if the stock were selling for \$31.80 per share. Participants responded using a ten-point scale anchored by "extremely unattractive investment" (1) and "extremely attractive investment" (10).

^bAfter participants make an initial attractiveness judgment (described in 1 above), they are presented with the company's actual earnings. At this point, participants responded to the request: Based on all the available information including the Company's actual EPS, please indicate the attractiveness of XYZ Company stock to you as an investment if the stock was selling for \$31.80 per share. Participants responded using a ten-point scale anchored by "extremely unattractive investment" (1) and "extremely attractive investment" (10).

^cParticipants responded to the request: Please indicate how much, if at all, you would expect actual EPS for 2003 to change from actual EPS for 2002 of \$1.70. Participants responded using a ten-point scale anchored by "expect a substantial DECREASE in actual EPS for 2003" (1) and "Expect a substantial INCREASE in actual EPS for 2003" (10).

^dParticipants indicated their level of agreement with three statements about the trustworthiness of management: Participants responded using a seven-point scale anchored by "strongly disagree" (1) and "strongly agree" (7). For each participant, the average response across the three items was calculated and used as the trustworthiness rating.

^eParticipants responded to the question: What is your age?

^fParticipants responded to the request: "Please assess your ability to read and understand financial statements." Participants indicated their response using a seven-point scale anchored by "very poor" (1) and "very strong" (7).

^gParticipants responded to the question: How many credit hours related to finance related and accounting related courses you have you taken (including classes that you are currently enrolled in)?

^hParticipants responded to the following question: "To what extent, if any, did your ethical impressions of management influence the likelihood that you would buy the Company's stock at the specified price of \$31.80?" Participants indicated their response using a ten-point scale anchored by "ethical impressions had no influence" (1) and "ethical impressions had a very large influence" (10).

ⁱParticipants received one of four different preannouncement conditions. These conditions were an *accurate* condition (e.g., the preannouncement of EPS of \$1.70 equaled the actual EPS of \$1.70), a *below* condition (e.g., the preannouncement of EPS of \$1.40 was below the actual EPS of \$1.70), an *above* condition (e.g., the preannouncement of EPS of \$2.00 was above the actual EPS of \$1.70), and a *none* condition (e.g., no preannouncement was issued and actual EPS was \$1.70). The conditions were assigned the following numbers: *none* = 1, *above* = 2, *accurate* = 3, and *below* = 4.

TABLE III

Descriptive statistics for participants' investment related judgments across preannouncement conditions (standard deviations in parentheses)

	Preannouncement condition			
	None	Above	Accurate	Below
Sample size	21	21	22	30
Consensus analysts forecast before preannouncement	\$2.00	\$2.00	\$2.00	\$2.00
Earnings preannouncement by Management	–	\$2.00	\$1.70	\$1.40
Actual earnings announcement	\$1.70	\$1.70	\$1.70	\$1.70
<i>Dependent variables</i>				
Initial attractiveness judgment	6.52 (1.29)	6.38 (1.86)	5.27 (1.7)	4.7 (2.15)
Revised attractiveness judgment	4.86 (1.53)	4.24 (1.34)	6.0 (1.6)	5.8 (1.83)
Trustworthiness rating	4.06 (0.96)	3.32 (0.99)	4.82 (1.07)	3.89 (1.03)
Forecasted EPS	5.67 (1.16)	5.48 (1.86)	6.27 (1.28)	5.8 (1.47)

See Table II for a description of each variable.

positive surprise will not be different from those following actual earnings that result in no surprise. A contrast was conducted comparing the trustworthiness judgments of participants assigned to the *below* and *accurate* preannouncement conditions. Contrary

to the hypothesis, the *F*-statistic is significant ($F = 11.12, p < 0.01$) and the cell means indicate that trustworthiness judgments were lower following a positive surprise than no surprise. These results do not support hypothesis four.

TABLE IV

Statistical results for trustworthiness judgments

Panel A: The effect of preannouncement condition ^a and age on trustworthiness judgments				
Source	Type III sum of squares	df	<i>F</i>	Sig
Preannouncement	26.186	3	9.34	0.000
Age	1.27	1	1.359	0.247
Finance credit hours	3.93	1	4.206	0.043
Error	77.568	83		
$R^2 = 0.289$ (Adjusted $R^2 = 0.246$)				
Panel B: Contrast results testing the hypotheses				
Hypothesis	Dependent variable	<i>F</i> value (<i>p</i> -value)	Mean of 1st variable (SD) ^b	Mean of 2nd variable (SD) ^b
H1: Above < Below	Trustworthiness ratings	6.019 (0.016)	3.21 (0.92)	3.89 (1.03)
H2: Above < None	Trustworthiness ratings	8.949 (0.004)	3.21 (0.92)	4.06 (0.96)
H3: Above < Accurate	Trustworthiness Ratings	27.343 (0.000)	3.21 (0.92)	4.82 (1.04)
H4: Below = Accurate	Trustworthiness ratings	11.118 (0.001)	3.89 (1.03)	4.82 (1.04)

^aParticipants received one of four different preannouncement conditions. These conditions were an *accurate* condition (e.g., the preannouncement of EPS of \$1.70 equaled the actual EPS of \$1.70), a *below* condition (e.g., the preannouncement of EPS of \$1.40 was below the actual EPS of \$1.70), an *above* condition (e.g., the preannouncement of EPS of \$2.00 was above the actual EPS of \$1.70), and a *none* condition (e.g., no preannouncement was issued and actual EPS was \$1.70).

^bMeans are adjusted for covariate and thus do not exactly match the unadjusted means shown in Table III.

See Table II for a description of each variable.

Hypothesis five predicts that trustworthiness judgments will be associated with judgments of the attractiveness of a firm's equity as an investment once actual earnings have been released. Table II reports the univariate correlations between pairs of investment related judgments. As predicted, trustworthiness judgments are significantly and positively associated with revised attractiveness judgments ($r = 0.21, p < 0.04$). Table II also shows significant correlations between revised attractiveness judgments and initial attractiveness judgments, forecasted EPS judgments, and ethical impressions, respectively.

Hypothesis five was also tested using a multivariate analysis. The results of these analyses are presented in Table V. In these analyses, the dependent measure is participants' revised attractiveness judgments. Participants' trustworthiness judgments represented the independent variable of interest to test hypothesis five. However, initial attractiveness judgments, forecasted EPS judgments and ethical impressions were included in Model A as control variables. Model B is similar to Model A, but also included the *accurate*, *above*, and *below* preannouncement conditions as three dummy variables, as additional control variables. As shown in Table V, under both models, trustworthiness judgments are significantly associated with revised

attractiveness judgments. Results from the multivariate tests also provide support for hypothesis five.

The results shown in Table V also indicate that revised attractiveness judgments are significantly associated with initial attractiveness, and with the exception of model B, with forecasted EPS. Ethical impressions are significantly associated with revised attractiveness judgments only in model A.

Additional analyses

We examined the effect of management's preannouncement strategies on forecasted EPS judgments. Analysis of variance (ANOVA) was performed to determine whether management's preannouncement condition was associated with these judgments. In these analyses, the independent variable is management's preannouncement level at four levels. The dependent variable is participants' future earnings judgments. Statistical results for this analysis are presented in Table VI. Descriptive statistics are presented in Table II.

As shown in Table VI, management's preannouncement condition is not significantly associated with future earnings judgments. This finding is somewhat in contrast to Tan et al. (2002), who

TABLE V
Regression model results dependent variable: revised attractiveness judgment (coefficient, *t*-statistic)

Variable	Model	
	A	B
Intercept	-0.770 (-0.83)	-0.783 (-0.886)
Preannouncement condition	-	
Accurate		1.32 (2.96)***
Above		-0.351 (-0.896)
Below		1.81 (4.65)***
Initial attractiveness Judgment	0.283 (3.63)***	0.498 (6.54)***
Forecasted EPS	0.260 (2.52)**	0.145 (1.59)
Trustworthiness rating	0.513 (3.84)***	0.320 (2.45)**
Ethical impressions	0.160 (2.42)**	0.059 (0.953)
Model-F	11.72***	14.48***
Adjusted R ²	0.32	0.504

significant at 0.05; *significant at 0.01.

See Table II for a description of each variable.

TABLE VI

Statistical results for forecasted EPS judgments. The effect of preannouncement condition^a on forecasted EPS

Source	Type III Sum of squares	df	F	Sig
Preannouncement	7.485	3	1.163	0.328
Error	200.553	93		

$R^2 = 0.037$ (Adjusted $R^2 = 0.005$).

^aParticipants received one of four different preannouncement conditions. These conditions were an *accurate* condition (e.g., the preannouncement of EPS of \$1.70 equaled the actual EPS of \$1.70), a *below* condition (e.g., the preannouncement of EPS of \$1.40 was below the actual EPS of \$1.70), an *above* condition (e.g., the preannouncement of EPS of \$2.00 was above the actual EPS of \$1.70), and a *none* condition (e.g., no preannouncement was issued and actual EPS was \$1.70).

See Table II for a description of each variable.

found that preannouncement condition significantly influenced financial analysts' judgments of future earnings. To some extent, our insignificant findings may reflect larger individual differences among nonprofessional investors than financial analysts with respect to forming earnings forecasts.

Discussion

The purpose of this study was to examine the role of a firm's preannouncement on judgments about management's trustworthiness by nonprofessional investors. This discretionary judgment by management is important because it significantly impacts the timing and content of financial disclosures and, consequently, the direction and magnitude of the eventual "earnings surprise" contained in the actual earnings report. We contend that the pattern of information disclosures is likely to shape nonprofessional investors' views about management carrying out their fiduciary duty, and consequently, their judgments about the trustworthiness of management. We primarily model nonprofessional investors' trust beliefs based on Slovic's (1993) asymmetry principle, which holds that bad news has a greater effect on trustworthiness judgments than good news. Consistent with the asymmetry principle, in modeling trustworthiness beliefs we generally assume that nonprofessional investors are relatively unaware that managers allegedly play earnings surprise games (Brown and Pinello, 2005; Brown and Caylor, 2005; Levitt, 1998; Schonfeld, 1998; Vickers, 1999).

Under our first hypothesis, we predict and find that trustworthiness judgments are damaged more when actual earnings create a negative rather than positive earnings surprise. This result is consistent with the asymmetry principle that holds that trust suffers to a greater extent following bad news as opposed to good news (Slovic, 1993) and extends this principle to the judgments of nonprofessional investors. This result, and its underpinnings in trust-based research, may also provide insight into managers' preannouncement decisions. Managers may be motivated to issue preannouncements that lead to positive earnings surprises in order to bolster nonprofessional investors' judgments of management's trustworthiness.

This result, however, differs from that of Tan et al. (2002), who find that financial analysts' beliefs about management's forthcomingness and integrity are damaged more by a positive earnings surprise (i.e., the actual reported earnings are greater than the earnings preannouncement) than by a negative earnings surprise (i.e., the actual reported earnings are less than the earnings preannouncement). We believe the difference between our results and those of Tan et al. (2002) are due to financial analysts' (participants' in their study) and nonprofessional investors' (participants' in our study) differing levels of institutional knowledge that managers allegedly play earnings surprise games (Brown and Pinello, 2005; Brown and Caylor, 2005; Levitt, 1998; Schonfeld, 1998; Vickers, 1999). Tan et al. (2002) contend that financial analysts are aware that managers allegedly play earnings surprise games, and consequently, view a positive earnings surprise following a

preannouncement as a trust-impairing event. In contrast, we suggest that nonprofessional investors, while generally knowledgeable about financial statements, are likely to be less acutely aware of managers' incentives and game playing behaviors than professional analysts. This characterization of nonprofessional investors and our results are consistent with and extend the work of Frederickson and Miller (2004), who find that nonprofessional investors and financial analysts differ in their use of valuation models and their manner of processing information.

Results for our second hypothesis show that controlling for the size of the negative earnings surprise, trustworthiness judgments are damaged more when a preannouncement is issued compared to when no preannouncement is issued. Here we extend trust research by distinguishing between a situation in which management has a relatively passive role in announcing bad news (e.g., management had not issued a preannouncement) versus a situation in which management's role is more active (e.g., management had previously issued a confirming preannouncement). This finding demonstrates that management's explicit active involvement in generating the negative outcomes also influences judgments of management's trustworthiness. That is, management's trustworthiness was damaged to a greater extent when management's role was more active and more causally linked to the negative outcome. This finding builds on prior research that finds that causal ambiguity moderates the positive relation between perceived trustworthiness and accuracy such that as causal ambiguity increases this relation diminishes (Szulanski et al., 2004). We find that perceptions of trustworthiness are impaired when there is decreased causal ambiguity associated with an earnings surprise – i.e., when management appears to be playing a more active (causal) role in an earnings surprise. In addition, the finding that investors' trustworthiness judgments are impaired more when a preannouncement (compared to no preannouncement) has been issued may provide insight into managers' preannouncement decisions. Managers may realize that under certain conditions, issuing a preannouncement may damage trustworthiness more than not issuing a preannouncement.

Results for our third hypothesis, as expected, showed that when a preannouncement has been

issued, trustworthiness is judged less favorably following an earning report containing a negative surprise than one containing no earnings surprise. This finding is consistent with results from Tan et al. (2002) and suggests that managers obtain benefits in terms of enhanced perceptions of trustworthiness following an accurate preannouncement. This result also may provide insight into managers' earnings management decisions. That is, once a preannouncement has been issued, managers may be motivated to engage in earnings games, if needed, in order to meet an earnings target from a preannouncement to avoid damaging the trust relationship with equity owners.

Results for our fourth hypothesis were not as expected. Compared to an accurate preannouncement, trustworthiness judgments were unexpectedly damaged following an earnings reporting containing a positive earnings surprise. Thus, even though the actual earnings report contained good news, nonprofessional investors viewed the release of an actual earning reported that differ from expectations set by the preannouncement as diminishing trust. Our findings suggest that in a financial reporting setting the asymmetry principle may operate differently than in other settings. That is, while unexpected negative outcomes weigh more heavily than unexpected positive outcomes in trustworthiness judgments, unexpected outcomes in either direction diminished trust compared to when earnings expectations were met. This finding is important because it suggests that there are costs as well as benefits to reporting a positive earnings surprise rather than earnings that simply meet expectations. While positive earnings may be associated with analysts' forecasts of future earnings (Tan et al., 2002), such reports apparently damage trust among nonprofessional investors to some extent.

Results for hypothesis five demonstrate that trustworthiness judgments are significantly associated with nonprofessional investors' revised attractiveness evaluations. This finding was robust over both univariate and multivariate tests, and corroborates assertions on the importance of trustworthiness to equity markets (Jennings, 2005) and to credibility (Mercer, 2005). This result also confirms the importance of examining nonprofessional investors' judgments about the trustworthiness of management, as it in turn, is associated with equity related judgments.

In considering further trust related research regarding financial disclosures, we believe it is especially important to investigate managers' beliefs about trustworthiness when they are making pre-announcement or other financial disclosure decisions. Our results indicate that managers' preannouncement decisions shape nonprofessional investors' judgments of the trustworthiness of management. Further research should explore whether managers understand the trust implications associated with their preannouncement decisions and the extent to which this understanding influences their disclosure and subsequent earnings management decisions.

Two limitations to our study should be noted. First, an inherent limitation of all experimental work is that participants respond to a hypothetical scenario with limited information presented. As a result, our results may not generalize to natural settings where the information set is not experimentally constrained. Second, participants in our and similar experiments do not face the same incentives faced by actual investors. Thus, these participants represent a potentially weak proxy for shareholders. While the presence of stronger incentives might be expected to lead to more vigilant information processing, which might modify the magnitude of any effects, it is not clear how such incentives would interact with any of the preannouncement strategies.

In closing, the results of the study present further evidence of the benefits stemming from the issuance of accurate earnings and/or conservative earnings preannouncement. Managers who are able to issue accurate preannouncements are judged as more trustworthy than other managers. Future research may wish to explore whether the influence of pre-announcement strategies on beliefs about management's trustworthiness is associated with individual differences. For example, the extent to which pre-announcement strategies modify beliefs about trustworthiness and/or the extent to which such beliefs influence investment decisions might be a function of the individuals' moral reasoning.

Appendix A

XYZ Company is a publicly traded chemical company listed on the NYSE. The Company is engaged

in the manufacture and distribution of polymers, resins and monomers, performance chemicals, agricultural chemicals, and plastics. The Company is one of the world's largest manufacturers of specialty chemicals. Most of the Company's products are never seen by consumers; rather, they are used by other industries to produce better-performing, high-quality end-products and finished goods. Markets where extensive use is made of Company products include the paint and coating industry, electronics, household products/detergents/personal care, water treatment, adhesives, and plastics. The Company has sales of over \$6.5 billion and more than 17,000 employees. It operates in 140 research and manufacturing locations in 27 countries.

Selected financial information for prior year (i.e., 2002)

	XYZ company	Chemical industry
52-week stock price range	\$24.90–38.70	
Price/earnings ratio	\$19.00	\$38.1
Price/sales ratio	\$1.16	\$0.94
Return on assets	3.1%	2.3%
Return on equity	9.7%	8.4%
Return on invested capital	5.1%	2.05%
Price/book ratio	\$1.96	
Annual income	\$354 million	
Annual revenue	\$6,879 million	
Annual operating cash flow	\$967 million	
Annual dividend per share	\$0.80	
Total debt/equity ratio	\$1.03	
Book value/share	\$16.61	

Appendix B

In the experimental questionnaire, participants were asked to indicate their agreement on a 7-point scale anchored at 1 (strongly disagree) and 7 (strongly agree) with the six statements below. These statements are taken from Mercer (2005) who developed

a three-item measure of "management's trustworthiness in financial reporting" (T) and a three-item measure of "management's competence in financial reporting" (C).

- a. I believe XYZ's management is very competent at providing financial disclosures. (C)
- b. I believe that XYZ's management is very trustworthy. (T)
- c. I believe that XYZ's management is very honest. (T)
- d. I believe XYZ's management has little knowledge of the factors involved in providing useful disclosures. (C)
- e. I believe that few people are as qualified as XYZ management to provide useful financial disclosures about XYZ. (C)
- f. I believe that XYZ management may not be truthful in their financial disclosures. (T)

Notes

¹ While many diverse definitions of trust have been proposed, one connecting feature among them is the positive motivation of the trustee – i.e., his/her not intending to deceive the trusters (e.g., Cummings and Bromiley, 1996; March and Olson, 1989; Peters et al., 1997; Slovic, 1993).

² Since preannouncements generally contain bad news, attempting to preempt litigation represents a second motivation for preannouncing earnings (Skinner, 1994).

³ Economics (North, 1990; Williamson, 1993), psychology (Rotter, 1967; Tyler, 1990, sociology (Granovetter, 1985; Zucker, 1986) and organizational theory (Kramer, 1999; Mayer et al., 1995; McAllister, 1995) view trust as a separate construct.

⁴ We considered using estimated stock price as a dependent measure. However, this measure would not necessarily provide a measure of participants' demand for the equity. Further, because information was incomplete, many participants may have felt that they did not have sufficient information to estimate a stock price.

⁵ A recent study by Clement et al. (2003) documents the fact that it is not uncommon for managers to issue confirming preannouncements. Their study, however, focused exclusively on preannouncement period and does not provide evidence on the eventual earnings announcement.

⁶ An exploratory factor analysis of all six items of Mercer's (2005) scale shows that the first factor loads on the three items that relate to trust (items b, c, and f in Appendix B) and one item that relates to competence (item a in Appendix B). We reran the analyses in Tables IV and V replacing the current measure of trust (based on averaging the three trust items) with an alternative measure of trust based on averaging the four items loading in the factor analysis. The results using the alternative (4-item) measure of trust are the same as those reported in Table IV (Panels A and B) and in Table V (Models A and B) except that the covariate finance hours in Table IV Panel A is only marginally significant ($F = 3.86, p = 0.053$).

⁷ These control variables are used as dependent variables in the additional analyses discussed later in this paper.

⁸ ANOVA was conducted to determine whether preannouncement condition was associated with any of the background measures (i.e., work experience, age, financial statement ability, financial statements examined, finance credit hours, accounting credit hours). The analysis indicated no significant differences among the preannouncement conditions for any of the background measures.

⁹ A comparison was made between those passing and not passing the manipulation check. No significant differences between the two groups were found on any of the items presented in Table I. In addition, analyses testing the hypotheses were conducted using all participants' responses, including those who failed the manipulation check. The results of these analyses indicate that only one contrast testing Hypothesis 1 (Above < Below) becomes marginally significant ($F = 3.20; p = 0.077$) as opposed to significant in the analysis using only responses from participants who passed the manipulation check. All other results are the same.

¹⁰ Multivariate analysis was conducted in which the three trustworthiness measures were used as the dependent variables, preannouncements were used as the independent variable, and age and finance hours were used as covariates. The results indicate that trustworthiness is significantly affected by preannouncements ($F = 4.76, p < 0.01$).

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