

Reconciling GAAP losses and pro forma profits: Effects on investor judgments

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ABSTRACT: This study provides evidence that firms can lead non-sophisticated investors to make higher earnings performance judgments and future EPS estimates by emphasizing pro forma earnings in a quarterly press release. This evidence is the result of an experiment in which non-sophisticated and sophisticated investors analyze a firm's first quarter earnings announcement in the form of a press release. Non-sophisticated investors who viewed pro forma earnings followed by GAAP earnings judged earnings performance to be higher than those who viewed either GAAP earnings alone or GAAP earnings followed by pro forma earnings. Sophisticated investors' earnings judgments were not affected by the presence of pro forma earnings. Presenting a simultaneous reconciliation of GAAP and pro forma earnings mitigated the earnings performance judgments and future EPS estimates of non-sophisticated investors. Sophisticated investors' earnings judgments were increased by a simultaneous reconciliation.

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I. INTRODUCTION

This study investigates whether firms can influence investors' perceptions of their earnings reports by emphasizing pro forma profits and downplaying GAAP losses in a quarterly earnings announcement. Specifically, I examine whether leading a press release with pro forma earnings followed by GAAP earnings leads investors to judge the firm's earnings performance to be higher, relative to viewing a press release that leads with GAAP earnings alone or GAAP earnings followed by pro forma earnings. I also test whether presenting GAAP and pro forma earnings simultaneously in a reconciled format reduces the firm's ability to influence investors' perceptions.¹

These two questions are important because it is getting harder for investors to answer the basic question, "What is a company's bottom line?" Is it the earnings number the firm is required to report in its GAAP-based SEC filings, or is it the pro forma number the firm's management pitches in its unregulated press release?² Forty-five percent of companies in the S&P 500 announced pro forma earnings in the 2002 third-quarter reporting seasons, while 40 percent have announced pro forma earnings thus far in the fourth-quarter reporting season (The Wall Street Journal, January 18, 2003). Without an understanding of how reported pro forma earnings differ from reported GAAP earnings, investors may be misled by the reported pro forma earnings figure. Former SEC Chairman Harvey Pitt warns "in cases where pro forma statements change a loss into a profit, my view is there

¹ In this study I define a simultaneous reconciliation as a simultaneous presentation of GAAP and pro forma earnings so that differences between the two earnings measures can be easily identified. See Appendix I for an example of presenting GAAP and pro forma earnings simultaneously in a reconciled format by Amazon.com for the third quarter ended September 30, 2002.

² Bhattacharya et al. (2002a) find that the some of the most common items excluded from GAAP earnings in computing pro forma earnings are: (1) depreciation and amortization costs, (2) stock-based compensation related costs, (3) restructuring charges, (4) research and development (R&D) costs and write-offs of purchased in-process R&D costs, and (5) gains and losses on sales of various assets.

is almost 100 percent chance that a company that is capable of doing that without appropriate disclosure will have defrauded or confused its investors” (CFO.com, December 3, 2001).³

The SEC urges investors to look for explanations of how pro forma results differ from financial statements prepared under GAAP, and to be sure they understand these differences before making an investment decision (SEC, December 4, 2001b). The SEC recently adopted Regulation G which requires public companies that release non-GAAP financial measures to include, in that release, a presentation of the most directly comparable GAAP financial measure and a quantitative reconciliation (by schedule or other clearly understandable method) of the differences between the non-GAAP financial measure presented and the most directly comparable GAAP financial measure (SEC, Regulation G). SEC officials claim that a reconciliation of GAAP and pro forma earnings will help investors and market professionals better evaluate pro forma earnings. However, this presumes that any type of quantitative presentation of GAAP and pro forma earnings where the differences between the two measures are “clearly understandable” is helpful to investors. I propose that a simultaneous presentation of GAAP and pro forma earnings in a reconciled format is helpful to investors in evaluating pro forma earnings, while a sequential presentation of the earnings information may not be as helpful.

I conduct an experiment to examine the effects of pro forma reporting on investor judgments. An experimental methodology allows me to manipulate the type (GAAP and/or pro forma), order (GAAP first or pro forma first) and format (sequential or simultaneous) of the earnings information provided to investors, while holding financial condition constant. In addition, using an experimental

³ Bhattacharya et al. (2002b) find that, for a sample of pro forma announcements from 1998 to 2000, 13.5 percent turned a GAAP loss into a pro forma profit. In addition, Bowen et al. (2003) report that, for a sample of pro forma announcements in 2001 and 2002, 20 percent of the observations reported a GAAP loss and a pro forma profit. One specific example is DoubleClick Inc. For the fourth quarter ended December 31, 2002, DoubleClick reported a pro forma profit of \$7.4 million and a GAAP loss of \$54.0 million.

methodology allows me to compare user sophistication and to focus on non-sophisticated investors' judgments – a group of investors about which the SEC has expressed concern. Former SEC Chairman, Harvey Pitt has stressed that financial information should be “useful to and utilizable by ordinary investors” (Pitt, October 22, 2001).

In my experiment, M.B.A. students (i.e., non-sophisticated investors) and sell-side analysts (i.e., sophisticated investors) judge the earnings performance of a hypothetical firm in the technology sector based on an earnings announcement.⁴ The earnings announcement contained either GAAP earnings information alone or GAAP and pro forma earnings information for a firm that reported a GAAP loss and a pro forma profit.

Sophisticated investors understand the differences between GAAP and pro forma earnings and likely incorporate both earnings measures into their valuation and forecasting models (Barron's Online, September 11, 2000). I therefore expect sophisticated investors to provide similar judgments of earnings performance regardless of whether GAAP earnings are presented alone, pro forma earnings are presented followed by GAAP earnings in a sequential format, or whether GAAP and pro forma earnings are presented in a simultaneous, reconciled format.

In contrast, non-sophisticated investors are unlikely to fully understand the differences between GAAP and pro forma earnings (Business Week, November 26, 2001). Non-sophisticated investors use ill-defined valuation models and tend to use sequential information search strategies when reading financial information (Bouwman 1982; Maines and McDaniel 2000; SRI International 1987). Thus, I predict non-sophisticated investors will anchor their earnings judgments on the first earnings information presented in a press release. I therefore expect non-sophisticated investors to judge earnings performance to be highest when pro forma earnings are followed by GAAP earnings

⁴ Previous research uses M.B.A. students as proxies for non-sophisticated investors (e.g., Hirst, Koonce and Miller 1999, Hodge 2001, and Maines and McDaniel 2000).

in a sequential format and I expect a simultaneous reconciliation of GAAP and pro forma earnings will mitigate these earnings judgments.

Consistent with expectations, M.B.A. participants who viewed a press release with pro forma earnings followed by GAAP earnings in a sequential format judged earnings performance higher than M.B.A. participants in any other condition. Results suggest that presenting a simultaneous reconciliation of GAAP and pro forma earnings mitigates these judgments. Thus, firms can influence non-sophisticated investors' perceptions by emphasizing pro forma earnings in a press release, but a simultaneous reconciliation diminishes this influence.

Also consistent with expectations, analysts who viewed a press release with GAAP earnings alone did not judge earnings performance differently than analysts who viewed a press release that led with pro forma earnings followed by GAAP earnings in a sequential format. However, inconsistent with expectations, analysts who viewed a simultaneous reconciliation of GAAP and pro forma earnings judged earnings performance to be higher than in any other condition. This evidence suggests sophisticated investors' earnings judgments are increased by a simultaneous reconciliation, but not the presence of pro forma earnings per se.

The remainder of the paper is structured as follows. Section II discusses prior research. Section III describes the theory and hypotheses. Section IV describes the experiment. Section V discusses the results and Section VI discusses additional analyses. Section VII presents the conclusions, limitations and implications.

II. BACKGROUND AND PRIOR RESEARCH

Companies claim that pro forma earnings communicate to investors a firm's underlying economic performance that is expected to continue in future periods (Wall Street Journal, August 21, 2001). However, the financial press and accounting regulators are skeptical, claiming that pro forma

earnings are used to hide the firm's actual economic performance and manipulate investors' perceptions of the firm. While critics complain about the growing use of pro forma earnings, former SEC Chairman Harvey Pitt claims "the trend may be partly driven by investors looking for information in an easy-to-understand format and a legitimate desire by corporate executives to focus on areas that management thinks are important" (Dow Jones Newswire, October 22, 2001). Regardless, in the absence of a standard definition of pro forma earnings, managers have considerable latitude over the reported earnings figure. While analysts and accountants likely understand the nuances between GAAP and pro forma earnings, the distinctions are not always clear to non-sophisticated investors (Wall Street Journal, September 30, 2001). According to former SEC Chairman Harvey Pitt, "Without appropriate disclosure, no investor - certainly not an ordinary investor - can read these [pro forma earnings reports] in a way that is useful" (Business Week, November 26, 2001).

In response to the debate over pro forma earnings, a number of studies have investigated the market's response to pro forma earnings and provide some conflicting evidence.⁵ Johnson and Schwartz (2002) examine 253 pro forma earnings press releases from June to August of 2000 and find that pro forma earnings are not incrementally informative to GAAP earnings. Lougee and Marquardt (2002) examine 479 press releases that contain a pro forma earnings figure from 1997 to 1999 and find that, in general, pro forma earnings do not provide incremental information content

⁵ Abarbanell and Lehavy (2000), Bagnoli, et al. (2001), Bradshaw and Sloan (2002), and Brown and Sivakumar (2001) examine the market's reaction to the actual earnings per share (EPS) figure published by I/B/E/S (i.e., "street" earnings) and collectively find that there is a growing divergence between the "street" earnings figure and GAAP earnings and that the "street" earnings figure is more highly associated with abnormal stock returns than GAAP earnings figures. Doyle et al. (2002) find greater differences between GAAP and pro forma earnings lead to lower future cash flows over the next three years. In addition, Doyle and Soliman (2002) provide evidence that managers use pro forma earnings opportunistically to avoid losses and to meet or beat analysts' forecasts. Each of these studies assumes that the actual EPS figure published by I/B/E/S is a reasonable proxy for the pro forma earnings figure reported by management in press releases. However, Bhattacharya et al. (2002a) find that only approximately 2 percent of all firms covered by I/B/E/S actually report pro forma earnings in public press releases and that for the firms that do report pro forma earnings there is a statistically significant difference between the management reported pro forma earnings figure and the figure reported by I/B/E/S. Thus, I only review studies that analyze actual pro forma earnings press releases (i.e., management reported pro forma earnings figures).

over GAAP earnings unless the pro forma earnings are reconciled with GAAP earnings or the firm avoids reporting a loss or a negative earnings surprise using the pro forma earnings figure. In contrast, Bhattacharya et al. (2002) examine 1,149 pro forma earnings press releases from 1998 to 2000 and find that pro forma earnings are more informative and persistent than GAAP earnings.⁶ In addition, Bhattacharya et al. (2002) examine one-quarter ahead revisions in analysts' earnings forecasts and find that analysts discount pro forma earnings announcements that appear to be manipulative (i.e., report a GAAP loss and a pro forma profit). In their sample, 65.5% of observations report a pro forma earnings profit while only 53.1% report a GAAP earnings profit suggesting that one motive to report pro forma earnings is to avoid reporting a loss. This finding is consistent with the SEC's concern that firms use pro forma earnings opportunistically to influence investors' perceptions of the firm's financial reports in a specified direction. Taken together, these studies provide evidence of a difference between reported GAAP earnings and reported pro forma earnings, but they do not provide conclusive evidence that pro forma earnings have incremental information content over reported GAAP earnings nor do they provide conclusive evidence that pro forma earnings are misleading.

Frederickson and Miller (2002) use an experimental methodology to investigate whether analysts and nonprofessional investors react differently to an earnings announcement for a firm that reports GAAP and pro forma earnings compared to a firm that only reports GAAP earnings. The authors find that nonprofessional investors provide significantly higher stock price assessments for the firm that reports both GAAP and pro forma earnings, while analysts' stock price judgments do

⁶ Bhattacharya et al. (2002) investigate why their findings – that pro forma earnings are incrementally informative to GAAP earnings – differ from the results reported in Johnson and Schwartz (2002) and Lougee and Marquardt (2002). Since the sample used in Bhattacharya et al. (2002) overlaps both the samples examined in Johnson and Schwartz (2002) and Lougee and Marquardt (2002), Bhattacharya et al. (2002) limit their sample to the periods investigated by these alternate studies and find that pro forma earnings are not incrementally informative to reported GAAP earnings in these shorter periods. Bhattacharya et al. (2002) suggest that the differences in the findings can be attributed to sample size and statistical power.

not differ across the two conditions. Their findings reinforce the SEC's concern that nonprofessional investors may be misled by pro forma reporting.

Johnson and Schwartz (2002), Lougee and Marquardt (2002) and Bhattacharya et al. (2002a) examine the market's reaction to pro forma earnings disclosures, but do not isolate the effect of pro forma earnings disclosures on non-sophisticated investors – the group of investors the SEC is concerned may be misled by these types of disclosures. Frederickson and Miller (2002) investigate the effect of pro forma earnings disclosures on non-sophisticated investors; however, they do not investigate the pro forma reporting case that the SEC is most concerned about – recasting a GAAP loss as a pro format profit. Frederickson and Miller (2002) also do not investigate the effect of a simultaneous reconciliation on the judgments of non-sophisticated and sophisticated investors.

My research complements and extends the prior research described above. I examine the effect of pro forma earnings disclosures on both non-sophisticated and sophisticated investors' judgments for the case the SEC has expressed the most concern – recasting a GAAP loss as a pro forma profit. I also provide evidence as to whether a simultaneous presentation of GAAP and pro forma earnings in a reconciled format is useful to investors and offer an explanation as to why this specific type of reconciliation is likely to be useful.

III. THEORY AND HYPOTHESES

Effect of Pro Forma Reporting on Investor Judgments

Quarterly earnings press releases provide managers an opportunity to emphasize alternative earnings metrics and influence investors' perceptions of the firm. Bowen et al. (2003) find that managers strategically emphasize the metric that portrays better firm performance. Specifically,

firms reporting pro forma profits but GAAP losses place greater emphasis on pro forma earnings.⁷ Managers who emphasize pro forma earnings in a press release as opposed to presenting GAAP and pro forma earnings in an easy-to-use, transparent format (i.e., a simultaneous reconciliation) can influence investors' perceptions by making it difficult for investors to use both GAAP and pro forma earnings in judging the earnings performance of the firm.

In performing judgment tasks, individuals often make estimates by starting from an initial value that is adjusted to yield a final answer. Anderson and Hovland (1957), Anderson and Hubert (1963) and Anderson (1965) find that individuals pay more attention to early data than to later data in a sequence. Tversky and Kahneman (1974) also find that different starting points yield different estimates, which are biased toward the initial value. For example, Tversky and Kahneman (1974) used a multiplication problem and contrasted estimates of two orders of the same product: $8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1$ and $1 \times 2 \times 3 \times 4 \times 5 \times 6 \times 7 \times 8$. The product of the first few numbers is relevant with respect to the final estimate; however, the disparity of the two estimates, which depends on the order in which the sequences are presented, indicates that earlier numbers receive too much weight in the estimation of the final product. Tversky and Kahneman (1974) name this phenomenon "anchoring."⁸ Although the anchoring heuristic is often helpful, adjustments from the anchor tend to be insufficient, leaving individuals' final estimates biased toward the initial anchor

⁷ Bowen et al. (2003) examine the determinants of emphasis placed on pro forma and GAAP earnings within quarterly earnings press releases. They find that firms with greater media exposure place greater emphasis on pro forma earnings and less emphasis on GAAP earnings. In addition, their evidence suggests that firms with greater analyst following place greater emphasis on pro forma earnings and firms with greater institutional ownership place less emphasis on GAAP earnings. Also, Bowen et al. (2003) find that firms with low value-relevance of earnings place less emphasis on GAAP earnings. In an analysis of the change in emphasis, the authors find that firms have reduced their emphasis on pro forma earnings and increased their emphasis on GAAP earnings in 2002 compared to 2001. However, firms that report a GAAP loss and a pro forma profit are less willing to decrease emphasis on pro forma earnings. This suggests that, for these firms, the benefits to pro forma reporting outweigh the costs associated with greater scrutiny over their reporting policies.

⁸ Prior research suggests that anchoring effects are common when the anchor has received sufficient attention (Chapman and Johnson 2002). This effect occurs even for extreme anchors and even when respondents are unaware of the effect, have been warned to avoid the effect, or are motivated to be accurate (Wilson et al. 1996; Tversky and Kahneman 1974). In addition, anchors are most influential if they are relevant to the target judgment (Chapman and Johnson 2002; Tversky and Kahneman 1974).

value (Tversky and Kahneman 1974). In support of insufficient adjustment from the anchor, Quattrone et al. (1981) find evidence that individuals adjust the anchor until shortly after it enters a range of plausible values for the final judgment. When adjusting from a relatively high anchor, individuals provide higher final judgments than when adjusting from a relatively low anchor. Thus, when individuals are uncertain about the value or final estimate they want to report, the first pieces of evidence serve as the anchor in the judgment task against which subsequent pieces of evidence are evaluated. Adjustment from the anchor is often insufficient and thus there is a force towards *primacy* (i.e., information presented first is most influential) in individuals' judgments.⁹

This general anchoring and adjustment model can be applied to non-sophisticated investors' judgments of earnings performance. Previous research on investor behavior has shown that non-sophisticated investors typically have ill-defined valuation models and tend to use sequential information search strategies when reading financial information (Bouwman 1982; Maines and McDaniel 2000; SRI International 1987). In addition, non-sophisticated investors are unlikely to fully understand the differences between GAAP and pro forma earnings and are unlikely to understand how to use both earnings measures in judging earnings performance. As a result, non-sophisticated investors are likely to use a cognitive shortcut or a heuristic such as anchoring and adjustment in judging earnings performance. I therefore expect that when a non-sophisticated investor is asked to judge the earnings performance of a firm using information from an earnings announcement, the investor will anchor on the first form of earnings provided (i.e., the type of earnings emphasized) resulting in primacy in their earnings judgments.¹⁰ If only GAAP earnings

⁹ Hogarth and Einhorn (1992) develop a descriptive belief-revision model that assumes individuals employ an anchoring-and-adjustment strategy to perform evaluation tasks. Their model predicts primacy in two general cases: 1) when subjects have no explicit initial opinion such that the anchor is derived from the first piece(s) of evidence and 2) when judgments involve a long series of information. If this belief-revision model were deemed more appropriate than a simple anchoring and adjustment strategy for describing how investors evaluate earnings performance using information in a press release, a primacy order effect would still be predicted.

¹⁰ I assume that the non-sophisticated investors are uncertain about the final earnings performance judgment they want to report.

information is provided to the non-sophisticated investor, the investor will anchor on GAAP earnings in performing the judgment task. However, if instead, GAAP and pro forma earnings are provided, non-sophisticated investors' judgments of earnings performance will depend on the order of the earnings information presented in the press release.¹¹

H1 (Content): *Non-sophisticated investors' earnings judgments are higher when pro forma earnings information is followed by GAAP earnings information than when only GAAP earnings information is presented.*

H2 (Order): *Non-sophisticated investors' earnings judgments are higher when pro forma earnings information is followed by GAAP earnings information than when GAAP earnings information is followed by pro forma earnings information.*

Effect of Reconciling GAAP Losses and Pro Forma Profits on Investor Judgments

Prior research suggests that individuals' judgments can be changed and improved by simple information display changes (Bettman and Kakkar 1977; Jarvenpaa 1989, 1990; Russo 1977; Slovic 1972). The SEC assumes that any type of quantitative presentation of GAAP and pro forma earnings where the differences between the two measures are "clearly understandable" is helpful to investors (i.e., the SEC's definition of a reconciliation). However, providing information to investors is not useful unless that information is presented in a format that allows investors to easily extract and use the information in judgment tasks.

Bloomfield (2002) argues that "statistics" that are more costly to extract from public data are less completely revealed by market prices.¹² Extraction costs could reflect the "cognitive difficulty" of extracting earnings information from data that has already been collected (Bloomfield 2002). Maines and McDaniel (2000) lend empirical support to this definition of extraction costs as they find that

¹¹ All hypotheses are stated assuming that reported pro forma earnings are higher than reported GAAP earnings.

¹² Statistics are defined as the "useful facts extracted from data such as earnings figures and financial ratios" (Bloomfield 2002). This theory, called the Incomplete Revelation Hypothesis, is in contrast with the Efficient Markets Hypothesis, which asserts that accounting data are so widely analyzed that analysis costs could not possibly account for observed inefficiencies.

data's placement, labeling, isolation, and degree of aggregation in the financial statements all influence the cost of extracting the information. Possibly some reporting formats make it more difficult to extract and use certain statistics in a judgment task while other reporting formats make it easier to extract and use these same statistics. For example, Hodge, Kennedy and Maines (2002) find that search facilitating technology that displays information simultaneously facilitates the integration and use of the information in a financial reporting context.

If GAAP and pro forma earnings are presented in a simultaneous, reconciled format, both earnings measures are available simultaneously (as opposed to sequentially) and the differences between the two earnings measures are transparent. The cognitive difficulty of extracting and using earnings figures, therefore, is reduced and non-sophisticated investors are unlikely to anchor on one earnings measure in judging earnings performance.

H3 (Reconciliation): *Non-sophisticated investors' earnings judgments are lower when GAAP and pro forma earnings statements are presented simultaneously in a reconciled format than when pro forma earnings information is followed by GAAP earnings information in a sequential format.*

Previous research has demonstrated that individuals who are familiar, experienced, or possess expertise with respect to a given task are less prone to some forms of biased decision making (Smith and Kida 1991). Since analysts are familiar with and have experience with the task of extracting and using multiple performance measures to judge earnings performance, they are unlikely to use cognitive shortcuts or heuristics in judging the earnings performance of a firm. Thus, analysts are unlikely to use an anchoring and adjustment strategy and anchor on a specific earnings figure simply because it is presented first in a press release. In addition, analysts claim to understand the differences between GAAP and pro forma earnings and often incorporate both earnings measures into their valuation and forecasting models for the firms that they follow (Barron's Online, September 11, 2000). In fact, managers claim that it is in response to analysts' demands that they

provide pro forma earnings (Business Week, May 14, 2001). These arguments suggest the costs for sophisticated investors to extract and use both GAAP and pro forma earnings from the data available are lower than the costs for non-sophisticated investors. Even if management does not disclose a pro forma earnings figure in the earnings announcement, sophisticated investors can create a pro forma earnings figure from the information provided in GAAP earnings and use it in their earnings performance judgments if they deem it useful. In fact, Frederickson and Miller (2002) provide evidence that analysts calculate the same valuation-relevant earnings, regardless of the type of earnings information disclosed by management in an earnings announcement.

H4 (Content): *Sophisticated investors' earnings judgments are no different when pro forma earnings information is followed by GAAP earnings information than when only GAAP earnings information is presented.*

H5 (Reconciliation): *Sophisticated investors' earnings judgments are no different when GAAP and pro forma earnings statements are presented simultaneously in a reconciled format than when pro forma earnings information is followed by GAAP earnings information in a sequential format.*

H3 predicts that when GAAP and pro forma earnings statements are presented simultaneously in a reconciled format, non-sophisticated investors judge earnings performance to be lower than when pro forma earnings are presented followed by GAAP earnings in a sequential format. However, this evidence may not be sufficient to infer that a simultaneous reconciliation of the two earnings measures improves non-sophisticated investors' judgments. I assume that non-sophisticated investors' judgments are better, on average, if they are closer to sophisticated investors'. As stated previously, analysts claim to understand the differences between GAAP and pro forma earnings and often incorporate both earnings measures into their valuation and forecasting models. Presenting GAAP and pro forma earnings statements simultaneously in a reconciled format

makes it easier for non-sophisticated investors to extract and use the same earnings information that sophisticated investors use in judging earnings performance.

H6: *Non-sophisticated investors' earnings judgments are closer to sophisticated investors' earnings judgments when GAAP and pro forma earnings statements are presented simultaneously in a reconciled format than when pro forma earnings information is followed by GAAP earnings information in a sequential format.*

IV. EXPERIMENT

Participants

Eighty-nine first-year M.B.A. students from a large state university participated in the experiment. Sixty-three percent of participants had previously invested in either a mutual fund or a security of an individual firm. Eighty percent of participants had heard of “pro forma earnings” before participating in the experiment and 68 percent understood that pro forma earnings was an earnings measure sometimes reported by firms in addition to GAAP earnings. Eighteen percent of participants had analyzed the financial statements of a firm that reported pro forma earnings and 15 percent had invested in a firm that reported pro forma earnings.

Fifty-five sell-side analysts with an average of 8.6 years experience in technology-related industries participated in the experiment.¹³ All analysts had heard of “pro forma earnings” before participating in the experiment and understood that pro forma earnings was an earnings measure sometimes reported by firms in addition to GAAP earnings. Ninety-four percent of analysts had analyzed the financial statements of a firm that reported pro forma earnings and 86 percent had invested in a firm that reported pro forma earnings.

¹³ Sell-side analysts were recruited from Nelson's Directory of Investment Research (2001).

Press Release

All participants viewed a press release for a hypothetical firm in the technology sector called X Technologies. The press release was modeled after actual reports from companies in the technology sector that trade on the NASDAQ and report both GAAP and pro forma earnings. The press release announced earnings for the first quarter ended February 28, 2002 and began with a headline stating “X Technologies Reports 1st Quarter Results,” followed by a sub-heading announcing either reported GAAP or pro forma EPS for the first quarter, depending on the condition. Next, reported sales were announced followed by a brief description of X Technologies and a narrative that stated comparative quarterly earnings for the first quarter ended 2002 and 2001.

For the first quarter ended 2002 (2001), X Technologies reported a GAAP loss of \$1.02 (\$1.29) per share and a pro forma profit/loss of \$0.01 (\$0.12) per share.¹⁴ The press release narrative also contained a list of the items excluded from GAAP earnings to arrive at pro forma earnings in every condition where pro forma earnings were reported.¹⁵ Finally, comparative financial statements for the first quarters ended February 28, 2002 and 2001 were presented.

The items excluded from GAAP earnings to arrive at pro forma earnings were chosen based on earnings announcements of actual firms in the technology sector and are some of the most common items excluded as reported in previous archival research (Bhattacharya et al. 2002a, 2002b; Bowen et al. 2003). Items excluded are listed below:

- *Stock-based Compensation Charges*¹⁶
- *Amortization of Purchased Intangibles*

¹⁴Prior archival research shows that pro forma earnings typically exceed GAAP earnings. In fact, Bhattacharya et al. (2002) find that for firms that reported pro forma earnings from 1998 to 2000, the mean GAAP earnings per share is negative (-\$0.135) while the mean pro forma earnings per share for these same firms is positive (\$0.083).

¹⁵ Dollar amounts for each exclusion were not given in the narrative. However, each exclusion was a line item on the GAAP Statement of Operations and thus all participants had the information available to calculate reported pro forma earnings. Thus differences in judgments should not be attributable to differences in information availability across conditions.

¹⁶ Often includes taxes on exercised employee stock options, charges incurred as a result of variable accounting treatment when underwater options are repriced, charges incurred as a result of a merger or acquisition related to repricing of acquired pool of options and compensation charges related to options paid to outside vendors.

- *Acquired In-Process Research and Development*
- *Amortization of Goodwill and Other Intangibles*¹⁷
- *Restructuring Charges*
- *Gain on Sale of Investments*
- *Equity Investment Losses*

Design and Task

I use a 4 x 2 between-subjects experiment (not fully crossed). The first independent variable, Earnings Information, has four levels as described in Figure 1. Appendix II provides excerpts from the materials for each level of the Earnings Information variable. The second independent variable, Investor Type, has two levels: non-sophisticated investor (i.e., first-year M.B.A. student) and sophisticated investor (i.e., analyst).

Each Earnings Information condition contains quarterly GAAP earnings information, a GAAP statement of operations and a balance sheet. The presence, order, and format of the quarterly pro forma earnings information and statement of operations varies with the level of the Earnings Information variable. In the GAAP-only condition, only quarterly GAAP earnings information and a GAAP statement of operations are presented for the first quarter ended 2002 and the first quarter ended 2001. In all other conditions, both quarterly GAAP and pro forma earnings information and GAAP and pro forma statements of operations are presented for the first quarter ended 2002 and the first quarter ended 2001. In the GAAP/PF – SQF (sequential format) condition, quarterly GAAP earnings information is followed by quarterly pro forma earnings information and a GAAP statement of operations is followed by a pro forma statement of operations in a sequential format. In the PF/GAAP – SQF (sequential format) condition, quarterly pro forma earnings information is followed

¹⁷ Statement of Financial Accounting Standards (SFAS) No. 142 effectively eliminated the amortization of goodwill for fiscal years beginning after December 15, 2001. X Technologies reports earnings for the first quarter ended February 28, 2002 indicating that the current fiscal year began before the effective date of SFAS No. 142. In addition, many firms in the technology sector continue to include a “Amortization of goodwill and other intangibles” line item on the income statement in fiscal years affected by SFAS No. 142. This line item often includes goodwill impairment charges and amortization of other intangibles not affected by SFAS No. 142.

by quarterly GAAP earnings information and a pro forma statement of operations is followed by a GAAP statement of operations in a sequential format. Finally, in the PF/GAAP – SMRF (simultaneous, reconciled format) condition, quarterly pro forma earnings information is followed by quarterly GAAP earnings information in a sequential format; however, GAAP and pro forma statements of operations are presented simultaneously in a reconciled format followed by a GAAP statement of operations alone.

Procedure

M.B.A. participants were randomly assigned to one of the four conditions described above and received a single piece of paper containing instructions and a web address for the case on one side and a preview of the first question set on the reverse side. Analysts were randomly assigned to either the GAAP-only, PF/GAAP – SQF or PF/GAAP – SMRF conditions and electronically received a link to the web-address for the study.¹⁸ After typing in the address, all participants viewed the same instructions, a general introduction and a preview of the first question set. Once they previewed the first question set, participants clicked on a “Begin” button that presented them with the press release for X Technologies and a link to “Question Set I” where they provided current earnings performance judgments, future earnings potential judgments and future EPS estimates. After completing Question Set I, participants submitted their responses electronically by clicking on a button labeled “Submit.” Participants then clicked on links to “Question Set II” and “Question Set III” and submitted their responses in the same manner. Question Set II elicited participants’ beliefs about the decision usefulness, and relevance and reliability of GAAP and pro forma earnings in

¹⁸ Analysts were only assigned to 3 of the 4 Earnings Information conditions as prior research suggests that individuals who are familiar, experienced or expert with respect to a given task are not affected by seemingly irrelevant characteristics of a task such as information order.

assessing the earnings of X Technologies. Question Set III contained several manipulation checks and demographic questions.

In this study, I examine three dependent variables: judgments of current earnings performance, judgments of future earnings potential and estimates of future EPS.¹⁹ Participants judged current earnings performance and future earnings potential by responding to the following questions: “Indicate on the scale below your judgment of X Technologies' earnings performance for the first quarter ended February 28, 2002” and “Indicate on the scale below your judgment of X Technologies' earnings potential over the next two years,” using 11-point scales with endpoints from 0 to 100 labeled “very weak/very strong. Participants provided an EPS estimate by responding to the open-ended question, “What is your estimate of EPS (earnings per share) that X Technologies will report in the first quarter of the *next fiscal year* (i.e., the first quarter ended February 28, 2003)”.²⁰

¹⁹ I also collected data on two investment decision dependent variables. Participants made investment decisions by responding to the following two questions: “Assume you have \$5,000 to invest in a stock. Assume the price of X Technologies' stock is \$2.00 per share after the first quarter earnings announcement. Indicate on the scale below how likely it is that you would invest the entire \$5,000 in X Technologies,” and “Indicate on the scale below how much of the \$5,000 you would invest in X Technologies,” using 11-point scales with endpoints from 0 to 100 labeled “not at all likely/very likely” and endpoints from \$0 to \$5,000 labeled “nothing at all/the entire amount,” respectively. An analysis of the investment decision dependent measures reveals that participants in all Earnings Information Conditions were reluctant to invest in X Technologies thus I do not examine these dependent measures in testing the hypotheses. For example, 45 percent of the M.B.A. participants reported that it was “not at all” likely that they would invest \$5,000 in X Technologies. In addition, 30 percent of the M.B.A. participants reported that they would invest \$0 in X Technologies, while 57 percent reported that would invest less than \$500. In a post-experiment debriefing session, some M.B.A. participants explained that they were not comfortable investing in a firm in the technology sector. Similarly, 70 percent of analysts reported that it was “not at all” likely that they would invest \$5,000 in X Technologies. In addition, 66 percent of analysts reported that they would \$0 in X Technologies, while 83 percent reported that would invest less than \$500. In post-experiment conversations, some analysts commented that they did not feel comfortable investing in X Technologies without management expectations and other forecast information.

²⁰ I did not ask participants specifically for GAAP earnings judgments or pro forma earnings judgments because I did not want to draw attention to the distinction between GAAP and pro forma earnings and potentially create a demand effect. However, by analyzing participants' assessments of GAAP and pro forma earnings usefulness, relevance and reliability in judging the earnings of X Technologies for each case, I can draw inferences about the earnings measure participants most likely used in assessing earnings performance.

V. RESULTS

Manipulation Checks

Data collected in the post-experimental questionnaire reveal that 90 percent of M.B.A. participants and 94 percent of analysts recognized that X Technologies reported GAAP earnings. In the conditions where pro forma earnings were presented in addition to GAAP earnings, all but one of the M.B.A. participants and one of the analysts recognized that X Technologies reported pro forma earnings. Sixty-seven percent of M.B.A. participants and 78 percent of analysts reported that X Technologies provided a reconciliation of GAAP and pro forma earnings in the condition where GAAP and pro forma earnings were presented in a simultaneously reconciled format. In contrast, only 28 percent of M.B.A. participants and 22 percent of analysts reported that X Technologies provided a reconciliation of GAAP and pro forma earnings in the conditions where GAAP and pro forma earnings statements were presented in a sequential format.²¹ The data reflect no significant differences between conditions in M.B.A. participants' or analysts' responses to post-experiment questions that elicit familiarity with pro forma earnings measures prior to participating in the study ($F = 1.17, p = 0.328$; $F = 0.99, p = 0.379$).²² The data also reveal no significant differences between conditions in the M.B.A. participants' experience in analyzing financial statements ($F = 0.60, p = 0.621$), investing in mutual funds ($F = 0.71, p = 0.550$) or investing in the individual securities of a firm ($F = 0.77, p = 0.513$). Finally, there are no significant differences between conditions in analysts' experience in a technology-related industry ($F = 0.18, p = 0.835$).

²¹ Exclusion of the participants that did not pass the manipulation tests does not change the reported results.

²² A Cronbach coefficient alpha score of 0.67 for M.B.A. participants and 0.67 for analysts confirms that the five familiarity questions likely measure the same underlying construct and are highly correlated. Therefore, I construct a composite measure of "pro forma familiarity" by taking a simple average of the five measures. Consistent with the combined familiarity measure, there are no significant differences between conditions in M.B.A. participants' or analysts' responses if each familiarity measure is examined independently.

Hypotheses Tests

Panel A of Table 1 reports descriptive statistics for each of the three dependent measures.²³

Effect of Earnings Information Type and Order on M.B.A. Participants' Judgments

H1 predicts that non-sophisticated investors' earnings judgments are higher when pro forma earnings information is followed by GAAP earnings information than when GAAP earnings information is presented alone. I test this hypothesis by comparing M.B.A. participants' mean responses in the PF/GAAP – SQF and GAAP – only conditions for the current earnings performance, future earnings potential and EPS estimate dependent measures using simple t-tests.²⁴ H2 predicts that non-sophisticated investors' earnings judgments are higher when pro forma earnings information is followed by GAAP earnings information than when GAAP earnings information is followed by pro forma earnings information. I test this hypothesis by comparing the difference between M.B.A. participants' mean responses in the GAAP/PF – SQF and PF/GAAP – SQF conditions for each dependent measure using simple t-tests. Figure 2a presents the experimental predictions for these hypotheses in graphical form.

Results are presented in Panels A and B of Table 2. Participants judged both current earnings performance and future earnings potential to be higher when pro forma earnings were followed by GAAP earnings (42.38, 49.05) than when GAAP earnings were presented alone (30.00, 38.08; $t =$

²³ I examined the effect of outliers by creating box plots for each of the dependent variables by the level of Earnings Information and Investor Type. I define an outlier as an observation greater than 3 standard deviations from the mean. There were no outliers for the future earnings potential or EPS estimate dependent measures for M.B.A. participants. There were outliers for the current earnings performance dependent measure, but their exclusion does not change the reported results. For analysts, there were no outliers for the current earnings performance dependent measure. There were outliers for the future earnings potential and EPS estimate dependent measures, but again their exclusion does not change the reported results. I report the results of the hypotheses tests using parametric tests. In results not reported, I also test each hypothesis using non-parametric tests and find that results do not differ.

²⁴ Comparing M.B.A. participants' mean responses in the GAAP/PF – SQF and GAAP – only conditions would also be a test of the incremental effect of pro forma earnings on investors' judgments. However, my theory suggests that participants will anchor on GAAP earnings in each of these conditions. Although I expect that the pro forma earnings information will influence investor judgments, I have no basis to predict that participants' mean responses will be significantly different in these two conditions.

2.36, $p = 0.012$, $t = 2.02$, $p = 0.017$). Participants also estimated future EPS to be higher when pro forma earnings were followed by GAAP earnings (-0.30) than when GAAP earnings were presented alone (-0.81; $t = 4.06$, $p = 0.000$). These results suggest that non-sophisticated investors' earnings judgments are affected by the presence of pro forma earnings.

In addition, participants judged future earnings potential to be higher when pro forma earnings were followed by GAAP earnings (49.05) than when GAAP earnings were followed by pro forma earnings (39.05; $t = 1.83$, $p = 0.038$). However, participants did not judge current earnings performance or estimate future EPS to be higher when pro forma earnings were followed by GAAP earnings (42.38, -0.30) than when GAAP earnings were followed by pro forma earnings (38.10, -0.37; $t = 0.62$, $p = 0.270$, $t = 0.46$, $p = 0.323$) See Figures 2b – 2d for graphs of these results.

Overall, these results support H1 and suggest non-sophisticated investors' current earnings performance judgments, future earnings potential judgments and EPS estimates are affected by the presence of pro forma earnings. Only partial support is provided for H2 as non-sophisticated investors' future earnings potential judgments are affected by the order of the earnings information, while their current earnings performance judgments and EPS estimates are not.

Effect of Earnings Information Reconciliation on M.B.A. Participants' Judgments

H3 predicts non-sophisticated investors' earnings judgments are lower when GAAP and pro forma earnings statements are presented simultaneously in a reconciled format than when pro forma earnings information is followed by GAAP earnings information in a sequential format. I test this hypothesis by comparing the difference between M.B.A participants' mean responses in the PF/GAAP – SQF and PF/GAAP – SMRF conditions for each dependent measure using simple t-tests. Figure 2a presents the experimental predictions for this hypothesis in graphical form.

Results are presented in Panel C of Table 2. Participants judged both current earnings performance and future earnings potential to be lower when GAAP and pro forma earnings statements were presented simultaneously in a reconciled format (30.48, 38.10) than when pro forma earnings were followed by GAAP earnings in a sequential format (42.38, 49.05; $t = 2.15$, $p = 0.019$, $t = 1.92$, $p = 0.031$). In addition, participants estimated future EPS to be lower when GAAP and pro forma earnings statements were presented simultaneously in a reconciled format (-0.51) than when pro forma earnings were followed by GAAP earnings in a sequential format (-0.30; $t = 1.38$, $p = 0.087$). See Figures 2b – 2d for graphs of these results. These results support H3 and suggest that presenting earnings information simultaneously as opposed to sequentially affects non-sophisticated investors' current and future earnings judgments. Specifically, a simultaneous reconciliation mitigates non-sophisticated investors' current earnings judgments, future earnings potential judgments and future EPS estimates as compared to a sequential presentation of the same earnings information.

Effect of Earnings Information Reconciliation on Analysts' Judgments

H4 predicts sophisticated investors' earnings judgments are no different when pro forma earnings information is followed by GAAP earnings information than when only GAAP earnings information is presented. I test this hypothesis by comparing the difference between analysts' mean responses in the PF/GAAP – SQF and GAAP-only conditions for each dependent measure using simple t-tests. H5 predicts sophisticated investors' earnings judgments are no different when GAAP and pro forma earnings statements are presented simultaneously in a reconciled format than when pro forma earnings information is followed by GAAP earnings information in a sequential format. I test this hypothesis by comparing the difference between analysts' mean responses in the PF/GAAP –

NR and PF/GAAP – R conditions for each dependent measure using simple t-tests. Figure 3a presents predictions for these hypotheses in graphical form.

Results are presented in Panels A and B of Table 3. Consistent with expectations, analysts judged current earnings performance and future earnings potential to be no different when pro forma earnings were followed by GAAP earnings in a sequential format (32.22, 31.67) than when GAAP earnings were presented alone (28.82, 28.82; $t = 0.57$, $p = 0.573$, $t = 0.45$, $p = 0.657$). Inconsistent with expectations, analysts' estimates of future EPS were significantly higher when pro forma earnings were followed by GAAP earnings in a sequential format (\$-0.16) than when GAAP earnings were presented alone (\$-0.82; $t = 4.92$, $p = 0.000$).

Inconsistent with expectations, analysts judged both current earnings performance and future earnings potential to be higher when GAAP and pro forma earnings statements were presented simultaneously in a reconciled format (44.00, 42.00) than when pro forma earnings were followed by GAAP earnings in a sequential format (32.22, 31.67; $t = 1.79$, $p = 0.082$, $t = 1.84$, $p = 0.074$). However, analysts' estimates of future EPS were no different when GAAP and pro forma earnings statements were presented simultaneously in a reconciled format (-\$0.27) than when pro forma earnings were followed by GAAP earnings in a sequential format (-\$0.16; $t = 0.76$, $p = 0.450$). See Figures 3b – 3d for graphs of these results. Together, these results suggest analysts' current earnings performance and future earnings potential judgments are increased by a simultaneous reconciliation, but are not affected by the presence of pro forma earnings per se; while analysts' EPS estimates are affected by the presence of pro forma earnings, but not the reconciliation.²⁵ Overall, these results provide only partial support for H4 and H5.

²⁵ In a post-experiment follow-up, one analyst indicated that when assessing current earnings performance and future earnings potential both earnings credibility and management credibility factors fed into his judgments, whereas when assessing future EPS, only earnings factors fed into his judgments. The analyst suggested that his current earnings performance and future earnings potential judgments would be affected by the format of the earnings information, while his EPS estimates would only be affected by the type of earnings information presented. This anecdote is consistent with my findings for H4 and H5.

Usefulness of Reconciliation: M.B.A. Participants' versus Analysts' Judgments

H6 predicts non-sophisticated investors' earnings judgments are closer to those of sophisticated investors' when GAAP and pro forma earnings statements are presented simultaneously in a reconciled format than when pro forma earnings are followed by GAAP earnings in a sequential format. I test this hypothesis by comparing the difference between M.B.A students' and analysts' mean responses in the PF/GAAP – SQF and PF/GAAP – SMRF conditions for each dependent measure using pooled-variance t-tests. Figure 4a presents predictions for this hypothesis in graphical form.

Results are presented in Panel A of Table 4. Consistent with expectations, M.B.A. participants future earnings potential judgments are significantly closer to analysts' future earnings potential judgments when GAAP and pro forma earnings statements are presented simultaneously in a reconciled format ($38.10 - 42.00 = 3.9$) than when pro forma earnings are followed by GAAP earnings in a sequential format ($49.05 - 31.67 = 17.38$; $t = 2.37$, $p = 0.011$). However, inconsistent with expectations, M.B.A. participants' current earnings performance judgments and future EPS estimates are not significantly closer to those of analysts' when GAAP and pro forma earnings statements are presented simultaneously in a reconciled format ($30.48 - 44.00 = 13.52$, $-\$0.51 - -\$0.27 = \$0.24$) than when pro forma earnings are followed by GAAP earnings in a sequential format ($42.38 - 32.22 = 10.16$, $-\$0.30 - -\$0.16 = \$0.14$; $t = -0.56$, $p = 0.710$, $t = -0.73$, $p = 0.764$).²⁶ See Figures 4b – 4d for graphs of these results. Thus, while a simultaneous reconciliation reduces the gap between M.B.A. participants' and analysts' *future earnings potential* judgments, the gap between the *current earnings performance* judgments and *future EPS* estimates of M.B.A. participants and analysts is not reduced. Together, these results provide only limited support for H6.

²⁶ I measure and compare the *absolute* difference between M.B.A. participants' and analysts' responses.

VI. ADDITIONAL ANALYSES

After providing earnings judgments for X Technologies, participants provided judgments about the usefulness, relevance and reliability of both GAAP and pro forma earnings in analyzing the earnings of X Technologies.²⁷ Participants' beliefs about these factors are potentially important in explaining the difference in their earnings judgments between the sequential condition (i.e., PF/GAAP – SQF) and the simultaneous, reconciled condition (i.e., PF/GAAP – SMRF).²⁸ Table 5 presents descriptive statistics for each question.

M.B.A. participants rate GAAP earnings as more useful in judging current earnings performance, and more relevant and more reliable than pro forma earnings in the sequential ($t = 3.04$, $p = 0.007$; $t = 3.86$, $p = 0.001$; $t = 3.94$, $p = 0.001$) and simultaneous, reconciled conditions ($t = 2.79$, $p = 0.011$; $t = 1.92$, $p = 0.069$; $t = 4.17$, $p = 0.000$).²⁹ This finding suggests that M.B.A. participants assess and predict GAAP earnings as opposed to pro forma earnings in both conditions. This finding also suggests that M.B.A. participants' higher earnings judgments in the sequential condition are not likely attributable to an increase in the perceived informativeness of pro forma earnings.

In contrast, analysts rate GAAP earnings as *no more* useful in judging current earnings performance or future earnings potential, and *no more* relevant or reliable than pro forma earnings in the sequential condition. However, in the simultaneous, reconciled condition, analysts rate *pro forma* earnings as more useful in judging future earnings potential and more relevant than GAAP earnings ($t = 2.49$, $p = 0.024$; $t = 1.93$, $p = 0.070$). This finding suggests that analysts assess and predict pro

²⁷ There were order effects for the decision usefulness, relevance and reliability questions depending on whether the participant viewed a GAAP question followed by a pro forma question or a pro forma question followed by a GAAP question. In the analysis of the usefulness, relevance and reliability questions, results do not differ when controlling for order using a covariate or collapsing the observations over order.

²⁸ The additional analyses focus on the GAAP-only, PF/GAAP – SQF and PF/GAAP – SMRF conditions. The GAAP/PF – SQF condition is excluded because it only exists for the M.B.A. participants. However, M.B.A. participant responses to the usefulness, relevance and reliability questions do not quantitatively differ between the GAAP/PF- SQF and PF/GAAP- SQF conditions.

²⁹ I test the significance of the difference between the usefulness, relevance and reliability of GAAP and pro forma earnings in each condition using paired sample t-tests. Reported p-values are two-tailed.

forma earnings (or an adjusted GAAP earnings figure) as opposed to GAAP earnings, at least when the earnings measures are simultaneously reconciled. In addition, these findings suggest that the reason analysts' earnings judgments increase in the simultaneous, reconciled condition as compared to the sequential condition is because of an increase in the perceived informativeness of pro forma earnings.

Participants also assessed the usefulness of the format in which the earnings figures were presented.³⁰ Participants' responses to this question provide insight as to why analysts' earnings judgments increased with a simultaneous presentation of the earnings information, while M.B.A. participants' earnings judgments decreased. Analysts indicate that a simultaneous reconciliation of GAAP and pro forma earnings is more useful in understanding and using the earnings information than a sequential presentation ($t = 2.67$, $p = 0.012$). A mediation analysis reveals that analysts' beliefs about the usefulness of the presentation of the earnings information partially mediate the effect of the earnings information format on their future earnings potential judgments ($t = 1.84$, $p = 0.074$ versus $t = 0.493$, $p = 0.625$).³¹ Possibly, analysts view a simultaneous reconciliation as a signal about the reliability of the pro forma earnings figure and the credibility of management.

Unlike analysts, M.B.A. participants do not view a simultaneous reconciliation as more useful ($t = 0.098$, $p = 0.922$) yet, it changes their judgments. This finding suggests that non-sophisticated investors' judgments are influenced by a seemingly irrelevant characteristic of the task;

³⁰Participants assessed the usefulness of the format by responding to the following question "Indicate on the scale below how useful you believe X Technologies' presentation of earnings information is in understanding and using the information" using an 11-point scale from 0 to 100 with endpoints labeled "not at all useful/very useful".

³¹ Baron and Kenny (1986) outline conditions that must hold to establish mediation: (1) the independent variable must affect independent variable, (2) the independent variable must affect the dependent variable, (3) the mediator must affect the dependent variable when the independent variable is also included in the regression equation and (4) the effect of the independent variable on the dependent variable must be less when the mediator is included in the regression equation than when it is excluded. The mediation analysis results reported above meet each of the conditions outlined by Baron and Kenny (1986). The two-tailed t-tests reported in the text reflect the decrease in the effect of the independent variable (i.e., earnings information) on the dependent variable (i.e., earnings judgment) when the mediator (i.e., presentation usefulness) is included in the regression.

they make judgments based on the order of information received. This effect is likely purely cognitive in that non-sophisticated investors are more easily able to combine or integrate the earnings information when it is presented simultaneously (i.e., in a reconciled format) than when it is presented sequentially.

VII. CONCLUSIONS, LIMITATIONS AND IMPLICATIONS

In this study, I investigate how management's emphasis of pro forma earnings in a press release affects the earnings judgments of investors for a firm that reports a GAAP loss and a pro forma profit. In addition, I investigate whether a simultaneous reconciliation of GAAP and pro forma earnings mitigates non-sophisticated investors' earnings judgments and closes the "gap" relative to sophisticated investors' judgments. Results indicate that non-sophisticated investors' earnings judgments are affected by the presence and order of pro forma earnings. When pro forma earnings led a press release, M.B.A. participants provided higher earnings judgments relative to when GAAP earnings led the press release. A simultaneous reconciliation of GAAP and pro forma earnings appears to mitigate these higher earnings judgments. In contrast, sophisticated investors' earnings judgments increased with a simultaneous reconciliation of GAAP and pro forma earnings. Thus, a simultaneous reconciliation closes the "gap" between non-sophisticated investors' and sophisticated investors' future earnings potential judgments.

My results suggest that a simultaneous reconciliation of GAAP and pro forma earnings is useful to both non-sophisticated investors and managers, but in different ways. A simultaneous reconciliation allows non-sophisticated investors to more easily combine, integrate and use multiple earnings measures, eliminating the influence of a seemingly irrelevant characteristic of the judgment task – information order. Thus, management's ability to influence the perceptions of non-sophisticated investors in a specified direction by emphasizing one earnings measure over another is

reduced. In addition, a simultaneous reconciliation enhanced sophisticated investors' perceptions of the usefulness of the firm's earnings reports. Perhaps they attribute greater credibility to financial reports when management presents earnings information in an easy-to-use, transparent format – an apparent benefit to management.

This study is subject to several limitations. First, I limited the amount of information participants received to a press release reporting earnings for the first quarter of fiscal 2002 so that participants could complete the task in a reasonable amount of time. Typically when an investor is evaluating the financial performance of a firm, more information is available and, in general, the information environment is more complex. However, reducing the complexity of the information environment allowed me to make stronger inferences about the specific factors that influenced participants' judgments of earnings performance and was necessary to maximize the number of analysts willing to participate in the study.

Second, since participants completed this study in an "out-of-lab" setting, I cannot be certain that participants complied with my instructions to refrain from looking back through the case materials when answering the final question set. Although I have no reason to expect participants did not comply with my instructions, the out-of-lab setting cannot eliminate the possibility that uncontrolled, extraneous factors affected my results.

Third, I used M.B.A students as surrogates for non-sophisticated investors. Although first-year M.B.A students likely exhibit demographic characteristics similar to those of ordinary investors, many may have limited investment experience and therefore may not accurately reflect the opinions of actual investors.

Despite these limitations, this study provides evidence to policymakers that firms can influence the earnings judgments of investors by emphasizing pro forma earnings in a press release. In addition, this study provides evidence to the SEC that a specific type of reconciliation of GAAP

and pro forma earnings reduces the ability of firm's to influence non-sophisticated investors' perception while enhancing sophisticated investors' perceptions of the firm's financial reports and perhaps its management's credibility.

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APPENDIX I

AMAZON.COM, INC.
Pro Forma Statements of Operations
(in thousands, except per share data)
(unaudited)

	Three Months Ended September 30, 2002			Three Months Ended September 30, 2001		
	Pro Forma		Pro Forma	Pro Forma		Pro Forma
	As Reported (1)	Adjustments		As Reported (1)	Adjustments	
Net sales	\$ 851,299	\$ -	\$ 851,299	\$ 639,281	\$ -	\$ 639,281
Cost of sales	635,132	-	635,132	477,089	-	477,089
Gross profit	216,167	-	216,167	162,192	-	162,192
Operating expenses:						
Fulfillment	90,342	-	90,342	81,400	-	81,400
Marketing	26,728	-	26,728	32,537	-	32,537
Technology and content	52,907	-	52,907	53,846	-	53,846
General and administrative	18,698	-	18,698	21,481	-	21,481
Stock-based compensation	(832)	832	-	(2,567)	2,567	-
Amortization of goodwill and other intangibles	1,212	(1,212)	-	41,835	(41,835)	-
Restructuring-related and other	36,757	(36,757)	-	3,994	(3,994)	-
Total operating expenses	225,812	(37,137)	188,675	232,526	(43,262)	189,264
Income (loss) from operations	(9,645)	37,137	27,492	(70,334)	43,262	(27,072)
Interest income	5,600	-	5,600	6,316	-	6,316
Interest expense	(35,922)	-	(35,922)	(35,046)	-	(35,046)
Other income (expense), net	3,183	-	3,183	(2,203)	-	(2,203)
Other gains (losses), net	2,261	(2,261)	-	(63,625)	63,625	-
Total non-operating expenses, net	(24,878)	(2,261)	(27,139)	(94,558)	63,625	(30,933)
Income (loss) before equity in losses of equity-method investees	(34,523)	34,876	353	(164,892)	106,887	(58,005)
Equity in losses of equity- method investees, net	(557)	557	-	(4,982)	4,982	-
Net income (loss)	\$ (35,080)	\$ 35,433	\$ 353	\$ (169,874)	\$ 111,869	\$ (58,005)
Net cash provided by (used in) operating activities	\$ 38,108		\$ 38,108	\$ (64,403)		\$ (64,403)
Basic and diluted income (loss) per share	\$ (0.09)	\$ 0.09	0.00	\$ (0.46)	\$ 0.30	\$ (0.16)
Shares used in computation of income (loss) per share						
Basic	379,650		379,650	368,052		368,052
Diluted	379,650		398,361	368,052		368,052

(1) In accordance with accounting principles generally accepted in the United States.

APPENDIX II GAAP-ONLY

Monday April 8, 7:01 am Eastern Time

Press Release

Source : X Technologies

X Technologies Reports 1st Quarter Results

GAAP Earnings Per Share Loss at \$1.02

X Technologies today reported sales of \$362 million for the first quarter ended February 28, 2002, 15% below sales reported for the first quarter ended February 28, 2001.

X enables carriers and service providers to build profitable next-generation metro broadband and optical networks. The Company offers a product portfolio that includes subscriber management and optical platforms, as well as a comprehensive set of network provisioning and management software.

Financial Results

For the first quarter ended February 28, 2002, X reported a GAAP loss of \$1.4 billion, or \$1.02 per share. This was better than the reported GAAP loss of \$1.7 billion, or \$1.29 per share, for the first quarter ended February 28, 2001.

X TECHNOLOGIES
GAAP CONSOLIDATED STATEMENT OF OPERATIONS
(in millions, except per share data)
(unaudited)

	Three months ended February 28, 2002	Three months ended February 28, 2001
Net sales	\$361.80	\$426.10
Cost of sales	230.10	436.40
Gross profit (loss)	131.70	(10.30)
Operating expenses:		
Research and development	48.60	58.90
Selling, general and administrative	77.30	98.20
Stock-based compensation	94.50	95.60
Amortization of purchased intangibles	693.80	741.30
Acquired in-process research and development	132.40	128.10
Amortization of goodwill and other intangibles	337.20	377.60
Restructuring	124.20	142.10
Total operating expenses	1,508.00	1,641.80
Income (Loss) from operations	(1,376.30)	(1,652.10)
Interest and other income, net	11.20	9.70
Gain on sale of investments	4.50	6.40
Equity investment losses	(22.50)	(25.80)
Net income (loss)	(\$1,383.10)	(\$1,661.80)
Net income (loss) per share	(\$1.02)	(\$1.29)
Shares used in computation of loss per share	1,360.00	1,290.00

GAAP/PF - SQF

Monday April 8, 7:01 am Eastern Time

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X TECHNOLOGIES
GAAP CONSOLIDATED STATEMENT OF OPERATIONS
(in millions, except per share data)
(unaudited)

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Shares used in computation of loss per share	1,360.00	1,290.00

GAAP/PF - SQF

X TECHNOLOGIES
PRO FORMA CONSOLIDATED STATEMENT OF OPERATIONS
(in millions, except per share data)
(unaudited)

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Pro forma gross profit (loss)	131.70	(10.30)
Research and development	48.60	58.90
Selling, general and administrative	77.30	98.20
Total operating expenses	125.90	157.10
Pro forma income (loss) from operations	5.80	(167.40)
Interest and other income, net	11.20	9.70
Pro forma net income (loss)	\$17.00	(\$157.70)
Pro forma net income (loss) per share	\$0.01	(\$0.12)
Shares used in computation of loss per share	1,360.00	1,290.00

PF/GAAP - SQF

Monday April 8, 7:01 am Eastern Time

Press Release

Source : X Technologies

X Technologies Reports 1st Quarter Results

Pro Forma Earnings Per Share Profit at \$0.01

X Technologies today reported sales of \$362 million for the first quarter ended February 28, 2002, 15% below sales reported for the first quarter ended February 28, 2001.

X enables carriers and service providers to build profitable next-generation metro broadband and optical networks. The Company offers a product portfolio that includes subscriber management and optical platforms, as well as a comprehensive set of network provisioning and management software.

Financial Results

For the first quarter ended February 28, 2002, X reported a pro forma profit of \$17 million, or \$0.01 per share. This was better than reported pro forma loss of \$158 million, or \$0.12 per share, for the first quarter ended February 28, 2001. Pro forma earnings are stated excluding stock-based compensation charges, amortization of purchased intangibles, acquired in-process research and development, amortization of goodwill and other intangibles, restructuring charges, gains on sale of investments and equity investment losses. The Company reported a GAAP loss of \$1.4 billion, or \$1.02 per share. This was better than the reported GAAP loss of \$1.7 billion, or \$1.29 per share, for the first quarter ended February 28, 2001.

X TECHNOLOGIES
PRO FORMA CONSOLIDATED STATEMENT OF OPERATIONS
(in millions, except per share data)
(unaudited)

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PF/GAAP – SQF

X TECHNOLOGIES
 GAAP CONSOLIDATED STATEMENT OF OPERATIONS
 (in millions, except per share data)
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Total operating expenses	1,508.00	1,641.80
Income (Loss) from operations	(1,376.30)	(1,652.10)
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Gain on sale of investments	4.50	6.40
Equity investment losses	(22.50)	(25.80)
Net income (loss)	(\$1,383.10)	(\$1,661.80)
Net income (loss) per share	(\$1.02)	(\$1.29)
Shares used in computation of loss per share	1,360.00	1,290.00

PF/GAAP – SMRF

Monday April 8, 7:01 am Eastern Time

Press Release

Source : X Technologies

X Technologies Reports 1st Quarter Results

Pro Forma Earnings Per Share Profit at \$0.01

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X TECHNOLOGIES
PRO FORMA CONSOLIDATED STATEMENT OF OPERATIONS
(in millions, except per share data)
(unaudited)

Three months ended

	February 28, 2002			February 28, 2001		
	As Reported (1)	Pro Forma Adjustments	Pro Forma	As Reported (1)	Pro Forma Adjustments	Pro Forma
Net sales	\$361.80	\$ --	\$361.80	\$426.10	\$ --	\$426.10
Cost of sales	230.10	--	230.10	436.40	--	436.40
Gross profit (loss)	131.70	--	131.70	(10.30)	--	(10.30)
Operating expenses:						
Research and development	48.60	--	48.60	58.90	--	58.90
Selling, general and administrative	77.30	--	77.30	98.20	--	98.20
Stock-based compensation	94.50	(94.50)	--	95.60	(95.60)	--
Amortization of purchased intangibles	693.80	(693.80)	--	741.30	(741.30)	--
Acquired in-process research and development	132.40	(132.40)	--	128.10	(128.10)	--
Amortization of goodwill and other intangibles	337.20	(337.20)	--	377.60	(377.60)	--
Restructuring	124.20	(124.20)	--	142.10	(142.10)	--
Total operating expenses	1,508.00	(1,382.10)	125.90	1,641.80	(1,484.70)	157.10
Income (loss) from operations	(1,376.30)	1,382.10	5.80	(1,652.10)	1,484.70	(167.40)
Interest and other income, net	11.20	--	11.20	9.70	--	9.70
Gain on sale of investments	4.50	(4.50)	--	6.40	(6.40)	--
Equity investment losses	(22.50)	22.50	--	(25.80)	25.80	--
Net income (loss)	(\$1,383.10)	\$1,400.10	\$17.00	(1,661.80)	1,504.10	(157.70)
Net income (loss) per share	(\$1.02)		\$0.01	(\$1.29)		(\$0.12)
Shares used in computation of loss per share	1,360.00		1,360.00	1,290.00		1,290.00

(1) In accordance with U.S. generally accepted accounting principles (GAAP).

PF/GAAP – SMRF

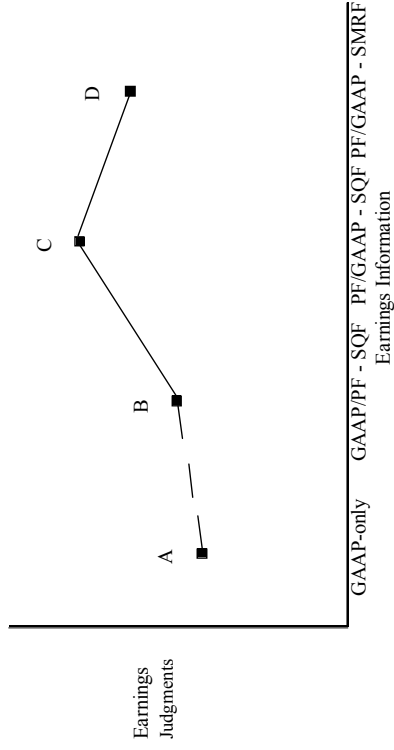
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Figure 1: Description of Levels of Earnings Information Independent Variable

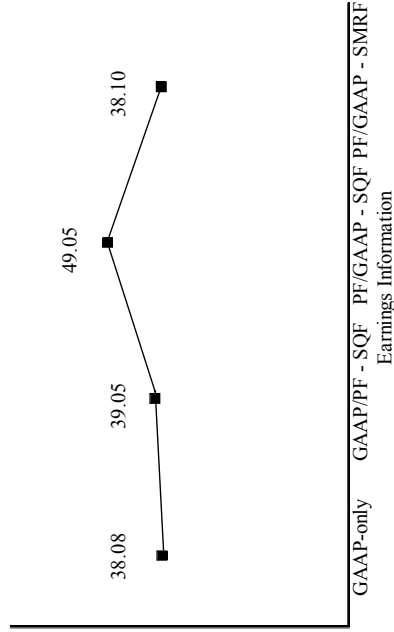
Level	Earnings Information (Type, Order and Format)
GAAP-only	<ol style="list-style-type: none"> 1. GAAP EPS Sub-Heading 2. GAAP Quarterly EPS 3. GAAP Statement of Operations 4. Balance Sheet
GAAP/PF - SQF (Sequential Format)	<ol style="list-style-type: none"> 1. GAAP EPS Sub-Heading 2. GAAP Quarterly EPS/ Pro Forma Quarterly EPS 3. GAAP Statement of Operations 4. Pro Forma Statement of Operations 5. Balance Sheet
PF/GAAP - SQF (Sequential Format)	<ol style="list-style-type: none"> 1. Pro Forma EPS Sub-Heading 2. Pro Forma Quarterly EPS/ GAAP Quarterly EPS 3. Pro Forma Statement of Operations 4. GAAP Statement of Operations 5. Balance Sheet
PF/GAAP - SMRF (Simultaneous, Reconciled Format)	<ol style="list-style-type: none"> 1. Pro Forma EPS Sub-Heading 2. Pro Forma Quarterly EPS/ GAAP Quarterly EPS 3. Reconciled GAAP/Pro Forma Statements of Operations 4. GAAP Statement of Operations 5. Balance Sheet

Figure 2a: Experimental Predictions - Non-sophisticated Investors



H1: C > A
 H2: C > B
 H3: D < C

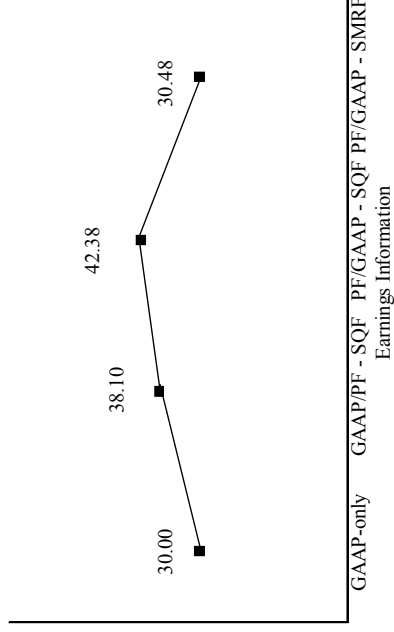
Figure 2c: Mean Future Earnings Potential Judgments - M.B.A. Participants^a



H1: (49.05) > (38.08); Confirmed: t = 2.02 p-value = 0.017^b
 H2: (49.05) > (39.05); Confirmed: t = 1.83, p-value = 0.038^b
 H3: (38.10) < (49.05); Confirmed: t = 1.92, p-value = 0.031^b

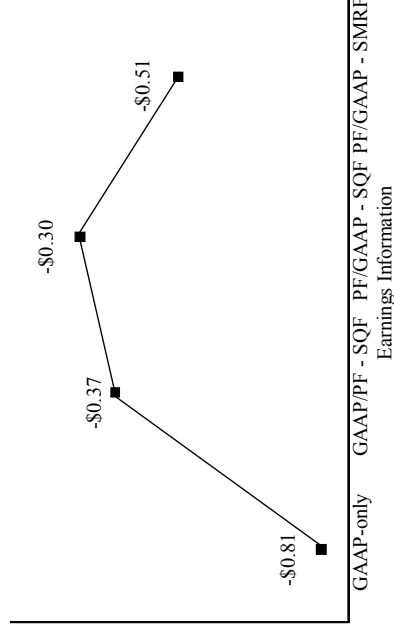
^aRefer to Table 1 for descriptions of independent and dependent variables.
^bp-values are one-tailed.

Figure 2b: Mean Current Earnings Performance Judgments - M.B.A. Participants^a



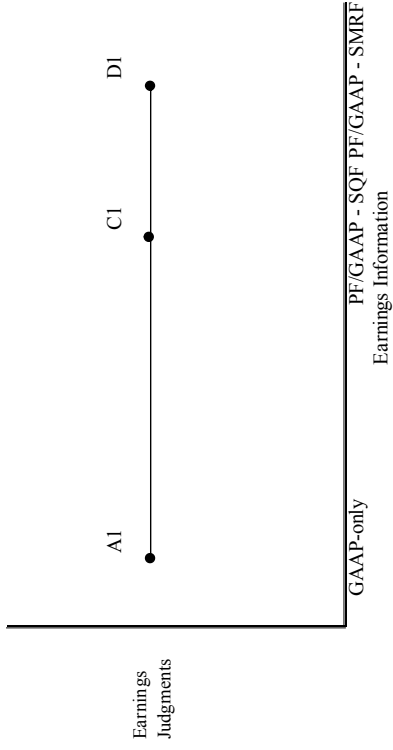
H1: (42.38) > (30.00); Confirmed: t = 2.36 p-value = 0.012^b
 H2: (42.38) > (38.10); Not Confirmed: t = 0.62, p-value = 0.270^b
 H3: (30.48) < (42.38); Confirmed: t = 2.15, p-value = 0.019^b

Figure 2d: Mean EPS Estimates - M.B.A. Participants^a



H1: (-\$0.30) > (-\$0.81); Confirmed: t = 4.06, p-value = 0.000^b
 H2: (-\$0.30) > (-\$0.37); Not Confirmed: t = 0.46, p-value = 0.323^b
 H3: (-\$0.51) < (-\$0.30); Confirmed: t = 1.38, p-value = 0.087^b

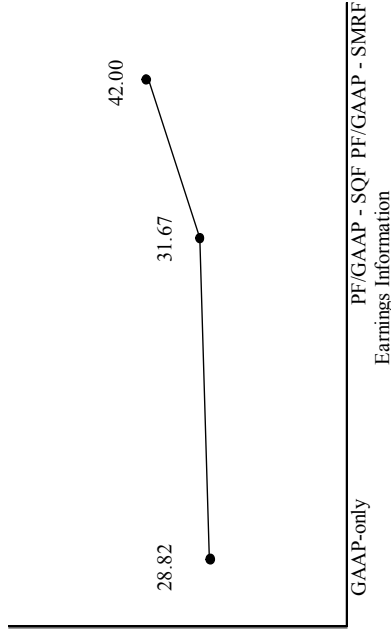
Figure 3a: Experimental Predictions - Sophisticated Investors



H4: C1 = A1

H5: D1 = C1

Figure 3c: Mean Future Earnings Potential Judgments - Analysts^a



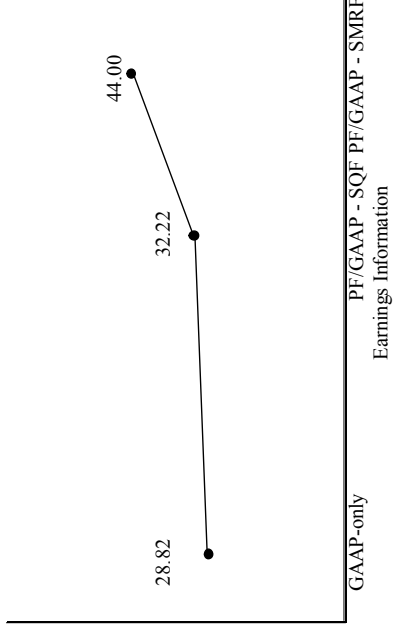
H4: (31.67) = (28.82); Confirmed: $t = 0.45, p = 0.657^b$

H5: (42.00) = (31.67); Not Confirmed: $t = 1.84, p = 0.074^b$

^aRefer to Table 1 for descriptions of independent and dependent variables.

^bp-values are two-tailed.

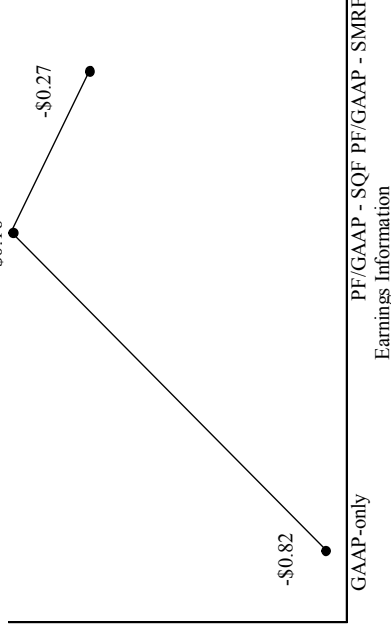
Figure 3b: Mean Current Earnings Performance Judgments - Analysts^a



H4: (32.22) = (28.82); Confirmed: $t = 0.57, p = 0.573^b$

H5: (44.00) = (32.22); Not Confirmed: $t = 1.70, p = 0.082^b$

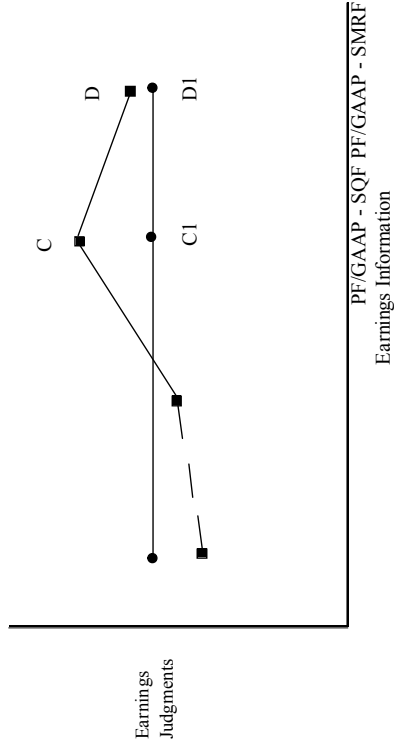
Figure 3d: Mean EPS Estimates - Analysts^a



H4: (-\$0.16) = (-\$0.82); Not Confirmed: $t = 4.92, p = 0.000^b$

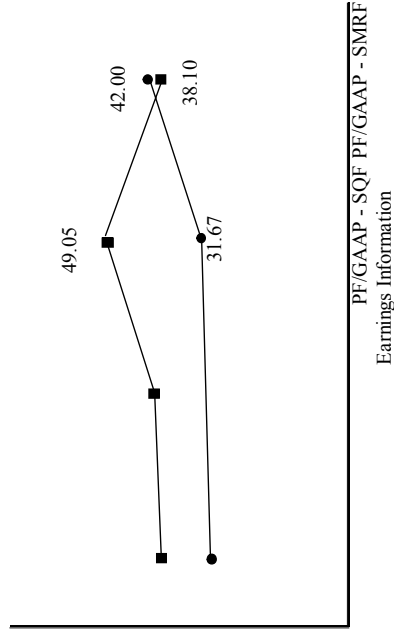
H5: (-\$0.27) = (-\$0.16); Confirmed: $t = 0.76, p = 0.450^b$

Figure 4a: Experimental Predictions - Non-Sophisticated vs Sophisticated Investors



H6: (D - D1) < (C - C1)

Figure 4c: Mean Future Earnings Potential Judgments - M.B.As vs Analysts^a



H6: (38.10 - 42.00) < (49.05 - 31.67); Confirmed: $t = 2.37, p = 0.011^b$

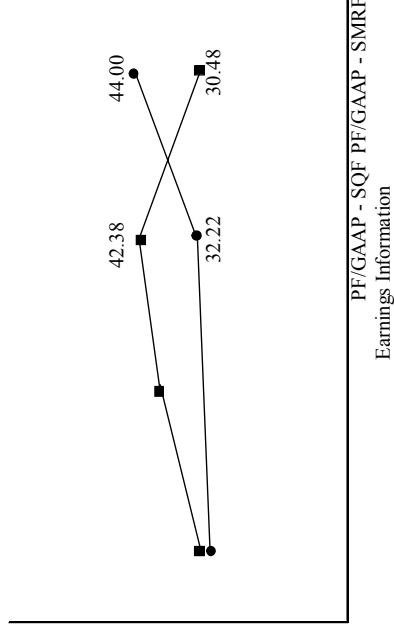
- Non-sophisticated Investor (i.e., M.B.A. Participant)
- Sophisticated Investor (i.e., Analyst)

^aRefer to Table 1 for descriptions of independent and dependent variables.

^bp-value is one-tailed.

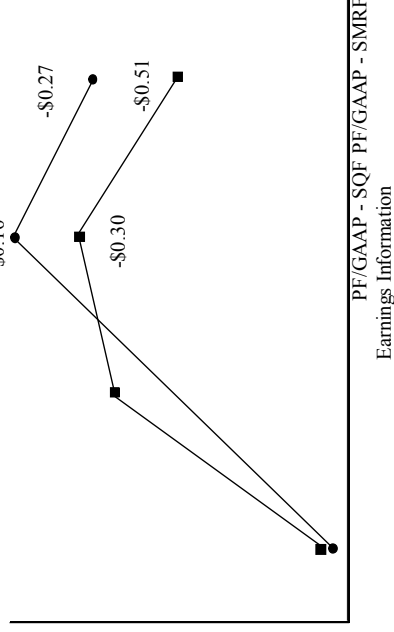
^cp-values are 1 - (one-tailed p-values)

Figure 4b: Mean Current Earnings Performance Judgments - M.B.As vs Analysts^a



H6: (30.48 - 44.00) < (42.38 - 32.22); Not Confirmed: $t = -0.56, p = 0.710^c$

Figure 4d: Mean EPS Estimates - M.B.As vs Analysts^a



H6: (-\$0.51 - -\$0.27) < (-\$0.30 - -\$0.16); Confirmed: $t = -0.73, p = 0.764^c$

TABLE 1
Participants' Current Earnings Performance Judgments, Future Earnings Potential Judgments and EPS Estimates
Panel A: Descriptive Statistics - Mean [median] (standard deviation)

Earnings Information Condition ^a	Dependent Variables		
	Current Earnings Performance Judgment ^b	Future Earnings Potential Judgment ^b	EPS Estimate ^c
GAAP - only			
Non-sophisticated (n = 26)	30.00 [30.00] (18.33)	38.08 [40.00] (15.75)	-\$0.81 [-0.94] (0.45)
Sophisticated (n = 17) ^d	28.82 [30.00] (17.99)	28.82 [30.00] (20.58)	-\$0.82 [-0.83] (0.35)
GAAP/PF - SQF			
Non-sophisticated (n = 21)	38.10 [30.00] (26.57)	39.05 [40.00] (17.00)	-\$0.37 [-0.50] (0.59)
PF/GAAP - SQF			
Non-sophisticated (n = 21)	42.38 [40.00] (17.29)	49.05 [50.00] (18.41)	-\$0.30 [-0.03] (0.41)
Sophisticated (n = 18) ^d	32.22 [30.00] (17.34)	31.67 [30.00] (16.89)	-\$0.16 [0.00] (0.38)
PF/GAAP - SMRF			
Non-sophisticated (n = 21)	30.48 [30.00] (18.57)	38.10 [30.00] (18.61)	-\$0.51 [-0.80] (0.58)
Sophisticated (n = 20) ^d	44.00 [40.00] (22.57)	42.00 [45.00] (17.65)	-\$0.27 [-0.01] (.40)

^aThe financial information was in the form of a press release announcing earnings for the first quarter ended February 28, 2002. All participants received a press release that included a company description, a narrative that stated comparative financial results, income statement(s) and a balance sheet. Participants in the GAAP-only condition received only quarterly GAAP earnings information and a GAAP statement of operations while participants in every other condition received both GAAP and pro forma quarterly earnings information and statements of operations. In the GAAP/PF-SQF condition, quarterly GAAP earnings information is followed by quarterly pro forma earnings information and a GAAP statement of operations is followed by a pro forma statement of operations in a sequential format. In the PF/GAAP-SQF condition, quarterly pro forma earnings information is followed by quarterly GAAP earnings information and a pro forma statement of operations is followed by a GAAP statement of operations in a sequential format. In the PF/GAAP-SMRF condition, quarterly pro forma earnings information is followed by quarterly GAAP earnings information in a sequential format; however, GAAP and pro forma statements of operations are presented simultaneously in a reconciled format followed by a GAAP statement of operations alone.

^bParticipants provided judgments of current earnings performance and future earnings potential using 11-point scales with endpoints from 0 to 100 labeled "very weak/very strong".

^cParticipants provided open-ended EPS estimates for the first quarter ended February 28, 2003.

^dOf the 17 analysts in the GAAP-only condition, only 14 provided EPS estimates. Of the 18 analysts in the PF/GAAP-NR condition, only 17 provided EPS estimates. Of the 20 analysts in the PF/GAAP-R condition, only 18 provided EPS estimates.

TABLE 2
The Effect of Information Type, Order and a Reconciliation on M.B.A Participants'
Current Earnings Performance Judgments, Future Earnings Potential Judgments and EPS Estimates^a
Panel A: Planned Comparison of Earnings Judgments between PF/GAAP - SQF and GAAP-only conditions (H1)

	<i>df</i>	<i>t-statistic</i>	<i>p-value^b</i>
Current Earnings Performance Judgment (H1)			
PF/GAAP - SQF (42.38) vs GAAP-only (30.00)	45	2.36	0.012
Future Earnings Potential Judgment (H1)			
PF/GAAP - SQF (49.05) vs GAAP-only (38.08)	45	2.02	0.017
EPS Estimate (H1)			
PF/GAAP - SQF (-\$0.30) vs GAAP-only (-\$0.81)	45	4.06	0.000

Panel B: Planned Comparison of Earnings Judgments between PF/GAAP - SQF and GAAP/PF - SQF conditions (H2)

	<i>df</i>	<i>t-statistic</i>	<i>p-value^b</i>
Current Earnings Performance Judgment (H2)			
PF/GAAP - SQF(42.38) vs GAAP/PF - SQF (38.10)	40	0.62	0.270
Future Earnings Potential Judgment (H2)			
PF/GAAP - SQF (49.05) vs GAAP/PF - SQF (39.05)	40	1.83	0.038
EPS Estimate (H2)			
PF/GAAP - SQF (-\$0.30) vs GAAP/PF - SQF (-\$0.37)	40	0.46	0.323

Panel C: Planned Comparisons of Earnings Judgments between PF/GAAP - SMRF and PF/GAAP - SQF conditions (H3)

	<i>df</i>	<i>t-statistic</i>	<i>p-value^b</i>
Current Earnings Performance Judgment (H3)			
PF/GAAP - SMRF (30.48) vs PF/GAAP - SQF (42.38)	40	2.15	0.019
Future Earnings Potential Judgment (H3)			
PF/GAAP - SMRF (38.10) vs PF/GAAP - SQF (49.05)	40	1.92	0.031
EPS Estimate (H3)			
PF/GAAP - SMRF (-\$0.51) vs PF/GAAP - SQF (-\$0.30)	40	1.38	0.087

^aRefer to Table 1 for descriptions of independent and dependent variables.

^bp-values are one-tailed.

TABLE 3
The Effect of Information Type and a Reconciliation on Analysts' Current Earnings Performance Judgments, Future Earnings Potential Judgments and EPS Estimates^a
Panel A: Planned Comparisons of Earnings Judgments in the PF/GAAP - SQF and GAAP-only conditions (H4)

	<i>df</i>	<i>t-statistic</i>	<i>p-value^b</i>
Current Earnings Performance Judgment (H4) PF/GAAP - SQF (32.22) vs GAAP-only (28.82)	33	0.57	0.573
Future Earnings Potential Judgment (H4) PF/GAAP - SQF (31.67) vs GAAP-only (28.82)	33	0.45	0.657
EPS Estimate (H4) PF/GAAP - SQF (-\$0.16) vs GAAP-only (-\$0.82)	29	4.92	0.000

Panel B: Planned Comparisons of Earnings Judgments in the PF/GAAP - SMRF and PF/GAAP - SQF conditions (H5)

	<i>df</i>	<i>t-statistic</i>	<i>p-value^b</i>
Earnings Performance Judgment (H5) PF/GAAP - SMRF (44.00) vs PF/GAAP - SQF (32.22)	36	1.79	0.082
Future Earnings Potential Judgment (H5) PF/GAAP - SMRF (42.00) vs PF/GAAP - SQF (31.67)	36	1.84	0.074
EPS Estimate (H5) PF/GAAP- SMRF (-\$0.27) vs PF/GAAP - SQF (-\$0.16)	33	0.76	0.450

^aRefer to Table 1 for descriptions of independent and dependent variables.

^bp-values are two-tailed.

TABLE 4
Comparing M.B.A. Participants' Earnings Judgments to Analysts' Earnings Judgments:
Current Earnings Performance Judgments, Future Earnings Potential Judgments and EPS Estimates^a
Panel A: Planned Comparisons of Earnings Judgments in PF/GAAP - SMRF and PF/GAAP - SQF conditions (H6)

	<i>df</i>	<i>t-statistic</i>	<i>p-value</i> ^b
Current Earnings Performance Judgment (H6)			
PF/GAAP - SMRF (30.48 - 44.00) vs PF/GAAP - SQF (42.38 - 32.22)	38	-0.56	0.710 ^c
Future Earnings Potential Judgment (H6)			
PF/GAAP - SMRF (38.10 - 42.00) vs PF/GAAP - SQF (49.05 - 31.67)	38	2.37	0.011
EPS Estimate (H6)			
PF/GAAP - SMRF (-\$0.51 - -\$0.27) vs PF/GAAP - SQF (-\$0.30 - -\$0.16)	38	-0.73	0.764 ^c

^aRefer to Table 1 for descriptions of independent and dependent variables.

^bp-values are one-tailed.

^cp-value is (1 - one-tailed p-value).

TABLE 5
Participants' Assessments of the Decision Usefulness, Relevance
and Reliability of GAAP Earnings versus Pro Forma Earnings

Panel A: Participants' Assessments of GAAP Versus Pro Forma Earnings - Mean [Median] (standard deviation)

Earnings Information Condition ^a	GAAP Usefulness ^b		Pro Forma Usefulness ^b		GAAP Relevance ^c	Pro Forma Relevance ^c	GAAP Reliability ^d	Pro Forma Reliability ^d
	Current	Future	Current	Future				
Earnings Information Condition ^a								
	GAAP - only							
Non-sophisticated (n = 26)	57.69 [60.00] (23.55)	36.92 [35.00] (22.76)	37.89 [40.00] (21.49)	44.21 [50.00] (24.34)	46.15 [50.00] (26.99)	46.67 [50.00] (13.72)	51.54 [60.00] (26.94)	43.33 [45.00] (19.10)
Sophisticated (n = 16)	42.50 [45.00] (28.40)	31.88 [20.00] (30.82)	55.00 [60.00] (23.58)	44.44 [45.00] (20.36)	36.25 [30.00] (29.64)	40.56 [35.00] (27.75)	36.25 [30.00] (27.05)	41.11 [40.00] (21.66)
PF/GAAP - SQF								
Non-sophisticated (n = 18)	63.89 [70.00] (20.04)	54.21 [60.00] (22.44)	37.89 [40.00] (21.49)	44.21 [50.00] (24.34)	66.67 [70.00] (14.55)	46.67 [50.00] (13.72)	70.00 [70.00] (14.55)	43.33 [45.00] (19.10)
Sophisticated (n = 18)	53.89 [60.00] (29.33)	34.44 [30.00] (22.55)	55.00 [60.00] (23.58)	44.44 [45.00] (20.36)	40.56 [35.00] (27.75)	53.33 [60.00] (20.00)	52.22 [55.00] (31.16)	41.11 [40.00] (21.66)
PF/GAAP - SMRF								
Non-sophisticated (n = 21)	60.00 [60.00] (18.97)	47.62 [50.00] (20.71)	41.90 [40.00] (22.72)	43.33 [50.00] (19.58)	55.24 [50.00] (16.62)	43.81 [50.00] (19.87)	66.67 [70.00] (14.94)	39.52 [40.00] (19.87)
Sophisticated (n = 18)	53.89 [45.00] (26.15)	42.22 [40.00] (29.62)	60.56 [60.00] (21.00)	61.67 [70.00] (26.40)	47.22 [40.00] (24.92)	63.33 [70.00] (22.75)	60.56 [60.00] (21.00)	50.56 [50.00] (22.61)

^aRefer to Table 1 for descriptions of levels of Earnings Information variable.

^bParticipants indicated the usefulness of GAAP and pro forma earnings in assessing X Technologies' current earnings performance and future earnings potential using 11-point scales with endpoints from 0 to 100 labeled "not at all useful/very useful".

^cParticipants indicated the relevance of GAAP and pro forma earnings in assessing X Technologies' sustainable earnings potential (i.e., recurring earnings) using 11-point scales with endpoints from 0 to 100 labeled "not at all relevant/very relevant".

^dParticipants indicated the reliability of GAAP and pro forma earnings in assessing X Technologies' unbiased earnings potential using 11-point scales with endpoints from 0 to 100 labeled "not at all reliable/very reliable".