
ANALYSTS' RESPONSES TO ALTERNATIVE METHODS OF REPORTING UNREALIZED GAINS AND LOSSES ON DERIVATIVES

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ABSTRACT

With the publication of two statements on accounting for derivatives (SFAS 133 and SFAS 138), the Financial Accounting Standards Board (FASB) has taken another substantial step on the path toward its goal of requiring the reporting of all financial instruments at market value, generally with unrealized gains and losses included in income. This study investigates whether reporting an unrealized gain or loss in a separate line item on the income statement, as opposed to disclosure only in a footnote, affects how financial analysts use and evaluate information on such gains and losses. The vehicle for this research is unrealized gains or losses on derivatives. The study consisted of short financial analysis cases, presented to financial analysts and executives primarily through mail surveys. Each subject received one of the four different possible combinations of derivative gain or loss and disclosure type. When the unrealized derivative gain/loss was included as a separate line item in the income statement, analysts included the gain/loss significantly more often in their P/E ratios, and were more likely to list the derivative as a factor affecting their investment recommendation, than when the derivative gain/loss was disclosed only in a footnote. Moreover, regardless of disclosure type, analysts included unrealized losses on derivatives in their P/E ratios significantly more often than unrealized gains, and were more likely to list the derivative as a factor affecting their investment recommendation when there was a loss as opposed to a gain. Perhaps more interesting, given the FASB's disclosure rules in Statement 133 (FASB, 1998), was the fact that when the gain/loss was presented as a separate line item in the income statement a substantial minority of analysts (44 percent) chose to exclude the gains from their P/E ratios, whereas only 17 percent chose to exclude losses. Finally, results from a subset of participants who were asked to think aloud while analyzing the case suggest that analysts are less likely to consider information regarding derivatives when it is contained only in a footnote. In addition, the protocols suggest that if participants acquire the information on derivatives, they may give as much as, if not more consideration to that information, and evaluate it more negatively, when it is disclosed in a footnote rather than on the income statement.

This study contributes to knowledge in the area of financial statement disclosure in two primary ways. First, it provides evidence with respect to disclosure alternatives for unrealized

derivative gains and losses that is consistent with inferences drawn from prior capital markets studies regarding disclosure issues, and indicates that disclosure format may affect analysts' use of information, contrary to a strict interpretation of the efficient markets hypothesis. Second, it suggests that a substantial minority of analysts seem to prefer to exclude unrealized derivative gains and losses, particularly gains, when evaluating earnings for analysis, especially if the amount of those gains and losses is clearly disclosed and readily available. This further supports the need for full disclosure of unrealized derivative gains and losses included in income.

INTRODUCTION

This paper investigates whether reporting unrealized losses or gains on financial instruments as a separate line item in the income statement, as opposed to disclosure only in a footnote, affects financial analysts' use and evaluation of information about those gains and losses. We use information on derivatives as the specific vehicle for this investigation. Until implementation of SFAS 133 after June, 2000 (FASB, 1998), in order to find detailed information on a company's investments in derivatives, investors have had to sort through voluminous notes to the financial statements (Roulstone, 1999). Although the new Financial Accounting Standards Board (FASB) standard on derivatives is intended to give investors more readily available information on the value of derivatives held by companies and improve the quality of financial reporting, implementation of the complex new standard on derivatives may be costly and difficult (Reinstein & Lander, 2000; FASB, 1999a; MacDonald, 1997), overly complicated (Wilson, 1998), and could lead to increased volatility in companies' reported earnings and equity (Lesak, 1998). Moreover, it seems likely that where unrealized gains and losses on derivatives are included in income (the general model under Statement 133) they will not generally be shown as a separate line item, but rather lumped in with other miscellaneous non-operating income items under an "other" category. Also, the FASB specifically eliminated any requirements to separately disclose gross gains and losses on derivatives, in some cases substituting requirements for disclosure of net gains or losses. The FASB justified these decisions because they "could reduce the cost of applying the Statement without a significant reduction in the benefits to users" (FASB, 1998, paragraph 506).

As the FASB continues with its project on reporting financial instruments at fair value, and as researchers continue to raise questions about market efficiency (see, e.g., Kothari, 2001; Lee, 2001) further study is needed to investigate to what extent, if any, disclosure format affects the use of information about fair value of financial instruments. If, consistent with the efficient markets hypothesis, disclosure format does not affect the use of information about financial instruments, then incurring the costs associated with implementing standards for fair value measurement may not be warranted. If disclosure format does matter, then assumptions about costs and benefits may need to be reassessed. This has implications beyond the United States because harmonized international accounting standards are gaining in importance with the enormous increase in global investing and

lending (Pacter, 1998). International Accounting Standards Committee (IASC) Standards 32 and 39 (IASC, 1998a; 1998b), for instance, include requirements for accounting and reporting for derivatives that closely resemble those in SFAS No. 133 (FASB, 1999b). In addition, both the FASB and IASC are working toward reporting fair-value recognition of all financial instruments in the financial statements (FASB, 2001; JWG, 2000).

This study also investigates whether analysts will be more likely to include unrealized losses on derivatives in their P/E ratios as opposed to unrealized gains. Research in psychology, finance, and accounting, including recent research by Koonce et al. (2001), suggests that investors place more weight on loss probabilities and outcomes than they do on gain probabilities and outcomes. Therefore, analysts may be more likely to include unrealized losses on derivatives in their P/E ratios than to include unrealized gains. The FASB has, by substituting reporting of net gains and losses for reporting of gross gains and losses, deprived analysts of the information needed to exercise this tendency toward conservatism in interpretation of at least some financial information. While the FASB has expressed its own rejection of conservatism as an objective for financial reporting, it is not clear that they benefit users by imposing equal treatment for unrealized financial instrument gains and losses by allowing net reporting. Moreover, Koonce et al. (2001) indicate that financial statement users view derivatives as riskier than other financial items even when the underlying exposure is held constant, so even unrealized gains on derivatives may be viewed by analysts as risky. Therefore, research on the financial reporting of unrealized gains and losses on derivatives is important and needed.

To investigate these issues, we asked 81 financial analysts to review the financial statements and footnotes of a hypothetical company and to calculate P/E ratios for three years. Of the 81, 17 analysts completed the task in the presence of one of the authors and were asked to think out loud while performing the task. The hypothetical company had either an unrealized gain or an unrealized loss on derivatives in the third year, which was either recognized as a separate line item in the income statement or disclosed only in a footnote.

The results of this study suggest that, contrary to a strict interpretation of the efficient markets hypothesis, the use of derivatives information in the decision-making of relatively sophisticated financial statement users is affected by whether information is reported as a line item in the income statement or disclosed only in a footnote. These findings are consistent with inferences drawn from prior research and extend those prior findings to the topic of reporting for derivatives. In addition, the results of this study suggest that analysts weigh losses on derivatives more heavily than gains on derivatives. Although most analysts included losses on derivatives in their P/E ratios when losses were clearly displayed on the income statement, and a few even included them when they were only disclosed in a footnote, many analysts removed gains on derivatives when such information was shown on the income statement and none included gains when they were only disclosed in a footnote.

In addition, results from a group of analysts who were asked to think aloud while analyzing the case suggest that analysts are less likely to acquire information regarding derivatives when it is contained only in a footnote. The verbal protocols also suggest that, among those who acquired the derivatives information, analysts may have been more concerned about derivatives when the information was disclosed in a footnote instead of being clearly displayed on the income statement. These findings extend previous research on financial statement recognition versus disclosure of information by providing direct evidence about whether information disclosed in a footnote is: a) not acquired by financial statement users or b) acquired but given less weight than information shown in the financial statements. The findings of this study suggest that derivatives information disclosed in a footnote is less likely to be acquired by financial statement users, but if acquired it may be given equal or more weight than information disclosed in financial statements.

This study provides support for the value of including information as a separate line item on the face of the financial statements when it is thought to be important to financial statement users. Currently, companies are still allowed to include derivative amounts in “other” on the balance sheet and income statement. The results of this study suggest that if the objective is to make information readily available and clear, a separate financial statement line item may be needed. As a result of the adoption of net gain or loss reporting, even investors who are willing and able to sort through footnotes for more detailed information may not find quantitative data that they would want to use in their decisions if it were available. The disclosure decisions adopted by the FASB in the interest of cost reduction and reduction of disclosure of proprietary information may not prove as low-cost to many users as the Board supposed, in that they may deprive users of information that might well affect their investment decisions.

THEORY AND HYPOTHESES

A derivative is a financial instrument that derives its value from an “underlying” such as an “interest rate, security price, commodity price, foreign exchange rate, index of prices or rates, or other variable” (FASB, 1998, paragraphs 6 & 7). Derivatives are used as speculative investments, as well as to hedge against risk. Currently, about seventy-five percent of corporations and almost all financial institutions use derivatives (Lesak, 1998). Derivatives can be very complex and are potentially volatile investments that may result in gains or losses much greater than the amount of initial investment, which typically is very small. Even companies that carefully developed strategies for using derivatives as hedges (e.g., Procter & Gamble) have experienced disastrous results (Stanko, 1996). In some cases corporate (e.g., Showa Shell Sekiyu) and government (e.g., Orange County) losses from derivatives have exceeded \$1 billion.

Recent research suggests that companies typically do not provide enough detail regarding their quantitative disclosures about derivatives (SEC, 1998). Roulstone (1999), for example, found that many companies included gains and losses related to derivatives in “other revenues” so that it

is not possible to determine the exact impact of derivatives on earnings. Only one of the 25 firms Roulstone studied indicated the exact amount of actual derivatives losses incurred during the year. In addition, the majority of companies studied also favored more complex disclosure formats that do not indicate the underlying positions in derivatives over a simpler, more revealing tabular format. Although Roulstone's study predated implementation of SFAS 133, Statement 133 does not expand the amount of quantitative information required for derivatives, nor does it specify formats.

In response to: 1) several highly publicized situations in which investors and creditors were surprised by large unexpected losses on derivatives, 2) the fact that many companies reported derivatives at historical cost or failed to report them at all, and 3) differing treatment of different types of derivatives, the FASB issued SFAS Nos. 133 (FASB, 1998) and 138 (FASB, 2000). Statement 133 is effective for all fiscal quarters of all fiscal years beginning after June 15, 2000 (FASB, 1999a). SFAS No. 133 is intended to provide a consistent set of rules for accounting for derivatives that would allow investors and creditors access to information needed to properly assess the effects of a company's use of derivatives. It requires companies to recognize all derivatives as either assets or liabilities in the balance sheet and to measure derivative instruments at fair value. Accounting for changes in the fair value of a derivative (i.e., gains or losses) depends on its intended use and resulting designation. In general, for a derivative designated as a fair value hedge (i.e., intended to hedge against exposure to changes in the fair value of an asset or liability), the gains or losses on the derivative, whether realized or not, are recognized in earnings. Offsetting value changes in the hedged items are also recognized in earnings. In addition, realized and unrealized gains and losses on derivatives not designated as hedging instruments are recognized in earnings. Gains and losses on derivatives designated as cash flow hedges are deferred by being recognized as other comprehensive income until the hedged item affects income. Ineffective portions of cash flow hedges are included in income. Similarly, gains and losses on derivatives designated as foreign currency hedges are included in other comprehensive income to the extent the instrument is an effective hedge. (See Wilson, 1998 and Gastineau et al., 2001) for detailed examples of the various types of hedges addressed by SFAS No. 133 and the characteristics that qualify a financial instrument as a derivative).

Research in psychology suggests that the information presentation format (IPF) will influence the way information is used and evaluated to make judgments and decisions (Painton & Gentry, 1985; Kliemuntz & Schkade, 1993). IPF is the manner, style or arrangement used to display information (Russo, 1977). For example, Johnson, Payne and Bettman (1988) suggest that individuals may change their strategies to search for information to fit the form of the information display. In addition, the performance of the individuals in their study improved when information was presented in decimal format rather than fractions that were difficult to process (e.g., 0.83 vs. 535/642). These findings suggest that information displays should be designed to make it easier for decision makers to employ strategies that will result in better decisions. Similarly, Russo (1977) found that when price information was displayed in a per unit format on an organized list, consumer

spending decreased and market shares of store brands increased. Russo concluded that in order for individuals to use information it must be both readily available and easily processed.

The IPF of financial statements may influence the information processing of financial statement users in a similar way. Maines and McDaniel (2000), for example, suggest that financial statement presentation format influences how nonprofessional investors weight comprehensive-income information when making judgments regarding management effectiveness. Specifically, Maines and McDaniel found that M.B.A. students place significant weight on their volatility assessments of unrealized gains when unrealized gains were shown in SFAS No. 130's statement of comprehensive income, but not when gains were shown in the statement of stockholders' equity under either SFAS No. 130 or SFAS 115. A related study by Hirst and Hopkins (1998) found that analysts are more likely to use information on unrealized gains and losses on marketable securities when that information is displayed in the statement of comprehensive income as opposed to the statement of stockholders' equity. In addition, Hopkins (1996) found that placing a financial instrument in the liabilities section versus the equity section of the balance sheet affected the impact of the financial instrument on analysts' stock valuations.

An important issue related to financial statement presentation format is whether information is placed in the financial statements or footnotes. Accounting standards require that certain information must be recognized on the face of the financial statements (e.g., as a line item in the income statement) while other information may be disclosed in footnotes. Bernard and Schipper (1994) theorize that financial statement users may "process footnote data incompletely" or view information disclosed in footnotes as less reliable than information recognized in the body of financial statements. In a lease accounting context, Imhoff, Lipe and Wright (1995) investigated the issue of footnote disclosure versus financial-statement display. They found that capital markets react to obligations contained in the balance sheet, but respond in a naive manner to footnote disclosure. Based on these results, Imhoff et al. (1995) suggest that the form of disclosures and their ease of use may be important, even for sophisticated analysts. Similarly, Davis-Friday et al. (1998) found that the liability for post-retirement benefits other than pensions (PRBs) are capitalized at a higher rate by the stock market when the PRB liability is recognized in the financial statements as opposed to in a footnote. They posit that the market may treat information disclosed in footnotes as less reliable than similar information recognized in the financial statements. Amir (1993) also suggests that investors underestimated the effect of PRB liabilities on firm value when PRB information was disclosed in footnotes.

Most of the previous research in accounting related to financial statement recognition versus footnote disclosure has been in the capital markets area. Therefore, researchers have had to infer the effect of recognition versus disclosure on a diverse group of market participants using aggregate financial data. A limitation of this literature is that it provides little information about the reaction of individual investors, or their information processing (Wahlen et al., 2000). For example, it is unknown whether financial statement users: a) fail to acquire information in footnotes, or b) acquire

it but place less weight on that information than when it is displayed in the financial statements. However, there have been a few experimental studies that have examined this issue as well. An advantage of experimental research is that it can isolate the effects of variables on a specific group of financial statement users (McDaniel & Hand, 1996). To date, the evidence from these studies has been somewhat mixed.

Abdel-khalik, Thompson and Taylor (1981) found that most analysts and loan officers viewed a company more favorably if it did not capitalize leases than an otherwise identical company that did capitalize leases. One explanation for this finding is that if a company does not capitalize leases lenders and analysts will be less likely to include such leases in the company's debt to equity ratios. Similarly, in a pension accounting context, Harper, Mister and Strawser (1987) found that both sophisticated (bankers) and unsophisticated (accounting students) users of financial statements were more likely to include a pension liability in the numerator of a debt to equity ratio when the pension liability was recognized in the balance sheet rather than disclosed in a footnote to the financial statements.

Nevertheless, interviews conducted with loan officers in America, Singapore and Australia, and bank training literature, suggest that loan officers are aware of the effect of non-capitalized leases on debt to equity ratios and make adjustments to financial statements and cash flow projections accordingly when assessing loan risk and repayment ability (Wilkins & Zimmer, 1983). Moreover, the results of an experimental study with loan officers by Wilkins and Zimmer indicate that there was no association between alternative accounting treatments for financial leases (capitalization, footnote only) and credit decisions (ability to repay, maximum loan amount). Evidence from verbal protocols collected in this study suggest that while a minority of loan officers in the footnote condition performed written adjustments in their debt to equity ratios to capitalize lease commitments, all of them appeared to cognitively adjust financial statements to reflect lease commitments as liabilities.

Recently, Hirst et al. (2002) suggest that differences in fair value performance measurement and reporting format affect analysts' assessment of risk and value. Specifically, bank analysts' valuation judgments of high and low risk banks differed under full fair value accounting, where gains and losses were reported in a performance statement, but analysts did not distinguish between high and low risk banks when fair value gains and losses were reported in footnotes. Therefore, footnote disclosure did not appear to be a perfect substitute of financial statement recognition. Hirst et al. theorize that information provided directly in financial statements, rather than footnotes, is easier to link to the performance attribute being evaluated and thus is weighted more heavily.

Our paper extends these prior studies by using an experiment involving reporting of financial instruments at market value to further examine this phenomenon. Our paper not only examines in a new context whether analysts' reactions differ between footnote-only disclosure and inclusion in income, but also sheds light on whether any method short of specific line item display on the face of the income statement will actually achieve the objective of clearer and more useful information

for statement users. In addition, the use of verbal protocol analysis in this study provides detailed data on analysts' information processing (Ericsson & Simon, 1984; Bedard & Biggs, 1991). For example, previous research such as Bernard and Schipper (1994) and Hirst and Hopkins (1998) has theorized that as a result of the information presentation format financial statement users: 1) may not acquire information or 2) may view that information differently. In this study, verbal protocols will be used to evaluate whether analysts: 1) do not acquire information disclosed in a footnote, or 2) acquire it but evaluate that information differently than when it is highlighted in financial statements.

Moreover, previous research has not examined financial statement recognition versus footnote disclosure of information on derivatives. Given the current controversy about the use of derivatives in the financial press (e.g., MacDonald, 1997), financial statement users may view derivatives differently than other types of financial instruments. For example, recent research by Koonce et al. (2001) indicates that investors consider derivatives riskier than non-derivatives, even when the underlying economic exposure is held constant. Since derivatives have the potential to be highly risky investments that may lead to large losses for a company, analysts may view information on derivatives as important regardless of where it is divulged. In the current study, an experimental setting is used to focus on whether individual line item disclosure versus footnote disclosure of derivatives information affects financial analysts' use and evaluation of that information. Based on the aforementioned research in psychology and accounting which suggests that format may affect how information is used several hypotheses emerge:

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| <i>H1:</i> | <i>Financial analysts' P/E ratios will be more likely to include unrealized losses or gains on derivatives when such information is disclosed as a separate line item in the income statement rather than solely in footnotes.</i> |
| <i>H2:</i> | <i>Financial analysts will be more likely to list losses or gains on derivatives as a factor that affected their investment recommendation when such information is disclosed as a separate line item in the income statement rather than solely in footnotes.</i> |

Research in psychology has suggested that individuals have a tendency to weigh losses more heavily than gains (Kahneman & Tversky, 1979). For example, based on the results of fourteen experiments, Gneezy and Potters (1997) conclude that individuals are more sensitive to losses than gains, and become more risk averse the more frequently returns are evaluated. Research in economics involving theoretical simulations suggests that investors weigh losses about twice as heavily as gains when they evaluate their portfolios (Benartzi & Thaler, 1995). In accounting research, Rapaccioli and Schiff (1991) found evidence that managers are more likely to report gains on sales of business segments "above the line" in income from continuing operations, and losses on business segments "below the line" in income from discontinued operations. In addition, Revsine (1991) suggests that managers prefer "loose" financial reporting standards that allow them to defer recognition of investment gains in order to offset current operating losses. Therefore, financial

analysts may be more skeptical of gains on derivatives than losses. Moreover, Koonce et al. (2001) found that investors place more weight on loss probabilities and outcomes than they do on gain probabilities and outcomes. Similarly, analysts may weigh unrealized losses on derivatives more heavily than unrealized gains on derivatives. However, there has been relatively little research devoted to the issue of analysts' evaluation of unrealized gains versus unrealized losses, particularly with regard to derivatives. It is possible that analysts may view any information on derivative holdings negatively, even if there is an unrealized gain. This study will use the verbal protocol data to evaluate if analysts view unrealized gains and losses on derivatives favorably, unfavorably, or neutrally. Two hypotheses follow:

H3: Financial analysts' P/E ratios will be more likely to include unrealized losses on derivatives than unrealized gains on derivatives, regardless of presentation format.

H4: Financial analysts will be more likely to list unrealized losses on derivatives as a factor that affected their investment recommendation than unrealized gains, regardless of presentation format.

METHODS

An experiment was used to investigate the effect of financial statement versus footnote disclosure of unrealized derivatives gains/losses on financial analysts' use of information about derivatives. Participants were 81 buy-side equity analysts, portfolio managers, and business managers. On average, participants had 9.88 years of financial statement analysis experience (standard deviation 10.79 years). Participants were randomly assigned to one of four experimental conditions (income statement/loss, footnote/loss, income statement/gain, footnote/gain) described below. The Appendix contains the complete income statement/loss and income statement/gain conditions, along with the pertinent changes contained in the footnote/loss and footnote/gain conditions.

The experimental materials for this study were developed with the assistance of a certified financial analyst. The materials consisted of three years of summary income statement and balance sheet information for a hypothetical company, footnotes to the financial statements, a P/E ratio calculation, an investment recommendation task, and a post-experimental questionnaire. Earnings projections for the company and its stock price were also included in the case materials. Finally, the price-earnings ratio for the industry was provided in the materials to give participants a basis of comparison when making their investment recommendation. The company-specific information in the case was based on an actual company. None of the participants recognized the identity of the company. Financial statement data was held constant across conditions, except for the gain or loss on derivatives. The company was subject to interest rate risk, which is one of the most common risks faced by companies that hold derivatives (Roulstone, 1999).

Since the data gathering began before issuance of SFAS 133 and the dates of the comparative financial statements are 1993-1995, the disclosures do not attempt to simulate exactly the disclosures required under that statement. However, they do reflect directly on the requirements of SFAS 133. In practice we can expect many, if not most, companies to include the unrealized gains and losses in an unspecified "other" category (Roulstone, 1999). The effect of this would be very similar to our "footnote only" condition, since analysts would need to refer to a footnote to separate the derivative results from other non-operating items. In fact, since only net derivative gains and losses must be disclosed under SFAS 133, our "footnote only" condition still gives more specific information than would be required for a company with more than one derivative instrument on its balance sheet. Although SFAS 133 does not require it explicitly, truly material net gains or losses from non-hedge derivatives might be reported in a separate line item on the income statement in much the same way as our "separate line item" condition.

After reviewing the financial statements and footnotes, participants were asked to calculate price-earnings (P/E) ratios for the company for the last three years, compare the company's P/E ratio for the most recent year with the industry average, make an investment recommendation (buy, hold, sell), and list factors in order of importance that affected their recommendation. Finally, we gathered demographic information from participants with a post-experimental questionnaire.

The first independent variable was the financial reporting format of the derivative information (FORMAT). This variable was assigned a value of 1 if the unrealized derivative loss/gain was disclosed as a separate line item in the income statement, and 0 if it was disclosed only in a footnote. The second independent variable was whether there was a gain or a loss on the value of derivative investments (CHANGE). This variable was assigned a value of 1 if there was a loss on derivatives, and 0 if there was a gain.

The first dependent variable, PEWD, was assigned a value of 1 if the derivative loss or gain was included in the analyst's P/E ratio, and 0 if the derivative loss/gain was not included in the analyst's P/E ratio. The second dependent variable, FACTOR, was assigned a value of 1 if the derivative gain or loss was included in analysts' list of factors that affected their investment recommendation, and 0 if the derivative was not on the list.

Concurrent verbal protocols are generally considered to be the most appropriate method to obtain evidence of what subjects are thinking about as they perform a task (Ericsson & Simon, 1984; Bedard & Biggs, 1991). Verbal protocols were collected from a subset of 17 participants at their place of business to further examine the way they processed the information about derivatives. These participants were evenly divided among the four experimental conditions and asked to "think aloud" as they performed the task. A researcher was present to operate a tape recorder and remind the participants to think aloud.

Verbal protocols were coded using the following procedures. First, audio tapes of verbalizations were transcribed into phrases. Next, one author and a graduate student with public accounting experience independently coded the transcribed verbal protocols. Differences in coding

were reconciled between the coders. The protocols were first examined to identify all statements pertaining to derivatives in order to assess if analysts acquired the derivatives information. Then, to further examine analysts' information processing about derivatives, statements about derivatives were coded by type: factual, evaluations, inferences or queries. Statements coded as factual simply expressed that the company had derivatives (i.e., "the company engaged in some interest rate swaps"). Statements coded as evaluations expressed an opinion about the derivatives (i.e., "the only thing that concerns me is the unrealized loss on derivatives"). Evaluations were further coded as unfavorable (see above), or not important ("unrealized gains on derivative transactions, who cares?"). Favorable evaluations regarding derivatives were searched for but not found. Statements coded as inferences involved a supposition about the derivatives (i.e., "I guess it must be the gain is due to derivative transactions"). Finally, statements coded as queries expressed a desire for more information about the derivatives (i.e., "I would call the company and find out why their unrealized loss...happened and would it happen again").

RESULTS

The first hypothesis asks if financial analysts' P/E ratios will be more likely to include losses or gains on derivatives when such information is disclosed in the income statement rather than in the footnotes. As shown in Panel A of Table 1, approximately 71 percent of analysts in the income statement disclosure condition included the derivative gain/loss in their P/E ratios, as opposed to 5 percent of the analysts in the footnote disclosure condition (Chi square = 37.0; $p = 0.001$). Multiple regression analysis was used to determine if these results are significantly different from chance (Panel B of Table 1). FORMAT is statistically significant ($t = 8.10$; $p = 0.00001$), indicating that analysts in the income statement condition included the derivative loss/gain in their P/E ratios significantly more often than analysts in the footnote condition.

The second hypothesis asks if financial analysts will be more likely to list losses or gains on derivatives as a factor that affected their investment recommendation when such information is disclosed in the income statement rather than in footnotes. As shown in Panel A of Table 2, approximately 29 percent of analysts in the income statement disclosure condition included the derivative gain/loss in their list of factors that affected their investment recommendation, as opposed to 10 percent of the analysts in the footnote disclosure condition (Chi square = 4.74; $p = 0.02$). As shown on Panel B of Table 2, FORMAT is significant ($t = 1.94$; $p = 0.028$), indicating that analysts' in the income statement condition included the derivative loss/gain in their list of investment recommendation factors more often than analysts' in the footnote condition.

The third hypothesis asks if financial analysts' P/E ratios will be more likely to include losses on derivatives than gains on derivatives. As shown in Panel A of Table 1, 51 percent of financial analysts included unrealized derivative losses in their P/E ratios, as compared to 25 percent of financial analysts who included unrealized derivative gains in their P/E ratios (chi square = 5.89;

$p = 0.01$). It is interesting to note that none of the analysts in the footnote/gain condition brought the unrealized gain into their P/E calculation, while 44 percent of those in the income statement/gain condition took out the unrealized gain before calculating their P/Es. As reported in Panel B of Table 1, CHANGE is significant ($t = 2.23$; $p = 0.014$), indicating that analysts included derivative losses in their P/E ratios significantly more often than derivative gains.

Table 1: Analysis of Financial Analysts' P/E Ratios			
Panel A: Percentage of Analysts Who Included			
Derivative Gain/Loss in Their P/E Ratios			
Format	Loss	Gain	Total
Income Statement	0.83	0.56	0.71
	n = 23	n = 18	n = 41
Footnote	0.11	0.00	0.05
	n = 18	n = 22	n = 40
Total	0.51	0.25	0.38
	n = 41	n = 40	n = 81
Panel B: Multiple Regression Analysis of Analysts' P/E ratios			
Model: $pewd = f(\text{Format}, \text{Change})$			
F-Statistic = 38.2 P-Value = 0.00001 Adjusted R-Square = 0.49			
Variable	Beta	T-Statistic	P-Value
Format	0.65	8.10	0.00001
Change	0.18	2.23	0.014
Key:			
Pewd = 1 if derivative loss/gain included in P/E ratio, 0 if derivative loss/gain not included in P/E ratio			
Format = 1 if derivative loss/gain reported in the income statement, 0 if derivative loss/gain in footnote			
Change = 1 if derivative loss, 0 if derivative gain			

The fourth hypothesis asks if financial analysts will be more likely to list losses on derivatives as a factor that affected their investment recommendation than gains. As shown in Panel A of Table 2, approximately 29 percent of analysts in the loss condition included the derivative in their list of factors that affected their investment recommendation, as opposed to 10 percent of the analysts in the gain condition ($\chi^2 = 4.74$; $p = 0.02$). Interestingly, analysts appeared equally likely to include the derivative information in their list based on FORMAT (whether or not it was shown in the income statement or a footnote) and CHANGE (whether it was a gain or a loss). As reported in Panel B of Table 2, CHANGE is significant ($t = 1.94$; $p = 0.028$), indicating that analysts

in the loss condition included the derivative in their list of investment recommendation factors significantly more often than analysts' in the gain condition.

Table 2: Analysis of Financial Analysts' Investment Recommendation Factors			
Panel A: Percentage of Analysts Who Included			
Derivative Gain/Loss in Investment Recommendation Factors			
Format	Loss	Gain	Total
Income Statement	0.39	0.17	0.29
	n = 23	n = 18	n = 41
Footnote	0.17	0.05	0.10
	n = 18	n = 22	n = 40
Total	0.29	0.10	0.20
	n = 41	n = 40	n = 81
Panel B: Multiple Regression Analysis of Analysts' Investment Recommendation Factors			
Model: FACTOR = f (FORMAT, CHANGE)			
F-Statistic = 4.31 P-Value = 0.01 Adjusted R-Square = 0.079			
Variable	Beta	T-Statistic	P-Value
FORMAT	0.17	1.94	0.028
CHANGE	0.17	1.94	0.028
Key:			
FACTOR	= 1 if derivative loss/gain included analysts' list of factors that affected their investment recommendation, 0 if derivative loss/gain not included in the list		
FORMAT	= 1 if derivative loss/gain reported in the income statement, 0 if derivative loss/gain in footnote		
CHANGE	= 1 if derivative loss, 0 if derivative gain		

The verbal protocols of 17 participants were analyzed to further investigate if reporting losses or gains on derivatives in the income statement, as opposed to a footnote, affect financial analysts' use of derivatives information. First, to examine the effect of format on analysts' information acquisition, the number of participants who did not mention the derivative at all was examined. Three out of eight analysts in the footnote conditions did not acquire the derivative information, as opposed to one out of nine analysts in the income statement conditions. Therefore, the majority (three out of four) of participants who made no mention of the derivative were in the footnote conditions. While almost half of the participants in the footnote conditions missed the derivative, only one analyst in the income statement conditions did not notice the derivative. Interestingly, all of the analysts in the income statement/loss condition acquired the derivatives information, whereas at least one member of each of the other groups failed to consider that information. Although these numbers are small, participants appeared more likely to notice the

information on derivatives when it was shown as a separate line item in the financial statements, providing further and more direct evidence that disclosing information on derivatives in footnotes may fail to make that information readily available and clear to financial statement users.

Second, to gain further insight into analysts' reactions to the derivative information, statements about derivatives were coded as facts, evaluations, queries or inferences. The results are shown in Table 3. The average number of statements coded as facts, evaluations, inferences and queries are displayed on Panel A of the table by condition (IS/Gain, IS/Loss, Footnote/Gain, Footnote/Loss). Surprisingly, Panel B shows that negative evaluations of derivatives were made more often in the footnote conditions as opposed to the financial statement conditions (mean 0.25 vs. 0.11), suggesting that analysts may have been more suspicious of management intentions when derivative information was disclosed in a footnote. In contrast, the income statement/gain condition was the only condition where there were no negative evaluations of the derivatives, perhaps because the information was clearly disclosed and gains were viewed more positively than losses.

As shown on Panel C, for statements coded as facts, it appears that participants in the loss conditions mentioned the derivatives about twice as often as participants in the gain conditions (1.11 vs. 0.5 statements on average). Consistent with the idea that losses are weighed more heavily than gains, the derivatives were deemed unimportant more often in the gain conditions as opposed to the loss conditions (0.5 vs. 0.11 on average). However, no favorable evaluations of derivatives were found in any of the conditions, suggesting that even when there was an unrealized gain on derivatives, analysts' reactions were neutral at best. This finding suggests analysts may view unrealized gains on derivatives as more inherently risky than unrealized gains on other types of financial instruments. Results were similar across conditions with regard to inferences. Participants in the income statement/loss condition made the most queries on average (1.4), almost twice as many as any other group (0.25, 0.5, 0.75 respectively), providing further evidence to suggest that participants may have been more concerned about losses on derivatives than gains, particularly when such losses were clearly displayed on the income statement.

Third, another analysis of the protocols was conducted excluding those subjects who failed to acquire the derivatives information. Since the majority of analysts who did not consider the derivatives information were in the footnote conditions, the previous results may have been overstated for the income statement conditions, and understated for the footnote conditions. The results of this analysis are shown in Table 4. Similar to the previous results, Panel B shows that negative evaluations of derivatives were made more often in the footnote conditions as opposed to the financial statement conditions (mean 0.4 vs. 0.125), and Panel C shows that the derivatives were deemed unimportant more often in the gain conditions as opposed to the loss conditions (0.67 vs. 0.14 on average). Also, Panel C shows for statements coded as facts, it appears that participants in the loss conditions mentioned the derivatives about twice as often as participants in the gain conditions (1.42 vs. 0.67 statements on average).

Table 3: Results of Verbal Protocol Analysis						
Panel A: Average Number of Statements by Condition						
Statement Types ^a						
Condition ^b	Fact	Eval-UF	Eval-NI	Inference	Query	Total
IS/Loss n = 5	1.00	0.20	0.20	0.60	1.40	3.40
Foot/Loss n = 4	1.25	0.25	0.00	0.50	0.25	2.25
IS/Gain n = 4	0.50	0.00	0.50	0.50	0.50	2.25
Foot/Gain n = 4	0.50	0.25	0.50	0.75	0.75	2.75
Overall n = 17	0.82	0.18	0.29	0.59	0.76	2.71
Panel B: Income Statement vs. Footnote						
Statement Types ^a						
Condition ^b	Fact	Eval-UF	Eval-NI	Inference	Query	Total
IS n = 9	0.78	0.11	0.33	0.56	1.00	2.88
Footnote n = 8	0.88	0.25	0.25	0.63	0.50	2.50
Panel C: Loss vs. Gain						
Statement Types ^a						
Condition ^b	Fact	Eval-UF	Eval-NI	Inference	Query	Total
Loss n = 9	1.11	0.22	0.11	0.56	0.89	2.89
Gain n = 8	0.50	0.125	0.50	0.63	0.63	2.50
Key:						
^a Statement Types:						
Fact = factual statement about derivatives (i.e., "the company engaged in some interest rate swaps").						
Eval-UF = unfavorable evaluation of the derivatives (i.e., "the only thing that concerns me is the unrealized loss on derivatives").						
Eval-NI = derivative evaluated as unimportant (i.e., "unrealized gains on derivative transactions, who cares?").						
Inference = a supposition about the derivatives (i.e., "I guess it must be the gain is due to derivative transactions").						
Query = expressed a desire for more information about the derivatives (i.e., "I would call the company and find out why their unrealized loss...happened and would it happen again")						
^b Conditions:						
IS/Loss = Loss on derivatives shown as a line item on Income Statement						
IS/Gain = Gain on derivatives shown as a line item on Income Statement						
Foot/Loss = Loss on derivatives disclosed in a footnote						
Foot/Gain = Gain on derivatives disclosed in a footnote						

Table 4: Results of Verbal Protocol Analysis: Excluding Analysts Who Did Not Acquire the Derivatives Information						
Panel A: Average Number of Statements by Condition						
Statement Types ^a						
Condition ^b	Fact	Eval-UF	Eval-NI	Inference	Query	Total
IS/Loss n = 5	1.00	0.20	0.20	0.60	1.40	3.40
Foot/Loss n = 2	2.5	0.50	0.00	1.00	0.50	4.50
IS/Gain n = 3	0.67	0.00	0.67	0.67	0.67	3.00
Foot/Gain n = 3	0.67	0.33	0.67	1.00	1.00	3.67
Overall n = 13	1.08	0.23	0.38	0.77	1.00	3.53
Panel B: Income Statement vs. Footnote						
Statement Types ^a						
Condition ^b	Fact	Eval-UF	Eval-NI	Inference	Query	Total
IS n = 8	0.875	0.125	0.375	0.625	1.125	3.25
Footnote n = 5	1.4	0.40	0.40	1.00	0.80	4.00
Panel C: Loss vs. Gain						
Statement Types ^a						
Condition ^b	Fact	Eval-UF	Eval-NI	Inference	Query	Total
Loss n = 7	1.43	0.29	0.14	0.71	1.14	3.71
Gain n = 6	0.67	0.17	0.67	0.83	0.83	3.33
Key:						
^a Statement Types:						
Fact = factual statement about derivatives (i.e., "the company engaged in some interest rate swaps").						
Eval-UF = unfavorable evaluation of the derivatives (i.e., "the only thing that concerns me is the unrealized loss on derivatives").						
Eval-NI = derivative evaluated as unimportant (i.e., "unrealized gains on derivative transactions, who cares?").						
Inference = a supposition about the derivatives (i.e., "I guess it must be the gain is due to derivative transactions").						
Query = expressed a desire for more information about the derivatives (i.e., "I would call the company and find out why their unrealized loss...happened and would it happen again")						
^b Conditions:						
IS/Loss = Loss on derivatives shown as a line item on Income Statement						
IS/Gain = Gain on derivatives shown as a line item on Income Statement						
Foot/Loss = Loss on derivatives disclosed in a footnote						
Foot/Gain = Gain on derivatives disclosed in a footnote						

However, Panel A shows that factual statements about the derivatives were mentioned most often in the footnote/loss condition (mean 2.5) and this condition also had the highest number of statements about derivatives overall (mean 4.5). In addition, Panel B shows that analysts in the footnote conditions made more factual statements (mean 4.00 vs. 3.25), unfavorable evaluations (mean 0.4 vs. 0.125), inferences (mean 1.00 vs. 0.625), and comments about the derivatives overall (mean 4.00 vs. 3.25) than analysts in the income statement conditions. Therefore, it appears that if analysts in the footnote conditions acquired the derivatives information, they were likely to give it as much as, if not more consideration than analysts in the income statement conditions, and may have judged it more harshly. These findings shed light on the results of previous research (e.g., Bernard and Schipper 1994), which has raised questions about whether financial statement users fail to acquire information in footnotes, or evaluate it differently than information in financial statements. The results of the verbal protocols suggest that, after excluding those analysts who did not acquire the derivatives information, the remaining analysts may have actually given greater consideration to the derivatives information, and evaluated it more negatively, when it was disclosed in a footnote rather than the income statement.

CONCLUSIONS

This study investigates whether disclosure of an unrealized gain or loss on derivatives as a separate line item in the income statement, as opposed to in a footnote, affects financial analysts' information processing. Specifically, the study examines if the information presentation format of the unrealized derivative gain or loss influences whether the gain or loss will be included in analysts' P/E ratios. The results of this study indicate that when the derivative gain/loss was included as a separate line item in the income statement, analysts included the gain/loss significantly more often in their P/E ratios, and were more likely to list the derivative as a factor affecting their investment recommendation, than when the derivative gain/loss was disclosed only in a footnote. The findings of this study also indicate that analysts included losses on derivatives in their P/E ratios significantly more often than gains, and were more likely to list the derivative as a factor affecting their investment recommendation when there was a loss as opposed to a gain.

Previous research has speculated that financial statement users may: a) fail to acquire information in footnotes, or b) place less weight on information if it was disclosed in the footnotes as opposed to the financial statements. The results of verbal protocol analysis from this study provide evidence that participants appeared less likely to consider information regarding derivatives when it was contained in the footnotes. However, after excluding those analysts who did not acquire the derivatives information, the remaining analysts may have actually given greater consideration to the derivatives information, and evaluated it more negatively, when it was disclosed in a footnote. Therefore, these results suggest that previous research findings may have been driven more by financial statement users failing to acquire information in footnotes, rather than placing less weight

on that information. Although the verbal protocol results were based on a small sample size, they echo the findings of the larger sample regression results, and provide additional and more direct evidence that analysts may be more likely to consider disclosures on derivatives when they are displayed in the financial statements rather than the footnotes.

Currently, both the FASB and IASC are working toward reporting fair-value recognition of all financial instruments in the financial statements (FASB, 2001; JWG, 2000). This study responds to calls for more research on disclosure and the potential effects of changes in accounting rules (Johnson, 1992; Beresford & Johnson, 1995; Hussein & Rosman, 1997). The results of this study have implications for accounting standard setters, accounting educators, auditors, and users and preparers of financial statements. The findings of this study suggest that financial analysts will be more likely to include changes in the value of derivatives in their P/E ratios when this information is reported as a separate line item in the income statement as opposed to in a footnote. Moreover, analysts' investment recommendations may be more likely to be influenced by changes in value of derivatives when such information is included as a separate line item in the financial statements, particularly when there is a loss. However, this study also shows that many analysts, when provided with sufficient, clearly presented information, will choose to exclude unrealized derivative gains from their P/E ratios. This suggests that when financial instruments are reported at fair value with unrealized gains and losses reported in income, net reporting of gains and losses, along with reporting of those gains and losses in other than separate line item format, may frustrate the intent of providing statement readers with more useful information.

It is also important to examine the relevance of disclosure-type research in the context of the efficient markets hypothesis. As Kothari (2001, 110) points out: "Choice between disclosure in footnotes and recognition in financial statements... is less contentious from the perspective of its effect on security prices in an efficient market. Naturally, the opposite would be true... if markets were not efficient." Therefore, if capital markets are in fact efficient in a semi-strong form sense, our results have far less salience. However a consensus appears to be emerging in the financial economics and accounting literature that capital markets are far less efficient than previously thought. Kothari (2001, 109) observes: "The belief that 'price convergence to value is a much slower process than prior evidence suggests' (Frankel & Lee, 1998, 315) has acquired currency among leading academics, spurring research on fundamental analysis". If fundamental analysis (including ratio analysis) does have a role to play in price discovery, then our results suggest that the outcome of the fundamental analysis depends on the disclosure format. We believe that experimental studies (such as ours) complement capital markets research directions suggested by Kothari (2001), Lee (2001) and others.

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Appendix

Experimental Instrument (Format slightly modified to match publication specifications.)

(Note: bold and italics added to highlight line item on derivative transactions to assist reader; no such highlighting was done in the experimental version)

Case A: Losses on Derivatives accrued in Financial Statements.

ACME INC.

The following summaries set forth selected financial data for the Company for each of the three years in the period ended December 31, 1995. Selected financial data should be read in conjunction with selected notes to accounts and other industry data provided.

Statement of Operations Data (Dollars and shares in thousands except per share amounts)

	Years Ended December 31		
	1995	1994	1993
Revenues and Gains			
Net Sales	\$ 546,165	\$ 484,118	\$ 522,166
Royalty income	761	1,705	2,148
Interest income	949	1,023	342
Total revenues and gains	547,875	486,846	524,656
Expenses and Losses			
Cost of products sold	277,109	247,340	252,217
Selling, distribution and administrative expenses	227,863	218,642	194,872
Interest expense	7,737	7,803	9,380
<i>Unrealized loss on derivative transactions/settlement, net</i>	<i>5,689</i>	<i>0</i>	<i>0</i>
Income (loss) before income taxes	29,477	13,061	68,187
Income taxes	11,909	5,076	26,303
Net Income (loss)	17,568	7,985	41,884
Net Income (loss) per share	\$1.09	\$ 0.50	\$ 2.61
Dividends per share	\$ 0.40	\$ 0.39	\$ 0.36
Average common shares	16,103	16,104	16,039

Selected Financial Data (Dollars and shares in thousands except per share amounts)

	December 31		
	1995	1994	1993
Plant and equipment, net	\$ 116,900	\$ 112,712	\$ 110,769
Total assets	574,759	501,104	544,261
Long-term debt	74,365	70,175	71,079
Debt due within one year	66,187	31,911	71,208
Shareholder's equity	315,397	303,341	300,743
Working Capital	211,509	224,261	215,011
Capital expenditures	31,049	30,970	31,736
Market Price per share	23.00	8.80	37.50
Industry Price/Earnings Ratio	19.20	17.60	14.30

Growth Projections: Acme company's operating earnings are expected to grow at the industry average for the foreseeable future.

Selected Notes to Financial Data
Years Ended December 31, 1995, 1994, 1993

Cash and equivalents: Cash and equivalents are stated at cost. Cash equivalents include time deposits, money market instruments and short-term debt obligations with original maturities of three months or less. The carrying amount approximates fair value because of the short maturity of these instruments.

Inventories: Inventories are stated at the lower of cost (first-in, first-out) or market.

Plant and equipment: Plant and equipment are stated at cost. Plant and equipment, except for leasehold improvements, are depreciated over their related estimated useful lives, using the straight-line method. Leasehold improvements are amortized over the terms of the respective leases, using the straight-line method. Expenditures for maintenance and repairs are charged to operations currently; renewals and betterments are capitalized.

Other assets: Other assets include deferred and prepaid costs, goodwill and other intangibles. Deferred and prepaid costs represent costs incurred relating to long-term customer sales agreements. Deferred and prepaid costs are amortized ratably over the terms of agreements, generally three to six years. Goodwill and other intangibles are amortized over periods ranging from three to twenty years, using the straight-line method.

Interest rate swap agreements: The Company periodically enters into interest rate swap or derivative transactions with the intent to manage the interest rate sensitivity of portions of its debt. The difference between the amount of interest paid and the amount of interest received under interest rate swap agreements due to changing interest rates is charged or credited to interest expense over the life of the agreements. All interest rate swaps are marked-to-market, i.e. the unrealized gains/losses on outstanding agreements are recognized in the income statement and stockholders equity. At December 31, 1995, the Company had four outstanding rate swap/derivative positions with a total notional amount of \$ 96 million. The fair value of interest rate swaps (used for risk management purposes) is the estimated amount that the company would receive or pay to terminate the swap agreements at the reporting date.

Case B: Losses on Derivatives disclosed in a footnote (selected information).

(Note: some of the information held constant between conditions is omitted).

Statement of Operations Data (Dollars and shares in thousands except per share amounts)

	Years Ended December 31		
	1995	1994	1993
Revenues and gains			
Net Sales	\$ 546,165	\$ 484,118	\$ 522,166
Royalty income	761	1,705	2,148
Interest income	949	1,023	342
Total revenues	<u>547,875</u>	<u>486,846</u>	<u>524,656</u>
Expenses and Losses			
Cost of products sold	277,109	247,340	252,217
Selling, distribution and administrative expenses	227,863	218,642	194,872
Interest expense	7,737	7,803	9,380
Income (loss) before income taxes	35,166	13,061	68,187
Income taxes	14,209	5,076	26,303
Net Income (loss)	<u>20,957</u>	<u>7,985</u>	<u>41,884</u>
Net Income (loss) per share	<u>\$ 1.30^z</u>	<u>\$ 0.50</u>	<u>\$ 2.61</u>
Dividends per share	<u>\$ 0.40</u>	<u>\$ 0.39</u>	<u>\$ 0.36</u>
Average common shares	<u>16103</u>	<u>16104</u>	<u>16039</u>

*Selected Notes to Financial Data**Years Ended December 31, 1995, 1994, 1993*

(Note: Bold and italics added to show differences between Case A notes and Case B notes)

Interest rate swap agreements: The Company periodically enters into interest rate swap or derivative transactions with the intent to manage the interest rate sensitivity of portions of its debt. The difference between the amount of interest paid and the amount of interest received under interest rate swap agreements due to changing interest rates is charged or credited to interest expense over the life of the agreements. At December 31, 1995, the Company had four outstanding rate swap/derivative positions with a total notional amount of \$ 96 million. The fair value of interest rate swaps (used for risk management purposes) is the estimated amount that the company would receive or pay to terminate the swap agreements at the reporting date. *Based on the estimated cost of terminating these positions, the Company has an unrealized net loss at December 31, 1995 of \$ 5.689 million.*

Case C: Gains on Derivatives accrued in Financial Statements.

(Note: bold and italics added to highlight line item on derivative transactions.)

ACME INC.

The following summaries set forth selected financial data for the Company for each of the three years in the period ended December 31, 1995. Selected financial data should be read in conjunction with selected notes to accounts and other industry data provided.

Statement of Operations Data (Dollars and shares in thousands except per share amounts)

	Years Ended December 31		
	1995	1994	1993
Revenues and Gains			
Net Sales	\$ 546,165	\$ 484,118	\$ 522,166
Royalty income	761	1,705	2,148
Interest income	949	1,023	342
<i>Unrealized gain on derivative transactions/settlement, net</i>	5,689	0	0
Total revenues and gains	553,564	486,846	524,656
Expenses and Losses			
Cost of products sold	277,109	247,340	252,217
Selling, distribution and administrative expenses	227,863	218,642	194,872
Interest expense	7,737	7,803	9,380
Income (loss) before income taxes	40,855	13,061	68,187
Income taxes	16,505	5,076	26,303
Net Income (loss)	24,350	7,985	41,884
Net Income (loss) per share	\$ 1.51	\$ 0.50	\$ 2.61
Dividends per share	\$ 0.40	\$ 0.39	\$ 0.36
Average common shares	16,103	16,104	16,039
Selected Financial Data (Dollars and shares in thousands except per share amounts)			
Plant and equipment, net	\$ 116,900	\$ 112,712	\$ 110,769
Total assets	581,541	501,104	544,261
Long-term debt	74,365	70,175	71,079
Debt due within one year	66,187	31,911	71,208
Shareholder's equity	322,179	303,341	300,743
Working Capital	218,291	224,261	215,011
Capital expenditures	31,049	30,970	31,736
Market Price per share	27.00	8.80	37.50
Industry Price/Earnings Ratio	19.20	17.60	14.30

Growth Projections: Acme company's operating earnings are expected to grow at the industry average for the foreseeable future.

Selected Notes to Financial Data
Years Ended December 31, 1995, 1994, 1993

Cash and equivalents: Cash and equivalents are stated at cost. Cash equivalents include time deposits, money market instruments and short-term debt obligations with original maturities of three months or less. The carrying amount approximates fair value because of the short maturity of these instruments.

Inventories: Inventories are stated at the lower of cost (first-in, first-out) or market.

Plant and equipment: Plant and equipment are stated at cost. Plant and equipment, except for leasehold improvements, are depreciated over their related estimated useful lives, using the straight-line method. Leasehold improvements are amortized over the terms of the respective leases, using the straight-line method. Expenditures for maintenance and repairs are charged to operations currently; renewals and betterments are capitalized.

Other assets: Other assets include deferred and prepaid costs, goodwill and other intangibles. Deferred and prepaid costs represent costs incurred relating to long-term customer sales agreements. Deferred and prepaid costs are amortized ratably over the terms of agreements, generally three to six years. Goodwill and other intangibles are amortized over periods ranging from three to twenty years, using the straight-line method.

Interest rate swap agreements: The Company periodically enters into interest rate swap or derivative transactions with the intent to manage the interest rate sensitivity of portions of its debt. The difference between the amount of interest paid and the amount of interest received under interest rate swap agreements due to changing interest rates is charged or credited to interest expense over the life of the agreements. All interest rate swaps are marked-to-market, i.e. the unrealized gains/losses on outstanding agreements are recognized in the income statement and stockholders equity. At December 31, 1995, the Company had four outstanding rate swap/derivative positions with a total notional amount of \$ 96 million. The fair value of interest rate swap (used for risk management purposes) is the estimated amount that the company would receive or pay to terminate the swap agreements at the reporting date.

Case D: Gains in Derivatives disclosed in a footnote (selected information).

(Note: some of the information held constant between conditions is omitted).

Statement of Operations Data (Dollars and shares in thousands except per share amounts)

	Years Ended December 31		
	1995	1994	1993
Revenues and gains			
Net Sales	\$ 546,165	\$ 484,118	\$ 522,166
Royalty income	761	1,705	2,148
Interest income	949	1,023	342
Total revenues	547,875	486,846	524,656
Expenses and Losses			
Cost of products sold	277,109	247,340	252,217
Selling, distribution and administrative expenses	227,863	218,642	194,872
Interest expense	7,737	7,803	9,380
Income (loss) before income taxes	35,166	13,061	68,187
Income taxes	14,209	5,076	26,303
Net Income (loss)	20,957	7,985	41,884
Net Income (loss) per share	\$ 1.30	\$ 0.50	\$ 2.61
Dividends per share	\$ 0.40	\$ 0.39	\$ 0.36
Average common shares	16103	16104	16039

Selected Notes to Financial Data

Years Ended December 31, 1995, 1994, 1993

(Note: Bold and italics added to show differences between Case C notes and Case D notes)

Interest rate swap agreements: The Company periodically enters into interest rate swap or derivative transactions with the intent to manage the interest rate sensitivity of portions of its debt. The difference between the amount of interest paid and the amount of interest received under interest rate swap agreements due to changing interest rates is charged or credited to interest expense over the life of the agreements. At December 31, 1995, the Company had four outstanding rate swap/derivative positions with a total notional amount of \$ 96 million. The fair value of interest rate swap (used for risk management purposes) is the estimated amount that the company would receive or pay to terminate the swap agreements at the reporting date. *Based on the estimated cost of terminating these positions, the Company has an unrealized net gain at December 31, 1995 of \$ 5.689 million.*

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Accounting Editor

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Finance Editor

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CONTENTS

LETTER FROM THE EDITORS	vi
ANALYSTS' RESPONSES TO ALTERNATIVE METHODS OF REPORTING UNREALIZED GAINS AND LOSSES ON DERIVATIVES	1
James L. Bierstaker, Villanova University Satish Thosar, University of Technology, Sydney David N. Wiest, University of Hartford	
REEXAMINATION OF THE FIRM VALUE AND WEIGHTED AVERAGE COST OF CAPITAL CONCEPT	29
Confidence W. Amadi, Florida A&M University	
THE TAX REFORM ACT OF 1986 AND THE HOUSING AFFORDABILITY CRISIS: IS IT TIME FOR A HOME MORTGAGE INTEREST CREDIT?	39
Christopher L. Brown, Western Kentucky University William R. Simpson, Southeastern Louisiana University	
MINIMIZING THE EXPECTATION GAP	51
Lisa N. Bostick, The University of Tampa Michael S. Luehlfing, Louisiana Tech University	
DEBT COVENANT SELECTION: AN EMPIRICAL EXAMINATION	63
Fonda L. Carter, Columbus State University Linda H. Hadley, Columbus State University Patrick T. Hogan, Columbus State University	

THE EFFECTS OF THE TAX REFORM ACT OF 1986 ON BUSINESS FAILURE MOMENTUM	77
Askar H. Choudhury, Illinois State University Steven V. Campbell, University of Idaho	
SIMILARITIES AND DIFFERENCES BETWEEN THE SEXES IN FINANCIAL ANALYSIS AND SELF-CONFIDENCE	89
Robert L. Webster, Ouachita Baptist University T. Selwyn Ellis, Louisiana Tech University Barry J. Bryan, Ouachita Baptist University	
IS FRAUD A PROBLEM IN GOVERNMENTAL ENTITIES?	101
Sharron M. Graves, Stephen F. Austin State University Treba Lilley Marsh, Stephen F. Austin State University Miguel Lozano III, Stephen F. Austin State University	
AN EXAMINATION OF INDUSTRIAL RELATEDNESS, POTENTIAL INDUSTRIAL SYNERGIES, AND MERGER PREMIUMS IN LARGE CORPORATE MERGER TRANSACTIONS	111
Natalie Tatiana Churyk, Northern Illinois University Richard E. Baker, Northern Illinois University	

LETTER FROM THE EDITORS

Welcome to the *Academy of Accounting and Financial Studies Journal*, an official journal of the Allied Academies, Inc., a non profit association of scholars whose purpose is to encourage and support the advancement and exchange of knowledge, understanding and teaching throughout the world. The *AAFSJ* is a principal vehicle for achieving the objectives of the organization. The editorial mission of this journal is to publish empirical and theoretical manuscripts which advance the disciplines of accounting and finance.

Dr. Janet Dye, University of Alaska Southeast, is the Accountancy Editor and Dr. Denise Woodbury, Weber State University, is the Finance Editor. Their joint mission has been to make the *AAFSJ* better known and more widely read.

As has been the case with the previous issues of the *AAFSJ*, the articles contained in this volume have been double blind refereed. The acceptance rate for manuscripts in this issue, 25%, conforms to our editorial policies.

The Editors work to foster a supportive, mentoring effort on the part of the referees which will result in encouraging and supporting writers. They will continue to welcome different viewpoints because in differences we find learning; in differences we develop understanding; in differences we gain knowledge and in differences we develop the discipline into a more comprehensive, less esoteric, and dynamic metier.

Information about the Allied Academies, the *AAFSJ*, and the other journals published by the Academy, as well as calls for conferences, are published on our web site. In addition, we keep the web site updated with the latest activities of the organization. Please visit our site and know that we welcome hearing from you at any time.

Janet Dye, University of Alaska Southeast

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