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Strategic Benchmarks in Earnings Announcements: The Selective Disclosure of Prior-Period Earnings Components

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ABSTRACT: This paper provides evidence that managers strategically select the prior-period earnings amount that is used as a benchmark to evaluate current-period earnings in quarterly earnings announcements. Managers are more likely to separately announce a prior-period gain from the sale of property, plant, and equipment (PPE) than a loss. This strategy provides the lowest possible benchmark for evaluating current earnings, thereby allowing the manager to highlight the most favorable change in earnings. This strategic disclosure behavior is more likely to occur when it prevents a negative earnings surprise. The observed strategic disclosure decisions are consistent with a conjecture by managers that the nonrecurring nature of the prior-period gain/loss will be forgotten unless it is separately announced. Consistent with this conjecture, there is some evidence that equity investors, one potential target of strategic reporting, use the benchmark that managers provide in earnings announcements to evaluate current earnings, even when the components of this benchmark have different persistence. However, cross-sectional analyses provide no evidence that managers *ex post* exploit the equity mispricing that occurs between the earnings announcement date and the release of the financial statements.

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Key Words: *Discretionary disclosure, Earnings management, Nonrecurring items, Market reactions.*

Data Availability: *Data are available from sources indicated in the text.*

I. INTRODUCTION

This paper provides evidence that managers strategically select the prior-period earnings amount that is used as a benchmark to evaluate current-period earnings in quarterly earnings announcements. Managers are more likely to separately announce a prior-period nonrecurring gain from the sale of property, plant, and equipment (PPE) than a loss. This strategy provides the lowest possible benchmark against which to evaluate current earnings, thereby allowing managers to highlight and discuss the most favorable change in earnings. In the text of the earnings announcement, firms that incurred a prior-period loss on the sale of PPE (hereafter, loss-firms) that do not separately mention the loss can emphasize the largest increase (or smallest decline) in current-quarter results relative to those from the comparable quarter of the prior year.¹ This strategic disclosure behavior is more likely to occur when it prevents a negative earnings surprise.

Strategic disclosure in earnings announcements is related to earnings management, but the manager is managing the perception of earnings rather than managing actual earnings. As in earnings management studies, our sample managers must believe that their behavior will not be unraveled. In the strategic-reporting context, managers must conjecture that the transitory nature of a prior-period gain/loss will be forgotten unless it is separately noted in the current-period earnings announcement. Consistent with this conjecture of a processing bias, stock price reactions to earnings announcements indicate that equity investors use the benchmark managers provide in the earnings announcement to evaluate current earnings, even when the components of this benchmark have different persistence. Although the mispricing is only temporary, these results suggest that strategic reporting at the earnings announcement date can affect the perceptions of one obvious target of strategic disclosure, equity investors. Further analysis, however, reveals that strategic-reporting behavior does not vary as a function of several variables identified in prior studies as incentives for "real" earnings management such as investor sophistication, subsequent securities issues, insider trading, and the propensity for litigation.

In summary, there is strong evidence of strategic reporting by managers, and some evidence that investors are misled by the reports. However, variables that proxy for the benefits of misleading equity investors do not explain the cross-sectional variation in managers' propensities to report strategically. There are several possible explanations for this combination of results. One explanation is simply that the cross-sectional tests lack power. The small sample, selected for the primary tests related to strategic reporting, limits our ability to detect cross-sectional variation in disclosure decisions associated with variables that proxy for the benefits from temporary mispricing. An alternative explanation is that strategic reporting of a prior-period nonrecurring item is costless. In this case, managers have incentives to behave strategically to create an option to exploit mispricing, even if *ex post* they do not. A final explanation is that managers' incentives to report strategically

¹ For example, J&J Snack Foods (J&J) recognized a loss on the sale of PPE in the second quarter of 1990 (representing 390 percent of net income). In its earnings announcement, J&J announced this amount separately, and made all comparisons to the same quarter of 1989 both including and excluding the loss (*PR Newswire* 1990). However, in the second quarter of 1991, J&J announced only that "earnings soared 281 percent" over the comparable quarter of the prior year, not that the prior-year net income included a nonrecurring PPE loss and thus was artificially deflated (*PR Newswire* 1991). Adjusting for the nonrecurring charges from the previous year, earnings had actually declined 22 percent.

stem from sources other than equity investors, although a by-product of the strategic reporting decisions is the observed effect on stock prices.

Our conclusions are based on the analysis of the strategic reporting of a particular nonrecurring item, significant gains and losses on the sale of PPE. This focus has two advantages. First, we can use disaggregated data in the statement of cash flows and 10-K schedules to identify the existence and amount of PPE gains/losses, even if the firm chooses *not* to discuss this item in the income statement, Management's Discussion and Analysis, or earnings announcement.² Financial statement data necessary to identify the existence of other types of nonrecurring items in the absence of voluntary disclosure are not required.

Second, we focus on PPE gains/losses because managers have more discretion in deciding whether to separately mention above-the-line items rather than below-the-line items. Although not required, many firms include summary income statements in earnings announcements. In these summary statements, PPE gains and losses are often aggregated with other above-the-line earnings components. In contrast, below-the-line items, such as extraordinary gains and losses, income and gains and losses from discontinued operations, and adjustments for changes in accounting principles, are generally disclosed separately in the summary income statement in the earnings announcement consistent with the separate reporting of these items in the income statement that is included in the annual report.³

While the focus on PPE gains and losses limits the extent to which we can generalize, we believe such strategic behavior is not limited to this particular component of income. As noted previously, this particular nonrecurring item was chosen, in part, because it is more easily identifiable using financial statement data. Other nonrecurring items, such as litigation costs or benefits, product warranty charges, environmental remediation costs, gains/losses on sales of investments in assets other than PPE, write-offs of intangibles, write-downs of real assets, or gains/losses from unusual/infrequent tax or regulatory changes, are more easily "hidden" in the financial statements, increasing the likelihood that firms can strategically disclose these items in the earnings announcement.

Anecdotal evidence suggests that firms use discretion over other earnings-related disclosures as well. For example, the *Wall Street Journal* (Bailey 1997, B4) criticized Waste Management when they disclosed in 1997 that 1996 earnings had included nonrecurring items and that these items were not "disclosed in the company's earnings release at the time." These nonrecurring items included "gains on sale of businesses, income from insurance-claim settlements and lower depreciation and expenses from casualty claims." Similarly, Coca-Cola announced that third-quarter net income for 1998 was flat compared to 1997 once gains from bottling transactions in 1998 and 1997 were eliminated, even though net income had actually decreased. In 1997, however, Coca-Cola had emphasized the recurring nature of these bottling gains as "an integral part of the soft drink business"

² Despite these disclosures, we are still forced to eliminate some firms from the sample because we cannot measure the magnitude of the PPE gain/loss. The eliminated firms differ from the sample firms in that they have intentionally aggregated the PPE information, within the discretion allowed by APB No. 30, which the sample firms chose to provide. Although the decision to aggregate the PPE gain/loss with other information could be strategic, the lack of necessary information to separately identify the PPE gain/loss prevents the inclusion of these firms in the sample.

³ In the year of recognition, some sample firms segregate the amount on the face of the income statements included in their annual reports as a gain or loss from the sale of PPE. The remaining firms include the gain/loss in nonoperating income, but do not identify the source or the amount. The financial statements for the firms that do not segregate the item are in compliance with APB No. 30 since the statement requires only that items that are unusual or infrequent (but not both) be included in nonoperating income. The statement precludes separately categorizing these items, if material, below income from continuing operations or including them in operating income. Our definition of "material" is that the gain or loss is large relative to actual unadjusted net income. The firms may judge materiality of the PPE gain/loss using other criteria.

(Lowenstein 1997, C1; Deogun 1998, A4). Likewise, Sony and Gabelli Asset Management have been accused of strategically choosing benchmarks to present current earnings in the most positive light (McGeehan 1999, C4). Strategic selection of benchmarks does not appear to be limited to earnings announcements. Byrd et al. (1998) and Soffer (1998), for example, also document that firms strategically select a benchmark to maximize relative performance measures in proxy statements.

The paper is organized as follows. Section II discusses managers' incentives to strategically mention a prior-period nonrecurring item in a current-period earnings announcement. Section III describes the sample and explains why we examine prior-period gains or losses from PPE sales. The factors that are associated with managers' disclosure decisions are presented in Section IV. Section V examines equity market reactions to earnings announcements as one possible incentive for strategic reporting, and then analyzes cross-sectional variation in managers' decisions to strategically announce prior-period nonrecurring items. Conclusions follow in Section VI.

II. STRATEGIC ANNOUNCEMENT OF THE COMPONENTS OF EARNINGS

This paper investigates whether managers strategically choose a benchmark earnings number to present in the earnings announcement to evaluate current earnings. Specifically, we analyze a firm's decision to mention separately a nonrecurring prior-period earnings component in a current-period earnings release. For expositional convenience, we refer to such announcement decisions as "strategic" if mentioning or not mentioning the item appears to reflect an attempt to influence readers' perceptions of the change in earnings.

This paper focuses on disclosures by firms that have a nonrecurring item in the prior year, but not in the current year, because these firms have the most discretion to strategically select the earnings benchmark. All firms generally include some prior-period quarterly earnings number in current-period earnings announcements as a benchmark.⁴ A common benchmark is total prior-period earnings. However, when current-period earnings does not contain any nonrecurring items, a manager can justify presenting a prior-period amount that has been adjusted for nonrecurring items because the adjustment makes prior-period and current-period earnings more comparable. The adjustment is also justified because persistent earnings, which is better represented by prior-period "adjusted earnings," should receive more weight than transitory earnings in predicting future earnings (Foster 1977; Kormendi and Lipe 1987; Easton and Zmijewski 1989; Freeman and Tse 1992). The benchmark that is presented affects the magnitude, and possibly the sign, of the change in earnings that the manager discusses and evaluates in the earnings announcement.

"Strategic" reporting of a prior-period nonrecurring item implies that managers hold two beliefs. First, managers must believe that current-period earnings are evaluated against the prior-period earnings benchmark. This belief is reasonable because, as discussed above, earnings announcements commonly provide historical earnings.⁵ Second, managers must believe that the components of prior-period earnings will be ignored when they are not mentioned separately in the current-period earnings announcement. That is, managers must

Firms registered on the New York Stock Exchange are required to announce the current quarter's total earnings and are encouraged to include "like figures of the same period of the previous year, to afford a basis for comparison" (New York Stock Exchange 1995, para. 203.02(C)).

However, as Beatty et al. (1995) discuss, there is a lack of consensus in the earnings management literature about the benchmark toward which earnings are managed. While some studies have investigated earnings management relative to firm-specific time-series benchmarks, including prior-period earnings (e.g., Bartov 1993; Collins et al. 1995), other studies have focused on management relative to a cross-sectional benchmark, such as an industry average (e.g., Barth et al. 1990; Scholes et al. 1990; Clinch and Magliolo 1993; Haw et al. 1991), or firm-specific, non-time-series benchmarks, such as analysts forecasts (e.g. Robb 1998).

believe that there is some probability that investors and other readers will rely on the earnings benchmark that managers present to evaluate current earnings, even if this benchmark is not the one most comparable to current-period earnings in terms of earnings persistence. If instead managers believe that earnings adjusted for the gain/loss will be used as the benchmark even when the prior-period gain/loss is not separately mentioned, managers have no incentives to make strategic disclosures.

In the analysis, we examine which of two possible disclosure strategies is more consistent with observed disclosure decisions. One disclosure strategy is to maximize the increase (or minimize the decrease) in earnings that is highlighted in the earnings announcement by lowering the prior-period earnings benchmark (the “maximization objective”). A second strategy is to minimize the absolute value of the highlighted change in earnings (the “smoothing objective”). Prior literature has found support for both maximization and smoothing behavior (Bartov 1993; Dechow 1994; Burgstahler and Dichev 1997; Degeorge et al. 1999). A manager’s incentives to strategically announce can also depend on the sign and magnitude of the firm’s earnings realization in the announcement quarter if the objective of strategic reporting is to avoid a negative earnings surprise. In Section IV, we outline predictions about strategic announcement in the case of maximization and smoothing objectives, and conditional on the earnings realization.

The discussion to this point has been silent about whose perceptions managers are attempting to influence through their reporting decisions. The analysis of reporting decisions does not depend on the intended target of strategic reporting. However, a question that arises naturally is whose perceptions are managers trying to influence? We provide some preliminary evidence on this issue by examining stock market reactions to earnings announcements and analyzing cross-sectional determinants of strategic reporting under the assumption that equity investors are a likely target of the report.

We focus on the effects of strategic reporting only on equity investors’ perceptions of the change in earnings because of existing evidence on equity investors’ processing biases. There is evidence that some investors fixate on information reported to them (e.g., Hand 1990). Further, investors do not fully incorporate information on the persistence of earnings or earnings components, leading to post-earnings-announcement drift, and postpone a more complete reaction to earnings information until more information is released (see Freeman and Tse 1989; Bernard and Thomas 1990; Abarbanell and Bernard 1992; Sloan 1996; Soffer and Lys 1999). By contrast, other potential targets of strategic reporting, such as compensation committees, regulators, and creditors, are less likely to rely exclusively on information revealed in an earnings announcement. For example, Dechow et al. (1994) document that compensation committees adjust earnings-based compensation for restructuring charges. In addition, it is difficult to specify appropriate analyses to identify the reactions of parties such as creditors, regulators, or compensation committees to strategic reporting.

III. SAMPLE AND DESCRIPTIVE STATISTICS

Sample Selection Criteria

Although required financial statement disclosures make PPE gains and losses more easily identifiable than other above-the-line nonrecurring items, Compustat does not report a “clean” amount that represents a quarterly gain or loss on the sale of PPE. We use two approaches to determine observations that represent a material quarterly PPE-related gain or loss. The first sample of potentially material quarterly gains and losses is based on the actual gain/loss amount reported as a reconciling item in the operating section of the statement of cash flows (annual Compustat item 213, quarterly Compustat item 102). Annual amounts are collected in addition to quarterly amounts because for many firms the

quarterly amount is missing from Compustat. For the *annual* observations, we analyze various firm reports (including the 10-K, 10-Q, and annual report) to determine the *quarterly* gain/loss amount and whether it is material on a quarterly basis. The second sample of potentially material quarterly gains and losses is generated by calculating the gain or loss amount as the proceeds from the sale of PPE reported in the statement of cash flows (annual Compustat item 107) less the net book value of retired PPE reported in Schedules V and VI in the 10-K (annual Compustat items 184 and 221, respectively). Because this amount can be calculated only on an annual basis, we analyze various firm reports to determine the material *quarterly* gain/loss amount, if any.

In the years from 1988 through 1994, there are 6,319 observations with annual gains or losses on the sale of PPE that exceed 5 percent of annual income before extraordinary items, in absolute value, or a quarterly gain or loss that exceeds 5 percent of quarterly income before extraordinary items. The sample period is restricted to post-1987 because we require data from the statement of cash flows. The sample period ends in 1994 because we require data from Schedules V and VI in 10-Ks, and these schedules were not required after this date.

In addition to containing both annual and quarterly amounts, this initial sample overstates the number of observations that represent occasional sales of PPE because of data aggregation by Compustat and by firms. The most significant overstatement occurs because the statement of cash flow items on Compustat can include gains or losses on sales of fixed assets even if the sales are an operating activity for a firm. For example, firms in the oil and gas or timber industries sell properties on a recurring basis and manufacturers of heavy equipment sell this equipment on a recurring basis, but Compustat aggregates the gains or losses on these sales with the gains or losses on occasional sales of assets. From the sample of 6,319 observations, we eliminate those that we believe are misclassifications of gains or losses related to operating activities. As an alternative to hand-collecting information about the nature of the sales for the 6,319 observations, we claim that firms that have material gains or losses in at least five of the eight sample years are most likely to be misclassifications of this type. Using this criterion, we eliminate 570 firms (representing 4,417 observations). Of these 570 firms, 500 have significant gains or losses on the sale of PPE as identified by our initial Compustat screens in every year for which Compustat data are available (i.e., not just in five years).

While this methodology is somewhat *ad hoc* and likely eliminates some observations that represent gains/losses on nonrecurring sales, *ex post* analysis of the eliminated firms suggests that it successfully captures observations for which the sale of PPE is an integral part of the firm's operating activities. For these observations, the gain/loss amount as reported on Compustat is a predictor of future earnings.⁶ Further, the industry membership of the 570 eliminated firms suggests that the gains/losses are related to sales that are more of an operating activity than an occasional PPE sale.⁷

In a regression of total earnings from year t on earnings from continuing operations from year $t - 1$, earnings from noncontinuing operations from year $t - 1$, and the gain/loss amount for year $t - 1$ (where $t - 1$ is the year of the PPE sale), the coefficient on the gain/loss amount is statistically significant at two-tailed probability < 0.01 (results not tabulated). The magnitude of the coefficient on the gain/loss amount is not statistically different from the magnitude of the coefficient on continuing operations.

The observations are concentrated in the following industries: oil and gas extraction (10.2 percent), food and kindred products (7 percent), paper and allied products (6.5 percent), fabricated metals, except machinery (13.5 percent), machinery, except electrical (6.5 percent), transportation equipment (4.9 percent), measuring instruments (8.2 percent), nondurable goods—wholesale (5.9 percent), eating and drinking places (9.9 percent), and business services (8.4 percent). As an example of the misclassification problem, the gains and losses for firms in the "eating and drinking places" category include gains and losses on sales of franchises or company-owned locations.

Another problem with the Compustat data is that “Sale of Property, Plant, and Equipment and Sale of Investments—Loss (Gain)” (Compustat item 213) and “Sale of Property, Plant, and Equipment (Flow of Funds Statement)” (Compustat item 107) include transactions related to sales of assets other than PPE. The Schedules V and VI data allows us to identify the amount, if any, of the Compustat number that corresponds to PPE sales for the 1,902 remaining observations that potentially represent nonrecurring gains or losses. When the gain/loss amounts determined from the statement of cash flows and schedules are different, we read the annual report, 10-K, and 10-Q to determine the correct PPE gain or loss amount and the quarter in which it occurs. This analysis results in the elimination of 450 observations for which the gain/loss is (1) not related to PPE (Compustat misclassifications), (2) immaterial after correcting Compustat errors, (3) related to PPE sales associated with plant closings or sales of a line of business (including manufacturing rights),

TABLE 1
Sample Selection

	<i>Number of Observations</i>
Observations with a gain or loss on the sale of PPE ^a $\geq 5\%$ of annual or quarterly income before extraordinary items during the period 1988–1994	6,319
Less: Observations related to firms with a significant gain or loss in five or more years	(4,417)
	1,902
Less: Unusable observations ^b	(450)
Less: Firms missing data on CRSP, Compustat, or observations with an indeterminate gain/loss amount or quarter of gain/loss recognition	(559)
Less: Observations in consecutive years	(472)
Less: Firms in bankruptcy	(12)
Less: Firms restructuring in either the year of recognition or the subsequent year	(111)
Less: Observations where the quarterly gain or loss is immaterial relative to quarterly income before extraordinary items	(131)
	167
Less: Firms missing earnings announcements	(34)
Less: Firms announcing earnings after releasing financial statements	(3)
Usable observations	130

^a Based on the reconciling item from the statement of cash flows, or calculated as proceeds from sales less the net book value of PPE sold.

^b Observations are unusable if the gain or loss is (1) not related to PPE (Compustat misclassifications), (2) immaterial after correcting Compustat errors, (3) related to a sale associated with plant closings or sales of a line of business (including manufacturing rights), (4) recorded prior to the execution of the sale, or (5) recorded in U.S. dollars but available reports are only in a foreign currency.

TABLE 2
Sample Descriptive Statistics for Size, Leverage, Earnings and the Impact of PPE Sales

Variable ^a	Total Sample (n = 130)		Industry Averages ^b (n = 130)		Gain-Observations ^c (n = 79)		Loss-Observations ^d (n = 51)	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
MKTVAL	142.19*	48.17*	1,446.31	689.89	138.93	56.07	147.25	36.55
REVS	164.52*	60.00*	1,461.31	680.58	159.05	59.58	172.99	60.14
TA	135.00*	48.52*	1,681.20	542.99	138.79	50.01	129.14	39.66
ΔREVS	0.08	0.04*	0.11	0.07	0.10	0.04	0.05	0.04
ΔTA	0.05*	0.04*	0.11	0.06	0.06	0.06	0.03	0.03
DEBT/EQ	0.30	0.26	0.26	0.27	0.28	0.21	0.33	0.29
EPS-XO	0.42*	0.25*	0.89	0.85	0.64†	0.42†	0.09	0.18
"AS-IF" EPS-XO	0.36	0.27	—	—	0.48	0.30	0.16	0.23
EPS	0.45*	0.31*	0.88	0.88	0.69†	0.46†	0.08	0.19
"AS-IF" EPS	0.39	0.29	—	—	0.53	0.32	0.16	0.25
NBV/TA	0.014*	0.006	0.007	0.005	0.015	0.005†	0.014	0.008

(Continued on next page)

TABLE 2 (Continued)

* The total sample is statistically different from the industry averages sample at the 10 percent level based on a t-statistic (for means) and Wilcoxon rank-sum test (for medians).

† The gain-observations are statistically different from the loss-observations at the 10 percent level.

^a Variable definitions:

MKTVAL = the market value of common stock outstanding (Compustat data item 199 times item 25) plus long-term debt (item 9) plus debt in current liabilities (item 34) plus the carrying value of preferred stock (item 130) at the end of the fiscal year of the PPE sale (\$MM).

REVS = total revenues (item 12) for the fiscal year of the PPE sale (\$MM).

TA = total assets (item 6) at the end of the fiscal year of the PPE sale (\$MM).

ΔREVS = the annual percentage change in revenues over the year prior to the year of recognition of the PPE gain or loss.

ΔTA = the annual percentage change in total assets over the year prior to the year of recognition of the PPE gain or loss.

DEBT/EQ = long-term debt plus debt in current liabilities divided by MKTVL at the end of the fiscal year of the PPE sale.

EPS-XO = annual earnings per share before extraordinary items for the fiscal year of the PPE sale.

“AS-IF” EPS-XO = annual earnings per share before extraordinary items excluding the PPE gain or loss for the fiscal year of the PPE sale.
EPS = annual earnings per share for the fiscal year of the PPE sale.

“AS-IF” EPS = annual earnings per share excluding the PPE gain or loss for the fiscal year of the PPE sale.

NBV/TA = the net book value of the PPE sold divided by total assets at the end of the fiscal year of the PPE sale.

^b The industry averages represent the four-digit SIC codes of the sample observations in the year of the gain or loss.

^c Observations in the total sample with PPE gains.

^d Observations in the total sample with PPE losses.

(4) recorded prior to the execution of the sale (losses only), or (5) recorded in U.S. dollars but the financial statements are available only in a foreign currency.

We also eliminate 559 observations over the eight-year sample period for which financial statements are not available, that are missing CRSP or Compustat data, or that do not provide sufficient information in their financial statements to determine the actual gain/loss amount or the quarter of recognition. We eliminate 472 observations that have a gain/loss which is greater than 5 percent of income in the subsequent year. A nonrecurring item in the current-period limits the manager's ability to justify strategically announcing only the components of prior-period earnings. We exclude 123 observations that correspond to firms in bankruptcy during either the year of the PPE sale or the year following the sale, and firms that report initiating or completing any restructuring of operations that might involve the sale of PPE. This elimination further decreases the likelihood that PPE gains and losses are correlated with an event of real economic significance for the firm.

Finally, we exclude the *annual* observations for which the quarterly amount, once identified, was insignificant based on the 5 percent criterion (131 observations). The remaining observations represent material quarterly gains or losses on the sale of PPE. Firms that are missing earnings announcements (34 observations) and firms that announce earnings after the release of their financial statements (three observations) are also eliminated from the sample.

Table 1 summarizes the sample selection criteria and the resulting number of sample firms and observations. The total sample includes 130 observations (79 gains and 51 losses) representing 123 firms. The seven firms with multiple observations have gains or losses in nonconsecutive years. For these 130 firms, we read the financial statements and 10-Ks to determine the circumstances surrounding the gain/loss on the sale of PPE. The PPE sales for our sample firms occurred in the ordinary course of business, consistent with our attempt to identify firms with nonrecurring gains/losses from nonoperating activities. The PPE sales in our sample occur most frequently in the fourth quarter (98 of the 130 observations). The high proportion of fourth-quarter sales is most striking for loss-observations (88 percent), but is also observed for gain-observations (67 percent).

Descriptive Statistics

Table 2 provides descriptive statistics about the sample firms relative to industry-averages matched to the sample on the basis of year and four-digit SIC codes. Compared to the industry-averages, the sample firms are small as reflected in market capitalization (MKTVAL), revenues (REVS), and total assets (TA). The sample firms also exhibit slower median growth rates in total assets and revenues than the industry averages over the year prior to the year of the PPE sale. Despite the size and growth differences, the sample firms are not significantly different from their industry counterparts with respect to leverage.

Although the gain/loss amount is significant relative to accounting earnings, the sample PPE sales do not represent extreme economic events in terms of the disposal of earnings-generating assets. The median net book value (NBV) of the retired assets is 0.6 percent of total assets for the sample firms. For the industry averages, median PPE sales are 0.5 percent of total assets. The mean PPE sales of the sample firms, however, are significantly higher than the industry averages because of skewed data in the small sample. The similarity of the median values is consistent with an objective to identify firms for which the PPE sale has significant accounting consequences, but does not indicate a major change in the firm's core operations.

Table 2 compares gain- and loss-observations because several of the empirical tests are based on the sign of the prior-period nonrecurring item. There are no significant differences

in size, growth, leverage, or “as-if” annual earnings between gain- and loss-firms. Therefore, the tests of gain-observations vs. loss-observations are not confounded by cross-sectional differences in these firm-specific characteristics.

IV. STRATEGIC DISCLOSURE IN EARNINGS ANNOUNCEMENTS

Predictions

The reporting strategy that a manager follows depends on the manager’s objectives. We consider two disclosure objectives: (1) maximize (minimize) the highlighted increase (decrease) in earnings by lowering the prior-period earnings benchmark, or (2) smooth the highlighted change in earnings by providing the benchmark that is closest to current-period earnings. We also investigate if the incentives to strategically mention a prior-period non-recurring item are conditional on the level of the current-period earnings realization because it can affect the sign of the earnings surprise.

When a manager’s objective is to minimize the earnings benchmark, thereby highlighting the most favorable change in earnings, the announcement decision depends only on the sign of the nonrecurring item. The manager will announce a prior-period nonrecurring gain and not announce a prior-period loss. For gains, this strategy focuses attention on adjusted earnings as the benchmark for evaluating current earnings and highlights the change in adjusted earnings, which is more favorable than the change in total unadjusted earnings. In the case of a prior-period nonrecurring loss, *not* mentioning separately the loss provides the lowest benchmark and focuses attention on the most favorable change in earnings, which is the change in total unadjusted earnings. If a manager were to separately mention the prior-period loss, the earnings announcement would highlight that prior-period earnings are artificially low and any change in earnings for the year would appear less favorable.

When a manager’s objective is to smooth the highlighted change in earnings, the announcement decision depends only on the relative magnitudes of the change in total unadjusted earnings and the change in adjusted earnings. The manager will separately announce the nonrecurring item if the absolute value of the change in earnings per share adjusted for the nonrecurring item ($|\Delta \text{ADJEPS}|$) is less than the absolute value of the change in total unadjusted earnings per share ($|\Delta \text{EPS}|$). For either gains or losses, this strategy focuses attention on the smallest change in earnings (in absolute value). An income-smoothing objective is consistent with empirical evidence that managers smooth income through real transactions or earnings management (e.g., Bartov 1993; Dechow 1994).⁸

Not all firms have equal incentives to either maximize or smooth the change in earnings that is emphasized in the earnings announcement. Recent empirical evidence suggests that managers use earnings management to avoid negative earnings surprises (e.g., Barth et al. 1999; Burgstahler and Dichev 1997; Dechow et al. 1999).⁹ Similarly, in certain situations, a manager can affect the sign of the earnings surprise that is discussed in the earnings announcement through strategic choice of the prior-period earnings benchmark. Managers can change a negative surprise to a positive surprise by strategically announcing a prior-period PPE gain (or not announcing a loss) if current-period earnings fall between adjusted and unadjusted earnings. If current-period earnings are less than both adjusted and unadjusted earnings, managers can strategically adjust the earnings benchmark to reduce the

⁸ Ronen and Sadan (1981) and Watts and Zimmerman (1986) summarize the theories and empirical evidence on income smoothing.

⁹ Baber et al. (1991) provide results consistent with managers reducing R&D expenditures to avoid showing a negative earnings surprise.

magnitude of the negative earnings surprise. Hence, a manager's incentives to alter the prior-period benchmark can depend on the level of the current-period earnings realization.

Results

This section reports the analysis of firms' earnings-announcement decisions. Because the prior-period nonrecurring amount is publicly available information at the time of the

TABLE 3
Analysis of Firms' Decisions to Remind about Prior-Period Gains and Losses from the Sale of PPE^a

Tests of the Maximization Objective for Remind Decisions

Panel A: Univariate Comparison of Remind Decisions Based on the Sign of the Prior-Period Item

<u>REMIND</u>	<u>PPE GAIN</u>	<u>PPE LOSS</u>	<u>Total</u>	<u>p-value^b</u>
Yes	23	3	26	0.001
No	<u>56</u>	<u>48</u>	<u>104</u>	
	<u>79</u>	<u>51</u>	<u>130</u>	

Panel B: Logit Analysis of the Association between the Likelihood of Reminding and the Sign of the Prior-Period Item

$$\text{Equation (1):}^c \text{ REMIND}_j = \delta_0 + \delta_1 \text{GAIN}_j + \delta_2 |\text{GL}|_j + \delta_3 \text{LNMV}_j + \omega_j$$

<u>n</u>	<u>Intercept</u>	<u>GAIN</u>	<u> GL </u>	<u>LNMV</u>	<u>LR Test^d</u>
126	-0.571 (0.000)	0.165 (0.031)	0.610 (0.008)	0.051 (0.011)	28.017 (0.000)

Tests of the Smoothing Objective for Remind Decisions

Panel C: Univariate Comparison of Remind Decisions Based on the Absolute Value of the Change in Earnings

	<u> \Delta ADJEPS < \Delta EPS </u>	<u> \Delta ADJEPS > \Delta EPS </u>		
<u>REMIND</u>	<u>(Smoothers)</u>	<u>(Nonsmoothers)</u>	<u>Total</u>	<u>p-value^b</u>
Yes	14	11	25	0.298
No	<u>46</u>	<u>58</u>	<u>104</u>	
	<u>60</u>	<u>69</u>	<u>129</u>	

Panel D: Logit Analysis of the Association between the Likelihood of Reminding and the Absolute Value of the Change in Earnings

$$\text{Equation (1):}^c \text{ REMIND}_j = \delta_0 + \delta_1 \text{SMOOTH}_j + \delta_2 |\text{GL}|_j + \delta_3 \text{LNMV}_j + \omega_j$$

<u>n</u>	<u>Intercept</u>	<u>SMOOTH</u>	<u> GL </u>	<u>LNMV</u>	<u>LR Test^d</u>
125	-0.548 (0.000)	0.106 (0.097)	0.877 (0.000)	0.051 (0.011)	24.818 (0.000)

(Continued on next page)

TABLE 3 (Continued)

^a This table provides univariate and logit analysis of the determinants of firms' decisions to separately announce the prior-period components of earnings in the earnings announcement (REMIND). Panels A and B test the maximization objective for the selection of the earnings benchmark. Panel A shows the frequencies of observations classified according to whether the item is a gain or loss. Panel B presents the results of a logit analysis of the likelihood that a firm reminds as a function of the sign of the prior-period item. Panels C and D test the smoothing objective for the selection of the earnings benchmark. Panel C shows the frequencies of observations classified according to the magnitude of the change in adjusted EPS ($|\Delta \text{ADJEPS}|$) relative to the change in unadjusted EPS ($|\Delta \text{EPS}|$). Panel D presents the results of a logit analysis of the likelihood that a firm reminds as a function of the magnitude of the change in adjusted EPS ($|\Delta \text{ADJEPS}|$) relative to the change in unadjusted EPS ($|\Delta \text{EPS}|$). Panels B and D provide the estimated marginal effects from the logit model of the relation between the likelihood that a firm reminds and explanatory variables. The marginal effects of the regressors on the probabilities are: $\partial Y / \partial x_i = \Lambda(\delta'x)(1 - \Lambda(\delta'x))\delta_i$, where Y = dichotomous dependent variable; x = vector of independent variables; x_i = i th independent variable; Λ = the logistic cumulative distribution function; and δ = vector of coefficient estimates. The derivative is calculated at the means of the regressors. p -values for the coefficient estimates are in parentheses.

^b p -value of a Pearson χ^2 test of the homogeneity across classifications.

^c Variable definitions:

GAIN = an indicator variable which equals 1 for gain-observations and 0 for loss-observations.

SMOOTH = an indicator variable which equals 1 if $|\Delta \text{EPS}| > |\Delta \text{ADJEPS}|$ and 0 otherwise.

|GL| = the absolute value of the prior-period gain/loss per share.

LNMV = the natural logarithm of the market value of equity.

^d Likelihood Ratio Test: $\frac{-2 * \text{Log-likelihood at Convergence}}{\text{Restricted Log-likelihood}} \sim \chi^2(k)$

where k = the number of parameters in the model - 1. The logit model presented in Panel B correctly classifies eight of 24 (96 of 102) remind (nonremind) observations. The logit model presented in Panel D correctly classifies seven of 23 (96 of 102) remind (nonremind) observations.

current-period earnings announcement, we say that a firm “reminds” readers about the nonrecurring item if management identifies this source of income from quarter $q - 4$ in the text of the earnings announcement for quarter q , and/or separately notes the gain or loss in the condensed financial statements that are included in the earnings announcement. We examine all available earnings announcements including those from the *Dow Jones News Retrieval Service*, *Reuters*, *PR Newswire*, *Business Wire*, the *New York Times*, and local newspapers. These publications perform minimal editing of the announcements that managers provide for release.¹⁰ Therefore, we attribute the observed disclosure decisions to managerial intent.

Table 3 provides univariate and logit tests of the determinants of the announcement decisions in the year following the PPE sale. Panel A classifies the firms' disclosure decisions based on the sign of the nonrecurring amount generated by the sale of PPE (gain or loss). The analysis reveals that managers are more likely to adjust the prior-period earnings benchmark for a nonrecurring gain than for a loss. Only three of the 51 (6 percent) observations with prior-period nonrecurring losses remind investors about them in the earnings announcements. This number compares to 23 gain-observations that remind, which represents approximately 29 percent of the sample of 79 gain-observations. These relative frequencies are significantly different at the 0.001 level based on a Chi-square test. The greater

¹⁰ The editorial offices at the major wire services indicated that the wire services generally do not edit earnings announcements. *Business Wire* and *PR Newswire* edit press releases only for grammar (such as commas, decimal points, and AP style) and verify any changes with the firm. *Dow Jones* tabulates all numbers in a firm's earnings release. Any text in the release, such as a discussion of the components of prior-period earnings, is included either immediately below the table or as a separate release. *Reuters* follows similar editing guidelines. The results are qualitatively similar if we exclude announcements from *Dow Jones* and *Reuters*.