## Cost/Benefit Tradeoffs Relating To Reductions In Postretirement Health Care Benefits In The SFAS 106 Environment

Howard Bunsis, (E-mail: howard.bunsis@emich.edu), Eastern Michigan University Susan Riffe, (E-mail: sriffe@mail.cox.smu.edu), Southern Methodist University

#### Abstract

We investigate what factors help explain postretirement health care benefit (PRB) reductions around the adoption of Statement of Financial Accounting Standard 106 (SFAS 106). We find that firms with more motivation to make benefit cuts because of larger PRB-related obligations were more likely to decrease benefits. Our primary contribution comes from examining the cost/benefit tradeoffs of making these reductions. For example, we find a trade-off between reductions in PRB and increases in pension obligations, consistent with firms offering higher alternative forms of compensation to make up for the loss in PRB. In addition, firms with greater unionization among employees are somewhat less likely to reduce benefits. Finally, we document that firms involved in more extensive efforts to reduce capacity and cut costs through firm restructurings are more likely to reduce benefits.

#### Introduction

standard 106 (SFAS 106) requires firms to recognize postretirement healthcare benefits (PRB)<sup>1</sup> on an accrual rather than "pay-as-you-go" basis<sup>2</sup> by 1993. While this standard does not increase the cash outflows from providing PRB, it requires firms to recognize substantially increased accounting expenses and show a new liability on their financial statements for future benefit obligations. For our sample, the mean newly recognized liability as a percentage of total assets was 6%, ranging from .01% to 37%. The increasing cost of providing future retiree health benefits<sup>3</sup> coupled with the

Readers with comments or questions are encouraged to contact the authors via email.

SFAS 106 requirements that expose the magnitude of these costs have encouraged many firms to reduce the benefit packages they offer. However, some firms chose to leave their PRB benefit packages intact. The purpose of this paper is to investigate what firm-specific factors help explain the decision to reduce benefits surrounding the issuance of SFAS 106. We find that the reduction decisions are related to the cost trade-off that firms face when decreasing benefits.

Several previous papers have provided evidence about PRB reductions. Mittelstaedt, Nichols, and Regier (1995) found that reductions in benefits were negatively related to the financial strength of the firm and positively related to the impact of SFAS 106 adoption on

debt levels. Amir and Gordon (1996) found firms that reduce PRB tend to use accounting assumptions about the discount rates and health care trend rates that increase reported PRB obligations. Amir and Ziv (1997) found that firms that delay adoption of SFAS 106 have larger PRB obligations and are more likely to reduce benefits. In summary, previous research has focused on the improvement of reported financial results as the primary benefit from PRB reductions.

We contribute to the previous literature by considering both the benefits and costs of reducing PRB. The primary benefit comes from reducing the cost of retiree healthcare and decreasing the liabilities and hits to income reported under the SFAS 106 accounting rules. However, if a firm chooses to make these benefit reductions, they will also face additional costs. They will face the direct costs of renegotiating the benefits. Some firms have even faced costly litigation because of their reduction decisions (Bunsis 1999). They will also incur indirect costs from lower employee productivity, higher turnover, and the inability to attract skilled workers unless they provide costly replacement The trade-off between the compensation. benefits and costs of the reduction decision is the focus of our analysis and the primary contribution of our paper. Section II presents the hypotheses. Section III reports the empirical analysis, and section IV summarizes the paper.

#### Hypotheses

In explaining the decision to reduce PRB, we expect firms that have more to gain and less to lose will be more likely to reduce benefits. Thus, we divide our hypotheses into those relating to the motivations to reduce PRB (H1 and H2) and those capturing the cost tradeoffs of making reductions (H3-H5).

### Hypotheses Relating to Benefit of Reducing PRB

Reductions in retiree health benefits may result from firms trying to mitigate the negative

SFAS 106 on their financial impact of statements. For example, in attributing the reduction in benefits to the accounting changes. an officer of Westinghouse stated, "FASB forced us to recognize the reality that we have committed to providing future benefits at a significant cost" (Harty 1991). Various health care consultants and analysts have been equally explicit about blaming their changes on the new accounting rule. Dale Grant of Martin E. Segal called all benefit reductions "FASB-driven changes" (Durgin 1991). At first glance, these claims are dubious because SFAS 106 does not alter the firms' cash outflows associated with PRB. However, because the new accounting requirement reveals the tremendous estimated costs some firms must bear in paying for the promised benefits, the changes may affect the firms' contracting environments and motivate a reduction in benefits. For example, if SFAS 106 causes firms to move closer to debt covenant restrictions, it could lead to costly debt refinancing activity. We would expect that firms with a greater SFAS 106 accounting burden are more likely to reduce PRB because these firms can potentially gain the most from undertaking a costly negotiation that reduces or eliminates benefits. Thus, we test the following hypothesis:

### H1: Firms with larger PRB-related accounting measures are more likely to reduce benefits.

Financial strength may also be a factor in a decision to reduce benefits. Adoption of SFAS 106 led to significantly higher liabilities on the balance sheet and expenses on the income statement for most firms. Firms that are under pressure financially either because of a higher changes in debt levels or greater reductions in profitability would be more motivated to cut PRB to make their financial statements appear stronger. Mittelstaedt, Nichols, and Regier (1995) find some evidence that reducing firms are weaker financially. Thus, we test the following hypothesis to capture a firm's motivation to make PRB reductions when experiencing financial difficulties:

H2: Firms with deteriorating financial condition are more likely to reduce PRB.

#### Hypotheses Relating to Cost of Reducing PRB

Firms that choose to reduce benefits will provide their workers with alternative forms of compensation or face indirect costs such as greater turnover or less productive workers. Pension benefits are one type of similar compensation that can be used as a replacement for PRB reductions. All else being equal, firms would prefer to allocate available funds to pensions rather than PRB because of the associated tax advantages.4 It is also more costly to reduce pensions than PRB because pension reductions require approval of the Pension Benefit Guaranty Corporation (PBGC), with stiff penalties for noncompliance.5 Alternatively, PRB reductions are exempt from this ERISA approval requirement. In addition, while pension benefits vest, retiree benefits are easier to reduce because they do not necessarily vest. Because pensions have tax advantages and are less costly to reduce than PRB, we test the following hypothesis relating to the expected trade-off between pension and PRB benefits:

### H3: Firms with a greater increase in pension obligations are more likely to reduce PRB.

It may be more difficult to reduce PRB when the workers affected are heavily unionized. For example, if a firm has unionized workers, and the right to reduce benefits is not explicitly written in the collective bargaining agreement, the decision to cut benefits can be challenged by the union. Further, if the contractual language is ambiguous (as is often the case), then most courts have ruled that the firm is free to reduce cost for non-union workers, but not unionized workers. Further, renegotiating a reduction in PRB with union employees may be more costly because these workers have greater power to obtain other concessions in exchange for giving up PRB. This leads to the following hypothesis:

H4: Firms with a lower concentration of union employees receiving PRB are more likely to reduce benefits.

Firms that are trying to cut costs and reduce capacity may also be more likely to reduce PRB as part of their operational restructuring. Previous research has found that firms that restructure operations have had poor financial performance in previous periods (Elliott and Shaw 1988). These troubled firms that are implementing restructurings will typically lay off workers and sell assets in an effort to refocus their efforts and cut costs. Because these firms are looking for ways to cut costs, they may try to reduce PRB. It also may be less difficult for restructuring firms to negotiate compensation reductions in this environment because workers believe cost cuts are needed to help preserve the long-term financial health of the company. This leads to the following hypothesis:

# H5: Firms with more extensive restructuring activities will be more likely to reduce benefits.

#### **Empirical Analysis**

#### Sample Selection

We used an annual report search on Dialog to identify our sample firms. We initially identified 1,170 firms that recognized an expense and liability for postretirement benefits in calendar year 1993 using the search terms "postretirement," "service cost," and "interest cost."8 Public utilities and banks were eliminated because these firms face regulatory environments that may affect their PRB accounting and reduction decisions (Khurana and Loudder 1994). Our final sample includes 251 firms randomly selected from the remaining firms (out of the 1170 firms that were not banks or utilities). Two firms were then eliminated because of lack of data availability, leaving us with a final sample of 249 firms.

The mean (median) asset size of \$5,147 (\$962) million indicates that our sample is comprised of relatively large firms. This result is not surprising given that Warshawsky (1992) finds that larger firms are more likely to offer PRB. There was not a significant difference in mean assets between reducers and nonreducers, but the Wilcoxon signed ranks tests showed a significant difference. Therefore, financial statement variables are deflated by total assets in the logit analysis to control for size effects. Not surprisingly, 77% of our sample is comprised of manufacturing firms (one digit SIC code of 2 or 3) that are also more likely to have PRB. There are no appreciable differences between reducers and nonreducers by industry classification.

We identified 113 sample firms as nonreducers and 136 as reducers by examining the footnotes from 1990 through 1994. Nonreducers either did not mention a reduction in the PRB footnote or indicated that no changes were made. Some of the nonreducers did mention that they reserved the right to modify benefits in the fu-Most reducer firms were identified because their footnotes discussed general reductions, greater cost sharing, smaller benefit caps, or total benefit elimination. However, 31 of the reduction firms were identified because they disclosed an unrecognized gain from benefit cuts in the quantitative information provided in the footnotes separate from the unrecognized gain/loss for actuarial differences without discussing the nature of the reported cuts in the footnotes. 9

We also determined the benefit reduction year from reading the footnotes. Panel A of table 1 reports that four firms actually reduced these benefits prior to 1990, before the FASB approved the new accounting rules. However, a majority of reducing firms (56.6%) reduced their benefits during fiscal 1993, which was the last year firms could adopt SFAS 106. To facilitate meaningful comparisons between reducing and nonreducing firms in our empirical analysis, nonreducer firms are randomly assigned a "quasi-reduction year" based on the frequency

distribution of fiscal years for the reducer sample. Thus, approximately the same percentage of the nonreducer sample is represented in each fiscal year as the reducer sample. Panel B compares the timing of the reduction decision with the timing of the adoption decision. The new accounting rule apparently relates to the reduction decision because 50% of the reductions came prior or simultaneous with the adoption of SFAS 106.

#### **Univariate Results**

H1 predicts that firms with greater PRB measures will be more likely to reduce because they will benefit the most from the associated decrease in the PRB liability and expense. We use two measures of PRB financial statement impact. The first measure is the adoption year accumulated projected benefit obligation divided by assets (APBOAT). APBOAT measures the present value of future retiree health costs relative to firm size.10 The second measure is the incremental expense recognized on the income statement under SFAS 106. It is defined as adoption year ongoing expense<sup>11</sup> minus the average cash outflow recorded as expense under the pre-SFAS 106 accounting rules all divided by sales (EXPMCASH). We use the average cash paid out over the three years prior to adoption because cash payments in the adoption year were not consistently reported. Table 2 indicates that the mean (median) APBOAT is 7.3% (5.8%) for reducers, and 5.2% (2.6%) for nonreducers.

The mean (median) EXPMCASH for reducers is .4% (.3%) and .3% (.1%) for nonreducers. The differences in the means and medians of both of these variables are significant at the .07 level. The univariate results are consistent with H1, suggesting that reducing firms have significantly larger SFAS 106-related obligations and expenses than nonreducers. This result indicates firms that could gain the most from making reductions were more likely to renegotiate PRB plans.

Table 1
Timing of Adoption and Reduction

Panel A: Fiscal Year of Reduction

	Reducers		Nonreducers	
	Number	Percent	Number	Percent
Prior to 1990	4	2.9%	3	2.7%
1990	5	3.7%	5	4.4%
1991	7	5.1%	6	5.3%
1992	28	20.6%	20	17.7%
1993 .	77	·; 56.6%	70	61.9%
1994	<u>15</u>	<u>11.0%</u>	9	8.0%
Total	136	100.0%	113	$1\overline{00.0\%}$

Pauel B: Timing of Reduction Relative to Adoption of SFAS 106

	Number	Percent
Prior	20	14.7%
Simultaneous	48	35.3%
Post	<u>68</u>	50.0%
Total	136	100.0%

Notes: Reducers were identified as those firms that discussed reductions in their footnotes or disclosed unrecognized gains from benefit cuts recognized separately from unrecognized gains/losses for actuarial differences without discussing the nature of the cuts in the footnotes. To facilitate meaningful comparisons between reducers and nonreducers, nonreducers were randomly assigned a year as the "quasi-reduction" year based on the frequency distribution of years for reducers. For panel B, the adoption year of SFAS 106 was also inferred from reading the footnotes for sample firms. Prior (post) means the reduction was made before (after) the adoption decision.

H2 predicts that firms reducing benefits will have deteriorating financial conditions. We use change in total debt adjusted for pensions and SFAS 106 effects (CHLT) and change in income before extraordinary items adjusted for SFAS 106 effects (CLINC) as measures of change in financial strength. These change variables capture the incentives that managers face as operating conditions improve or deteriorate before considering the SFAS 106 effect. The variables are measured in the period prior to the reduction because that data would have been available during the PRB renegotiations period. There is no difference in reducers and nonreducers for CHLT. CHINC is significant in the direction expected for the median tests, but not the mean tests. Overall, these results suggest that two commonly used summary measures of change in financial condition are not consistently related to the decision to reduce benefits.12

H3 was tested using the change in the projected benefit obligation of pensions divided by assets (CHPEN). CHPEN measures the change in the present value of the future pension obligations relative to firm size. Table 2 shows that consistent with H3, reducers had a significantly higher change in pension benefits than nonreducers using both mean and median tests. This relationship has not been documented in previous research and provides evidence that firms may be trading off an increase in pension benefits for a reduction in PRB.

Under H4, we expect that the smaller the concentration of unionized workers, the more likely firms are to reduce benefits. Using benefit plan data from the Bureau of Labor Statistics, we gathered information on the degree of unionization for firms in our sample. Importantly, we

Table 2
Univariate Statistics and Tests (n=249)

	Mean		Median			
	Reducers	Nonreducers	p-values for t-tests	Reducers	Nonreducers	p-values for Wilcoxon tests
CHLT	004	011	.59	012	015	.64
CHINC	017	.002	.11	003	.004	.00***
CHPEN	.021	.006	.00***	.008	.004	.07*
EXPMCASH	.004	.003	.07*	.003	.001	.01***
APBOAT	.073	.052	.02**	.058	.026	.00***

Notes: The sample contains data on 249 firms. The table reports means and medians of the following variables:

CHLT = change in total liabilities adjusted for both the pension liability and PRB liability divided by total assets:

CHINC = change in income before extraordinary items adjusted for PRB expense divided by total assets;

CHPEN= change in pension projected benefit obligation divided by total assets;

EXPMCASH = ongoing PRB expense in the year of SFAS 106 adoption versus the average cash paid out in the 3 years prior to adoption divided by sales and

APBOAT = accumulated projected benefit obligation for postretirement benefits in the adoption year divided by total assets.

For reducers, the variables are measured in the year prior to the reduction. For nonreducers, the variables are measured in a randomly assigned year that ensures that the approximately the same proportion of firms is represented in each calendar year for reducers and nonreducers.

The reported p-values for t-tests represent tests of mean differences between reducers and nonreducers. The reported p-values for the Wilcoxon signed ranks tests represent nonparametric tests of difference between reducers and nonreducers. \*,\*\*,\*\*\* indicates a significant difference at the .10,.05, .01 level, respectively.

were able to measure unionization for employees who received retiree health care benefits NOT the entire workforce. Table 3 shows that we were able to discern the extent of unionization for 196 out of 249 firms. The mean unionization is smaller for reducers than nonreducers, but not significantly smaller. We also performed binomial tests comparing the percentage of reducers versus nonreducers for three categories: zero union coverage, less than 100% union coverage, and 100% union coverage. Consistent with H4, we find that among nonreducers, more of them have 100% union coverage than what would be expected by chance. 25.6% of nonreducers have 100% coverage compared to only 14.9% of re-64% of reducers have zero coverage compared to 58.5% of nonreducers. This difference is in the right direction given H4, but not statistically significant. Overall, the results from using univariate tests for H4 are mixed.

Elliott and Hanna (1996) found a greater tendency for firms to take multiple restructuring charges in subsequent years when their earnings before special items are especially depressed. Bartov, Lindahl and Ricks (1998) find that firms with multiple write-offs under-perform the market by 21% annually for a two-year holding period after the announcement compared to a 10% market under-performance for firms with a single write-off. Thus, we know firms that announce multiple restructuring charges have more pervasive problems that will require more extensive cost cutting and reorganization of the firm. Accordingly, we use a measure of the extent of restructuring defined as the number of periods that firms report restructurings from two years prior to one year after the announced PRB reductions. Table 4 compares this measure that ranges from zero to four for reducers and nonre-

Table 3 Unionization

	Reducers (n=114)	Nonreducers (n=82)	p-value
Mean Unionization	25.5%	32.4%	.26
Binomial Tests:			
Zero Union Coverage	73	48	.19
J	64%	58.5%	
Some Union Coverage	24	13	.21
8	21.1%	15.9%	
100% Union Coverage	17	21	.05
	14.9%	25.6%	

Notes: Union data was available for 196 of the 249 sample firms. Unionization for each firm is defined as the percentage of unionized employees who receive firm-sponsored retiree health-care out of the total number of employees who receive retiree health-care. Mean unionization is reported separately for the reducer and nonreducer firms, and the reported p-value is for a t-test of differences in the means. The firms are then divided into those with (1) zero union coverage, (2) a percentage unionization between zero and 100% and (3) 100% union coverage. The number and percentage of firms with a specific level of coverage out of the reducer (n=114) or nonreducer (n=82) category is also reported. The p-value for the binomial test of differences between reducers and nonreducers is derived from the normal approximation of the comparison of two binomial proportions. A z-statistic is computed as the difference in population proportions divided by a pooled standard deviation and then is converted to the reported p-values.

ducers. More nonreducers have zero years where they report restructuring (46.9%) than would be expected by chance and the binomial test is significant at a .06 level. The differences between reducers and nonreducers are not significant for the other levels of the restructuring variable. The multivariate tests that follow will help clarify the importance of restructuring activity after controlling for other important factors.

#### **Multivariate Logit Results**

We also estimated a multivariate logit model to test our hypotheses. The dependent variable is defined as one for reducers and zero for non-reducers. We use APBOAT as the proxy for PRB commitments to test H1. The only correlations that are significant among the independent variables at the .01 level are between the CHINC and CHLT (rho =-.51); CHPEN and REST (rho = .19); and APBOAT and UNION (rho=.23). Column 1 of table 5 reports results for the full sample without requiring union data

to be available. The coefficients on APBOAT and CHPEN are significantly different from zero and have the sign expected given H1 and H3. The income (CHINC) and debt variables (CHLT) are not significant in the direction expected. When we include UNION our sample size drops to 196 firms with complete data. The second column shows that APBOAT and CHPEN remain significant for this group, and consistent with H4, the unionization coefficient has the expected negative sign and is significant at the 5% level. When we include the REST variable in the last column, it has a significant coefficient with the expected positive sign. However, the p-value for UNION drops from .08 to .12. The results did not change substantially when including total assets in the regression to control for size or removing either the debt or income variable because of the significant correlation. Overall, existing PRB obligations, change in pension obligations, restructuring activity, and, to a lesser extent, unionization appear to provide the most explanatory power for the reduction decision.

Table 4
Extent of Restructuring

Number of years with restructuring	Reducers (n=136)	Nonreducers (n=113)	p-value
0	51 37.5%	53 46.9%	.06
1	42 30.9%	38 33.6%	.33
2	19 14.0%	13 11.5%	.35
3	17 12.5%	9 8.0%	.24
4	7 5.1%	0 0.0%	.21

Notes: A firm is counted as having a restructuring if they discuss a new restructuring plan or a plan to discontinue operations in their footnotes for a particular year. For reducers, the four-year period from two years prior to one year after the announcement of the PRB reduction is examined. For non-reducers, the four-year period is measured relative to a randomly assigned year that ensures that approximately the same proportion of firms is represented in each calendar year for reducers and non-reducers. The number and percentage of reducer and nonreducer firms restructuring a certain number of years out of the four years examined is listed. The binomial tests compare these percentages for reducers and non-reducers. The p-value is derived from the normal approximation of the comparison of two binomial proportions. A z-statistic is computed as the difference in population proportions divided by a pooled standard deviation and then is converted to the reported p-values.

#### Conclusions

Many firms have reduced postretirement health care benefits surrounding the adoption of SFAS 106. This study investigates differences in characteristics between firms that reduced benefits versus firms that made no changes to their postretirement benefit plans. Firms with the most significant PRB obligations were the ones most likely to reduce benefits. While change in the financial strength of the firm measured by income and debt does not seem to drive reductions, evidence is presented that firms are trading off increases in pension obligations with reductions in PRB. Firms that are undertaking more extensive restructuring activity during the sample period are also more likely to reduce benefits as part of their efforts to reorganize and cut costs. We also present mixed evidence that firms with heavily unionized employees with PRB are less

likely to reduce benefits because it would be more costly for them to renegotiate benefit packages. Our paper makes a contribution by documenting the cost tradeoffs firms made when choosing to reduce benefits. A potential area for future research is to investigate whether firms traded off a reduction in PRB with other forms of compensation such as stock options.

#### Suggestions for Future Research

The environment for retiree medical care is changing rapidly. In 1997, the Budget Reconciliation Act passed by Congress limited the amount that Medicare will pay to health care providers. In addition, health care inflation is again rising faster than general inflation. As Medicare covers less, this puts more of a burden on firms that offer retiree healthcare. Future research can examine two areas: (1) whether those

Table 5
Logit Analysis

			Coefficient (p-value) (n=249)	Coefficient (p-value) (n=196)	Coefficient (p-value) (n=196)
INTERCEPT			30 (.05)	01 (.48)	22 (.20)
CHLT		+	29 (.44)	.53 (.41)	.25 (.46)
CHINC		-	-2.92 (.13)	-1.97 (.27)	-2.06 (.26)
CHPEN		+	13.13 (.003)***	14.71 (.01)***	13.72 (.01)***
APBOAT	-	' <del>+</del>	5.13 (.01)***	5.36 (.02)**	4.94 (.03)**
UNION		-		52 (.08)*	46 (.12)
REST		+			.23 (.06)*
-2 Log-likelihood ratio			18.70 (.00)***	16.48 (.01)***	19.07 (.00)***

Notes: The reported logit results are for the firms that have complete data for the variables included in each model. The dependent variable is defined as one for reducers and zero for nonreducers. For reducers, the variables are measured in the year prior to the announcement of the PRB reduction. For nonreducers, the variables are measured in a randomly assigned year that ensures that approximately the same proportion of firms is represented in each calendar year for reducers and nonreducers. UNION is the percentage of employees that are unionized out of the employees covered by retiree healthcare benefits. REST is the number of years that a firm announces a restructuring or discontinued operation in their footnotes in the period from two years prior to one year after the PRB reduction (or the randomly assigned year for the nonreducers). See table 2 for a description of the other variables included. \*,\*\*\*,\*\*\* indicates that the one-tailed p-values are significant at the .10,.05, and .01 levels, respectively. The -2 log-likelihood ratio measures the fit of the model and has a chi-square distribution.

firms that had not made cuts to PRB obligations have decided to reduce benefits, and (2) for those firms that had previously reduced benefits, have they made further reductions in the face of these new changes in the retiree healthcare environment?

#### **Endnotes**

- SFAS 106 covers all non-pension postretirement costs including retiree health care, life insurance, tuition assistance, legal services, and housing subsidies. A majority of the cost is for retiree health care not covered by Medicare.
- 2. Under SFAS 106, firms must recognize an expense as the employees earn benefits during their careers. The expected benefits to be paid to current retirees, fully eligible future retirees, and potentially eligible future retirees are considered in calculating the accrued expense and liability amounts. In the past, most firms recognized expense on a cash basis as they paid the benefits.

- The Bureau of Labor and Statistics reports that medical costs increased twice the rate of inflation during the 1991-1993 period.
- Contributions to pension funds are generally tax deductible within certain limits. Sec. 419A of the Internal Revenue Code precludes an employer from deducting amounts set aside to prefund future retiree medical cost inflation. Since the inflation component represents the largest portion of the PRB obligation, Sec.419A essentially eliminated employer tax deductions for prefunding retiree health care. In addition, the Deficit Reduction Act of 1984 also enacted Sec.512(a)(3)(E), which taxes income earned on reserves set aside to fund postretirement health care benefits. Previously, this income was taxexempt. Therefore, there are no tax advantages to prefunding PRB. By contrast, the income on assets set aside for pension benefits is not subject to tax.
- If a firm does not make required pension contributions, Section 4207 of ERISA (Employment Retiree Income Security Act), a 1974 law that established the PBGC, authorizes the PBGC to

- place a lien on the firm's assets within 60 days after the payment was due. In addition, failure to make minimum pension contributions subjects employers to possible excise taxes of between 10% and 110%. Lastly, section 4071 of ERISA fixes fines of \$1,000 per day for firms not in compliance with PBGC funding (Turner 1993).
- 6. In International Brotherhood of Electrical Workers, AFL-CIO et al v. North American Philips (U.S. District Court, E.D. Kentucky, 1993), the unions were successful in challenging the firm's attempt to unilaterally reduce benefits that were part of a collective bargaining agreement. A similar result was reached in Independent Lift Truck Builders Union v. Hyster Company (U.S. District Court, C.D. Illinois, 1992).
- See, for example, American General Corp. 861
   F2d 897 (6th Cir. 1989); Moore v. Metropolitan
   Life Insurance Co. 856 F2d 488 (2d Cir. 1989);
   and Alday v. Container Corporation of America
   906 F2d 610 (11th Cir. 1990).
- 8. The terms "service cost" and "interest cost" are the two main elements of the annual ongoing expense for postretirement benefits. We used calendar year 1993 because this was the last year firms could adopt the new accounting standard.
- We did not find a significant difference in means and medians for the variables in our empirical analysis by type of benefit cut. Thus, our empirical analysis places all reducers into one group.
- 10. Firms do not have to recognize the full amount of the APBO on the financial statements at adoption of SFAS 106. Firms can choose delayed recognition and gradually increase the amount of the liability recognized over time by amortizing the APBO adjusted for assets set aside for funding over 20 years. The APBO is also reduced (increased) by unamortized gains or losses from actuarial differences or benefit plan changes in arriving at the liability amount. We use the APBO to measure the PRB obligation rather than actual liability because the size of the liability is dependent on the choice of delayed recognition.
- 11. There are 6 elements of the ongoing expense: (a) service cost, or the increase in the APBO for another year of service; (b) interest cost, or the implied interest on the APBO; (c) a reduction for expected return on assets, which is usually zero; (d) amortization of the transition obligation, if the delayed recognition method was chosen; (e) amortization of any actuarial gains or losses; and (f)

- amortization of the unrecognized gain from benefit cuts.
- 12. We also did not find a relationship between reductions and other correlated variables of financial strength such as cash flow from operations.

#### References

- Amir, E., and E. Gordon. 1996. Firms' choice of estimation parameters: empirical evidence from SFAS No. 106. Journal of Accounting Auditing & Finance (Summer): 427-448.
- 2. Amir, E., and A. Ziv. 1997. Timing the adoption of SFAS No. 106. *Journal of Accounting Research* (Spring): 61-81.
- Bartov, E., F. Lindahl, and W. Ricks. 1998. "Stock price behavior around announcements of write-offs." Review of Accounting Studies 3: 327-346.
- Bunsis, H. 1999. "Should companies cut their retiree medical benefits?" Working paper, Easter Michigan University.
- Durgin, H. 1991. New retiree health cap, VEBA will freeze costs. *Pensions and Investments* (October 14).
- Elliott, J.A., and W. Shaw. 1988. Unusual charges as accounting procedures to manage perceptions. *Journal of Accounting Research*: 91-126.
- Elliott, J. and D. Hanna. 1996. Repeated accounting write-offs and the information content of earnings. *Journal of Accounting Research*: 135-155.
- 8. Harty, S.J. 1991. Westinghouse caps retiree health benefits. *Business Insurance* (November 11).
- Khurana, I., and M. Loudder. 1994. The economic consequences of SFAS 106 in rate-regulated enterprises. The Accounting Review (April): 364-381.
- Mittelstaedt, H., W. Nichols, and P. Regier. 1995. SFAS No. 106 and benefit reductions in employer-sponsored retiree health care plans. *The* Accounting Review (October): 535-556.
- 11. Turner, J.A. 1993. U.S. pension benefit insurance. *Benefits Quarterly* (First Quarter): 77-85.
- Warshawsky, M. 1992. The uncertain promise of retiree health benefits. Washington, D.C.: AFEI Press.