

Opinions of Financial Analysts on Accounting for Defined Benefit Pension Plans

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Abstract

Responding financial analysts preferred pension plan accounting which contrasts with requirements of SFAS No. 87. The preferred model included: (1) Plan assets and accumulated benefit obligations are on the balance sheet. (2) Prior service cost is recognized in the year of plan adoption or amendment. (3) Gains and losses are recognized when they occur. (4) Annual pension expense is computed by netting the change in fair value of plan assets, deposits to the pension plan, and the change in accumulated benefit obligations.

Introduction

Corporate managements have generally chosen to smooth earnings as much as possible because investors perceive companies with smooth, constantly increasing earnings as the best investments. Volatile earnings from year to year are perceived as less desirable by investors. If annual earnings reflect considerable volatility, creditors and investors may conclude their investments are subject to higher levels of risk and require higher rates of return for the use of their capital. Therefore, creditors and investors may prefer financial statements which reflect the true volatility of annual earnings as opposed to financial statements which report smoother earnings of lower quality. Financial reporting of the economic consequences of providing a defined benefit pension plan in the period when those consequences occur could cause considerable volatility in reported annual income.

Current GAAP for defined benefit pension plans is stated in SFAS No. 87 which was issued in December, 1995, the same time as SFAC No. 6. The FASB would have preferred to follow the basic principles stated in the SFAC's, including placement of the fair value of the plan assets and projected benefit obligations on the balance sheet; however, because of the political nature of the promulgation process, the final draft of SFAS No. 87 was considerably different and more preparer oriented than what the FASB originally proposed.

In this research project, Certified Financial Analysts (CFA's) were asked to express their opinions about various procedures for financial reporting of defined benefit pension plans. They were also asked to express a preference for either the current GAAP for pension accounting or an alternative method of accounting proposed in this paper. Accounting for defined benefit pension plans was chosen as the subject of this research because current GAAP does not appear to be in agreement with accounting theory expressed in the SFAC's; the consistent application of accounting principles recommended in the SFAC's would very likely cause greater volatility in the annual earnings reported by companies maintaining these plans.

Research Design

Without knowledge of the FASB's original intent, the accounting principles articulated in the SFAC's and a process of deductive reasoning were used to develop an accounting method for defined benefit pension plans. The method developed closely resembled the accounting treatment originally proposed by the FASB (Miller and Redding, 1992) before adopting SFAS No. 87 in its final form. A major difference is the use of accumulated benefit obligations rather than projected benefit obligations for the reporting of pension expense and liabilities. The primary differences between the requirements of SFAS No. 87 and

the proposed accounting model used in this research project are:

1. Total accumulated benefit obligations are presented as a liability on the balance sheet. The use of accumulated benefit obligations rather than projected benefit obligations recognizes the effects of salary increases on pension expense and benefit obligations in the period when salary increases are granted.

2. The potential impact of future salary increases on the pension liability is disclosed in the notes accompanying the financial statements. This allows users to make their own evaluation about the magnitude and effects of any future salary increases.

3. Gains and losses are recognized immediately when they occur rather than amortizing accumulated gains and losses in excess of a corridor amount. This approach more vividly reflects the volatile effect on earnings of maintaining a defined benefit pension plan.

4. All pension plan assets are presented on the balance sheet at fair value rather than limiting the recognition of an asset to the extent that cumulative funding exceeds cumulative expense or as required by the minimum liability provision of SFAS No. 87. This procedure recognizes the effects of changes in the value of pension plan assets in the period in which they occur.

5. Pension plan assets and liabilities are presented separately on the balance sheet instead of netting them. This allows users to determine the economic status of the pension plan without analyzing data disclosed in the notes accompanying the financial statements.

6. Prior service cost is recognized in the period of plan adoption or amendment rather than amortizing the prior service costs over future years. This treatment recognizes the impact of adopting or amending a pension plan in the period when the management decision to adopt or amend the plan is made. This treatment is also consistent with the treatment of a change in estimate when the additional estimated cost does not benefit future years.

7. Prior service cost is presented on the income statement as a cumulative adjustment (or an extraordinary item). This treatment results in separate presentation of the pension costs associated with past periods and those associated with the current period. This should provide more useful information for projecting the impact of the existing pension plan on future earnings.

8. Annual pension expense is determined by netting the following three items: (1) change in fair value of plan

assets, (2) deposit to the pension plan, and (3) change in accumulated benefit obligations unrelated to prior service cost. This combined with immediate recognition of prior service cost allows all of the economic consequences of providing a defined benefit pension plan to be reflected in net income in the period when they occur.

A questionnaire was used to measure the preferences of respondents for various techniques of accounting for defined benefit pension plans. The last question asked respondents to indicate a preference for either the alternative accounting method proposed or the accounting requirements of SFAS No. 87. The example used in the questionnaire to contrast these two methods is presented in the Appendix. A Likert five point scale was used to measure responses.

The questionnaire was mailed to 350 Certified Financial Analysts selected at random. Seventy-four of the questionnaires were returned, a response rate of approximately 21%.

Analysis of Respondents' Opinions

A summary of responses to the questionnaire is presented in Table 1. At least a plurality of the respondents in this study preferred all of the concepts used in the proposed accounting method with the exception of the treatment prescribed for recognizing gains or losses. However, by supporting the proposed, alternative accounting method, the respondents ultimately give implicit support to recognition of gains and losses in the period when they occur. The level of preference for the various concepts varied substantially.

Two-thirds of the participants preferred the use of the accumulated benefit obligation as a balance sheet liability. A possible explanation for this preference is that the participants wish to evaluate the effect of current-year salary increases on the benefit obligation. Also, the respondents may be concerned about the reliability of management estimates of future salary increases used to compute projected benefit obligations. They may prefer their own estimates based on independently provided data. This latter explanation is further substantiated by the strong preference expressed (76% to 12%) for disclosure in financial statement notes of information needed for estimates rather than incorporating management estimates in the body of the financial statements.

Initially, the respondents marginally preferred (51% to 42%) the amortization of gains and losses to immediate recognition. Two possible explanations for this preference are: (1) For both accounting and tax purposes, gains and losses of defined benefit pension plans have traditionally

been amortized rather than recognized immediately; therefore, some respondents may have simply selected the technique with which they were the most familiar. (2)

Some of the respondents may have initially preferred the smoothing of earnings to the volatility of earnings which immediate recognition would cause.

Table 1
Preferences of Respondents

<u>Statements</u>	<u>Response*</u>					<u>Summary</u>	
	<u>Prefer 1</u>		<u>Prefer 2</u>			<u>Pf. 1</u>	<u>Pf. 2</u>
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>		
A. 1. Projected benefit obligations as a liability on the balance sheet.	.07	.19	.07	.40	.27	26%	67%
2. Accumulated benefit obligations as a liability on the balance sheet.							
B. 1. Amortization of gains and losses over a substantial number of years.	.18	.33	.07	.22	.20	51%	42%
2. Immediate recognition of gains and losses in period when they occur.							
C. 1. Present limited pension plan asset(s), if any, on the balance sheet as required by SFAS No. 87.	.04	.15	.18	.38	.26	19%	64%
2. Present all pension plan assets on the balance sheet at fair value.							
D. 1. Present as one amount the net of pension plan assets and liabilities on the balance sheet.	.11	.18	.11	.36	.25	29%	61%
2. Present pension plan assets and liabilities as two separate amounts on the balance sheet.							
E. 1. Amortization of prior service cost over remaining service life of current employees.	.10	.33	.10	.29	.18	43%	47%
2. Immediate recognition of prior service cost in period of plan adoption or amendment.							
F. 1. Pension expense as one amount.	.00	.04	.11	.51	.34	4%	85%
2. Separate disclosure of prior service cost component of pension expense.							
G. 1. Management estimates incorporated in the body of the financial statements.	.07	.05	.12	.34	.42	12%	76%
2. A financial statement note describing how various alternative future events may impact the financial statements.							
H. 1. SFAS No. 87 accounting requirements	.05	.11	.18	.40	.27	16%	67%
2. Proposed method of accounting for defined benefit pension plans.							

*Responses: 1 - First choice is highly preferred
 2 - First choice is moderately preferred
 3 - Indifferent between the two choices
 4 - Second choice is moderately preferred
 5 - Second choice is highly preferred

The preference for reporting of all plan assets at fair value (64% to 19%) indicates that a substantial majority of the respondents find fair value to be quite relevant for financial evaluation and investment decisions. In addition to providing a more relevant balance sheet at a particular date, respondents may believe the use of fair market value for the reporting of plan assets provides valuable information about the volatility of pension asset values.

The strong preference for separate disclosure of the pension assets and pension liabilities (61% to 29%) apparently reflects a desire for better, more detailed information. The preferred presentation allows investors to evaluate separately the significance of changes in the value of plan assets and benefit obligations.

The very slight preference (47% to 43%) for immediate recognition of prior service cost as a cumulative adjustment (or an extraordinary item) may be the result of exposure to the past tax and financial accounting treatment of amortizing prior service cost. A number of the respondents could again be concerned with the potentially volatile effect on earnings of immediate recognition of prior service cost.

The strong preference for separate disclosure of prior service cost and service cost may be partially attributable to the respondents' desire to evaluate the effect of only service cost on benefit obligations. This may allow users to more easily predict future cash disbursements for benefits.

The very strong support for the proposed accounting method (67% to 16%) is somewhat contradictory considering the responses to two previous questions favoring amortization of gains and losses and only narrowly supporting immediate recognition of prior service cost. The proposed accounting model requires recognition of the fair value of plan assets and the accumulated benefit obligations on the balance sheet. The use of fair value recognizes all gains and losses related to plan assets in the period when they occur. Reporting the total accumulated benefit obligations on the balance sheet also requires the immediate recognition of other actuarial gains and losses when they occur and requires the immediate recognition of prior service cost (based on accumulated benefit obligations) as a component of earnings in the period of a plan adoption or amendment.

The suggested accounting method (1) is theoretically sound and provides timely, relevant information; (2) provides information in the financial statements which is more representationally faithful of economic events than the information provided by SFAS No. 87 accounting; (3) is much easier to apply than the SFAS No. 87

requirements; and (4) is not as vulnerable to management manipulation of earnings as current GAAP. Apparently these advantages of the proposed accounting treatment overcame the initial desire of some respondents to smooth income through the amortization of gains and losses and prior service costs.

Implications of Research Findings

This research indicates that current GAAP may not provide information which users of financial statements desire. The FASB promulgates financial accounting standards in a political environment which is dominated by the management perspective. This is demonstrated by the substantial revision of SFAS No. 87 prior to its ultimate issuance. Miller and Redding (1992) have illustrated the effects of compromise on accounting for pension plans. The 1933 Securities Act was issued to safeguard the interests of creditors and investors. This act voiced the objective that the accounting profession should be an independent body which would insure proper communication between management and the users of their financial information. When GAAP requires reporting which is more management oriented than user oriented, this objective has not been met.

Given the dominance of preparers in the political promulgation process, the FASB needs to be able to exercise more independence than has been exhibited in the past. This independence is necessary not just to put preparers and users in a more equitable position. After many years of talking about a theoretical framework for accounting, the FASB completed the conceptual framework project which resulted in issuance of the SAFC's; the last SAFC was issued in December of 1985. When promulgated GAAP does not follow the principles discussed in the SFAC's because of pressure brought to bear by those responding to an exposure draft, the accounting profession is placed in an embarrassing position. This situation is exemplified by the requirements of SFAS No. 87. Such principles as relevance, reliability, timeliness, matching, periodicity, and representational faithfulness were not followed in SFAS No. 87 because the FASB was not independent enough to require the accounting procedures which adhered to those principles. The accounting profession could gain more credibility if promulgated GAAP more closely followed the advice of the SFAC's, including the cost-benefit principle. For example, SFAS No. 96 may have been theoretically correct; however, it failed primarily because the cost of adoption outweighed its benefits.

The belief by investors and creditors that smooth, steadily increasing earnings are preferable to volatile earnings has contributed to the problem of promulgating

theoretically good GAAP. This belief on the part of those responding to the SFAS No 87 exposure draft was the primary factor which caused acceptance of the income smoothing techniques included in SFAS No. 87--techniques such as amortization of prior service cost, amortization of the transition amount, and amortization of gains and losses. One year in the life of the average publicly held corporation is a very short period of time. If the principles of relevance, reliability, timeliness, matching, periodicity, and representational faithfulness are followed, one would expect that annual earnings would normally show some degree of volatility; these annual earnings would also be of a high quality. If smoothness is desired, then annual earnings can be averaged over selected multi-year intervals. Investors need additional education so they will understand that some volatility is to be expected in the year-to-year, high quality earnings reported by even the most successful companies. In other words, more of a long-run as opposed to a short-run perspective is needed.


In order for promulgated GAAP to be effective, some have argued that it must really be generally accepted. Does this mean acceptance by users or preparers? It should mean acceptance by a balanced group of both users and preparers. In order to assure this balance, the FASB should be able to operate in a more independent environment and follow the principles outlined in the SFAC's, including the assumption that any promulgation should be able to pass the cost-benefit test. If such a position of independence for the FASB--or similar body--could be achieved, it could greatly improve the credibility of the accounting profession and the quality of published financial statements.

Summary

A questionnaire was used to solicit the opinions of CFA's about accounting for defined benefit pension plans. The respondents generally preferred accounting techniques which are in contrast to the required GAAP as specified in SFAS No. 87. Sixty-seven percent of the respondents preferred the proposed accounting model for defined benefit pension plans. This model included the following: (1) Pension plan assets and accumulated benefit obligations are shown on the balance sheet. (2) Prior service cost is recognized in computing net income in the period of plan adoption or plan amendment as a cumulative adjustment or an extraordinary item. (3) Gains and losses are recognized in the period in which they occur. (4) Annual pension expense is computed by netting the change in fair value of plan assets, deposits to the pension plan, and the change in accumulated benefit obligations (not resulting from prior service cost).

The FASB originally wanted to account for pension plans in a manner somewhat similar to the proposed accounting method; however, the political promulgation process which was dominated by a preparer perspective resulted in the requirements of SFAS No. 87. In order to increase the credibility of the FASB and accounting profession, the FASB should be able to operate more independently and adhere to the principles discussed in the SAFC's, including the cost-benefit principle. If greater independence for the FASB could be attained, a better balance between the needs of users and preparers could be achieved, and the quality of published financial statements should be improved.

Suggestions for Future Research

This study could be extended to sample the attitudes of preparers and creditors toward the proposed accounting for defined benefit pension plans presented in this paper. The presumption is that preparers would generally oppose the suggested method; however, the extent of opposition is not known. Additional research could focus on whether or not a change in accounting would really make a difference in the decision making process of users. Would users make the same decisions using the information disclosures required by current GAAP? It would be interesting to compare earnings of a number of companies over several years using current GAAP and the proposed accounting for defined benefit pension plans to determine the volatility of annual earnings caused by using the suggested method. Finally, what would be necessary to convince both preparers and users that high quality earnings with annual volatility are more desirable for reporting purposes than lower quality earnings which are smoother? 

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Appendix

**Example of Accounting for A
Defined Benefit Pension Plan Contrasting
FASB # 87 Requirements and
A Proposed New Accounting Approach**

Pension Plan Data

Gleco Co. adopted a noncontributory, defined benefit pension plan at January 1, 1990. Data pertaining to the plan for 1990 and 1991 are:

	1990	1991
Prior service cost at plan adoption:		
Projected benefit obligation	\$500,000	
Accumulated benefit obligation	450,000	
Annual Service Cost:		
Projected benefit obligation	70,000	\$75,000
Accumulated benefit obligation	63,000	71,500*
Prior Service Cost increase in Accumulated benefit obligations due to 1991 wage increases		5,000
Fair value (and market related asset value) of plan assets--January 1	-0-	150,000
Fair Value of plan assets, December 31	150,000	313,500
Accumulated benefit obligation, Dec. 31	553,500	679,815
Projected benefit obligation, Dec. 31	615,000	745,350
Expected return on plan assets and settlement rate	9%	9%
Vested benefit obligations	200,000	250,000
Average remaining service life of employees--stated in years	10.5	10.5
Cash deposit to plan, December 31	150,000	150,000
Net gains and losses	-0-	-0-

Assume the first individual retirements under the plan will be in 1992 (no benefits paid or settled in 1990 or 1991).

*Includes \$4,000 due to wage increases granted for 1991.

For FASB No. 87 accounting, assume amortization of Prior service cost over the average remaining service life of active employees.

FASB # 87 - Financial Reporting Requirements

**Gleco Company
Partial Income Statements
For Years Ended December 31, 1990 and 1991**

	1990	1991
Pension Expense	\$ 162,619	\$ 164,469

**Gleco Company
Partial Balance Sheets
For December 31, 1990 and 1991**

	1990	1991
Non-Current Assets:		
Intangible Asset - Deferred Pension Cost	\$ 390,881	\$ 339,227
Long-Term Liabilities:		
Accrued Pension Cost	\$ 403,500	\$ 366,315

Note Accompanying Financial Statements In 1991

The corporation has a noncontributory defined benefit pension plan covering specified employees. The benefits under the plan are primarily based on years of service and compensation levels. The plan is funded in conformity with the funding requirements of applicable government regulations. The plan assets consist principally of marketable equity securities, corporate and government debt securities and real estate. The status of the plan at the end of 1991 was:

Fair market value of plan assets		<u>\$313,500</u>
Actuarial present value of accumulated benefit obligations, including		
vested benefits of \$250,000		679,815
Additional benefits based on future salary levels		<u>65,535</u>
Projected benefit obligations		<u>745,350</u>
Excess of projected benefit obligations over the fair value of plan assets		431,850
Recognition of deferred pension cost and additional pension liability		339,227
Unrecognized prior service cost		<u>(404,762)</u>
Accrued pension cost shown on balance sheet		<u>366,315</u>
Components of Pension Expense:	1990	1991
Service Cost	\$70,000	\$75,000
Interest on Projected Benefit Obligations	45,000	55,350
Interest on Fair Value of Plan Assets	-0-	(13,500)
Amortization of Prior Service Cost	<u>47,619</u>	<u>47,619</u>
Pension Expense	<u>\$162,619</u>	<u>\$164,469</u>

Proposed Financial Reporting Requirements

**Gleco Company
Partial Income Statements
For Years Ended December 31, 1990 and 1991**

	1990	1991
Pension Expense	\$103,500	\$112,815
Prior Service Cost - Extraordinary Item	<u>450,000</u>	<u> </u>
Total Charge Against Revenue	<u>\$553,500</u>	<u>\$ 112,815</u>

**Gleco Company
Partial Balance Sheets
At December 31, 1990 and 1991**

	1990	1991
Non-Current Assets:		
Fair Value of Pension Plan Assets	\$150,000	\$313,500
Long-Term Liabilities:		
Pension Plan Accumulated Benefit Obligations	553,500	679,815

Proposed Note to Accompany Financial Statements in 1991

The corporation has a noncontributory defined benefit pension plan which covers 100% of its full-time employees. The benefits under the plan are calculated based on years of service and the compensation level which is the average of the highest three salary years during the employment period. These benefits accrue annually at the rate of 1.5% of the defined compensation. The plan is funded in conformity with requirements of applicable government regulations. The plan assets consist principally of marketable equity securities, corporate and government debt securities and real estate. The fair value of plan assets and the accumulated benefit obligations are presented on the balance sheet. Other disclosures are:

Accumulated benefit obligations at December 31, 1990	\$553,500
Add:	
Increase due to 1991 Service prior to any salary increases	67,500
Increase due to 1991 Salary Increases	4,000
Adjustment for discounting at 9%	<u>54,815</u>
Accumulated benefit obligations at December 31, 1991	<u>\$679,815</u>

A 1% increase in salaries is expected to increase the accumulated benefit obligations by approximately \$13,107. Vesting for an employee is 20% at the beginning of the fourth year of employment, with full vesting at the end of eight years. Vested benefit obligations were \$250,000 at December 31, 1991.

The following actuarial assumptions were followed:

1. Discount rate = 9%
2. Assumed retirement age = 67 years of age.
3. Employee turnover = 5% annually.