The Enduring Controversy Over Pension Accounting: Are the Current Measures of Pension Assets and Liabilities Misleading?

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Abstract

The accounting profession has long attempted to improve the disclosure of pension information. However, even the most recent pension disclosure standard is criticized as being deficient. The purpose of this article is to: 1) briefly explain the current reporting standard, 2) note how the standard may tend to understate pension liability and expense, and 3) illustrate one of the most controversial aspects of the standard, which allows certain obligations to be reported as both a liability and an asset.

Introduction

Accounting standards for the disclosure of pension information have always been problematic. While the need for accurate and complete disclosure of pension information is imperative, the standards used to provide guidance for the disclosure of pension information have long been criticized for their deficiencies. The most recent attempt to significantly improve the disclosure of pension information was the Financial Accounting Standards Board's (FASB) Statement of Financial Accounting Standard No. 87, "Employers' Accounting for Pensions". However, Statement 87 still falls short of providing clear and comprehensive information about the status of defined-benefit pension plans. Three of the most serious shortcomings in the current standard are: 1) the recognition of certain liabilities and expenses are deferred to future periods, which may cause financial statement users to overestimate the financial integrity of both the pension plan and the sponsoring company, 2) certain obligations may be offset by items reported as assets that fail to meet most financial statement users' commonly held definitions of assets, and 3) there appears to have been a tendency for the FASB to have opted for the less conservative criteria when given choices in the development of the current standard.

Since pension liabilities and pension expenses frequently represent a large portion of a firm's net worth and total expenses respectively, it is important that users of financial statements not accept the amounts reported for pensions without question. However, for financial statement users to adequately understand what is

currently reported about pension plans, those users must have at least a cursory knowledge of how the various components of pension plans are measured and combined to produce the information found in the statements. Without this knowledge, financial statement users may be unintentionally misled in their evaluation of the financial statements. Ignorance of the assumptions and measurement techniques used to report pension information may cause financial statement users to overestimate not only the funding status of the pension plan, but perhaps even the status of the sponsoring company itself.

The Major Provisions of *Financial Accounting Standard No.* 87, "Employers' Accounting for Pensions"

Defined Contribution Plans Versus Defined Benefit Plans

The first important distinction to be made about the accounting methods for pensions is the distinction between defined contribution plans and defined benefit plans. Defined contribution plans are those pension plans that require the employer to make a specified contribution to a pension plan. In defined contribution plans the risk that the contributions will fail to adequately provide the intended pension benefits is largely borne by the employees. The employer's responsibility is primarily limited to meeting the agreed-upon payment schedule.

Due to the rather limited risks borne by the employer,

the accounting methods for defined contribution plans are rather straightforward and relatively uncomplicated. The employer's annual pension expense is the amount of the contribution that the employer is contractually obligated to make. An asset is recorded if the employer's contribution exceeds this contractual obligation and a liability is recorded if the employer's contribution falls short of the contractual obligation. Due to the relatively simplistic nature of accounting for defined contribution plans, the problems that have been historically linked to pension disclosures are not related to defined contribution plans, but are instead related to defined benefit plans.

Defined benefit plans specify the pension benefits that employees covered by the plan will receive. The benefits are usually a function of various uncertain factors, such as years' of service and average final years' salaries. As these benefits are earned, the employer should make contributions equal to their present value. Therefore, the risk of ensuring that the contributions provide the intended benefits is borne by the employer. It is this distinction that greatly increases the complexity of the accounting methodology for defined benefit plans.

Conceptual Ideas and Complicating Factors

Conceptually, pension disclosure requirements for defined benefit plans would be relatively easy if it were not for the following items: inflation, interest earned on accumulated pension funds, pay raises that will ultimately be given to employees in the future, varying life expectancies of employees, amendments to pension plans, and the desire to avoid wide fluctuations in the amount reported for pension expense from period to period. It is primarily the interaction of these latter elements that lead to the inherent, unavoidable complexities involved in the accounting methods required for defined benefit plans.

The basic concept of a defined benefit pension plan is that the present value of all future pension benefits should be funded by contributions made by the employer. These contributions are made to a fund that will not only make the specified pension payments to the qualifying employees, but will also invest the money in the fund in order to earn revenue that will help pay for the pension obligation. If it were not for the complicating items which were previously mentioned -- inflation, interest earned on accumulated pension funds, pay raises that will ultimately be given to employees in the future, varying life expectancies of employees, and the desire to avoid widely fluctuating measures of pension expense -- the calculations that would be required to fund the future pension benefits would be relatively easy. However, these complicating factors do exist and therefore must be considered. The following discussion is intended to provide a basic understanding of how these factors are handled. It is followed by an analysis of why it is important to understand the assumptions and methods used to account for pensions. The most important items in this latter analysis will be: 1) there may be large amounts of pension liabilities that are deferred to the future and are therefore largely unreported in the current period, and 2) certain obligations may be recorded not only as a liability, but as an off-setting asset that causes the net amount of these additional liabilities to effectively equal zero.

The Major Components of Periodic Pension Expense

The major components of pension expense for defined benefit plans are as follows: service cost, interest cost, the actual return on plan assets, the amortization of prior service cost, current gains and losses, prior gains and losses, and the amortization of transition amounts. Figure 1 shows how these different components combine to create the final amount ultimately reported as pension expense. A brief definition and description of each of these items will follow. It should be reemphasized that the interaction of these components causes the calculations to be somewhat interdependent and complex. However, it is to the benefit of financial statement users to acquire at least a cursory knowledge of the process used to determine the final measures of pension assets, liabilities, and expenses. Otherwise, a financial statement user may be blindly accepting a process that includes assumptions and calculations that the user may not fully understand or find acceptable.

Figure 1
The Determination of Periodic Pension Expense

- (+) 1. Service Cost
- (+) 2. Interest Cost
- (-) 3. Actual Return on Plan Assets
 - 4A. Current Gains and Losses
- (+) Current Gain (Because deferred to future periods)
- (-) Current Loss (Because deferred to future periods)
 - 4B. Prior Gains and Losses
- (-) A fraction of prior Gains (Through an amortization process)
- (+) A fraction of prior Losses (Through an amortization process)
- (+) 5. Amortization of Prior Service Cost
- (+) 6. Amortization of Transition Amount
- X X X <----- Net Periodic Pension Cost

Service Cost

The service cost element of periodic pension cost is what most people think of when they think of pension expense. Basically, the service cost element of periodic pension expense is the present value of the estimated future pension benefits earned by qualified employees in return for their work during the course of the current accounting period. For the accountant, however, the service cost element is only the first step in a long and complicated process used to ultimately determine the periodic pension expense and any related pension asset or liability.

The service cost obviously adds to the total amount of pension expense recorded for the year. The determination of the service cost requires the following estimates: the estimated years of service that the covered employees will provide, the estimated life spans of the employees, and the estimated periodic returns that the invested pension plan assets will earn in the future.

One additional complex estimation that may arise in measuring the service cost occurs when the pension benefits are based on an equation that considers the amount of pay that the employees earn in the last year(s) of employment. If the benefits are based on such an equation, the estimate of the present value of the benefits earned by the qualifying employees must include an estimate of the employees' salary during those last years of employment. For example, if the benefits due to an employee are 40% of the average salary earned by that employee in his or her last three years of employment, the service cost must be based on an estimate of what the employee's future salary will be during those last three years. When the estimated amounts of benefits to be paid are based on current salaries rather than future salaries, the total obligation is referred to as the accumulated pension benefit obligation. When the total accumulated pension obligation is measured based on the projected future salary, the total obligation is referred to as the projected pension benefit obligation.

Interest Cost

The interest cost component of pension expense is the amount by which the projected pension benefit obligation needs to grow in order to maintain present value equivalency. In other words, simply because of the passage of time, the dollar amount of the pension obligation must be greater at the end of the period than it was at the beginning of the period. Otherwise, the real obligation to provide future pension benefits would become smaller for no other reason than dollars are worth less in the future due to inflation. An analogy can be used to greatly simplify this concept. If a fund contained \$100 at the beginning of a period and the rate

of inflation during the period was 10%, the fund would need to have \$110 in it at the end of the period if it were to maintain the same purchasing power it had at the beginning of the period. The \$10 difference is analogous to the interest cost component of periodic pension expense.

Actual Return on the Plan Assets

Pension fund contributions are invested in order to earn revenue which is used to pay for part of the future benefit obligations. Due to the many time periods involved, the accumulated earnings from these contributions can pay for a relatively large amount of the pension obligation. Since the return that is earned on the plan assets each year pays for a part of that accrued pension obligation, these returns on the plan assets decrease the amount recorded for periodic pension expense. However, the deduction in that period's pension expense is not equal to the amount that was actually earned by the fund in that particular period. In an attempt to reduce fluctuations in the amount reported as pension expense from period to period, accountants manipulate the amount actually earned by the pension fund. This manipulation ultimately causes the deduction in periodic pension expense to differ from what was actually earned by the fund. The next section on gains and losses focuses in greater detail on this smoothing process.

Gains and Losses

In order to reduce the volatility of the pension expense recorded from period to period, the FASB introduced several mechanisms into the accounting process that smooth out the amounts reported for pension expense from period to period. One of the greatest sources of potential volatility arises from the actual return earned each period by the plan assets. Since the amount actually earned by a fund can vary widely from period to period, and since every dollar earned by the pension fund reduces by a dollar the amount that has to be contributed to the fund, unanticipated returns could have had a very volatile impact on the contributions required and pension expense recorded in each period. However, the FASB recognized the volatility that these varying investment earnings could have on the recorded pension expense and, in response, created a method that greatly diminishes this source of volatility.

The method used to reduce the volatility resulting from the fluctuation of the plan's actual return starts with an actuary's estimate of the fund's long-term periodic rate of return. This estimate then becomes a benchmark against which each period's actual return is compared. Differences between the actual and anticipated returns earned by the pension fund are referred to as

"actuarial gains" (when actual returns are greater than estimated) and "actuarial losses" (when actual returns are less than estimated). When the amount actually earned by the fund's assets either exceeds or falls short of the estimated return, the actuarial gain or loss is deferred to later years. In other words, if the fund was expected to earn \$10,000,000 but only earned \$8,000,000, the \$2,000,000 difference is an actuarial loss that would otherwise increase pension expense of the current period. However, the procedures implemented by FASB have the effect of delaying the recognition of this \$2,000,000 expense to the future. The result is that the \$2,000,000 increase in pension expense is divided and spread out over future accounting periods instead of being recognized in the current period. The time period over which this amount is spread is equal to the average remaining years of service expected to be provided by the current employees. Importantly, the end effect of deferring current gains or losses is often contrary to what financial statement users might expect. In order to clarify these effects, the next section of this paper illustrates the impact of this process on current versus past gains or losses.

The Effect of Current Plan Performance on Current Measures of Pension Expense

The current period effect of the deferral process just described is frequently different from what might be expected. If the pension plan performs better than anticipated, the extra earnings are not treated as a reduction of the current period's pension expense. This non-recognition of unanticipated earnings is contrary to the basic premise of pension plan accounting, which assumes that the returns on pension plan assets are used to help defray the periodic pension expense. However, if a reduction in the measurement volatility of periodic pension expense was to be achieved, the basic premise had to be altered in this particular case. Therefore, variations in performance from what was expected are always ignored in the period in which they occurred and are instead deferred to future periods through a process of multi-period amortization. The most important aspect of this deferred recognition is that the reported pension expense for a pension fund which performed poorly during an accounting period will not reveal the poor performance of that period.

As a final observation regarding the deferred recognition factor, it should be emphasized that this deferral process has the primarily beneficial effect of reducing pension expense volatility. The detrimental aspect of the deferral process is that financial statement users may be unaware of the mechanics of the accounting process for pensions, and may erroneously believe that a weak performance by the pension fund would be reflected in the current measure of periodic pension expense.

Amortization of Prior Service Costs

When pension plans are amended, the past service of employees usually causes the pension obligation to immediately and sometimes dramatically increase. For example, assume that an employee who has ten years of service is employed by a company that amends it's pension plan. The initial formula for determining the amount of the pension benefits that the employee was entitled to was as follows:

1.5% ×
$$\begin{pmatrix} \text{the number of} \\ \text{years of service} \end{pmatrix}$$
 × $\begin{pmatrix} \text{the average of the} \\ \text{last three years of salary} \end{pmatrix}$

If the amended formula was made more generous by increasing the first part of the formula from 1.5% to 1.75%, the employee would immediately be entitled to (0.25% X number of years service X the average of the last three years of salary) because of the employee's prior ten years of service. However, while this obligation comes into effect on the date that the plan is amended, the additional expense and liability is not immediately recognized. Instead, the liability and related expense are kept off of the financial statements until future periods when they can be gradually recorded in smaller increments through a process of amortization. While the deferral of expense and liability recognition is obviously a welcome procedure from the employer's viewpoint, it is doubtful whether there is any accounting basis to justify this treatment. The employer's new obligation, for example, meets the accounting profession's definition of a "liability", yet the full amount of the obligation is not recognized as such in the financial statements. Exacerbating the accounting treatment of prior service cost is that under certain conditions a part of this liability will be recorded. The condition that triggers this partial recognition is when the net liability that is reported for a pension is less than a "minimum pension liability" that must be recorded as specified by the current standard (to be discussed in more detail later). Furthermore, when part of the prior service cost is reported as a liability due to the "minimum pension liability" criteria, the additional liability is reported as both a liability and an asset. Thus, the net impact of reporting such liabilities is effectively negated. This accounting treatment of the prior service cost is perhaps the most controversial aspect of the current standard. And, importantly, it is a fairly safe assumption that this accounting treatment is not widely known. If the accounting standards for pension plans were easier to understand, it is likely that this treatment would come under a great deal of criticism. Unfortunately, the complexity of the accounting procedures for pension plans may actually serve to diminish critical analysis of this specific aspect of the current standards.

Transition Amount

Throughout the development of FASB Statement No. 87, it was widely acknowledged that many companies had large amounts of unreported pension liabilities that could have suddenly been required to be recognized. The FASB realized that the sudden appearance of large liabilities on corporate financial statements would give the appearance of a dramatic change in each company's overall financial position, the collective effect of which might be detrimental to the economy. In order to lessen the impact that an immediate recognition of these previously unrecognized liabilities would have, the FASB allowed companies to defer these liabilities to future periods when they will be recognized in smaller increments through a process of amortization.

How the Components Combine to Determine Periodic Pension Cost

The major components that comprise the periodic pension expense as measured by accountants are: Service Cost, Interest Cost, Actual Return on Pension Plan Assets, Current Gain or Loss, Past Gains or Losses, Prior Service Cost, and Transition Cost. Service Cost, Interest Expense, Current Gains, Past Losses, Prior Service Cost, and Transition Cost are all positive components of pension expense and therefore add to the expense. Actual Returns on Pension Plan Assets, Current Losses, and Past Gains are negative components of pension expense and therefore are subtracted from pension expense. These relationships are illustrated in Figure 1.

The Determination of the Reported Pension Liability

<u>Differences between the Contribution Made to the Fund and the Recorded Expense</u>

The component of pension liability that is easiest to understand is that portion which arises as a result of the difference between the employer's contribution to the fund and the recorded periodic pension expense. If the amount of the contribution made during a period exceeds the recorded periodic pension expense, the prepayment results in a reported asset. However, the more likely scenario is that the contribution is less than the periodic pension expense, in which case the difference is appropriately recorded as a liability.

The Deferred Gains or Losses of Prior Periods

Up to this point, frequent references have been made to deferrals of current gains or losses which resulted from the actual return of the plan assets differing from the estimated return on plan assets. These "current" gains and losses were said to be deferred to future periods when they would be recognized in smaller increments through an amortization process. In those future periods the "current" gain or loss combine with other previously deferred gains and losses to become the accumulated net gain or loss due to events of prior periods. One of the lesser known aspects of this treatment is that the accumulated net gain or loss does not have any affect on the "future" periods unless the accumulation exceeds an amount referred to as the corridor amount. The corridor amount, in effect, becomes a secondary layer of smoothing that helps diminish the volatility of the amount recorded for pension expense from period to period. If, for example, there were many consecutive periods where the actual return from the pension plan fell short of the estimated return, the losses would not be recorded in the period in which they occurred, but would instead be deferred to future periods. This deferral is the first layer of the smoothing process used by accountants. After several periods, these consecutive losses would accumulate. However, the recognition of these prior losses would not be necessary unless their accumulated amount exceeds the corridor amount. This prerequisite is the second layer of the smoothing process.

To fully understand how this process works, it is necessary to briefly discuss how the corridor amount is determined. The next section explains the determination of the corridor amount and also attempts to illustrate how the construction of the corridor amount is itself a third layer of smoothing. The primary point of the discussion is that the correlation between the actual obligation/expense and the reported obligation/expense becomes smaller as the efforts to reduce the volatility of the pension expense and liability reported are made. While the purpose of the smoothing process is honorable, the complexity of the mechanics involved could mislead financial statement users into assuming that the reported measure of pension liability is comprehensive, while in reality, it is not.

The Corridor Amount

The corridor amount is equal to the greater of either 10% of the "Market Related Asset Value" of the pension plan or 10% of the "Projected Benefit Obligation". The market-related asset value of the pension plan is found by averaging, over not more than the five most recent years, the market values of the plan assets. This averaging technique introduces part of the third layer of the smoothing process. Since the market-related asset value is based on an average of recent market values, the market-related asset value must be less volatile than the most recent market value. For example, if the last six market values of the plan were \$95, \$80, \$100, \$120, \$90, and \$110, the change in the market value from last year to this year would be approximately 22% (\$110/ \$90). However, the change in market-related asset value would be only approximately 3%, calculated as follows:

The average of the five most recent market values

divided bv The average of the five most recent market values as of one year ago

$$\frac{(80+100+120+90+110)}{5} + \frac{(95+80+100+120+90)}{5} = 3$$

While the criteria based on market-related asset values focus on the assets related to a pension plan, the criteria based on the projected benefit obligation are based on the liability related to a pension plan. However, it is interesting to note that while there were two obvious choices that could have been used to measure the pension obligation: 1) the accumulated benefit obligation, and 2) the projected benefit obligation, the accounting standard uses the projected benefit obligation. The aspect that makes this choice so intriguing is that the projected benefit obligation is a larger measure of the pension obligation than is the accumulated benefit obligation. Since the corridor amount must be reached before recognition of prior accumulated losses begins, the selection of the larger measure is clearly the less conservative route. It is also the route that would be favored by employers since it reduces the amount of the prior losses that must be recorded as part of pension expense. But perhaps the most interesting aspect of the required use of the larger measure of the pension obligation (the projected benefit obligation) for this part of the measurement process is the fact that the smaller measure (the accumulated benefit obligation) is required when calculating the "minimum pension liability" (to be discussed later). In other words the accounting procedures consistently use the least conservative selection of these measures. The larger measure is used when it helps to reduce the amount of the prior losses that must be recognized, and the smaller measure is used when it helps to reduce the amount of the liability that must be recorded. By reducing the amount of the pension expense and liability that must be recognized, both of these selections appear to favor the employer.

Finally, when the unrecognized gain or loss does exceed the corridor amount, the excess must be amortized over a period of time that represents the estimated average remaining years of service to be provided by the employees. Figure 2 summarizes the major points concerning the treatment of unrecognized prior gains and losses.

Unreported Pension Liabilities

There are several types of pension liabilities that are allowed to frequently go unreported. The three primary reasons that these liabilities go unreported are: 1) the desire to avoid widely fluctuating measures of pension expense from period to period, 2) disputes over the purpose of amendments to pension plans that recognize prior years of service, and 3) the desire to make the acceptance of SFAS 87 more palatable to the firms who feared the immediate recognition of previously (pre-SFAS 87) unrecognized pension obligations. The three primary types of unreported liabilities are: 1) actuarial gains and losses due to pension plan performance differing from the estimated performance, 2) liabilities for prior service cost resulting from increases in the pension plan formula, and 3) liabilities for any transition amounts.

Figure 2
Treatment of Unrecognized Prior Gains and Losses

- Accumulation of gains and losses which were deferred to future periods.
- These unrecognized gains or losses will combine so that either a net unrecognized loss or a net unrecognized gain results.
- The unrecognized gain or loss does not affect the amount recorded for pension expense unless it exceeds the corridor amount.
- 4. The corridor amount is equal to the greater of either 10% of the market-related value of the plan assets or 10% of the projected benefit obligation.
- If the unrecognized gain or loss exceeds the corridor amount the excess must typically be amortized over the remaining estimated average years of service to be provided by the employees.

Unamortized Gains or Losses

As was previously noted, any difference between the amount earned by the pension fund and the amount of anticipated earnings is referred to as an actuarial gain or loss. Furthermore, the actuarial gain or loss is gradually recognized in future accounting periods through a process of amortization if, and only if, the accumulated net amount of unrecognized gains or losses exceeds the corridor amount. This recognition process could keep gains or losses off the financial statements for what could be a substantial period of time. While the impact of this smoothing process is perhaps economically beneficial, many of the underlying mechanics involved in the process clearly favor the employer by reducing the amount of pension liability and expense that must be recognized. It is important for financial statement users to be aware of this fact.

Prior Service Costs

The treatment of Prior Service Costs is controversial even among accountants. The controversy arises when a pension plan is amended to increase the benefits <u>and</u> the

employees' prior years of service are included in the new pension benefit formula. The basic problem is that the liability occurs ahead of the benefits that the employer expects to receive in exchange for this amendment. The issue is whether to immediately recognize the liability for prior service that occurs on the date of the amendment, or to allow the deferral of this immediate liability in sympathy to the employers who: 1) would fear the effects that the immediate recognition of this liability would have on their financial statements, and 2) believe that the benefit that they receive in exchange for increasing pension benefits will come in the future through increased commitment and satisfaction of their employees. The controversy was settled in favor of the employers. Therefore, the immediate "expense" and "liability" that ensues on the date that a plan is amended is not recognized until future accounting periods, even though there appears to be no accounting basis for such treatment.

Transition Costs

As was previously noted, when companies adopted Statement No. 87, they were likely to have had large amounts of pension liabilities that would had to have otherwise been recognized. The FASB allowed companies to amortize these amounts of unrecognized liabilities over the greater of 1) the estimated average remaining years of service of the current employees or 2) 15 years. The amount used to measure this transition gain or loss is the difference between the projected benefit obligation and the fair market value of the plan assets on the date that Statement 87 was adopted by the company. Therefore, to mitigate the unfavorable impact that the new standard would have on corporate financial statements, the amount of the pension liability reported on a company's balance sheet may be substantially less than the company's actual obligation. In such circumstances, the uninformed reader of the balance sheet might conclude that the pension plan is more financially sound than is actually the case.

Notwithstanding the good intentions of the FASB in formulating the accounting requirements of Statement 87, the resulting measure of pension liability on corporate financial statements could be misleading.

Minimum Net Pension Liability

The FASB implemented a mechanism into this process which requires that at least a minimum amount of the liability be reported. The fact that the FASB included such a mechanism underscores the very purpose of this article. The implication of requiring a minimum pension liability is that there is still unreported pension liability even after meeting the standard enacted by the FASB. In more common language the term "minimum pension liability" could be interpreted as

"at least a minimal portion of the unrecognized liability should be reported". While there might be beneficial effects in letting some types of pension liability go unreported, some of the other unreported liabilities are clearly controversial. Moreover, even if all of the unreported liabilities had primarily beneficial effects, it would still be imperative for financial statement users to understand what is missing from the reported expense and liability.

The minimum net pension liability that must be reported by an employer is equal to the unfunded accumulated benefit obligation. The unfunded accumulated benefit obligation (unfunded ABO) is equal to the difference between the accumulated benefit obligation and the fair market value (FMV) of the plan assets (ABO - FMV):

One of the most intriguing aspects of the above equation is that the FASB selected the accumulated benefit obligation (ABO) for the measure of the pension obligation. As was noted earlier in this paper, there are two measures that are generally used for the pension obligation: the projected benefit obligation (PBO) and the accumulated benefit obligation (ABO). The projected benefit obligation is the larger of the two measures. By selecting the smaller measure of the pension liability (ABO) for the calculation of the minimum pension liability, the FASB selected the measure that was the least conservative and most favorable to the employer. For example, if the ABO was \$80 million, the PBO \$100, and the FMV of the plan assets \$70 million, the use of the ABO rather than the PBO causes the minimum net pension liability to equal \$10 million rather than \$30 million.

Earlier in this article, the amortization of prior gains and losses through the use of the corridor amount was discussed. When the FASB formulated the specifications for the corridor amount, they used the projected benefit obligation (PBO), even though the effect of this choice was to diminish the amount of the unrecognized liability that would have to be recognized. This requirement, like the choice for the minimum pension liability, was the measure that was the least conservative and most favorable to the employer. Either one of these selections could be criticized for being contrary to basic accounting theory and purpose. However, when examined together, the bias of these requirements is undeniable. The decision to use the smaller of the two measures (the accumulated benefit obligation) when calculating the minimum pension liability, and the larger of the two measures (the projected benefit obligation) to measure the amount of the unrecognized liability that has to be amortized, appears to strongly favor the employer in it's measurement of expense and liability. One could question the role of the FASB when closely examining the choices made during the development of this standard.

The Minimum Pension Liability and Recognition of Certain Obligations as both Assets and Liabilities

When the recognized pension liability of the reporting firm falls below the minimum net pension liability that FASB requires, an additional amount of pension liability must be recognized. The journal entry necessary to record this additional pension liability is perhaps the most controversial aspect of the disclosure requirements. The controversy arises out of the fact that an asset may be recognized for unrecognized prior service costs that are not as yet funded. Due to the mechanics of double entry accounting, every journal entry needs both a debit and credit. Therefore, the recognition of additional pension liability not only requires that a credit be made to the appropriate liability account, but also requires that a corresponding debit be entered into the accounting records.

If it were not for Statement 87's required debit to an asset account, most accountants would probably have debited an expense account in the entry to recognize this additional liability. However, the FASB decided that the debit should be made to an asset account if there was any unrecognized prior service cost. What this decision does is to negate the impact that the recognition of the additional liability would have had on the financial statements by offsetting the liability with an equal asset. In the situation covered by this part of the standard, the reporting company would have an obligation from agreeing to credit employees for prior years of service when a pension plan was amended. The liability for these prior years of service immediately comes into existence on the date of the plan's amendment. Current standards allow the recognition of this liability and related expense to be deferred to the future. However, if the net pension liability that is reported by a company is less than the minimum pension liability that is specified by Standard 87, at least part of this unfunded prior service cost must be recognized as a liability. Intuitively, the recognition of what was a previously unrecognized and unfunded liability would be accompanied by an associated expense. But, the standard allows companies to avoid the recognition of an expense even in the rather limited situation covered by this aspect of the statement. The standard accomplishes this by allowing the companies to record the unfunded liability that must be reported as both a liability and an asset.

The net effect of recording the part of the unfunded prior service cost that must be recognized as both an asset and a liability is that a net liability of zero is reported. While this treatment is controversial among accountants, due to the complexity of the current pension standard, it is probable that most financial statement users don't even know that such a controversy even exists.

Conclusion

The procedures which accountants use to determine the recorded amounts of pension expense and pension liability are very complex. As a result, financial statement users might be tempted to simply accept these measures and not subject them to critical analysis. However, there are few areas in the accounting standards more deserving of critical analysis. Even among accountants, many of the aspects of the current pension standards are criticized as being confusing, deficient, and unjustified. Figure 3 illustrates some of the more controversial and noteworthy aspects of the accounting treatment used to determine pension expense and liability.

If financial statement users wish to be capable of assessing the true dimensions of the pension expense and liability, they unfortunately must be cognizant of the basic mechanics used by accountants to arrive at these measures. It is only after obtaining this basic, cursory knowledge of the mechanics that financial statement users can truly understand what is and isn't included in the reported amounts for pension expense and liability. To simply rely on the reported measures without being aware of their omissions and shortcomings is suboptimal and perhaps negligent. It was the purpose of this paper to provide a brief exposition of the mechanics specified by Statement 87 to measure pension expense and liability, as well as to alert financial statement users to the more controversial elements of these mechanics. It is hoped that the paper provides the basis necessary for making sounder and more informed pension plan analyses.

Suggestions for Future Research

Future research topics concerning Statement 87 are seemingly abundant. First, the statement's complexities could be hypothesized to affect the form of pension plan offered by employers. For example, employers who currently offer defined benefit pension plans may seek to avoid Statement 87's complex accounting and financial reporting requirements by converting to defined contribution plans. Thus, research could focus on the economic consequences of accounting complexities. Secondly, the provisions of Statement 87 present the opportunity for a wide array of conventional capital market studies. Possible examples include: a) examining empirically the effect of pension "assets" being reported in a given year and then being absent in the financial statements of the subsequent year; and b) examining the

Figure 3 Some Lesser-Known Aspects of the Accounting Standards for Defined Benefit Pension Plans that Can Distort the Disclosure of Pension Information.

Pension Liabilities That Might Not Be Reported

- 1. The liability for current actuarial losses.
- 2. The liability for past actuarial losses, if the accumulated net loss is less than the corridor amount.
- 3. The liability due to any amendment to a pension plan that credits past years of service.
- 4. The liability due to the transition to the FASB's newest statement on pension.

Accounting Procedures That Can Lessen Pension Expense

- 1. The deferral of current actuarial losses.
- 2. The use of the Market-Related Value of the plan assets when determining the estimated return.
- 3. The use of the Corridor Amount as a criteria to be met before prior losses are recognized.
- 4. The use of the Projected Benefit Obligation, rather than the Accumulated Benefit Obligation, as one of the two possible measures of the Corridor Amount.
- 5. The deferral and subsequent amortization of Prior Service Cost.
- 6. The deferral and subsequent amortization of Transition Gains or Losses.

Aspects of the Current Pension Standards that Favor Employers

- The selection of the Projected Benefit Obligation (PBO) over the Accumulated Benefit Obligation (ABO) as a possible determinate of the corridor amount.
- 2. The selection of the Accumulated Benefit Obligation (ABO) over the Projected Benefit Obligation (PBO) in the determination of the minimum net pension liability that must be reported.
- Deferred recognition of expenses associated with Prior Service Costs to future periods where they will be recognized through a process of amortization.
- 4. Deferred recognition of expenses associated Transition Losses to future periods where they will be recognized through a process of amortization.
- 5. The possible recognition of an <u>asset</u> for any amount of unfunded pension liability that is due to unrecognized prior service costs (this is perhaps the most controversial aspect of the current accounting standards for pensions).
- 6. The possible recognition of a contra owners' equity account for amounts of unfunded pension liability that exceed any unrecognized prior service cost, which in effect offsets the impact of the related liability which is reported.

impact of transition to Statement 87's requirements (such as the minimum pension liability) on the debt service costs of firms.

Bibliography

- 1. Accounting Principles Board, "Accounting for the Cost of Pension Plans," *APB Opinion No. 8*, American Institute of Certified Public Accountants, 1966.
- 2. Daley, Lane Alan, "The Valuation of Reported Pension Measures for Firms Sponsoring Defined Benefit Plans" *The Accounting Review*, Vol. 59, No. 2, pp. 177-198, 1984.
- 3. Deaton, William C., and Jerry J. Weygandt. "Disclosures Related to Pension Plans." *Journal of Accountancy*, pp. 44-51, January 1975.
- 4. Deitrick, James W., and C. Wayne Alderman. "Pension Plans: What Companies Do- and Do Not-Disclose," *Management Accounting*, Vol. 61, No. 10, pp. 24-29, April 1980.
- 5. Financial Accounting Standards Board, "Employers'

- Accounting for Pensions," Statement of Financial Accounting Standard No.87 Financial Accounting Standards Board, 1985.
- 6. Francis, Jere R., "Lobbying Against Proposed Accounting Standards: The Case of Employers' Pension Accounting," *Journal of Accounting and Public Policy*, Vol. 6, No. 1, pp. 35-37, 1987.
- 7. Ghicas, Dimitrios C., "Determinants of Actuarial Cost Method Changes for Pension Accounting and Funding", *The Accounting Review*, Vol. 65, No. 2, pp. 384-405, 1990.
- 8. Hicks, Ernest L., "Accounting for the Cost of Pension Plans," Accounting Research Study No. 8, American Institute of Certified Public Accountants, 1965.
- 9. Lucas, Timothy S. and Hollowell, Betsy Ann "Pension Accounting: The Liability Question" *Journal of Accountancy*, pp. 57-66, October 1981.
- 10. Philips, G. Edward, "Pension Liabilities and Assets," *The Accounting Review*, Vol. 43, No. 1, pp. 10-17, 1968.

- 11. Rue, Joseph C. and Tosh, David E., "Continuing Unresolved Issues of Pension Accounting," *Accounting Horizons*, Vol. 1, No. 4, pp. 516-525, December 1987.
- 12. Stone, Mary S., "A Survey of Research on the Effects of Corporate Pension Plan Sponsorship: Implications for Accounting," *Journal of Accounting Literature*, Vol. 1, pp. 1-32, 1982.
- 13. Stone, Mary and Ingram, Robert W., "The Effect of Statement No. 87 on the Financial Reports of Early Adopters", *Accounting Horizons*, Vol. 2, No. 3, pp. 48-61, September 1988.