

Accounting for Pensions and Postretirement Benefits

A. Basic Features of Pensions.

1. Definition: an arrangement whereby an employer provides benefits (payments) to employees after they retire for services they provided while employed.
2. Types of pension plans.

- a. Defined contribution plans.

The employer's obligation is to contribute a certain sum each period based on some formula. The accounting is straightforward. The employer's annual cost is the amount it is obligated to contribute to the pension trust. If the contribution is made in full each year no pension asset or liability is reported on the balance sheet.

- b. Defined benefit plans.

The employer's obligation is to provide a certain benefit at the time of retirement. The accounting for a defined benefit plan is complex. Because the benefits are defined in terms of uncertain future variables, an appropriate funding pattern must be established. **THIS CHAPTER IS DEVOTED TO THE DISCUSSION OF DEFINED BENEFIT PLANS.**

- c. Funding

Prior to SFAS 87, *Employers Accounting for Pension Plans*, pension plans were often "pay as you go" plans. With SFAS 87, employers are required to **FUND** pension plans. A plan is **funded** when the employer sets funds aside for future pension benefits by making payments to a funding agency or trust. This funding agency is responsible for accumulating the assets of the pension fund and for making payment to the recipients as the benefits come due.

3. What is the employer's obligation? Three possibilities:
 - a. **Vested benefits:** is computed using current salary levels and includes only vested benefits. Vesting means the employee is entitled to benefits even if no further services rendered.
 - b. **Accumulated benefit obligation:** computed based on all years of service performed by employees under the plan—both vested and nonvested—using **current** salary levels.
 - c. **Projected benefit obligation:** computed using both vested and nonvested service using **future** salaries. This results in the largest measurement of the pension obligation.

THE ACCOUNTING PROFESSION GENERALLY CHOOSES PBO AS THE EMPLOYER'S OBLIGATION.

B. Pension Expense (to the employer) is composed of some or all of the following items:

1. **Service cost:** The expense caused by the increase in pension benefits payable (the projected benefit obligation) to employees due to **services rendered during the current year**. Actuaries compute service cost as the present value of the new benefits earned by employees during the year.
2. **Interest on the pension liability:** Because a pension is a deferred compensation arrangement, it is recorded on a discounted basis (Its actuarial PV). Interest expense accrues each year on the projected benefit obligation based on a selected interest rate called the **settlement rate**.
3. **Actual return on plan assets:** Pension expense is adjusted for interest and dividends that accumulate within the fund as well as increases and decreases in the market value of the fund assets. Computation of the actual return on plan assets is illustrated by the following schedule:

Fair value of plan assets at end of the period	\$2,500,000
Deduct: Fair value of plan assets at beginning of period	<u>1,800,000</u>
Increase/decrease in fair value of plan assets	700,000
Deduct: Contributions to plan during period	\$275,000
Less benefits paid during the period	<u>120,000</u> <u>155,000</u>
Actual return on plan assets	<u>\$ 545,000</u>

If the actual return on the plan assets is positive (gain) during the period, it is subtracted in the computation of pension expense. If the actual return is negative (loss) during the period, it is added in the computation of pension expense.

4. **Amortization of unrecognized prior service cost:** Prior service cost is an increase in the projected benefit obligation for services rendered in years prior to plan initiation or amendment. This cost is amortized by a *years-of-service method*. Most often, Prior Service Cost develops when the plan is first initiated.
5. **Amortization of unrecognized net gain or loss:** Two items comprise gain or loss:
 - (1) the difference between the actual return and the expected return on plan assets and
 - (2) amortization of the unrecognized net gain or loss from previous periods.

THIS TOPIC WILL BE DISCUSSED IN DETAIL ONCE WE HAVE A GRASP ON THE COMPUTATION OF PENSION EXPENSE.

C. Pension Work Sheet and Entries.

1. A work sheet is used to record both the formal entries and the memo entries of all pension plan items and components.
2. The formal general journal entry to record pension expense:

Pension Expense.	XXXX	
Cash		XXXX
Prepaid or Accrued Pension Cost		XXXX

If Pension Expense > Cash funding, this results in an Accrued Pension Cost (a liability)

If Pension Expense < Cash funding, this results in an Prepaid Pension Cost (an asset)

The text uses of a work sheet approach to compute Pension Expense. The work sheet is unique to pension accounting because it includes both the formal general journal entries and memo entries that are necessary to keep track of all the employer's relevant pension plan items and components.

The left-hand "General Journal Entries" columns of the work sheet record entries in the formal general ledger accounts. The right-hand "Memo Record" columns maintain balances on the unrecognized pension items. Beginning balances (if any) are recorded on the first line of the worksheet. Subsequently, transactions and events related to the pension plan are recorded, using debits and credits and using both sets of records as if they were one for recording the entries. For each transaction or event, the debits must equal the credits. The balance in the Prepaid/Accrued Cost column should equal the net balance in the memo side of the worksheet.

To illustrate the use of a work sheet, the following facts apply to Oehler Company for the year 1996:

Plan assets, 1/1/96	\$450,000
Projected benefit obligation, 1/1/96	\$450,000
Annual service cost for 1996	27,000
Settlement rate for 1996	7%
Actual return on plan assets for 1996	30,000
Contributions (funding) in 1996	32,000
Benefits paid to retirees in 1996	17,000

The work sheet would be completed as follows:

Oehler Company					
Items	General Journal Entries			Memo Record	
	Annual Pension Expense	Cash	Prepaid/ Accrued Cost	Projected Benefit Obligation	Plan Assets
Balance, 1/1/96			-0-	450,000 Cr.	450,000 Dr.
(a) Service Cost	27,000 Dr.			27,000 Cr.	
(b) Interest Cost	31,500 Dr.			31,500 Cr.	
(c) Actual Return	30,000 Cr.				30,000 Dr.
(d) Contributions		32,000 Cr.			32,000 Dr.
(e) Benefits				17,000 Dr.	17,000 Cr.
Journal Entry for 1996	<u>28,500</u> Dr.	<u>32,000</u> Cr.	<u>3,500</u> Dr.		
Balance, 12/31/96			<u>3,500</u> Dr.	<u>491,500</u> Cr.	<u>495,000</u> Dr.

In 1997, the Oehler amended their plan and incurred some prior service costs. This results in an additional entry for the amortization of unrecognized prior service costs.

Present value of prior service benefits granted 1/1/97	\$42,000
Annual service cost for 1997	28,000
Settlement rate for 1997	7%
Actual return on plan assets for 1997	31,000
Amortization of prior service costs	17,500
Contributions (funding) in 1997	29,000
Benefits paid retirees in 1997	24,000

The work sheet would be completed as follows:

Oehler Company						
Items	General Journal Entries			Memo Record		
	Annual Pension Expense	Cash	Prepaid/ Accrued Cost	Projected Benefit Obligation	Plan Assets	Unrecognized Prior Service Cost
Balance, 12/31/96			3,500 Dr.	491,500 Cr.	495,000 Dr.	
(f) Prior Service Cost				<u>42,000</u> Cr.		<u>42,000</u> Dr.
Balance, 1/1/97			3,500 Dr.	533,500 Cr.	495,000 Dr.	42,000 Dr.
(g) Service Cost	28,000 Dr.			28,000 Cr.		
(h) Interest Cost	*37,345Dr.			37,345 Cr.		
(i) Actual Return	31,000 Cr.				31,000 Dr.	
(j) Amortization of PSC	17,500 Dr.					17,500 Cr.
(k) Contributions		29,000 Cr.			29,000 Dr.	
(l) Benefits				<u>24,000</u> Dr.	<u>24,000</u> Cr.	
Journal Entry for 1997	<u>51,845</u> Dr.	<u>29,000</u> Cr.	<u>22,845</u> Cr.			
Balance, 12/31/97			<u>19,345</u> Cr.	<u>574,845</u> Cr.	<u>531,000</u> Dr.	<u>24,500</u> Dr.

*\$533,500 × .07

The pension reconciliation schedule is as follows:

Projected benefit obligation (Credit)	\$(574,845)
Plan assets at fair value (Debit)	<u>531,000</u>
Funded status	(43,845)
Unrecognized prior service cost (Debit)	<u>24,500</u>
Prepaid/accrued pension cost (Credit)	<u>\$ (19,345)</u>

We have now discussed all of the components of Pension Expense except Gains or Losses. We will save that discussion until later in the chapter.

D. Minimum Liability.

1. *FASB Statement No. 87* requires immediate recognition of a liability (called the **minimum liability**) when the accumulated benefit obligation (not the projected benefit obligation) exceeds the fair value of plan assets (**NOTE: FV OF PLAN ASSETS IS DIFFERENT THAN MARKET RELATED VALUE, WHICH IS USED IN COMPUTATION OF THE CORRIDOR APPROACH**). The purpose of this minimum liability requirement is to insure that the unfunded portion of the liability based on current salary levels is recognized. The Board does not permit the recording of an asset if the fair value of the pension plan assets exceeds the accumulated benefit obligation.
2. If a liability for accrued pension cost is already reported, only an additional liability equal to the required minimum liability (unfunded accumulated benefit) is recorded. When it is necessary to adjust the accounts to recognize a minimum liability, the debit should be to an intangible asset called Intangible Asset—Deferred Pension Cost.
3. The additional liability to be recorded in the current year is equal to:
 - a. The **excess less accrued pension cost**, or
 - b. The **excess plus prepaid pension cost**.

4. The journal entry is usually:

Intangible Asset—Deferred Pension Cost	XXX	
Additional Pension Liability		XXX

5. When the additional liability exceeds the unrecognized prior service cost, the excess should be reported as a contra account in stockholders' equity called **Excess of Additional Pension Liability Over Unrecognized Prior Service Cost**.

RATIONALE: IF LIABILITY IS GREATER THAN UNRECOGNIZED PRIOR SERVICE COST, THE LIABILITY RESULTED FROM AN ACTUARIAL LOSS, SO WE DECREASE EQUITY.

E. What happens when the *Actual* and *Expected* return on Plan Assets are different?

1. We use *Expected return* in the computation of pension expense. On the worksheet, however, this is accomplished by recording the Actual Return and then adjusting it to Expected Return by recording asset gains and losses (See definitions below). This is necessary because it serves to record Expected Return in the pension expense (for smoothing purposes) and Actual Return in the Plan Assets memo account. The difference goes into an Unrecognized Net Gain or Loss account on the Memo side.
2. The Unrecognized Net Gain or Loss account can continue to grow if asset gains and losses are not offset by liability gains and losses. To limit this potential growth, the FASB invented the **corridor approach** for amortizing the accumulated balance in the Unrecognized Gain or Loss account when it gets too large. The unrecognized net gain or loss account balance gets too large and must be amortized when it exceeds the arbitrarily selected FASB criterion of **10% of the larger of the beginning balance of the projected benefit obligation or the market-related value of plan assets**. Amortization of the excess unrecognized net gain or loss should be included as a component of pension expense only if, as of the **beginning of the year**, the unrecognized net gain or loss exceeded the corridor.
 1. Asset gains - when actual return is greater than expected return,
 2. Asset losses - when actual return is less than expected return
 3. Liability gains - resulting from unexpected decreases in the liability balance
 4. Liability losses - resulting from unexpected increases in the liability balance
3. To illustrate, assume the following information related to Scott Inc.'s pension plan:

	Beginning of the Year		
	<u>1996</u>	<u>1997</u>	<u>1998</u>
Projected Benefit Obligation	\$3,600,000	\$4,100,000	\$4,400,000
Market-Related Asset Value	4,100,000	4,300,000	4,200,000
Unrecognized Net Loss	-0-	900,000	800,000

Assume the average remaining service life of all remaining employees is 8 years, the schedule to amortize the unrecognized net loss is as follows:

Corridor Test and Gain/Loss Amortization Schedule

<u>Year</u>	<u>Projected Benefit Obligation</u>	<u>Plan Assets</u>	<u>Corridor</u>	<u>Cumulative Unrecognized Net Loss</u>	<u>Minimum Amortization of Loss (Current Year)</u>
1996	\$3,600,000	\$4,100,000	\$410,000	\$ -0-	\$ -0-
1997	4,100,000	4,300,000	430,000	900,000	58,750(a)
1998	4,400,000	4,200,000	440,000	1,641,250(b)	150,156(b)

(a) $\$900,000 - 430,000 = \$470,000$; $\$470,000/8 = \$58,750$

(b) $\$900,000 - 58,750 + 800,000 = \$1,641,250$

$\$1,641,250 - 440,000 = \$1,201,250$; $\$1,201,250/8 = \$150,156$

The loss recognized in 1997 would increase pension expense by \$58,750. This amount is far less than the \$900,000 that would be recognized if the corridor method was not applied. The rationale for the corridor is that gains and losses result from refinements in estimates as well as real changes in economic value and that over time some of these gains and losses will offset one another.