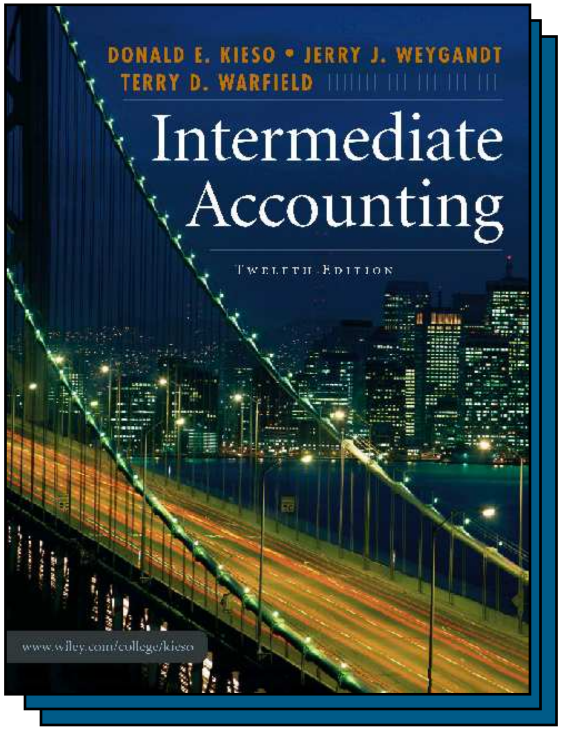
# Accounting for Pensions and Other Postretirement Benefits

# Chapter 20

Intermediate Accounting
12th Edition
Kieso, Weygandt, and Warfield






Prepared by Coby Harmon, University of California, Santa Barbara

# Learning Objectives

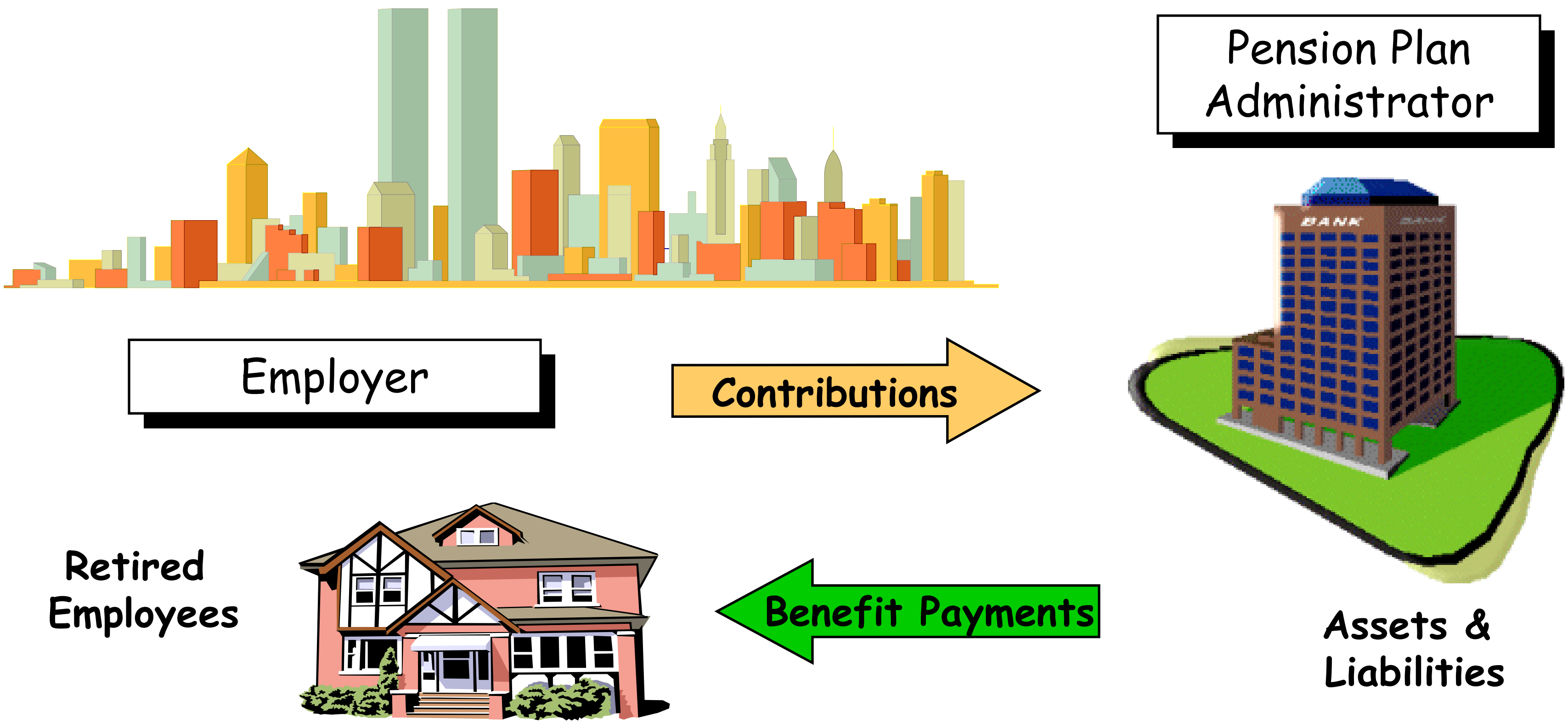
1. Distinguish between accounting for the employer's pension plan and accounting for the pension fund.
2. Identify types of pension plans and their characteristics.
3. Explain alternative measures for valuing the pension obligation.
4. List the components of pension expense.
5. Use a worksheet for employer's pension plan entries.
6. Describe the amortization of unrecognized prior service costs.
7. Explain the accounting procedure for recognizing unexpected gains and losses.
8. Explain the corridor approach to amortizing unrecognized gains and losses.
9. Explain the recognition of a minimum liability.
10. Describe the requirements for reporting pension plans in financial statements.

# Accounting for Pensions and Postretirement Benefits

| Nature of Pension Plans | Accounting for Pensions | Using a Pension Worksheet | Minimum Liability | Reporting Pension Plans in Financial Statements |
|---|---|---|---|---|
| ▪ Defined contribution plan<br>▪ Defined-benefit plan<br>▪ Role of actuaries | ▪ Alternative measures of liability<br>▪ Capitalization versus non-capitalization<br>▪ Components of pension expense | ▪ 2006 entries and worksheet<br>▪ Amortization of prior service cost<br>▪ 2007 entries and worksheet<br>▪ Gain or loss<br>▪ 2008 entries and worksheet | ▪ Minimum liability computation<br>▪ Financial statement presentation<br>▪ Worksheet example | ▪ Within the financial statements<br>▪ Within the notes to the financial statements<br>▪ 2009 entries and worksheet—a comprehensive example<br>▪ Special issues |

# Nature of Pension Plans

A Pension Plan is an arrangement whereby an employer provides benefits (payments) to employees after they retire for services they provided while they were working.






*LO 1 Distinguish between accounting for the employer's pension plan and accounting for the pension fund.*

# Nature of Pension Plans

Some pension plans are:

- Contributory: employees voluntarily make payments to increase their benefits.
- Noncontributory: employer bears the entire cost.
- Qualified pension plans: offer tax benefits.

Pension fund should be a separate legal and accounting entity.



*LO 1 Distinguish between accounting for the employer's pension plan and accounting for the pension fund.*

# Types of Pension Plans

| Defined-Contribution Plan | Defined-Benefit Plan |
| --- | --- |
| • Employer contribution determined by plan (fixed)<br>• Risk borne by employees<br>• Benefits based on plan value | • Benefit determined by plan<br>• Employer contribution varies (determined by Actuaries)<br>• Risk borne by employer |

**Actuaries** estimate the employer contribution by considering mortality rates, employee turnover, interest and earning rates, early retirement frequency, future salaries, etc.

Statement of Financial Accounting Standard No. 87, "Employers' Accounting for Pension Plans," 1985



*LO 2 Identify types of pension plans and their characteristics.*

# Accounting for Pensions

Two questions:

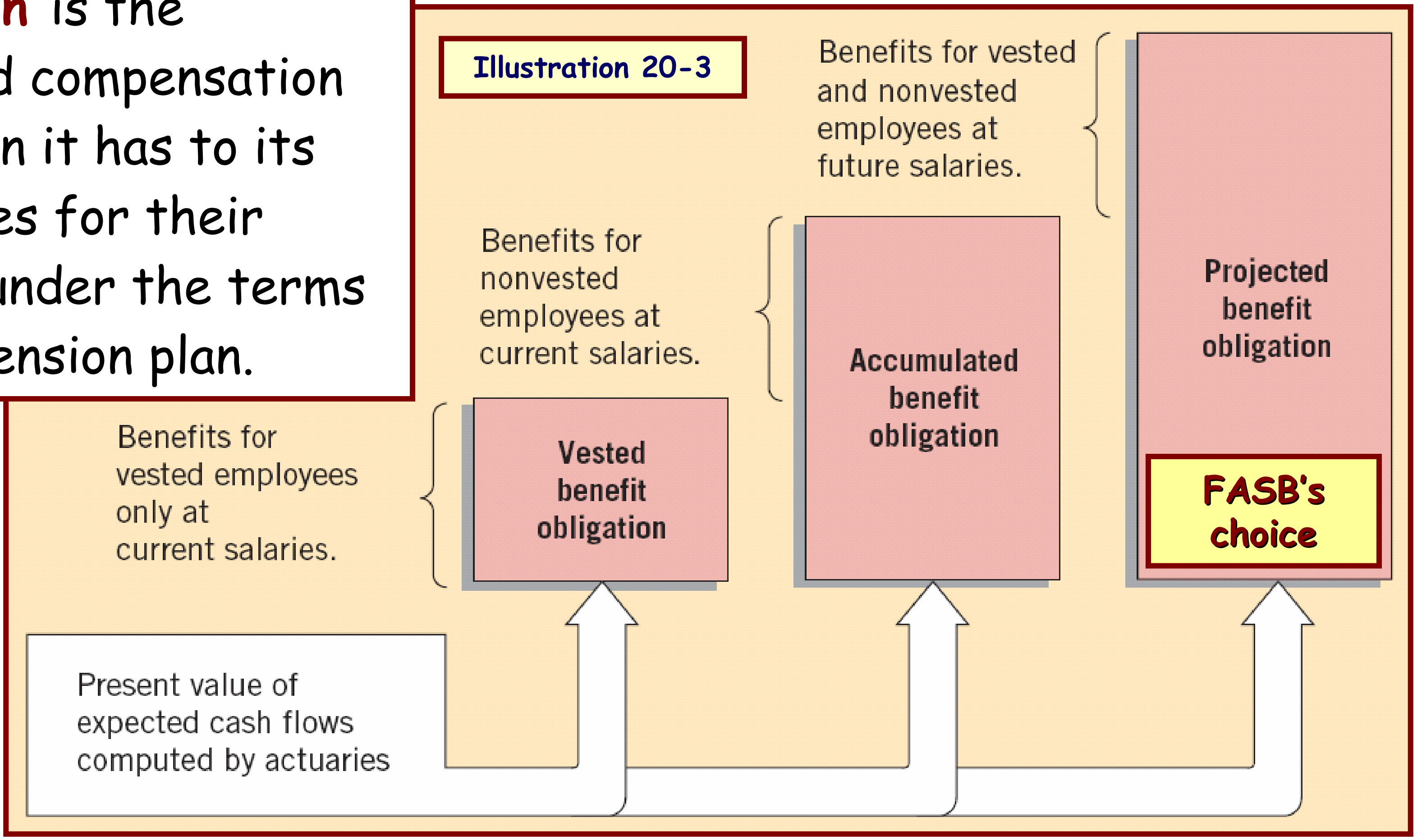
(1) What is the pension obligation that a company should report in the financial statements?

(2) What is the pension expense for the period?

# Accounting for Pensions

The employer's **pension obligation** is the deferred compensation obligation it has to its employees for their service under the terms of the pension plan.

## Alternative measures of the Liability






*LO 3 Explain alternative measures for valuing the pension obligation.*

# Accounting for Pensions

## Capitalization versus Noncapitalization

*FASB Statement No. 87* represents a compromise that combines some of the features of capitalization with some of the features of noncapitalization.

Companies do not capitalize some elements of the pension plan in the accounts and the financial statements.

# Accounting for Pensions

| Components of Pension Expense | | Effect on Expense |
| --- | --- | --- |
| 1. | Service Costs | + |
| 2. | Interest on Liability | + |
| 3. | Actual Return on Plan Assets | +- |
| 4. | Amortization of Unamortized Prior Service Costs | + |
| 5. | Gain or Loss | +- |



*LO 4 List the components of pension expense.*

# Accounting for Pensions

## Components of Pension Expense

**Effect on Expense**

| | | |
|---|---|---|
| 1. | **Service Costs** | + |

**Actuarial present value** of benefits attributed by the pension benefit formula to employee service during the period.

# Accounting for Pensions

## Components of Pension Expense

**Effect on Expense**

| 2. | **Interest on Liability** | + |
|---|---|---|

Interest for the period on the **projected benefit obligation** outstanding during the period.

The interest rate (**settlement rate**) should reflect the rate at which companies can effectively settle pension benefits.



*LO 4 List the components of pension expense.*

# Accounting for Pensions

## Components of Pension Expense

**Effect on Expense**

| 3. | Actual Return on Plan Assets | +- |
|---|---|---|

The **actual return** on plan assets is the increase in pension funds from interest, dividends, and realized and unrealized changes in the fair-market value of the plan assets.

# Accounting for Pensions

## Components of Pension Expense

**Effect on Expense**

| | | |
|---|---|---|
| 4. | **Amortization of Unamortized Prior Service Costs** | + |

Plan amendments often increase benefits for service provided in prior years.

The cost (**prior service cost**) of providing these retroactive benefits is allocated to pension expense over the remaining service-years of the affected employees.

# Accounting for Pensions

## Components of Pension Expense

Effect on Expense

| 5. | Gain or Loss | +- |
|---|---|---|

Volatility in pension expense can result from sudden and large changes in the market value of plan assets and by changes in the projected benefit obligation.



*LO 4 List the components of pension expense.*

# Using a Pension Work Sheet

Companies do not recognize several items in the accounts and in the financial statements:

- Projected benefit obligation.
- Pension plan assets.
- Unrecognized prior service costs.
- Unrecognized net gain or loss.

A company must disclose in notes to the financial statements, but not in the body of the financials.



*LO 5 Use a worksheet for employer's pension plan entries.*

# Using a Pension Work Sheet

**Pension Work Sheet**

| | GENERAL JOURNAL ENTRIES | | | MEMO RECORD | | | |
|---|---|---|---|---|---|---|---|
| Items | Pension Expense | Cash | Prepaid/ Accrued Costs | Projected Benefit Obligation | Plan Assets | Prior Service Costs | Unrecognized Gain/Loss |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

The **"General Journal Entries"** columns determine the journal entries to be recorded in the formal general ledger.

The **"Memo Record"** columns maintain balances on the unrecognized (noncapitalized) pension items.



*LO 5 Use a worksheet for employer's pension plan entries.*

# Using a Pension Work Sheet

**BE20-3** At January 1, 2008, Uddin Company had plan assets of $250,000 and a projected benefit obligation of the same amount. During 2008, service cost was $27,500, the settlement rate was 10%, actual and expected return on plan assets were $25,000, contributions were $20,000, and benefits paid were $17,500.

**Instructions**

Prepare a pension worksheet for Uddin for 2008.

# Using a Pension Work Sheet

**BE20-3** Prepare a pension worksheet for Uddin for 2008.

Pension Work Sheet

| | GENERAL JOURNAL ENTRIES | | | MEMO RECORD | | | |
|---|---|---|---|---|---|---|---|
| Items | Pension Expense | Cash | Prepaid/ Accrued Costs | Projected Benefit Obligation | Plan Assets | Prior Service Costs | Unrecognized Gain/Loss |
| Jan. 1, 2008 | | | 0 | (250,000) | 250,000 | | |
| Service costs | 27,500 | | | (27,500) | | | |
| Interest costs | 25,000 | | | (25,000) | | | |
| Actual return | (25,000) | | | | 25,000 | | |
| Contributions | | (20,000) | | | 20,000 | | |
| Benefits paid | | | | 17,500 | (17,500) | | |
| Journal entry | 27,500 | (20,000) | (7,500) | | | | |
| Dec. 31, 2008 | | | (7,500) | (285,000) | 277,500 | - | - |

($250,000 x 10%)

($7,500) net liability



*LO 5 Use a worksheet for employer's pension plan entries.*

# Using a Pension Work Sheet

Note the following about the Work Sheet:

- The balance in the Prepaid/Accrued Cost column should equal the net balance in the memo record.
- For each transaction or event, the debits must equal the credits.

# Using a Pension Work Sheet

## Amortization of Unrecognized Prior Service Cost

Company should not recognize the retroactive benefits as pension expense entirely in the year of amendment.

Employer should recognize the pension expense over the remaining service lives of the employees who are expected to benefit from the change in the plan.

Amortization Method:

- Board prefers a years-of-service method.
- SFAS No. 87 allows use of the straight-line method.

# Using a Pension Work Sheet

**E20-7** The following defined pension data of Doreen Corp. apply to the year 2008.

| | |
|---|---|
| Projected benefit obligation, 1/1/08 (before amendment) | $560,000 |
| Plan assets, 1/1/08 | 546,200 |
| Prepaid/accrued pension cost (credit) | 13,800 |
| On January 1, 2008, Doreen Corp., through plan amendment, grants prior service benefits having a present value of | 100,000 |
| Settlement rate | 9% |
| Service cost | 58,000 |
| Contributions (funding) | 55,000 |
| Actual (expected) return on plan assets | 52,280 |
| Benefits paid to retirees | 40,000 |
| Average remaining service life for Prior Service Costs | 5.8823 years |

**Instructions:** For 2008, prepare a pension work sheet for Doreen Corp. that shows the journal entry for pension expense.



*LO 6 Describe the amortization of unrecognized prior service costs.*

# Using a Pension Work Sheet

## E20-7

Amortization of Prior Service Costs :

| | |
|---|---|
| Prior Service Costs | $100,000 |
| Average remaining service life | 5.8823 |
| Amortization | $ 17,000 |



*LO 6 Describe the amortization of unrecognized prior service costs.*

# Using a Pension Work Sheet

## E20-7 Pension Work Sheet for 2008

| | GENERAL JOURNAL ENTRIES | | | MEMO RECORD | | |
|---|---|---|---|---|---|---|
| Items | Pension Expense | Cash | Prepaid/ Accrued Costs | Projected Benefit Obligation | Plan Assets | Prior Service Costs |
| Bal. Jan. 1, 2008 | | | (13,800) | (560,000) | 546,200 | |
| Prior service costs | | | | (100,000) | | 100,000 |
| Bal. Jan. 1, 2008 restated | | | (13,800) | (660,000) | 546,200 | 100,000 |
| Service costs | 58,000 | | | (58,000) | | |
| Interest on liability | 59,400 | | | (59,400) | | |
| Return on assets | (52,280) | | | | 52,280 | |
| Amort. of PSC | 17,000 | | | | | (17,000) |
| Contributions | | (55,000) | | | 55,000 | |
| Benefits paid | | | | 40,000 | (40,000) | |
| Journal entry | 82,120 | (55,000) | (27,120) | | | |
| Dec. 31, 2008 | | | (40,920) | (737,400) | 613,480 | 83,000 |

($40,920) net liability



*LO 6 Describe the amortization of unrecognized prior service costs.*

# Using a Pension Work Sheet

**E20-7** Pension Journal Entry for 2008.

| | | | |
|---|---|---|---|
| Dec. 31 | Pension expense | 82,120 | |
| | Prepaid/Accrued Costs | | 27,120 |
| | Cash | | 55,000 |



*LO 6 Describe the amortization of unrecognized prior service costs.*

# Using a Pension Work Sheet

## Gain or Loss

Unexpected swings in pension expense can result from:

1. Changes in the market value of plan assets, and
2. Changes in actuarial assumptions that affect the amount of the projected benefit obligation.



*LO 7 Explain the accounting procedure for recognizing unexpected gains and losses.*

# Using a Pension Work Sheet

**Question:** What is the potential negative impact on Net Income of these unexpected swings?

**Volatility**

The profession decided to reduce the volatility with **smoothing techniques**.



*LO 7 Explain the accounting procedure for recognizing unexpected gains and losses.*

# Using a Pension Work Sheet

**Question:** What happens to the difference between the expected return and the actual return?

**Answer**

Recorded in Unrecognized Net Gain or Loss account.

Amortize amount in excess of corridor to pension expense, over the average remaining service period of active employees expected to receive benefits under the plan.



*LO 7 Explain the accounting procedure for recognizing unexpected gains and losses.*

# Using a Pension Work Sheet

**Question:** What happens with unexpected gains or losses from changes in the Projected Benefit Obligation (PBO)?

## Answer

Recorded in Unrecognized Net Gain or Loss account.

Amortize amount in excess of corridor to pension expense, over the average remaining service period of active employees expected to receive benefits under the plan.



*LO 7 Explain the accounting procedure for recognizing unexpected gains and losses.*

# Using a Pension Work Sheet

## Corridor Amortization

FASB invented the **corridor approach** for amortizing the unrecognized net gain or loss accumulated balance when it gets too large. **How large is too large?**

10% of the larger of the beginning balances of the **projected benefit obligation** or the market-related value of the **plan assets**.

Any unrecognized net gain or loss balance above the 10% must be amortized.



*LO 8 Explain the corridor approach to amortizing unrecognized gains and losses.*

# Using a Pension Work Sheet

**BE20-7** Hunt Corporation had a projected benefit obligation of $3,100,000 and plan assets of $3,300,000 at January 1, 2008. Hunt's unrecognized net pension loss was $475,000 at that time. The average remaining service period of Hunt's employees is 7.5 years.

**Instructions**

Compute Hunt's amortization of the pension loss.

# Using a Pension Work Sheet

**BE20-7** Compute Hunt's amortization of the loss.

| | | | | Amortization |
|---|---|---|---|---|
| Projected benefit obligation | $ | (3,100,000) | | |
| Plan assets | | 3,300,000 | $ | 3,300,000 |
| Corridor percentage | | | | 10% |
| Corridor amount | | | | 330,000 |
| Unrecognized loss | | | | 475,000 |
| Excess loss subject to amortization | | | | 145,000 |
| Average remaining service | | ÷ | | 7.5 |
| Amortized to pension expense | | | $ | 19,333 |



*LO 8 Explain the corridor approach to amortizing unrecognized gains and losses.*

# Using a Pension Work Sheet

**P20-2** Katie Day Company adopts acceptable accounting for its defined benefit pension plan on January 1, 2008, with the following beginning balances: plan assets $200,000; projected benefit obligation $200,000. Other data are as follows.

| | 2008 | 2009 | 2010 |
|---|---|---|---|
| Annual service cost | $ 16,000 | $ 19,000 | $ 26,000 |
| Settlement rate and expected rate of return | 10% | 10% | 10% |
| Actual return on plan assets | 17,000 | 21,900 | 24,000 |
| Annual funding (contributions) | 16,000 | 40,000 | 48,000 |
| Benefits paid | 14,000 | 16,400 | 21,000 |
| Unrecognized prior service cost (plan amended, 1/1/09) | | 160,000 | |
| Amortization of unrecognized prior service cost | | 54,400 | 41,600 |
| Change in actuarial assumptions, Dec. 31 PBO | | | 520,000 |
| Average remaining service life | 15 years | 15 years | 15 years |



*LO 8 Explain the corridor approach to amortizing unrecognized gains and losses.*

# Using a Pension Work Sheet

## P20-2 Pension Work Sheet for 2008

| | GENERAL JOURNAL ENTRIES | | | MEMO RECORD | | | |
|---|---|---|---|---|---|---|---|
| Items | Pension Expense | Cash | Prepaid/ Accrued Costs | Projected Benefit Obligation | Plan Assets | Prior Service Costs | Unrecognized Gain/Loss |
| Bal. Jan. 1, 2008 | | | 0 | (200,000) | 200,000 | | |
| Service costs | 16,000 | | | (16,000) | | | |
| Interest | 20,000 | | | (20,000) | | | |
| Return on assets | (17,000) * | | | | 17,000 | | |
| Unexpected loss | (3,000) * | | | | | | 3,000 |
| Contributions | | (16,000) | | | 16,000 | | |
| Benefits paid | | | | 14,000 | (14,000) | | |
| Journal entry | 16,000 | (16,000) | | | | | |
| Dec. 31, 2008 | | | 0 | (222,000) | 219,000 | - | 3,000 |

($0)

* Expected Return on Plan Assets
$200,000 x 10% = $20,000



*LO 8 Explain the corridor approach to amortizing unrecognized gains and losses.*

# Using a Pension Work Sheet

**P20-2** Pension Journal Entry for **2008**

| | | | |
|---|---|---|---|
| Dec. 31 | Pension expense | 16,000 | |
| | Cash | | 16,000 |



*LO 8 Explain the corridor approach to amortizing unrecognized gains and losses.*

# Using a Pension Work Sheet

## P20-2 Pension Work Sheet for 2009

| | GENERAL JOURNAL ENTRIES | | | MEMO RECORD | | | |
|---|---|---|---|---|---|---|---|
| Items | Pension Expense | Cash | Prepaid/ Accrued Costs | Projected Benefit Obligation | Plan Assets | Prior Service Costs | Unrecognized Gain/Loss |
| Bal. Jan. 1, 2009 | | | 0 | (222,000) | 219,000 | | 3,000 |
| Prior service costs | | | | (160,000) | | 160,000 | |
| Bal. Jan. 1, 2009, revised | | | 0 | (382,000) | 219,000 | 160,000 | 3,000 |
| Service costs | 19,000 | | | (19,000) | | | |
| Interest | 38,200 | | | (38,200) | | | |
| Return on assets | (21,900) * | | | | 21,900 | | |
| Amort. of PSC | 54,400 | | | | | (54,400) | |
| Contributions | | (40,000) | | | 40,000 | | |
| Benefits paid | | | | 16,400 | (16,400) | | |
| Journal entry | 89,700 | (40,000) | (49,700) | | | | |
| Dec. 31, 2009 | | | (49,700) | (422,800) | 264,500 | 105,600 | 3,000 |

($49,700) net liability

* Actual return = Expected Return

*LO 8 Explain the corridor approach to amortizing unrecognized gains and losses.*

# Using a Pension Work Sheet

**P20-2** Pension Journal Entry for **2009**

| | | | |
|---|---|---|---|
| Dec. 31 | Pension expense | 89,700 | |
| | Prepaid/Accrued Costs | | 49,700 |
| | Cash | | 40,000 |



*LO 8 Explain the corridor approach to amortizing unrecognized gains and losses.*

# Using a Pension Work Sheet

## P20-2 Pension Work Sheet for 2010

| | GENERAL JOURNAL ENTRIES | | | MEMO RECORD | | | |
|---|---|---|---|---|---|---|---|
| Items | Pension Expense | Cash | Prepaid/ Accrued Costs | Projected Benefit Obligation | Plan Assets | Prior Service Costs | Unrecognized Gain/Loss |
| Bal. Jan. 1, 2010 | | | (49,700) | (422,800) | 264,500 | 105,600 | 3,000 |
| Service costs | 26,000 | | | (26,000) | | | |
| Interest | 42,280 | | | (42,280) | | | |
| Return on assets | (24,000) | | | | 24,000 | | |
| Unexpected loss | (2,450) | | | | | | 2,450 |
| Amort. of PSC | 41,600 | | | | | (41,600) | |
| Contributions | | (48,000) | | | 48,000 | | |
| Benefits paid | | | | 21,000 | (21,000) | | |
| Unexpected loss | | | | (49,920)* | | | 49,920 |
| Journal entry | 83,430 | (48,000) | (35,430) | | | | |
| Dec. 31, 2010 | | | (85,130) | (520,000) | 315,500 | 64,000 | 55,370 |

($85,130) net liability

* Plug



*LO 8 Explain the corridor approach to amortizing unrecognized gains and losses.*

# Using a Pension Work Sheet

**P20-2** Pension Journal Entry for **2010**

| | | | |
|---|---|---|---|
| Dec. 31 | Pension expense | 83,430 | |
| | Prepaid/Accrued Costs | | 35,430 |
| | Cash | | 48,000 |


*LO 8 Explain the corridor approach to amortizing unrecognized gains and losses.*

# Using a Pension Work Sheet

**P20-2 (Variation)** Would there be any amortization of the gain/loss for 2011?

| | | | Amortization | |
|---|---|---|---|---|
| Beg. Projected benefit obligation | $ | (520,000) | $ | 520,000 |
| Beg. Plan assets | | 315,500 | | |
| Corridor percentage | | | | 10% |
| Corridor amount | | | | 52,000 |
| Unrecognized loss | | | | 55,370 |
| Loss subject to amortization | | | | 3,370 |
| Amortization period | | | | 15 |
| Amortization to pension expense | | | $ | 225 |

The amortization would be reported in 2011 as follows.



*LO 8 Explain the corridor approach to amortizing unrecognized gains and losses.*

# Using a Pension Work Sheet

## P20-2 Partial Pension Work Sheet for 2011

| | GENERAL JOURNAL ENTRIES | | | MEMO RECORD | | | |
|---|---|---|---|---|---|---|---|
| Items | Pension Expense | Cash | Prepaid/ Accrued Costs | Projected Benefit Obligation | Plan Assets | Prior Service Costs | Unrecognized Gain/Loss |
| Bal. Jan. 1, 2011 | | | (85,130) | (520,000) | 315,500 | 64,000 | 55,370 |
| Service costs | | | | | | | |
| Interest | | | | | | | |
| Return on assets | | | | | | | |
| Amort. of loss | 225 | | | | | | (225) |
| | | | | | | | |
| Journal entry | | | | | | | |
| Dec. 31, 2011 | | | | | | | |
| | | | | | | | |



*LO 8 Explain the corridor approach to amortizing unrecognized gains and losses.*

# Minimum Liability

The Board, requires immediate recognition of a liability (**minimum liability**) when the accumulated benefit obligation exceeds the fair value of plan assets.

If a company has already reported a liability for accrued pension cost, it records only an additional liability to equal the required minimum liability.



*LO 9 Explain the recognition of a minimum liability.*

# Minimum Liability

**BE20-8** Judy O'Neill Corporation provides the following information at December 31, 2007.

| | |
|---|---|
| Accumulated benefit obligation | $2,800,000 |
| Plan assets at fair value | 2,000,000 |
| Accrued pension cost | 200,000 |
| Unrecognized prior service cost | 1,100, 000 |

Compute the additional liability that O'Neill must record at December 31, 2007.

# Minimum Liability

**BE20-8** Compute the additional liability that O'Neill must record at December 31, 2007.

| | |
|---|---|
| Accumulated benefit obligation | $2,800,000 |
| Fair value of plan assets | 2,000,000 |
| Minimum liability | 800,000 |
| Accrued pension cost | 200,000 |
| Additional liability | $ 600,000 |

| | | |
|---|---|---|
| Intangible asset | 600,000 | |
| Additional pension liability | | 600,000 |

# Reporting Pension Plans in Financial Statements

## Within the Financial Statements

- Pension expense
- Accrued Pension Cost
- Prepaid Pension Cost
- Intangible Asset—Deferred Pension Cost (Minimum Liability test)



*LO 10 Describe the requirements for reporting pension plans in financial statements.*

# Reporting Pension Plans in Financial Statements

## Within the Notes to the Financial Statements

1. Major components of pension expense.
2. Reconciliation showing how the projected benefit obligation and the fair value of the plan assets changed.
3. The funded status of the plan (difference between the projected benefit obligation and fair value of the plan assets).



*LO 10 Describe the requirements for reporting pension plans in financial statements.*

# Reporting Pension Plans in Financial Statements

## Within the Notes to the Financial Statements

4. Disclosure of the rates used in measuring the benefit amounts (discount rate, expected return on plan assets, rate of compensation).

5. Table indicating the allocation of pension plan assets by category.

6. The expected benefit payments to be paid to current plan participants for each of the next five fiscal years and in the aggregate for the five fiscal years thereafter.



*LO 10 Describe the requirements for reporting pension plans in financial statements.*

# Reporting Pension Plans in Financial Statements

## Special Issues

- The Pension Reform Act of 1974
- Pension Terminations



*LO 10 Describe the requirements for reporting pension plans in financial statements.*

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