CHAPTER 19

PENSIONS AND OTHER EMPLOYEE FUTURE BENEFITS

CHAPTER TOPICS CROSS REFERENCED WITH *CICA HANDBOOK*, PART I (IFRS) AND PART II (ASPE)

Employee Future Benefits	IAS 19 and IFRIC 14	Section 3461

LEARNING OBJECTIVES

1. Understand the importance of pensions from a business perspective.

2. Identify and account for a defined contribution plan.

3. Identify and explain what a defined benefit plan is and the related accounting issues.

4. Explain what the employer's benefit obligation is, identify alternative measures for this obligation, and prepare a continuity schedule of transactions and events that change its balance.

5. Identify transactions and events that change the benefit plan assets, and calculate the balance of the assets.

6. Explain what a benefit plan's funded status is, calculate it, and identify what transactions and events change its amount.

7. Identify the components of pension expense, and account for a defined benefit pension plan under the immediate recognition approach.

8. Account for defined benefit plans with benefits that vest or accumulate other than pension plans.

9. Identify the types of information required to be presented and disclosed for defined benefit plans, prepare basic schedules, and be able to read and understand such disclosures.

10. Identify differences between the IFRS and ASPE accounting for employee future benefits and what changes are expected in the near future.

11. Explain and apply basic calculations to determine current service cost, the defined benefit obligation and past service cost for a one-person defined benefit pension plan. (Appendix 19A).

12. Identify the components of pension benefit cost, and account for a defined benefit pension plan under the deferral and amortization approach under ASPE; determine the benefit plan accounts reported in the financial statements and explain their relationship to the funded status of the plan.

CHAPTER REVIEW

Introduction

1. Chapter 19 covers a variety of employee future benefits that are "earned by active employees and expected to be provided to them when they are no longer in active service" and that are usually covered by the benefit policies of an organization *(CICA Handbook*, Part I IAS 19 and Part II, ASPE Section 3461). Accounting for pension costs is somewhat complicated because of the variety of social concepts, legal considerations, actuarial techniques, income tax regulations, and varying business philosophies that affect the development and maintenance of pension plans. This chapter relates these issues to the recommended accounting treatment for the costs associated with a pension plan. The majority of the chapter is devoted to discussing the complex accounting issues related to defined benefit plans with benefits that vest or accumulate as the employee provides services.

Nature of Pension Plans

1. A **pension plan** is an arrangement whereby an employer provides benefits (payments) to employees after they retire. In accounting for a pension plan, consideration must be given to accounting for the employer and accounting for the pension plan itself. This chapter focuses on the employer's accounting. A pension plan is said to be **funded** when the employer sets funds aside for the future pension benefits by making payments to a funding agency that is responsible for accumulating the assets of the pension fund and for making payments to the recipients as the benefits become due.

2. Pension plans can be **contributory** or **non-contributory**. In a contributory plan, the employees bear part of the cost of the stated benefits or voluntarily make payments to increase the benefits. If the plan is non-contributory, the employer bears the entire cost. Because the problems associated with pension plans involve complicated actuarial considerations, **actuaries** are engaged to ensure that the plan is appropriate for all employee groups covered. Actuaries make predictions (actuarial assumptions) of mortality rates, employee turnover, interest and earnings rates, early retirement frequency, future salaries, and other factors necessary to operate a pension plan. Thus, accounting for defined benefit pension plans is highly reliant on information and measurements provided by actuaries.

Types of Pension Plans

1. The most common types of pension arrangements are **defined contribution (DC) plans** and **defined benefit (DB) plans**. In a **defined contribution plan**, the employer agrees to contribute a certain sum each period based on a formula. The formula might consider such factors as age, length of service, employer's profits, and compensation level. The accounting for a defined contribution plan is straightforward. The employer's responsibility is simply to make a contribution each year based on the formula established in the plan. Thus, 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 statement of financial position.

2. A **defined benefit plan** defines the benefits that the employee will receive at the time of retirement. The formula that is typically used provides for the benefits to be a function of the level of compensation near retirement and of the number of years of service. 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 to insure that enough monies will be available at retirement to meet the benefits promised. Because the problems associated with pension plans involve complicated actuarial considerations, actuaries are engaged to ensure that the plan is appropriate for all employee groups covered. Actuaries make predictions (actuarial assumptions) of mortality rates, employee turnover, interest and earnings rates, early retirement frequency, future salaries, and other factors necessary to operate a pension plan. Thus, accounting for defined benefit pension plans is highly reliant upon information and measurements provided by actuaries.

The Employer's Obligation: Alternative Measures of the Pension Obligation

1. Most accountants agree that an employer's **pension obligation** is a deferred compensation obligation it has to its employees for their service under the terms of the pension plan. However, there are alternate ways to measure this liability. One approach is to base the obligation on the **vested benefits** current employees are entitled to. The vested benefits pension obligation is computed using current salary levels and includes only vested benefits (the **vested benefit method obligation**). (Vested benefits are those to which the employee is entitled whether or not the employee remains in the service of the entity.) A second approach to the measurement of the pension obligation is to base the computation on all years of service performed by employees under the plan—both vested and non-vested—using **current** salary levels. This measurement of the pension obligation is called the **accumulated benefit method obligation**. A third technique bases the computation on both vested and non-vested service using **future** salary levels (the **projected benefit method**). Because future salaries are expected to be higher than current salaries, this approach, known as the **accrued benefit obligation (ABO) under ASPE** or pension benefit obligation (PBO) under IFRS, results in the largest measurement of the pension obligation. The FASB, IASB, and AcSB have all adopted the projected benefit method (also known as the accrued benefit obligation [ABO] under ASPE) as the best measure for accounting purposes.

2. The DBO for accounting purposes is the present value (discounted amount) of vested and non-vested benefits earned to the statement of financial position date, with the benefits measured using employees' future salary levels.

3. Companies must recognize on their statement of financial position the full overfunded or underfunded status of their defined-benefit pension plan. The overfunded or underfunded status is measured as the difference between the fair value of the plan assets and the defined benefit obligation.

Changes in the Defined Benefit Obligation

1. The Defined Benefit Obligation (DBO), though not recognized in the company's financial statements, is the focus of accounting for pension costs. The DBO is:
    - increased by the service cost, which is the cost of benefits to be provided in the future to employees in exchange for services in the current period,
    - increased by the interest cost associated with the discounted DBO,
    - decreased by benefits paid to retirees from the plan,
    - increased or decreased by past service costs that arise when the plan is started or amended,
    - increased or decreased by actuarial gains and losses arising from changes in actuarial assumptions or from experience gains and losses (i.e., the difference between what actuarial assumptions projected would happen and what did happen).

2. The interest cost above is calculated using the current market rate under IFRS, and either the current market rate of current settlement rate under ASPE.

Changes in Plan Assets

1. The benefit plan assets are the other major focus of accounting for pension costs. They are assets set aside in a trust or other legal entity that is separate from the employer company. They are restricted and can only be used to settle the related DBO not claims of other company creditors. Pension plan assets are:
    - increased by employer contributions in the period (and employees if applicable),
    - decreased by benefits paid to retirees,
    - increased/decreased by the actual return on plan assets.

Funded Status

1. The difference between the defined benefit obligation and the pension assets' fair value at a point in time is called the plan's funded status. If all changes in the DBO and the plan assets were reflected on the statements, the changes would be reflected in pension expense and the overfunded or underfunded status would equal the asset or liability on the statement of financial position. Under the immediate recognition approach, which is required under IFRS and an option under ASPE, the overfunded or underfunded status does equal the asset/liability on the statement of financial position. However, pension expense is calculated differently under IFRS and ASPE's immediate recognition approach.

Benefit Cost—the Components of Pension Expense under the immediate recognition approach

1. The determination of pension cost is very complicated, because it is a function of a number of factors. The most common components that make up the pension expense benefit cost are:
   - current service cost
   - interest cost
   - actual return on plan assets
   - past service cost
   - actuarial gains and losses

2. **Current service cost and interest cost.** Both the service cost for benefits earned by employees and the interest cost accrued on the DBO during the current period are recognized and included in pension expense in the same period..

3. **Actual return on plan assets.** Under IFRS, the same discount rate is used for interest cost on the DBO and for the interest assumed to be earned on the plan assets. The actual return earned on the plan assets, which is typically a positive amount, reduces the cost to the employer of sponsoring an employee pension plan. If a negative return is generated, the pension cost is increased.

   Under the immediate recognition approach for ASPE, the actual return on plan assets is used in the calculations of pension expense charged to net income. Under IFRS, the actual return on plan assets is allocated between pension expense on the statement of comprehensive income, and other comprehensive income. Specifically the interest on the net defined benefit liability/asset is recognized in net income (IAS 19.57). The return on plan assets other than interest on the net defined benefit liability/asset is recognized in OCI.

4. **Past service cost.** Plan amendments instantly change the amount of the employer's obligation, and the total cost (or benefit) of the amendment is recognized immediately in pension expense.

5. **Actuarial gains and losses.** When actuarial gains and losses are recognized as a component of pension expense in the same period they are incurred, the reported expense tends to fluctuate significantly from year to year. As you might expect, the immediate recognition approach under ASPE makes no adjustment for this. Instead, ASPE recognizes the full amount of the actuarial gain or loss in pension expense each period. IFRS is similar in that the gains and losses are not deferred, but under IFRS the actuarial gains or losses are included in OCI rather than in net income.

Plan Assets

1. Plan assets are assets that have been set aside in a trust or other legal entity that is separate from the employer company. The assets are restricted and can be used only to settle the related defined benefit obligation: they cannot be used for meeting the claims of other company creditors. The plan assets increase by the return on plan assets, with the difference between the (actual) return on plan assets and the (expected) interest income on plan assets being treated as a remeasurement gain or loss under the new IFRS rules. The remeasurement gain or loss on the plan assets is combined with the actuarial gain or loss on the DBO and is charged to OCI under IFRS. (ASPE works differently depending on whether the immediate recognition or deferral and amortization approach is chosen, as we will see later in the chapter and in Appendix 19B.)

Funded Status

1. The measures of the DBO and plan assets are fundamental to pension accounting. Because of this, accounting standards specify that they should be measured as at the date of the annual financial statements. Under IFRS, both the plan assets and DBO are required to represent reporting date values.

2. The difference between the DBO and the pension assets' fair value at a point in time is known as the plan's **funded status**. A plan with more liabilities than assets is **underfunded and has a funded status liability**. A plan with accumulated assets that are greater than the related obligation is **overfunded and is said to have a funded status asset**.

The Pension Worksheet

1. A pension worksheet can be used for both the immediate recognition approach, and the defer-and-amortize approach. (The only difference from the immediate recognition approach is that the defer-and-amortize approach will have the additional memo accounts of unrecognized past service costs and unrecognized actuarial gains and losses. Refer to the text for a comprehensive illustration of the immediate recognition approach and the defer-and-amortize approach). While providing an integrated way to look at all pension accounts, students should be advised to make sure that they can calculate individual numbers without having to prepare a complete work sheet. To calculate pension expense, for example, it is often far faster to zero in on and use only the necessary information.

2. The work sheet is unique to pension accounting and is utilized to record both the formal entries and memo entries that are necessary to keep track of all the employer's relevant pension plan items and components. The format of the work sheet is as follows:

Pension Work Sheet

General Journal Entries				Memo Record	
Items	Annual Pension Expense	Cash	Funded Pension Status asset/liability	Accrued Benefit Obligation	Plan Assets

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 (non-capitalized) pension items. On the first line of the work sheet, the beginning balances (if any) are recorded. Subsequently, transactions and events related to the pension plan are recorded, using debits and credits as if they were one for recording the entries. For each transaction or event, the debits must equal the credits. The balance in the Pension funded status asset/liability column should equal the net balance in the memo record. The work sheet approach to accumulating balances for pension accounting is an effective way of keeping track of complicated calculations.

Other Defined Benefit Plans with Benefits that Vest or Accumulate

1. All defined benefit plans with service-related future benefits should have their costs and liability accounted for on an accrual basis. In 1990, FASB required US companies, most of which had previously applied the pay-as-you-go basis, to apply the accrual method. The pay-as-you-go basis remained the predominant method for most companies in Canada until the adoption of *Handbook* Section 3461, effective in 2000. This new standard requires all Canadian companies to account for all defined benefit plans where the benefits vest or accumulate on the same basis as they account for defined benefit pension plans.

2. The most common types of such plan other than pensions are post-retirement plans that provide health care benefits. Accounting for these plans is identical to the standards for accounting for pensions.

Differences Between Pension Benefits and Post Retirement Health Care Benefits

1. There are some differences between these two types of retirement benefits, which are shown below:

Item	Pensions	Health Care Benefits
Funding	Generally Funded	Generally not funded
Benefit	Well defined and level dollar amount	Generally uncapped and great variability
Beneficiary	Retiree (maybe some benefit to surviving spouse)	Retiree, spouse and other dependents
Benefit Payable	Monthly	As needed and used
Predictability	Variables are reasonably predictable	Difficult to predict its utilization; level of cost varies and fluctuates over time

Defined Benefit Plans—Benefits Do Not Vest or Accumulate

1. Some employee future benefits, such as maternity/parental leave and long-term disability benefits, are available to all employees regardless of the length of service provided. Because the entitlement to these benefits does not accrue, but rather is payable when a specific event occurs, the entire expense and liability are recognized on the occurrence of the qualifying event. As the benefits are paid, the liability is reduced. (This is referred to as an “event accrual” method of accounting for benefits and is explained in Chapter 13.)

Presentation, Disclosure, and Analysis

1. Entities with two or more defined benefit plans are required to separately measure the benefit cost, accrued benefit obligation, and plan assets for each funded benefit plan. Amounts can be added together on the statement of financial position (if both assets or both liabilities) but cannot net as there is no legal right to use the assets of one plan to pay for benefits of the other. Generally the amounts are reported as long term assets or liabilities. As no guidance exists under ASPE or IFRS, companies have the option of reporting current service costs, interest costs, and the expected return on plan assets as separate components, as part of similar expenses, or in total as a single benefit cost.

2. Disclosure requirements are extensive, with the objective of providing better information for users to assess the amounts and likelihood of cash flows associated with future benefits, the relationship between cash flows and pensions and other benefits expense, the impact of employee benefits on the income statement, and the reasonableness of the assumptions that underlie the measurement of the liability, fund assets, and current expense. All enterprises are required to disclose information about the accounting policies applied, amounts recorded in the financial statements, the off-balance sheet amounts, and the underlying assumptions used.

3. Analysis should focus on the major assumptions used and an analysis of the components comprising pension expense.

IFRS/ASPE Comparison

1. Refer to **Illustration 19-15** in the text which identifies the differences between IRS and ASPE. All major elements in accounting for employee future benefits are harmonized with international standards, however IAS 19 requires recognition of actuarial gains and losses in OCI. There are also differences in how past service costs and actuarial gains and losses are recognized in the financial statements, as ASPE allows both the immediate recognition approach and the defer-and-amortize approach.

Appendix 19A: Example of a One-Person Plan

1. An example of a one-person plan is used to illustrate the concepts in this chapter.

Appendix 19B: Example of the Deferral and Amortization Approach

The following example illustrates the deferral and amortization approach, which is an option for accounting for pensions under ASPE (and was allowed under IFRS until January 1, 2013). At the time this book went to press, the AcSB was considering eliminating the deferral and amortization approach under ASPE; however, it may be several years until it is completely phased out in Canada.

Deferral and Amortization Approach

1. This approach would delay the recognition of a portion of both the changes due to actuarial valuation of the ABO and past service costs and actuarial gains and losses. The components under the defer and amortize approach are as follows:

    a. **Past Service Costs**. Plan initiation or amendments (including initiation of a pension plan) often include provisions to increase benefits for service provided in prior years. Because plan amendments are granted with the expectation that the employer will realize economic benefits in future periods, the cost of providing these retroactive benefits is generally considered to be allocated to pension expense in the future. The private enterprise defer and amortize standard specifies that past service costs are deferred initially and then amortized in a systematic and rational manner, usually over the period in which the firm expects to realize the economic benefits from the change in plans. These benefits are amortized on a straight line basis over the average period until the benefits become vested.

    b. **Actuarial Gains and Losses. Actuarial gains and losses** can arise from a) a change in actuarial assumptions that affect the amount of the ABO resulting in liability gains and losses, and b) large and sudden changes in the market value of plan assets resulting in asset gains and losses

Actuarial Gains and Losses

1. Because of the concern to companies that pension plans would have uncontrollable and unexpected swings in pension expense, ASPE allow companies to reduce the volatility by using the deferral and amortization method of accounting for defined benefit plans to lessen or eliminate the fluctuations.

2. **Asset experience gains** (occurring when actual returns are greater than expected returns) and **asset experience losses** (occurring when actual returns are less than expected) are recorded in an Unrecognized or Unamortized Net Actuarial Gain or Loss account (a memo account) combined with unrecognized gains and losses from prior years. **Liability experience gains** (resulting from unexpected decreases in the liability balance) and **liability experience losses** (resulting from unexpected increases in the liability balance) are deferred and combined in the same Unrecognized or Unamortized Net Actuarial Gain or Loss account and this balance is reported in the notes to the financial statements.

3. Because actuarial gains and losses can and are expected to offset each other over time, the accumulated amount may not grow very large, which is the reason for not including the fluctuations in expense. To limit the growth, a **corridor approach** to the amortization of the net actuarial gain or loss is applied.

4. The corridor approach is based on the assumption that actuarial gains and losses will offset each other from one year to the next, and only when this doesn't happen and the balance gets too large should they be amortized as a component of pension expense. Amortization of the net actuarial gain or loss should be a component of pension expense only if the balance of the net gain or loss is too large **as of the beginning of the year**.

5. The corridor approach is applied as follows: The unrecognized gain or loss is too large and must be amortized when it exceeds the arbitrarily selected criterion of **10% of the larger of the beginning balance of the accrued benefit obligation or the market-related value of plan assets**. The minimum amortization is the excess divided by the expected average remaining service life (**EARSL**) of the employee group. Any systematic method of amortizing the excess may be used so long as the amount calculated is greater than the minimum amount computed under the corridor approach, so long as it is applied consistently and the method is disclosed.

6. To illustrate the amortization of unrecognized gains and losses, assume the following information related to Scott Inc.'s pension plan:

Beginning of the Year

	2013	2014	2015
Accrued 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

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

Corridor Test and Gain/Loss Amortization Schedule

Year	Projected Benefit Obligation	Plan Assets	Corridor	Cumulative Unrecognized Net Loss	Minimum Amortization of Loss (Current Year)
2013	$3,600,000	$4,100,000	$410,000	$ -0-	$ -0-
2014	4,100,000	4,300,000	430,000	900,000	58,750 (a)
2015	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 2014 would increase pension expense by $58,750. This amount is far less than the amortization of the $900,000 that would be recognized if the corridor method were 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 the gains and losses will offset one another.

Other Options within the Defer-and-Amortize Approach

1. Even under the defer-and-amortize approach in ASPE, a company is allowed to choose to recognize actuarial gains and losses in income in the same period in which they occur (under net income in ASPE), however the entity has to apply this policy to all its defined benefit plans and to all its actuarial gains and losses.

Entries and Work Sheet Example

1. To illustrate the use of a worksheet, the following facts apply to Oehler Company in the year 2013:

Plan assets, January 1, 2013	$450,000
Accrued benefit obligation, January 1, 2013	$450,000
Service cost for 2013	27,000
Discount rate for 2013	7%
Expected and actual return on plan assets, 2013	30,000
Contributions (funding) in 2013	32,000
Benefits paid to retirees in 2013	17,000

Oehler Company
Pension Work Sheet

General Journal Entries				Memo Record	
Items	Annual Pension Expense	Cash	Pension Funded Status Asset/ Liability	Accrued Benefit Obligation	Plan Assets
Balance, Jan. 1/2013				450,000 Cr.	450,000 Dr.
Service cost	27,000 Dr.			27,000 Cr.	
Interest cost	31,500 Dr.			31,500 Cr.	
Expected return	30,000 Cr.				30,000 Dr.
Contributions		32,000 Cr.			32,000 Dr.
Benefits paid				17,000 Dr.	17,000 Cr.
Pension expense entry	28,500 Dr.		28,500 Cr.		
Funding entry		32,000 Cr.	32,000 Dr.		
Balance, Dec. 31/2013			3,500 Dr.	491,500 Cr.	495,000 Dr.

2014 Entries and Work Sheet

1. To illustrate the use of a work sheet with amortization of unrecognized past service costs, the following facts apply to Oehler Company for the year 2014:

Present value of past service benefits granted Jan. 1, 2014	$42,000
Service cost for 2014	28,000
Discount rate for 2014	7%
Expected and actual return on plan assets, 2014	31,000
Contributions (funding) in 2014	29,000
Benefits paid to retirees in 2014	24,000
Amortization of past service costs, 2014	17,500

The work sheet would be completed as follows:

Oehler Company
Pension Work Sheet

General Journal Entries				Memo Record		
Items	Annual Pension Expense	Cash	Pension Funded Status Asset/ Liability	Accrued Benefit Obligation	Plan Assets	Unrecognized Past Service Cost
Balance, Dec. 31/13			3,500 Dr.	491,500 Cr.	495,000 Dr.	
Past service cost				42,000 Cr.		42,000 Dr.
Balance, Jan. 1/14			3,500 Dr.	533,500 Cr.	495,000 Dr.	42,000 Dr.
Service cost	28,000 Dr.			28,000 Cr.		
Interest cost	*37,345 Dr.			37,345 Cr.		
Expected return	31,000 Cr.				31,000 Dr.	
Amortization of past service cost	17,500 Dr.					17,500 Cr.
Contributions		29,000 Cr.			29,000 Dr.	
Benefits paid				24,000 Dr.	24,000 Cr.	
Pension expense entry	51,845 Dr.		51,845 Cr.			
Funding entry		29,000 Cr.	29,000 Dr.			
Balance, Dec. 31/14			19,345 Cr.	574,845 Cr.	531,000 Dr.	24,500 Dr.

* $533,500 × .07

The pension reconciliation schedule is as follows:

Accrued benefit obligation (credit)	$(574,845)
Plan assets, at fair value (debit)	531,000
Funded status (credit)	(43,845)
Unrecognized past service cost (debit)	24,500
Pension Funded Status Asset/Liability (credit)	$ (19,345)

Methods Compared

	ASPE Policy Choice		**IFRS**
	Immediate Recognition Approach	**Defer and Amortize Approach**	**Immediate Recognition Approach**
Actuarial Valuation basis for ABO	ABO prepared for funding purposes	ABO used for accounting purposes (projected costs)	ABO used for accounting purposes (projected costs)
Include in expense and statement of financial position account:			
Current Service Cost	Include	Include	Include
Interest Cost on ABO	Include	Include	Include
Return on Plan Assets	Include actual return	Include expected return	Include expected return
Past Service Cost	Include all	Include only amortization over period to full eligibility, or shorter period that benefits	Include to extent benefits are vested; remainder is amortized over average period to full vesting
Actuarial Gains and Losses	Include all	Include amortization using corridor approach: minimum is excess amount over the corridor divided by EARSL or shorter period. May recognize immediately	Must recognize 100% as incurred; if so, may recognize cost in OCI instead of expense