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Financial Accounting

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Employee Future Benefits Pensions & Post Retirement Benefits

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Accounting for Pensions

- Technically IAS 19 deals with all employee benefits (both those paid to current and former employees / retirees)
- This presentation deals with pensions and other post retirement benefits ("Employee Future Benefits")
 - "Pension expense" will be used as shorthand for "Pensions & Post Retirement Benefits"
 - Current employee benefits were briefly covered in Current & Other Financial Liabilities
- Applies to all benefits earned by active employees that will be provided to them in their retirement

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Definitions

- Employee benefits
 - are all forms of consideration given by an entity in exchange for service rendered by employees.
- Short-term employee benefits
 - are employee benefits (other than termination benefits) that are due to be settled within twelve months after the end of the period in which the employees render the related service.
- Post-employment benefits
 - are employee benefits (other than termination benefits) which are payable after the completion of employment.

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Definitions

- Post-employment benefit plans
 - are formal or informal arrangements under which an entity provides post-employment benefits for one or more employees.
- Defined contribution plans
 - are post-employment benefit plans under which an entity pays fixed contributions into a separate entity (a fund) and will have no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods.

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Definitions

- **Defined benefit plans**
 - are post-employment benefit plans other than defined contribution plans.
- **Multi-employer plans**
 - are defined contribution plans or defined benefit plans that:
 - (a) pool the assets contributed by various entities that are not under common control; and
 - (b) use those assets to provide benefits to employees of more than one entity,
 - on the basis that contribution and benefit levels are determined without regard to the identity of the entity that employs the employees concerned.

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Definitions

- **Termination benefits**
 - are employee benefits payable as a result of either:
 - (a) an entity's decision to terminate an employee's employment before the normal retirement date; or
 - (b) an employee's decision to accept voluntary redundancy in exchange for those benefits.

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Definitions

- **Vested employee benefits**
 - are employee benefits that are not conditional on future employment.
- **The present value of a defined benefit obligation**
 - is the present value, without deducting any plan assets, of expected future payments required to settle the obligation resulting from employee service in the current and prior periods.
- **Current service cost**
 - is the increase in the present value of a defined benefit obligation resulting from employee service in the current period.

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Definitions

- **Interest cost**
 - is the increase during a period in the present value of a defined benefit obligation which arises because the benefits are one period closer to settlement.
- **Fair value**
 - is the amount for which an asset could be exchanged or a liability settled between knowledgeable, willing parties in an arm's length transaction.
- **Return on plan assets**
 - is interest, dividends and other revenue derived from the plan assets, together with realised and unrealised gains or losses on the plan assets, less any costs of administering the plan

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Definitions

- **Actuarial gains and losses comprise:**
 - (a) experience adjustments (the effects of differences between the previous actuarial assumptions and what has actually occurred); and
 - (b) the effects of changes in actuarial assumptions.
- **Past service cost**
 - is the change in the present value of the defined benefit obligation for employee service in prior periods, resulting in the current period from the introduction of, or changes to, post-employment benefits or other long-term employee benefits.
 - Past service cost may be either
 - positive (when benefits are introduced or changed so that the present value of the defined benefit obligation increases) or
 - negative (when existing benefits are changed so that the present value of the defined benefit obligation decreases).

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Types of Pension Plans

- **Defined contribution pension plans**
 - Aka (also known as) money purchase plans
 - Cost of the plan in the current year is known with certainty
 - Employer and employee both may contribute
 - Conceptually similar to an RRSP

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Types of Pension Plans

- **Defined benefit pension plan**
 - The end benefit is pre-defined
 - E.g., 75% of the best of the last five years of employment prior to retirement
 - Cost of the plan in the current year is not known with certainty (payments are made on the advice of actuaries but these are just estimates of the final cost)

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Pension Variables (Terminology)

- **Contributory**
 - Employee makes contributions
- **Non contributory**
 - Employees are not permitted to make contributions
 - DPSPs

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Pension Variables (Terminology)

- **Trusteed**
 - A trustee has been appointed to administer the plan
- **Registered**
 - Registered with the provincial pension commissioner
- **Level contribution**
 - Projects the annual funding on the final salary and on the years of service and allocates the cost evenly over the years of service

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Actuarial Considerations

- Consider the future amount that each employee will require to retire
- Consider the average employee's life expectancy
- Consider the probability that the average employee will make it to retirement (mortality, turnover)
- Funding is the cash amount that the trustee requires the company to pay
- Pension expense is the expense determined under GAAP

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Actuarial Considerations

PV of E(V) of pension payments

Pmts FV

\$ X % E(\$) \$ X % E(\$) \$ X % E(\$)

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Defined Contribution Plans

- Accounting for these are a piece of cake
- Dr expense and cr cash
- The probability of ever seeing a question on these?

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Defined Benefit Plans

- This is where the challenge lies
- It is a challenge because:
 - The terminology borders upon jargon
 - In the previous standards the standard setters compromised theory and amortized expense into income (instead of following convention and recognizing the entire liability in the period it arises)
 - To determine the actual cost of the pension, the user will need to identify and add three amounts

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Defined Benefit Plans

- Three actuarial methods
 - Vested
 - Amounts in the plan become the legal property of the employee
 - Governed by provincial law
 - Accumulated benefit obligation
 - Pension obligation is costed based on current wages
 - Projected benefit obligation (PBO)
 - Pension obligation is costed based on the projected wages of the employee at retirement

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Alternatives in Valuing Pension Obligations

Category	Relative Value
Vested	Lowest
Accumulated Benefit Obligation	Medium
Projected Benefit Obligation	Highest

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Defined Benefit Plans

- The calculation of the defined benefit obligation is the responsibility of the actuary – the accountant’s responsibility is to identify the relevant amounts provided by the actuary
- Projected unit credit method is required by IFRS to cost the pension obligation
 - The Actuarial Liability for active members either as a valuation date is calculated taking pensionable pay projected from the relevant date up to the assumed date of retirement, date of leaving service or date of death as appropriate.

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Pension Expense

Company

Profit and Loss Statement

- Service Cost expense
- Net interest cost

OCI Statement

- Re-measurement cost

Balance Sheet

- Net Defined Benefit Obligation

\$

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Trust

Plan Assets

Defined benefit obligation
(generally valued using the Projected Benefit Obligation value)

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Employees (pension benefits)

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Pension Expense

Profit and Loss Statement

Service cost

- + Current service cost
- + Past service cost (all of it)
- + Settlement cost

Net interest Cost (interest on net defined benefit liability)

- + Discount rate used for pension liability x (pension assets – defined benefit liability)

Statement of Other Comprehensive Income

- + / - Actuarial gains and losses
- Assets return not included in net interest cost (recall that the discount rate was used here)
- Change in effect of asset limitation other than interest at beginning of year

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Notes on Components

- Current service cost
 - The amount of pension benefit earned in the current period
- Expected interest on defined benefit obligation (DBO)
 - Consider DBO as a long term liability (albeit off balance sheet) that accrues interest
 - Interest cost is computed by multiplying the discount rate as determined at the start of the period by the present value of the defined benefit obligation throughout that period, taking account of any material changes in the obligation

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Note on Components

- Expected interest on DBO
- Rate calculated with reference to market yields at the end of the reporting period on high quality corporate bonds.
 - In countries where there is no deep market in such bonds, the market yields (at the end of the reporting period) on government bonds shall be used
 - As a result of the 2008 financial meltdown, IFRS issued an ED proposing to remove the reference to government bonds and instead require an estimation of market yields of high quality corporate bonds
 - Why? Low government rates caused a surge in pension expense – can't have this in high quality principled accounting standards
- Applied to the average balance in DBO

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Notes on Components

- Expected interest on plan assets
 - No longer used – the discount rate on the DBO is also applied to the pension assets
- Past Service Costs
 - PSC come about from either the initial adoption of a pension plan or an amendment to improve the plan
 - At one time these were amortized into pension expense but now they are included as a component of service cost and expensed in the year they arise

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Notes on Components

- Actuarial gains & losses
 - Includes
 - Experience gains & losses
 - Difference between actual return on plan assets and calculated interest using the DBO discount rate
 - Difference between actual interest and expected interest on DBO
 - Changes in actuarial assumptions
 - Recorded as a component of OCI (closed to Accumulated OCI on the balance sheet).
 - These are not to be recycled into the profit and loss statement

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Worksheet Approach

	Comprehensive Income		Balance sheet		Plan Assets	Defined Benefits Obligatio
	Profit and loss Statement	OCI	Cash	Net DB Liability		
	Service Cost	Net Interest Cost	Actuarial Gn/Loss			
Opening				- 250,000.00	750,000.00	- 1,000,000.00
Past service cost - BOY	80,000.00					- 80,000.00
Interest on PA (using discount rate)		- 75,000.00			75,000.00	
Interest on DBO (using discount rate)		100,000.00				- 100,000.00
Current service cost	75,000.00					- 75,000.00
Contributions				50,000.00	50,000.00	
Benefits paid					150,000.00	150,000.00
Actuarial loss in pension liability			15,000.00			- 15,000.00
Actuarial loss on plan assets			8,000.00			- 8,000.00
	155,000.00	33,000.00	23,000.00	50,000.00	717,000.00	- 1,128,000.00
				- 161,000.00		
Interest on plan assets 7%						
Discount on Pension Benefit Obligation - 10%					411,000.00	411,000.00

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Worksheet Approach

Journal entry		
Pension - service cost	155,000.00	
Pension - net interest cost	33,000.00	
OCI - Actuarial loss on pension	23,000.00	
Cash		50,000.00
Net DB Liability		161,000.00
	211,000.00	211,000.00

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Notes on Pension

- The net defined benefit asset / liability on the balance sheet now represents the difference between plan assets and the defined benefit obligation
- Benefits are paid from the pension plan
 - No effect to the reporting entity
 - Reduces plan assets & DBO

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Disclosure Recommendations

- Separate disclosure of pensions and other post retirement benefits
- Basically the changes in and the balances at the end of the year for the components in the pension worksheet
- Amount of contributions from employees

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Additional Disclosures

- the method used to determine the defined benefit obligation;
- the method used in calculating the market-related value of each class of asset;
- The measurement date used to determine the plan assets and the defined benefit obligation;
- Information to allow for a sensitivity analysis for changes of a change in interest rates on the calculation of pension expense and
- An estimation of the contributions expected to be paid by the entity to the plan for the next fiscal year

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APPENDIX

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Defined Benefit Plan Assets

- **Standard**
 - An entity shall recognise the net defined benefit liability (asset) in the statement of financial position.
 - When an entity has a surplus in a defined benefit plan, it shall measure the net defined benefit asset at the lower of:
 - the surplus in the defined benefit plan; and
 - the asset ceiling, determined using the prescribed discount rate (essentially the market yield on high quality corporate bonds).

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