IAS 19 – Employee Benefits

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Agenda

- Overall Understanding of Post- Retirement Benefits, Underlying Assets and Related Concepts
- Scope and Overview of IAS 19
- Accounting for DB Schemes
- Challenges relating to determination of demographic and economic assumptions
- An Overview of the Actuarial Valuation Process

OVERALL UNDERSTANDING OF POST-RETIREMENT BENEFITS, UNDERLYING PLAN ASSETS (IF ANY) AND RELATED CONCEPTS

Post-Retirement Benefits

- Although scope of IAS-19 lies beyond retirement benefit schemes, it is most commonly known for the need to actuarially evaluate the costs and liability related to retirement benefit schemes.
- The importance of retirement benefit schemes (or postemployment benefits) is becoming increasingly important.
 - It is clear that everyone will retire and stop working at some stage but the need for an income to support costs of living obviously remains (even if not at the same level as while working)
 - In many developed countries the state takes on the responsibility of providing for old age pensions, at least at a basic level
 - What is the subject of this presentation is, however, are benefits provided after retirement to employees by employers

Classification of Post Employment Plans

- *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
 - Contributions paid into a fund
 - No further obligation of the employing entity
 - Most common examples provident fund (in sub-continent) or 401K plans in the US
 - Defined benefit plans are post-employment benefit plans other than defined contribution plans
 - Employer has to pay a benefit as defined in the scheme irrespective of the cost
 - Pension schemes, gratuity schemes, End of Service Benefits in the GCC
- The standard also defines multi-employer plans although regionally the norm is for single employer plans

Defined Contribution Plans

- Key element in a DC plan is that the employing entity's liability is limited to contributions
 - Risks relating to whether the eventual fund will be enough to adequately provide for retirement are with the employee.
- Therefore plans having the following elements are not defined contribution
 - Where a minimum level of benefit is prescribed (i.e., possibly greater than accumulated contributions)
 - Where a minimum return on fund assets is guaranteed
 - Other constructive obligations like increasing benefit to keep pace with inflation.
- DC plans are usually, by definition, funded, i.e., contributions are paid into a fund/insurance plan where the funds are invested and grow through investment income.
- Accounting for DC plans is straightforward
 - Contribution payable by the employer should be recognized as a cost
 - Any unpaid contributions to be recognized as a liability

Defined Benefit Plan

- Employer entity's obligation is to provide the agreed benefits to current and former employees. Benefits could be:
 - Lump sum gratuity /end of service benefit
 - An annuity (possibly for life) pension
- It is common for benefits to be computed based on salary (usual final salary or some average of final few years' salaries) and length of service.
 - Hence during employment there is uncertainty as to what the eventual pay out will be
- Complex schemes could include:
 - Pensions to spouse (eg., full or 50% pension continues to be paid to spouse after death of pensioner)
 - Pensions even to dependent children
 - Post retirement medical coverage
- Actuarial risk (that benefits will cost more than expected) and investment risk (if the benefits are funded) fall, in substance, on the employer entity. If actuarial or investment experience are worse than expected, the entity's obligation may be increased.

Common Post Employment

- DC schemes include the following
 - Provident Funds, a DC scheme where employers and/or employees contribute a proportion of their salaries into a pooled fund
 - The fund is invested and returns distributed to members
 - The lump sum is paid out on retirement/resignation/death
 - Loans or permanent withdrawals can also be made
 - DC pension plans where asset management companies offer a range of funds into which contributions are paid
- DB schemes include:
 - Gratuity schemes which pay a lump sum based on final salary (or an average of salaries just prior to payment) for each year of service
 - Pension schemes which pay an income post retirement calculated again as a proportion of final or final average salary for each year of service
 - Post retirement medical; other benefits

Post-employment benefits in the GCC

- Most countries prescribe a minimum default postemployment scheme
- Retirement benefits tend to vary significantly between nationals of GCC countries and expatriates (which usually make up most of the populations being valued by actuaries)
- GCC nationals are usually covered by fairly generous pension schemes
- Each GCC country prescribes an End of Service Benefit (EOSB) for expatriate employees

EOSB in Saudi Arabia

- End of service Benefits are covered under Article 84 to 88 of Labor Law.
- Benefits payable are:
 - ½ month's salary for each year of service up to five years and then one month salary for each year of service thereafter
 - Salary for EOSB calculation is the last drawn wage / gross salary.
 The wage does not include all or some of the commissions, sales percentages and similar wage components.

On Resignation:

In case of the employee resigning from a contract of unspecified length, the benefits will be reduced to one-third in case of service being more than 2 years and less than 5 years, reduce to two-third in case of service being more than 5 years and less than 10 years and the full terminal benefit is paid in case of service being more than 10 years.

Termination / force majeure:

In case of the employee being terminated from the contract, 100% of the above benefits will be payable to the employees.

Funding

- DC schemes are usually, by definition, funded.
- DB schemes can or cannot be funded
- The motivation for funding is largely to isolate the retirement benefit provision from the risks associated with the employer entity
- Funding can take several forms
 - In the sub-continent, the UK and other ex-British colonies trust funds set up for the purpose sponsored by employers
 - Insurance policies designed and approved for the purpose
 - In some regimes funds can be directly invested in mutual funds managed by asset management companies
- There are usually rules relating to assets to reduce risks associated with investments
- In the GCC the EOSB is almost never funded

OVERVIEW OF IAS 19

Introduction

- IAS 19 Employee Benefits prescribes the accounting and disclosure by employers for employee benefits. The Standard does not deal with reporting by employee benefit plans (see IAS 26 Accounting and Reporting by Retirement Benefit Plans).
- Deals with all employee benefits other than Share Based Payments (dealt with by IFRS 2)
- *Employee benefits* are all forms of consideration given by an entity in exchange for service rendered by employees or for the termination of employment.
- Four categories of Employee Benefits
 - Short-term benefits
 - Post-employment benefits
 - Other long-term employee benefits
 - Termination benefits

Short Term Employee Benefits

- Generally expected to be paid within 12 months of end of reporting period in which service rendered
- Includes (for current employees)
 - Wages, salaries, and social security contributions
 - Paid annual leave and paid sick leave
 - Profit-sharing and bonuses
 - Non-monetary benefits (such as medical care, housing, cars, etc)
- To be recognized when an employee has rendered service in exchange for those benefits
 - Effectively requires these expenses to be accrued as service to which they are related are rendered and the expense recognized over such period.

Post Employment/Other Long Term Benefits

- Post Employment Benefits include
 - retirement benefits (eg pensions and lump sum payments on retirement); and
 - other post-employment benefits, such as postemployment life insurance and post-employment medical care, etc.
- Other Long Term Benefits include:
 - long-term paid absences such as long-service leave or sabbatical leave;
 - jubilee or other long-service benefits; and
 - long-term disability benefits.

Termination Benefits

- Termination benefits are employee benefits provided in exchange for the termination of an employee's employment as a result of either:
 - an entity's decision to terminate an employee's employment before the normal retirement date; or
 - an employee's decision to accept an offer of benefits in exchange for the termination of employment.

Basic Principles for Recognition

- The standard essentially seeks to recognize costs relating to employee service over the same period in which the benefits from that service are realized – essentially following through on the accrual principle prescribed in IAS 1
- Where the cost relating to a particular accounting period is easy to calculate (eg., the normal monthly salary relating to a month can be easily said to be the cost relating to the salary component of that employee's cost) – therefore simply measure it as such.
- Where the benefits are payable over the longer term, however, with different amounts payable under different conditions – then the actual determination of costs relating to a particular period is more complex

ACCOUNTING FOR DB SCHEMES

Accounting for DB Schemes



Measurement of the Liability

 Prior to complying with IAS 19 many entities offering lump sum schemes such as gratuity/ EOS would value the liability as the amount due if all persons retired on the balance sheet date

Others included broken periods to follow the "accrual" concept

- IAS 19, however, requires entities to take a more holistic view, recognizing that all employees are unlikely to leave together on a particular date
- Hence (simplistically put) the standard requires determining the expected eventual value of the defined benefit obligation and then apportions it between past and future service using a simple proportion (past service to future service).
 - This method is called the Projected Unit Credit method
 - The actual calculations are more complicated as the benefit may be paid at various points in time – hence the calculation has to be done for different points in time in the future and then the expected value calculated by weighting the calculation for each period with the probability of the benefit being paid at that period.

Apportionment per Standard

- In determining the present value of its defined benefit obligations and the related current service cost and, where applicable, past service cost, an entity shall attribute benefit to periods of service under the plan's benefit formula. However, if an employee's service in later years will lead to a materially higher level of benefit than in earlier years, an entity shall attribute benefit on a straight-line basis from:
 - the date when service by the employee first leads to benefits under the plan (whether or not the benefits are conditional on further service) until
 - the date when further service by the employee will lead to no material amount of further benefits under the plan, other than from further salary increases.

Simple Example (given in IAS)

- Salary 10,000 increasing at 7% p.a.
- Discount rate 10%

- EOS =1% final salary for each year of service
- Only one possibility retirement after 5 years

Years>	1	2	3	4	5		
Salary>	10,000	10,700	11,449	12,250	13,108	=prev yr salary * 1.07	
Accumulated Undiscounted Service Cost	131	262	393	524	655	= yrs of service (5) * 1% * Salary (13,108)	
Undiscounted Service Cost	131	131	131	131	131	= benefit divided by number of years over which earned	
Opening Obligation	0	90	197	325	477	= prev yrs closing	
Interest Cost	0	9	20	32	48	= opening * int rt (10%)	
Discounted Service Cost	90	98	108	119	131	=service cost / (1.10)^(5-yr)	
Closing Obligation	90	197	325	477	655	=op prov + interest+ discounted service cost	

Benefit Payment Scenarios

- The previous example was a simplistic one as only one possible scenario for the benefit payment was envisaged – retirement after 5 years.
- In practice there are a number of possible scenarios:
 - Employee leaving prior to retirement (withdrawal) either due to ill-health; due to voluntary early retirement; or simply to move to a different job.
 - Employee passing away while in active service.
- In pension schemes there are still more scenarios related to benefit payments, especially post retirement where spouses and even children can be the recipient of benefits.

Introducing Probabilities

- Where there are different payment scenarios the calculation done is the same for each scenario and then a weighted average is arrived at by weighting each scenario by the probability of it occurring.
- The probabilities are not also simple single decrement probabilities but multiple decrement ones
 - Even in simple EOSB calculations at least two decrements are used – mortality and withdrawal
 - As the benefits payable on death and normal withdrawal may vary the probability of each and the benefit payable need to be calculated separately

Extending Example

- Just extending the example to two possible scenarios:
 - Benefit becoming payable after 5 years (as originally envisaged) assume a 70% probability
 - Benefit becoming payable after 4 years assume a 30% probability
 - Note that the sum of the probabilities of all scenarios has to be 100%
- Let us only look at the PV of the Defined Benefit Obligation (expected future payments required to settle the obligation resulting from employee service in the current and x prior periods without considering plan assets) – at the end of year 3.
 - Calculated value assuming benefit payable in year 5 = 325
 - Calculated value assuming benefit payable in year 4 = 334
 - Therefore Expected = 70% x 325 + 30% x 334 = 328

Measurement of the Asset

- DC plans are funded by definition
- Not all DB plans are, however, funded
 - In fact in the case of the EOSB prevalent in the GCC it is rarely funded
- Plan assets comprise:
 - assets held by a long-term employee benefit fund; and
 - qualifying insurance policies.
- Assets held by a long-term employee benefit fund are assets (other than
- non-transferable financial instruments issued by the reporting entity)
- that:
 - are held by an entity (a fund) that is legally separate from the reporting entity and exists solely to pay or fund employee benefits; and
 - are available to be used only to pay or fund employee benefits
- 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.

Surplus/(Deficit)

- Deficit/(surplus)
 - Present value of Defined Benefit Obligation less
 - The fair value of plan assets (if any)
- Net defined benefit Liability/ (Asset)
 - Surplus or deficit but with any adjustment for asset ceiling
- Net defined benefit liability is to be recognized as a liability in the balance sheet of the employer. Similarly any net defined benefit asset is to be recognized as an asset.

Income Statement Entries

- Amounts to be recognized in profit or loss
 - current service cost
 - any past service cost and gain or loss on settlement
 - net interest on the net defined benefit liability (asset)
- Current service cost cost relating to current year on new assumptions
- The above to be determined using the current assumptions (and not previous year assumptions)
- Past Service Cost change in the present value of the defined benefit obligation resulting from a plan amendment or curtailment.
- Gain and loss on settlement Difference between
 - Present value of DBO on current actuarial assumptions; and
 - Amount of settlement

Income Statement Entries

- Net interest on the net defined benefit liability (asset) shall be determined by multiplying the net defined benefit liability (asset) by the discount rate as determined at the start of the annual reporting period, taking account of any changes in the net defined benefit liability (asset) during the period as a result of contribution and benefit payments.
 - On the liability side effectively the effect of unwinding of the discounting for one year
 - On the asset side effectively the assumed investment income earned on the asset

Income Statement Entries

- Remeasurements of the net defined benefit liability (asset), to be recognised in other comprehensive income:
 - actuarial gains and losses
 - return on plan assets, excluding amounts included in net interest on the net defined benefit liability (asset)
 - any change in the effect of the asset ceiling
- Actuarial gains and losses result from
 - Actual experience being different to that determined
 - A change in actuarial assumptions
- Actuarial gains and losses do not include changes in the present value of the defined benefit obligation because of the introduction, amendment, curtailment or settlement of the defined benefit plan, or changes to the benefits payable under the defined benefit plan.
 - Such changes result in past service cost or gains or losses on settlement.

Assumptions

- In estimating the liability assumptions need to be made relating to several parameters. These can broadly be divided into
 - Demographic assumptions
 - Economic/Financial Assumptions
- Demographic
 - Withdrawal probability that a member will resign from service prior to retirement
 - Mortality probability of death in service (for pension schemes also death post retirement)
 - Morbidity probability of early retirement due to ill-health
 - Medical claim incidence rates
 - Family mix and demographics important for pension schemes with family benefits
- Economic
 - Rate/pattern of salary increase
 - Discount rate
 - Sometimes inflation (eg., inflation of medical costs in the case of a post retirement medical scheme)
 - Increase in pensions post retirement

Setting Assumptions

- Actuarial assumptions need to be "unbiased and mutually compatible"
 - "Unbiased" neither imprudent nor excessively conservative
 - "Mutually compatible" most common issue in case of EOSB gap between salary increase rate and discount rate
- Assumptions need to be set with a view to:
 - Experience prevalent in the jurisdiction for which the calculations are being carried out
 - Actual experience of the entity
 - The actuary's views about future development (eg., improvements in mortality)
- The standard provides some guidance on setting assumptions
- In Pakistan the Pakistan Society of Actuaries has published a guidance note relating to setting assumptions

Setting Assumptions : Mortality

- Mortality assumptions do not usually materially impact gratuity/EOSB schemes
 - Post retirement mortality assumptions do have a significant impact on pension liabilities
 - Mortality improvements are the most significant cause of financial difficulties of DB pension schemes
- GCC countries do not have published mortality tables
 - Situation more difficult as significant diversity in the population being valued under the scheme due to multiple nationalities with differing underlying mortality trends
- SHMA tends to use reinsurance risk premium rates relating to group insurance as a proxy for mortality

Setting Assumptions : Discount Rate

- Discount rate reflects the time value of money
- Standard requires discount rate to be determined by reference to market yields at the end of the reporting period on high quality corporate bonds.
 - The duration of the liability needs to be calculated and the bond of which the yield is to be taken should be of a similar duration
- 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. The currency and term of the corporate bonds or government bonds shall be consistent with the currency and estimated term of the postemployment benefit obligations.
- The discount rate is one of the most key assumptions hence needs to be set carefully.
 - In Pakistan the Pakistan Society of Actuaries notifies the discount rate to be used by its members on a quarterly basis.

Setting Assumptions : Salary/Pension Increases

- The most significant assumption other than discount
- Actuary would need to study past patterns and determine, after discussions with management, as to the extent to which history is reflective of possible patterns in the future.
- Common to have different assumptions for short term and long term salary increases
- Pension increases are more difficult to set assumptions for, especially where increases are given in an irregular and ad hoc basis.
 - Again have a significant impact on cost for defined benefit pension schemes

Disclosure

- An entity shall disclose information that:
 - explains the characteristics of its defined benefit plans and risk associated with them
 - identifies and explains the amounts in its financial statements arising from its defined benefit plans
 - describes how its defined benefit plans may affect the amount, timing and uncertainty of the entity's future cash flows

Characteristics of DB plans and Associated Risks

- Information about the characteristics of its defined benefit plans, including:
 - the nature of the benefits provided by the plan (eg final salary defined benefit plan or contribution-based plan with guarantee).
 - a description of the regulatory framework in which the plan operates, for example the level of any minimum funding requirements, and any effect of the regulatory framework on the plan, such as the asset ceiling (see paragraph 64).
 - a description of any other entity's responsibilities for the governance of the plan, for example responsibilities of trustees or of board members of the plan.
- a description of the risks to which the plan exposes the entity, focused on any unusual, entity-specific or plan-specific risks, and of any significant concentrations of risk.
 - Eg., if plan assets are invested primarily in one class of investments, eg property, the plan may expose the entity to a concentration of property market risk.
- a description of any plan amendments, curtailments and settlements.

Explanation of Amounts in Financial Statements

- Reconciliation from the opening balance to the closing balance for each of the following, if applicable:
 - the net defined benefit liability (asset), showing separate reconciliations for:
 - (i) plan assets.
 - (ii) the present value of the DBO.

(iii) the effect of the asset ceiling.

 any reimbursement rights. An entity shall also describe the relationship between any reimbursement right and the related obligation.

Explanation of Amounts in Financial Statements (contd)

- Each reconciliation shall show each of the following, if applicable:
 - current service cost.
 - interest income or expense.
 - remeasurements of the net defined benefit liability (asset), showing separately:
 - the return on plan assets, excluding amounts include in determining net interest.
 - actuarial gains and losses arising from changes in assumptions.
 - An entity shall also disclose how it determined the maximum economic benefit available, ie whether those benefits would be in the form of refunds, reductions in future contributions or a combination of both.
 - past service cost and gains and losses arising from settlements.
 - the effect of changes in foreign exchange rates.
 - contributions to the plan, showing separately those by the employer and by plan participants.
 - payments from the plan, showing separately the amount paid in respect of any settlements.

RECONCILIATION - SIMPLE EXAMPLE

Plan liabilities		
	'000	
Present value at start of period	XX	Accumulated pension benefits earned by past and present employees in return for services to date, which will be payable in the future
Current service cost	XX	Extra pension benefits earned by employees in return for services in current period. Estimated by a qualified actuary - affected by mortality rates, future salaries, etc.
Interest cost	XX	Increase in the present value of future obligations during the current period ('unwinding the discount') Arises because the pension benefits for employees are now one year closer to being paid
Benefits paid	(XX)	Amounts paid out from pension fund in current year, thus reducing future liability of the plan as recipients are one more year into their retirement
Actuarial (gain)/loss	<u>X/(X)</u>	Balancing figure
Present value at end of period	XX	

Amount, Timing and Uncertainty of Future Cash flows

- An entity shall disclose:
 - a sensitivity analysis for each significant actuarial assumption as of the end of the reporting period, showing how the defined benefit obligation would have been affected by changes in the relevant actuarial assumption that were reasonably possible at that date.
 - the methods and assumptions used in preparing the sensitivity analyses required and the limitations of those methods.
 - Changes from the previous period in the methods and assumptions used in preparing the sensitivity analyses, and the reasons for such changes.
- An entity shall disclose a description of any asset-liability matching strategies used by the plan or the entity, including the use of annuities and other techniques, such as longevity swaps, to manage risk.
- To provide an indication of the effect of the defined benefit plan on the entity's future cash flows, an entity shall disclose:
 - a description of any funding arrangements and funding policy that affect future contributions.
 - the expected contributions to the plan for the next annual reporting period.

Other Long Term Employee Benefits

- Other long-term employee benefits include items such as the following, if not expected to be settled wholly before twelve months after the end of the annual reporting period in which the employees render the related service:
 - long-term paid absences such as long-service or sabbatical leave;
 - jubilee or other long-service benefits;
 - long-term disability benefits;
 - profit-sharing and bonuses; and
 - deferred remuneration.
- The measurement of other long-term employee benefits is not usually subject to the same degree of uncertainty as the measurement of post-employment benefits. For this reason, this Standard requires a simplified method of accounting for other long-term employee benefits.
 - Unlike the accounting required for post-employment benefits, this method does not recognize re-measurements in OCI

Other LT Benefits – Recognition and Measurement

- For other long-term employee benefits, an entity shall recognise the net total of the following amounts in profit or loss, except to the extent that another IFRS requires or permits their inclusion in the cost of an asset:
 - service cost (measured using the PUC methodology)
 - net interest on the net defined benefit liability (asset)
 same method as for post-employment plans
 - remeasurements of the net defined benefit liability (asset)

Termination Benefits

- Termination benefits result from either an entity's decision to terminate the employment or an employee's decision to accept an entity's offer of benefits in exchange for termination of employment.
 - do not include employee benefits resulting from termination of employment at the request of the employee without an entity's offer, or as a result of mandatory retirement requirements, because those benefits are post-employment benefits.
 - Some entities provide a lower level of benefit for termination of employment at the request of the employee (in substance, a post-employment benefit) than for termination of employment at the request of the entity.

Recognition and Measurement

- An entity shall recognise a liability and expense for termination benefits at the earlier of the following dates:
 - when the entity can no longer withdraw the offer of those benefits; and
 - when the entity recognises costs for a restructuring that is within the scope of IAS 37 and involves the payment of termination benefits.
- An entity shall measure termination benefits on initial recognition, and shall measure and recognise subsequent changes, in accordance with the nature of the employee benefit, provided that if the termination benefits are an enhancement to post-employment benefits, the entity shall apply the requirements for post-employment benefits. Otherwise:
 - if the termination benefits are expected to be settled wholly before twelve months after the end of the annual reporting period in which the termination benefit is recognised, the entity shall apply the requirements for short-term employee benefits.
 - if the termination benefits are not expected to be settled wholly before twelve months after the end of the annual reporting period, the entity shall apply the requirements for other long-term employee benefits.
- Given the nature of the benefit it is not attributable to service but to the termination event. Hence no attribution between past and future service full amount to be recognised immediately.

CHALLENGES IN SETTING ASSUMPTIONS

Main Assumptions Impacting Liability

- Based on our experience
 - The salary increase rate is higher as compare to the discount rated currently applicable (which are in turn based on bond yields currently available)
 - Resignation and termination probabilities are from 5% to 20% p.a.
- Most of the discussions which take place with management revolve around the salary increase assumption
 - Incidentally PSOA guidelines (no separate guidelines available for the GCC) restrict the gap between the discount rate and the long term salary increase rate
 - For the first few years in the future a greater gap can be maintained

PROCESS

Work Approach



Active employees as at December 31, 2014:

- Employee Number
- Employee Name
- Date of Birth
- Date of Appointment
- Contract type (limited / unlimited)
- Monthly Salary as applicable to the scheme (separately for last 3 year ends)
- Grade / Designation
- Sex (male/female)

Exits from Active Population (during the last three years; January 2011 to December 2014)

- Employee Number
- Employee Name
- Date of birth of persons leaving employment
- Date of Joining of persons leaving employment
- Date of leaving
- Mode of exit (Resignation/ Termination/ Death/ Disability)
- Last drawn salary on which benefits are based
- Benefits paid
- Contract type (limited / unlimited)

Exits from Active Population

Please provide the total number of existing employees and the total withdrawals occurred over the last three years in the below format:

Particulars	2014	2013	2012
# of employees at the beginning of the period			
Employees left due to			
Termination			
Resignation			
Death /Disability			
Transfers			
Employees Joined during the year			
# of employees at the End of the period			

Other Information

Please provide the Salary increase date and the Expected future salary increase rate.

Accounts / Previous Valuation:

- Rules for calculating EOSB benefits.
- Accounts of the company as at 31st December 2013. If accounts are not available than provide the liability movement under each entity in the below format:

Particulars	Amounts in AED		
Opening liability			
Expense for the year			
Benefits paid			
Closing liability			

THANK YOU

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