Note on Actuarial Valuation of Leave Encashment Liability

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Historically actuarial valuation of leave encashment liability is clubbed with actuarial valuation of gratuity liability. Actuaries have extended same principles and technologies to actuarial valuation of leave encashment liability as applied to actuarial valuation of gratuity liability. Reasons for this approach are obvious since leave encashment is allowed on death, cessation of service or on retirement from service and gratuity is also payable on death, cessation of service or on retirement from service. In the process we have ignored basic differences in manner in which the quantum of liability would change from one accounting date to another accounting date and what are 'drivers' which propel the changes in the quantum of liability.

Even actuarial valuation of gratuity liability is based on actuarial valuation of pension funds although gratuity is payable in lump sum while pensions are payable in form of annuity and can be exchanged for lump sum to the extent permissible i.e. Commuted Value available under Pension Plans. Under Pension Plans we are very much concerned with mortality after retirement of pensioners and we are concerned with a wide gamut of issues like widow's and orphan's pension, terms on which transfer values are allowed and terms on which commuted value is permitted in exchange for pension. As against this gratuity is simple lump sum payment and mortality during the active service is unimportant because it is very light. There is no justification for using same forms of disclosure as required under US GAAP or IFRS or IAS (19). We have failed to recognize essential difference in nature of benefits and even Revised AS (15) of the Institute of Chartered Accountants of India is merely stereotype extension of IAS (19) and even we have not cared to change the terminology. Multinational Companies are only forcing us to apply US GAAP or IFRS without realizing that employee benefits in India are different from benefits in USA or Europe. I would like the Institute to pull out of the rut and think on innovative lines. This does not debar us from using existing body of knowledge with appropriate modifications.

Coming back to leave encashment, the first step towards better understanding the problem is that we have to consider basic benefit to be valued is 'leave' or 'compensated absences' and not the lump sum payable on cessation of service. Payment of lump sum is just incidental to extinguishing vested rights to which employee is entitled in terms of the leave rules. The subject of ' compensated absences' is dealt with by FAS 43 which is statement of Financial Accounting Standard Board of USA.

The accounting principle enunciated by the Board is as under:

An employer shall accrue a liability for employees' compensation for future absences if all of the following conditions are met:

a. The employer's obligation relating to employees' rights to receive compensation for future absences is attributable to employees' service already rendered,
b. The obligation relates to rights that vest[1] or accumulated[2]
c. payment of the compensation is probable and
d. The amount can be reasonably estimated.

If an employer meets conditions (a), (b) and (c) and does not accrue a liability because condition (d) is not met, that fact shall be disclosed.

Main point to be noted is that stress is on accounting of compensated absences and there is no mention of as 'encashment' of leave. Except compensation payable for vested leave rights on cessation of service. However focus is no absences and not on futures leave encashment.

The actuarial methods which have developed concentrate on calculation of leave amount and calculation of factors. Leave Amount is calculated as under:

$$\frac{\text{Monthly salary}}{26} \times \text{leave Balances}$$

'Leave Balance' or 'accumulated leave balance' is the result of dynamics of leave accretion and leave utilization rules. The employer normally credits leave either on 1st January or 1st April of every year while some employers permit continuous accrual like 1 day's Privilege Leave for 11 days service. There are three types of leave viz .Privilege Leave (PL), Sick Leave (SL) and Casual Leave (CL). While PL and SL are 'accumulating' type there is one difference that in case of PL employee acquires vested right and would therefore be entitled to compensation in the event of cessation of service. SL is generally of accumulating type but employee can only avail of sick leave in during tenure of service and only in the event of sickness. Accumulated SL will lapse in the event of cessation of service or on retirement if employee was not required to avail of SL due to any illness. Casual leave lapses at the end of the year. Any unutilized CL on the accounting date is regarded as short term obligation to be computed on undiscounted basis.

Coming Back to PL, the changes in accumulated balances are the result of annual accretion and annual utilization. Pl is meant to be utilized so that employees are recharged with energy after vacation and can perform better. Many employers permit accumulation upto 90,120 or even 300 days and on resignation or retirement encashment is allowed based on final salary at the time of retirement or resignation, Leave encashment formula takes the following form:

$$\frac{\text{Monthly salary}}{26} \times \text{Leave balance}$$

Some employers who do not work on Saturdays will use the figure of 22 in denominator.

It is admitted that the leave rules encourage the employees to accumulate leave and the encashment of accumulated leave balance is another retirement benefit like gratuity. However provision made towards accumulated leave liability is not deductible and encashment amount in the hands of employee are also taxable except leave encashment paid on retirement which is tax free provided number of leave days encashed is not more than 240 days.. What is the trade-off between 'leisure' and 'future cash benefit' is not governed by any actuarial formula. For many enlightened employees, annual vacation is a must ritual and employers also encourage utilization of leave by giving benefits like leave travel concession. Some employers would permit encashment during tenure of service, only to the extent of utilization.

What is happening now is that PL is accounted on Last In First Out Method (LIFO) and leave utilized is taken out of current years accretion and balance is accumulated. Current service cost is the actuarial value of unutilized portion of current year's accretion and Defined Benefit Obligation is the actuarial value of accumulated leave balance. No attempt is made to even actualize the present pattern of leave consumption which will enable us to project as to how much leave will be accumulated. Some actuaries take the view that utilization will always be less than accretion and as a result accumulated balances will always go on increasing. If this is true, then there will be no need to value future leave consumption out of accumulated leave balances. It is quite possible that future generation of employees may prefer to utilize PL as and when earned instead of accumulating balances. Leave consumption pattern of present generation of employees as well as future generation of employees will then become an important actuarial parameter and variance between assumed leave consumption and actual leave consumption will become a source of actuarial gain or loss. Leave which is utilized is valued on 'cost to the company' (CTC) basis while leave which is encashed is costed on the basis of core wages as defined in the leave rules. Any understatement of future leave utilization can lead to understatement of liability. what is expected from actuary? Actuary must get appropriate inputs from Human Resource Department of the employer which will enable him to form reasonable estimate of leave consumption both from current accretion as well as from past accumulated balances. Actuary must draw up table of leave consumption rates based on attained age. Actuarial valuation will then take the following form:

1) Actuarial value of accumulated balances without taking into consideration leave consumption factor — A
2) Actuarial value of accumulated balances after taking into Account leave consumption factors — B
3) Value of future leave utilization — B-A=C

Actuarial liability of the employer = B + C x Total CTC/ total PF wages *

* Core salary for leave encashment.

With this format of valuation, leave consumption table like Mortality Table will constitute an actuarial parameter which will change as per observed trend of leave utilization. i.e. how much leave is consumed out of current year's accretion and how much leave is consumed out of accumulated leave balances.

Present practice of valuing accumulated leave balances ignore the dynamics of build-up of leave balances and does not give a true and fair view of accrued liability in respect of PL balances. Once leave consumption is given the status of actuarial parameters, everything will fall in place including disclosures. Actuarial Gain or Loss will include impact of variation in leave consumption rates.

Let us develop actuarial techniques based on Indian conditions. As far as SL is concerned while actuarial valuation of future leave utilization based on tables of sickness rates is possible, I would like to exercise the option of meeting the cost as and when incurred since except for some pandemic affecting all employees, incidence of sickness may be small and cost may not be 'material' in accounting parlance.