ARMSTRONG
INTERNATIONAL

2022

DISCOUNT RATE ASSUMPTIONS

APPLICABLE FOR: IND AS 19 AND AS – 15 (R)

AS ON 31 ST DECEMBER 2021

In Actuarial calculations, the discount rate is the factor used to restate the value of cash flow at a future date to today's value to arrive at the actuarial liabilities.

In other words, how much money would be need to set aside now, given a particular liability value at a future point.

One of the key actuarial assumptions, which has a material effect on the benefit obligations, is the discount rate. The discount rate reflects the time value of money but not the actuarial or investment risk. Specifically, the discount rate does not reflect the entity- specific credit risk borne by theentity's creditors, nor does it reflect the risk that future experience may differ from actuarial assumptions.

The discount rate plays a key role in assessing whether the defined benefit pension/gratuity plan has enough assets to meet its future pension obligations. The discount rate should be determined by reference to market yields at the end of the reporting period. The discount rate reflects what the plan's assets can reasonably be expected to earn over the long term. From this are subtracted the cost of running the pension plan and provisions for major adverse events.

The discount rate reflects the estimated timings of benefits payments. This can be achieved by applying a single weighted average discount rate that reflects the estimated timing and amount of benefits payment and the currency in which benefits are to be paid.

IND AS 19 – DISCOUNT RATE

As per the **IND AS 19 Guidelines** issued by the **Ministry of Corporate Affairs**, to decide upon the rate of discounting for the post- employment benefit obligations, it is suggested to use the **yields on long term Indian Government bonds.**

It is suggested in practice to follow discount rates based on assumptions, such as weighted average yields, instead of considering the actual durations matching G-Sec.

For more information on this subject, please write to us at mail@consultactuary.com

GOVERNMENT OF INDIA BOND RATES – AS ON 31ST DECEMBER 2021

The yield rates below are comprised of Indian government bills and bonds. The rates given below are based on the benchmark FIMMDA (Fixed Income Markets and Derivatives Association of India) indices. FIMMDA is the nodal agency designated by RBI to set financial benchmarks, and the benchmarks are published by Financial Benchmark India Pvt. Ltd (FBIL), authorised by RBI for benchmark administration activities relating to the valuation of Government of India Securities.

	Year	Tenor	Yield
G-Sec		3M	3.70%
G-Sec		6M	3.97%
G-Sec	2022	1Y	4.48 %
G-Sec	2023	2Y	5.12%
G-Sec	2024	3Y	5.48%
G-Sec	2025	4Y	5.86%
G-Sec	2026	5Y	6.21%
G-Sec	2027	6Y	6.51%
G-Sec	2028	7Y	6.67%
G-Sec	2029	8Y	6.78%
G-Sec	2030	9Y	6.71%
G-Sec	2031	10Y	6.68%
G-Sec	2032	11Y	6.85%
G-Sec	2033	12Y	7.07%
G-Sec	2034	13Y	7.23%
G-Sec	2035	14Y	7.31%
G-Sec	2036	15Y	7.34%
G-Sec	2040	19Y	7.42%
G-Sec	2045	24Y	7.42%
G-Sec	2051	30Y	7.40%

G-Sec – Government of India dated Securities.

Yield indicates annualized yield as on 31st December 2021.

Sources: https://www.fbil.org.in/#/home

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NOTES ON BOND RATES

1. Discount rate used in Actuarial Valuation is based on bond yields as on end of balance sheet reporting period – as Per **Para 83** of **IND AS 19**. Impact of change in assumption is recognized in Profit & Loss in case of AS 15 valuations, whereas in Ind AS 19 valuations it is recognized though OCI (post-employment obligations) and P&L will not be affected.

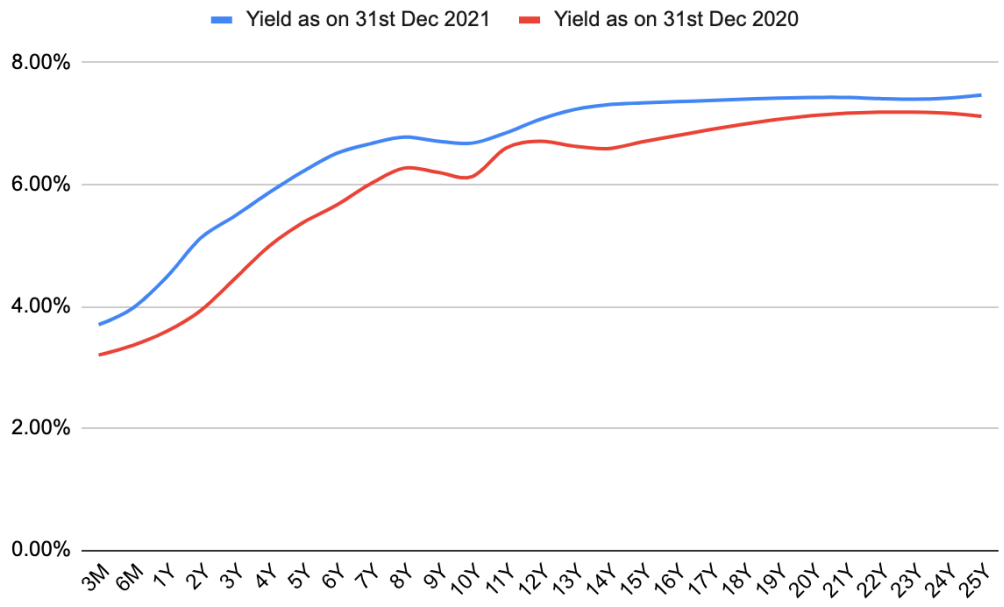

Figure 1: Government of India G-Sec Yield Comparison

2. Comparing **10 Year G-Sec yields** between 31st Dec 2020 and 31st Dec 2021, we note that there is an increase of 55 basis points in the last one year.

3. Comparing **Short term (< 5 years) G-Sec yields** between 31st Dec 2020 and 31st Dec 2021, there is a sharp 84 basis point increase in the 5-year yield.

4. Comparing **Long term G-Sec yields** between 31st Dec 2020 and 31st Dec 2021, we note that there is almost a 35 basis points increase as the term approaches 25 years. Thus, there is a pattern of increasing long term yields.

5. The increase in G – Sec yields will result in decrease in the actuarial liability. Increase in G – Sec yields will also result in variations in Actuarial Gains and Losses in Defined Benefits Obligations due to discount rate impact. Offsetting this impact b changing other actuarial assumptions like salary growth rate should be done cautiously by considering relevant factors including long term costs and practical feasibility of controlling it from HR perspectives, and after discussion with actuary and company HR team and the management of the company