Frequently Asked Questions (FAQs) on Use of Discount Rate under the uncertain economic conditions

1. Why are Companies required to do adjustments to the Discount Rate under the present economic conditions?

In Sri Lanka, treasury bill / bond rates are considered as the high-quality corporate bond rate and used as an input in estimating the discount rates as an actuarial assumption for valuing Employee benefit obligations. Sri Lanka is currently facing an economic crisis, and within the past year, the treasury bill / bond rates have been increased from 9.9% to 30%. In this context, the appropriateness of the use of these distorted and seemingly temporary sovereign debt instrument yield as an input in the determination of the discount rates for valuing Employee benefit obligations is questionable.

Determining the appropriate discount rates for the purpose of LKAS 19 *(as per Paragraph 83 of LKAS 19)* is challenging due to the exceptionally high treasury bill / bond rates prevailing in the market. This is mainly due to the following reasons:

- Current economic crisis and inability of the government to meet foreign debt obligations in Sri Lanka has led to sovereign default and the sovereign credit rating of the country has been downgraded significantly. At present, discussions are in progress on debt restructuring to make the debt levels sustainable. Also, the government is expecting IMF's assistance to overcome the current crisis.

- Along with the significant increase in the inflation in the recent past, headline inflation has recorded 65% in the month of November 2022 (as per the NCPI)[1]. Accordingly, inflation adjusted interest rate (i.e. real interest rate) shows a negative figure in a situation where the market yields are around 30% - 35%. Further, based on the economic fundamentals these rates are not expected to remain at these levels in the long term.

As per paragraph 84 of LKAS 19, the discount rate reflects the time value of money but not the actuarial or investment risk. Furthermore, the discount rate does not reflect the entity-specific credit risk borne by the entity's creditors, nor does it reflect the risk that future experience may differ from actuarial assumptions. Accordingly, in order to arrive at the discount rate, the Institute of Chartered Accountants of Sri Lanka (CA Sri Lanka) has proposed to consider adjustments to remove the risk from the market rate in arriving the discount rate for the purpose of valuing Employee benefit obligations as per LKAS 19.

Illustration 1: Adjust the Risk spread from the bond yield to derive the Discount Rate

Illustration 2: Conversion of coupon bearing yield to a zero-coupon yield

Illustration 3: Adjust the Country Default Spread to the bond yield to derive the Discount Rate

Please refer Annexure 1 for the illustrations.

2. Are there any specific conditions on use of salary increment rate in this circumstance?

The salary increment rate shall be in par with the adjusted discount rate. Accordingly, there couldn't be a significant variation between the salary increment rate and adjusted discount rate.

3. What disclosures need to be provided in the financial statements?

If any company has calculated an adjusted discount rate in preparation of financial statements under the current economic conditions, such company shall disclose the rate that has been used along with the methods, inputs used and assumptions followed in arriving at such rate.

[1] NCPI - National Consumer Price Index was driven by the monthly increases of both food and non-food categories. NCPI based headline inflation recorded at 65% on year-on-year basis in November 2022

Annexure 1

Illustration 1- *Adjust the Risk spread from the bond yield to derive the adjusted discount rate*

To isolate the Credit Risk component from the existing bond yields the Risk spread of the Investment Grade and the Speculative Grade Bonds as per the publicly available data on Sovereign Default and Recovery Rates by rating or research agencies.

Following steps have been followed in deriving at the adjusted discount rate

Step 1 - Establish the credit spread between investment grade vs speculative grade

Step 2 - Establish the credit spread in relative terms to the tenor of the bonds issued during the specific period of time.

	1	2	3	4	5	6	7	8	9	10
Investment Grade	0.00%	0.10%	0.27%	0.44%	0.61%	0.82%	1.02%	1.22%	1.43%	1.66%
Speculative Grade	2.73%	5.23%	7.59%	9.77%	11.74%	13.44%	15.16%	17.00%	18.46%	19.78%
Spread	2.73%	5.12%	7.33%	9.33%	11.12%	12.62%	14.14%	15.78%	17.03%	18.12%
Auction Amount	-	83,128,000,000	122,452,000,000	25,000,000,000	65,000,000,000	104,309,000,000	74,455,000,000	-	128,117,000,000	155,000,000,000
Weightage	0%	11%	16%	3%	9%	14%	10%	0%	17%	20%
Weighted Spread	0%	1%	1%	0%	1%	2%	1%	0%	3%	4%
Cum. Weighted Spread	13%									

*** Exhibit illustrates the Term structure of the spread up to 10 years. However, it can be established to n number of years considering reasonable extrapolation methodology such as Log-normal, exponential extrapolation methodology.*

**** Illustrative data on the risk spread have been obtained by the Moody's Sovereign default and recovery rates*

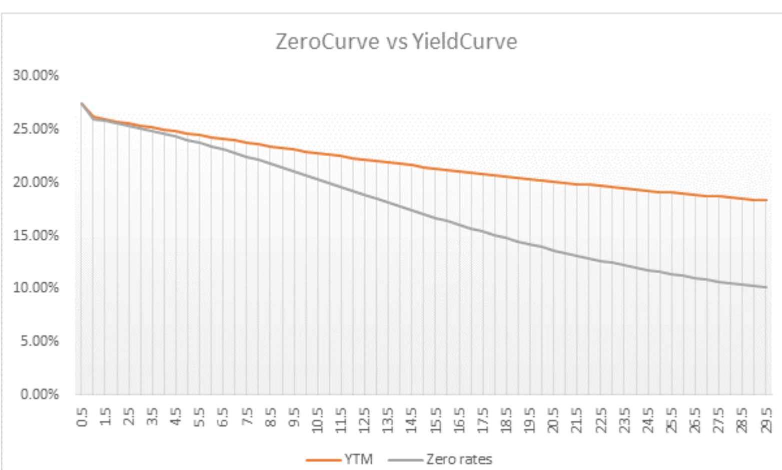
Step 3 - Adjust the Risk spread from the bond yield to derive the adjusted discount rate

Adjusted Discount Rate = Bond Yield-Credit Spread

Step 4 - Analyse the Issue Date and the term of the Bond to arrive at the adjusted discount rate

<u>Illustration 2: Conversion of coupon bearing yield to a zero-coupon yield</u>

The Government bonds in Sri Lanka are coupon bearing securities and accordingly, to match the characteristics of the gratuity payment liability and the resulting yield to maturity, coupon bearing yield has been converted to a zero-coupon yield. The resulting zero-coupon yield is illustrated below.



<u>Illustration 3: Adjust the Country Default Spread to the bond yield to derive the Discount Rate</u>

From the treasury bond rate of the applicable tenure, present Sri Lanka country default spread is eliminated and the country default spread prior to the sovereign debt default and COVID 19 pandemic is added to arrive at an adjusted discount rate.