## I. Reopening of Bond Issue

Reopening a Bond issue is issuing additional amounts of a previously issued Bond. Reopened Bonds have the same maturity date and interest rate as the original bonds, but they are sold on different dates and usually at a different price.

## II. Formula to Calculate Price per \$100

$$\begin{split} PRICE &= \left[ \frac{redemption}{\left(1 + \frac{yld}{frequency}\right)^{\left(\frac{\mathcal{Y}^{1} + \frac{\mathcal{ICC}}{E}}{E}\right)}} \right] + \left[ \sum_{k=1}^{N} \frac{100 \times \frac{rate}{frequency}}{\left(1 + \frac{yld}{frequency}\right)^{\left(\frac{k}{k} - 1 + \frac{\mathcal{ICC}}{E}\right)}} \right] \\ &- \left(100 \times \frac{rate}{frequency} \times \frac{A}{E}\right) \end{split}$$

## where:

- ♦ DSC = number of days from settlement to next coupon date.
- $\downarrow$  E = number of days in coupon period in which the settlement date falls.
- $\downarrow$  N = number of coupons payable between settlement date and redemption date.
- $\downarrow$  A = number of days from beginning of coupon period to settlement

$$DSR = E - A$$

$$T1 = 100 * \frac{rate}{frequency} + redemption$$

$$T2 = \frac{yld}{frequency} * \frac{DSR}{E} + 1$$

$$T3 = 100 * \frac{rate}{frequency} * \frac{A}{E}$$

$$Price = \frac{T1}{T2} - T3$$

To determine the dirty (gross) price (SETTLEMENT PRICE) of a security, one would need to derive the amount to be settled and accrued interest has to be added.

The amount of accrued interest is for any settlement is:

Accrued Interest = Amount of next coupon due \* (number of days between settlement date and previous coupon date) / (number of days between next coupon date and previous coupon date)

Settlement Price is therefore the price of the bond calculated using PRICE ()+ Accrued Interest. No difference between the dirty (gross) price and the clean price occurs, if the settlement date is the issuance date or any coupon payment date.