FUNDAMENTALS OF FINANCE

Bond Valuation

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Chapter Description

- Synopsis

  This chapter explain definition of bond, its features and its valuation.

- Expected Outcomes

  Students should be able to:

  1. Understand bond and its features
  2. Evaluate bond

Content

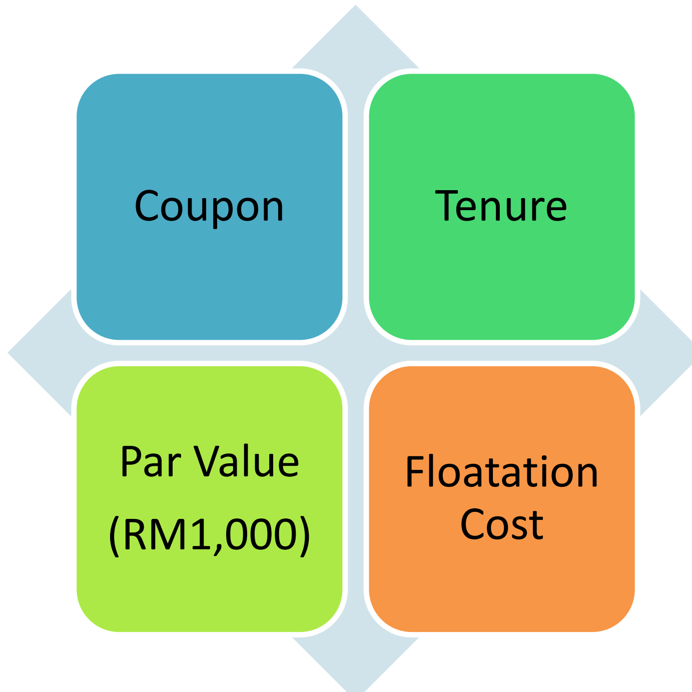
- Definition of Bond
- Features of Bond
- Valuation of Bond

Definition of Bond

- Bond could be defined as a long-term debt security.
- It is a financial instrument that could fulfill capital needs of a firm.

Features of Bond

- Bond has its own features that make it unique from Equity fund. Among its features are:



Valuation of Bond

- **Cost of debt before-tax:**

$$YTM = Kdb = \frac{\left[Coupon + \dfrac{(ParValue - (MktPrice - FloatationCost)]}{\text{Years to Maturity}}\right.}{\dfrac{ParValue + (MktPrice - FloatationCost)}{2}}$$

- **Cost of debt after-tax:**

$$\boxed{Kd = Kdb\,(1 - Tax)}$$

Valuation of Bond

- **Value of a bond:**

$$Vb = Coupon\ (PVIFAi,n) + ParValue\ (PVIFi,n)$$

Rule of thumb: If $k\% = r\%$;

Hence, $Vb = PVb$

If $Vb > PVb$; $k\% < r\%$

If $Vb < PVb$; $k\% > r\%$

Conclusion of The Chapter

- Conclusion
  - Bond is a debt, hence it has tenure (long-term).
  - Bond is a financial security and an alternative for a firm to raise capital.
  - A firm have to pay coupon (fixed interest) until maturity upon issuing a bond.

Disclaimer: The material prepared is for learning purpose only.