

Diversification

TOTAL RISK

=

MARKET RISK

(systematic)

+

FIRM (not FRIM) SPECIFIC RISK

(unsystematic)

SML & CAPM

If your risk premium $(R_m - R_f) = 0$ then:

$$K_e = \text{risk free return } (R_f)$$

CAPM used to determine K_e

$$K_e = R_f + \beta (R_m - R_f)$$

Correction from $(R_m + R_f)$

WACC and CAPM

(Example page 160 (or 146) of text book)

Non-redeemable preference share

- Value Perpetuity of future preference dividends is capitalised & discounted at a fair rate of return:

- Example:

Company A has 100 000 non redeemable preference shares at a nominal value of **R100 (not R10)** each. The shares has a fixed dividend of 11% and it is payable in arrears. The latest dividend declared has just been paid. The required rate of return on similar dividends are 8%

Redeemable preference shares

- Value the expected future preference dividends and preference capital & discount at fair rate of return

- Example

Company A has 100 000 redeemable preference shares at a nominal value of **R100 (not R10)** each.

The shares has a variable dividend of 75% of the prime interest rate and it is payable in arrears. The latest dividend declared has just been paid. The shares are redeemable in five years at issue price and prime is currently 9%. The required rate of return on similar dividends are **11% (or 8%)**.

Redeemable preference shares

Input in calculator		
Payment (dividend) [PMT]	$R100 \times 100\,000 \times (9\% \times 0,75)$	R675 000
Future value [FV]	$R100 \times 100\,000$	R10 000 000
Interest [i/y]		11% (or 8%)
Number of years [N]		5
Calculate PV		R8 429 244 (AT THE 11%) (or R9 500 911 AT THE 8%)

Cumulative Non-redeemable preference share

- Example

Company A has 100 000 non redeemable preference shares at a nominal value of **R100 (not R10)** each. The shares has a fixed dividend of 12% and it is payable in arrears. The latest dividend declared has just been paid. Due to financial difficulty the directors expect that next year's dividend will be missed. From year 2 onwards payment is expected to continue as normal. The required rate of return on similar dividends are 8%

Cumulative Non-redeemable preference share

YEAR		0	1	2
Year 1 dividend (paid in year 2)	R100 x 100 000 x 12%	R0	R0	R1 200 000
Year 2 dividend (paid in year 2)	R100 x 100 000 x 12%	R0	R0	R1 200 000
Present value of dividend to infinity (Calculated for year 2)	$P_2 = \frac{D_3}{k_e - g}$ $P_2 = \frac{R1\,200\,000}{8\% - 0\%}$			R15 000 000
TOTAL per year				R17 400 000
INPUT in calculator				
FV	R17 400 000			
N	2			
i/y	8%			
Comp PV	R14 917 695			

Cumulative Non-redeemable preference share

Explanation for correction on previous slide:

In the original set of slides the year 2 dividend has been omitted and therefore the correction.

The PV of the dividend to infinity is based on the dividend declared from **year 3** onwards and therefore we need to make provision for the dividend that should be declared and paid in year 2.