

Ch 9

$$\text{Cost of debt} = YTM = \frac{PMT + \frac{PV - NP}{n}}$$

$$= \frac{PMT + \frac{PV - NP}{n}}{2} = \frac{PMT}{2} \times (1 - \text{Tax})$$

* PMT = Coupon payment + Par value
 OR = Payment.

* NP = Market price (MP) - flotation cost - underpriced
 OR = Par value - discount - flotation cost - underpriced
= Par value + premium - flotation cost - underpriced

Flotation cost 2% of par value
= 2% * P.V

$$\text{Cost of Preferred stock} = \frac{\text{Dividend (expected)}}{NP}$$

$$= \frac{D}{NP}$$

Dividend = $D_0(1+g)$

$$= \frac{D_0(1+g)}{NP}$$

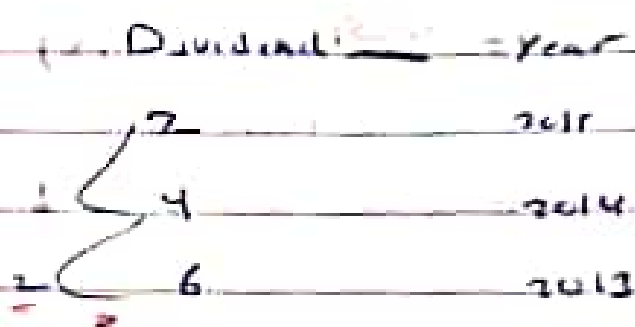
(1)

□

A Cost of Common Stocks = $\frac{D}{NP} + g$

(New Issues) رشد

Dividend
↑
growth



امثلة $D_1 = D_0 (1 + g)^2$

$2 = 6 (1 + g)^2$

ثم تقدم بتقريب $g =$ ✓

القانون

B Cost of Common Stock = $\frac{D}{Price (P)} + g$

(Retained Earning)

على نفس طريقة قبل يتم حساب g

رشد هنا: Retained Earnings نوفذ

Price (أي Market selling) NP

أي السعر بدون التوزيع أو underpriced

رشد

(2)

2

التكلفة الثانية حساب
Cost of Common Stock (r_s) CAPM

$$\text{Cost of Common Stock } (r_s) = R.F + B (R.M - R.F)$$

←
←
←
←

Risk Free
Beta
Risk Market
Risk Free

↓
Risk premium

$$r_s = R.F + B (R.P)$$

←
←
←

Risk Free
Beta
Risk Premium

$$WACC = \text{Capital Structure} \times \text{Cost (P.S, C.F, Debt)}$$

$$= (\text{Capital Structure} \times \text{Cost Debt}) + (\text{Capital Structure} \times \text{Cost C.F})$$

$$+ (\text{Capital Structure} \times \text{Cost P.S})$$

بالا على Retained Earnings
او على New Issues
وهذا هو

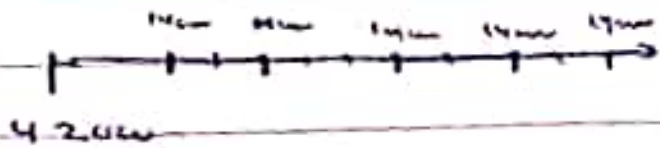
بالا على الاول او على الثانية

(3)

Ch 10

Pay back period \Rightarrow

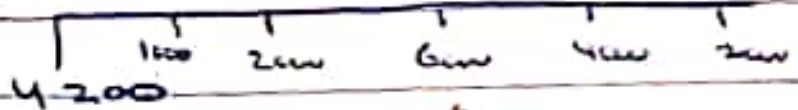
① دفاتر اداري



$$PBP = \frac{42000}{14000} = 3 \text{ years}$$

اندھون بدي 3 سنين
حق ارجح استشاري

② دفاتر شريكه



1000 + 2000 + $\frac{1200}{6000}$ \rightarrow 42000

Handwritten notes in red: '42000 قبل' above the fraction, and '42000' to the right of the arrow.

$$1 + 1 + 0.2$$

$$= 2.2 \text{ years}$$

(4)

$$\text{Net Present Value} = \text{PV} - \text{Initial Investment}$$

① ادفعات متساوية

$$\text{NPV} = \frac{\text{PMT}}{r} \left(1 - \frac{1}{(1+r)^n} \right) - \text{Initial Investment}$$

(Cash out flow)

② دفعات مختلفة

$$\text{NPV} = \sum \frac{\text{CF}}{(1+r)^n} - \text{Initial Investment}$$

(Cash out flow)

$$\frac{\text{CF}_1}{(1+r)^1} + \frac{\text{CF}_2}{(1+r)^2} + \frac{\text{CF}_3}{(1+r)^3} + \dots$$

Profitability Index

$$\text{PI} = \frac{\sum \frac{\text{CF}}{(1+r)^n}}{\text{Initial Investment (Cash out flow)}} \Rightarrow \text{دفعات مختلفة}$$

$$= \frac{\frac{\text{PMT}}{r} \left(1 - \frac{1}{(1+r)^n} \right)}{\text{Initial Investment (Cash out flow)}} \Rightarrow \text{دفعات متساوية}$$

(5)

← آخر سب سے بڑے انڈسٹری کے لئے

Internal Rate of Return (IRR)

$$0 = \sum \frac{CF}{(1+IRR)^n} - CF_0 \text{ (Initial Investment)}$$

$$\sum \frac{CF}{(1+IRR)^n} = CF_0 \text{ (Initial Investment)}$$

↓
مقررہ نرخ

⇒ $IRR > \text{Cost of Capital (r)} \Rightarrow \text{accept}$
✓

⇒ $IRR < \text{Cost of Capital (r)} \Rightarrow \text{reject}$

✓
مقررہ نرخ

Ranking ← سب سے بڑے

(6)

accept, reject ← من الامتياز

* PBP :-

PBP > ^{مقبول} Max (استرداد) → reject

PBP < ^{مقبول} Max → accept

PBP shorter → the best

* NPV :-

NPV \geq 0 → accept

NPV < 0 (ليس) → reject

NPV longer → the best

* PI :-

PI > 1 → accept

PI < 1 → reject

(7)