

(Thank positive my friend)

Deciding to activate business projects. "This is Finance Yipee!"

Break even analysis = Fixed costs

profit = Sales - Cost

price of sales - Variable costs

price of sales = $\frac{\text{total revenue}}{\text{units sold}}$

(including everything)
materials, loan, hourly wage etc.

$$NPV = C_0 + \frac{C_t}{(1+r)^t}$$

(Cash now paid out) (rate)

NPV = PV - required investment

If PV is more than required rate of return then good investment.
The parameter for a company to be profitable. "increasing shareholder value"

ex:

NPV: $-350,000 + \frac{16,000}{(1.07)^1}$ if multiple year project $\frac{16,000}{(1.07)^2}$ etc.

(cash flow expected 1st year)

is negative for investment
sign because its paid out "outflow"

7% required IRR internal rate of return.
(to cover expenses - materials, labor etc.)

even a penny above IRR is positive.

will the company make back the investment over time?

is the investment worth the out-flow of cash?

Real Rate of Return is calculated using the WACC.
(weighted average cost of capital)

What % of capital structure is debt and equity?

How is the "weight" of each? which is cheaper?

Ex: of 100% in capital structure

debt = 30% preferred = 10%

equity = 60%

debt or equity
(loans, bonds issued) (stock)

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* "Cost of Financial Capital" *

Determining Cost of Debt
paid to bond holders

$$K_d = \text{yield} (1 - T)$$

↑ corporate tax

ex: $K_d = .077 \times .30 = .023 = 2.3\% K_d$

What % of Capital Structure is debt and equity?

which is cheaper to carry, debt or new stock?

Equity is ~~Retained~~ earnings

Debt is total liabilities.

Cost of preferred Stock

$$K_p = \frac{D_p}{P_p - F}$$

(dividends) - not tax deductible

ex: $\frac{10}{\$98 - \$5.50} = .11 = 11\%$

Usually 30% to 50% debt in a firms capital structure is good.

(price) (flotation costs - selling and distribution cost of new stocks (AKA securities))

Cost of Common Equity

$$K_E = \frac{D_1}{P_0} + g$$

(common dividend) (growth rate)

ex: $= \frac{\$3}{\$50} + .08 = 7.7\%$

(price of common stock)

WACC is the combined cost of Debt/Equity.

Debt is the cheapest right?

Its 2.3% whoo hoo!

Debt = 2.3%

Pref. stock = 11%

Common stock = 7.7%

21%

So the real rate of return is 21%

Anything over 21% is a good project return!