SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore – 641 107

An Autonomous Institution

Accredited by NBA – AICTE and Accredited by NAAC – UGC with 'A' Grade

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF MANAGEMENT STUDIES

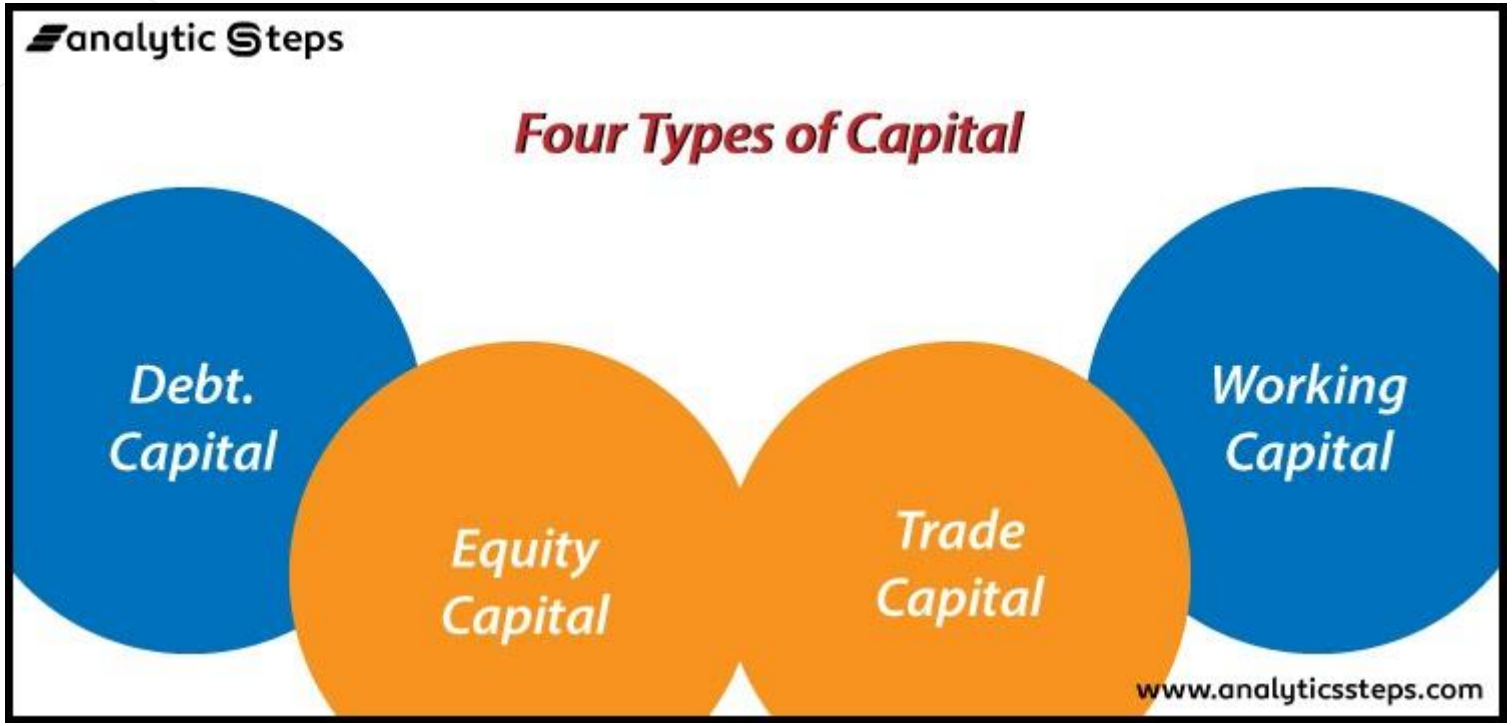
COURSE NAME : 19BA201 FINANCIAL MANAGEMENT

I YEAR / II SEMESTER

UNIT 3 - COST OF CAPITAL & CAPITAL STRUCTURE

What Is Capital?

Capital is a large sum of money which you use to start a business, or which you invest in order to make more money.


analytic Steps
Four Types of Capital
Debt. Capital
Equity Capital
Trade Capital
Working Capital
www.analyticssteps.com

Equity Capital

Equity capital is funds paid into a business by investors in exchange for common or preferred stock.

Debt Capital

Debt capital is the capital that a business raises by taking out a loan. It is a loan made to a company, typically as growth capital, and is normally repaid at some future date.

Trade Capital

It's the amount of money available to a company or individual for the buying and selling of various assets.

Working Capital

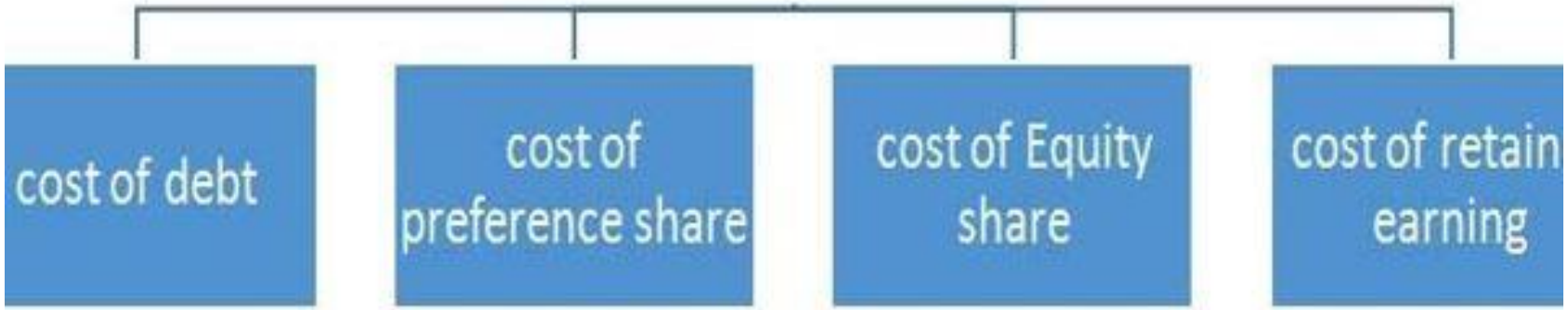
he capital of a business which is used in its day-to-day trading operations, calculated as the current assets minus the current liabilities.

What Is Cost of Capital?

Cost of capital represents the return a company needs in order to take on a capital project, such as purchasing new equipment or constructing a new building.

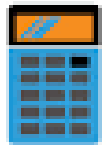
Cost of capital represents a hurdle rate that a company must overcome before it can generate value, and it is used extensively in the capital budgeting process to determine whether a company should proceed with a project.

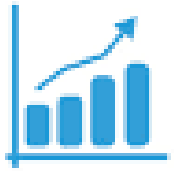
Components of Cost of Capital



Cost of Debt

The cost of debt is the rate a company pays on its debt, such as bonds and loans.





Cost of Debt Formula = Interest Expense x (1 – Tax Rate)

Cost of Debt in Excel Sheet

	A	B	C
4			
5	Tax Rate	30%	
6	Loan Amount	$200,000	
7	Rate of Interest	8%	
8	Interest Expenses	$16,000	
9			
10	Cost of Debt is calculated Using below formula		
11	**Cost of Debt = Interest Expense (1- Tax Rate)**		
12			
13	**Cost of Debt Formula**	=(1-B5)*B8	
14	**Cost of Debt**	**$11,200**	
15			

Cost of Debt in Excel Sheet

	A	B	C
4			
5	Tax Rate	30%	
6	Loan Amount	$50,000	
7	Rate of Interest	8%	
8	Tenure(In years)	5	
9			
74	Interest Expenses is calculated as:		
75			
76	**Interest Expenses**	**$3,694**	
77			
78	Cost of Debt is calculated using formula		
79	**Cost of Debt = Interest Expense (1- Tax Rate)**		
80			
81	**Cost of Debt Formula**	**=B76*(1-B5)**	
82	**Cost of Debt**	**$2,585.68**	
83			

Cost of Preferred Stocks

The cost of preferred stock to a company is effectively the price it pays in return for the income it gets from issuing and selling the stock. In other words, it's the amount of money the company pays out in a year, divided by the lump sum they got from issuing the stock.

$$\text{Cost of Preferred Equity} = \frac{\text{Dividend of Pref. Shares}}{\text{Price of Pref. Shares}}$$

Cost of Preferred Equity

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Cost of Preferred Stock Calculator

Cost of Preferred Stock (Rp) = Dividend Price / Stock Price

Rp (with Growth) = Dividend at Y1 / Stock Price + Growth Rate

Dividend (in dollars)	3
Stock Price (in dollars)	21
Growth Rate (Optional leave blank if no growth)	2%

Rp = 16.57%

Cost of Preferred Stock Formula

$$\text{Cost of preferred stock} = \frac{\text{Dividend rate} \times \text{Par value}}{\text{Share price at issue} \times \left(1 - \text{Issue costs \%}\right)}$$

Cost of preferred stock: P_{ps} = \$116.95,
Div=10%, Par = \$100, F = 5%

Use this formula:

$$r_{ps} = \frac{D_{ps}}{P_{ps}(1 - F)} = \frac{0.1\ (\$100)}{\$116.95\ (1 - 0.05)}$$

$$= \frac{\$10}{\$111.10} = 0.09 = 9.0\%$$

Cost of Retained Earnings

The cost of retained earnings is the cost to a corporation of funds that it has generated internally. If the funds were not retained internally, they would be paid out to investors in the form of dividends.

Cost of Retained Earnings

C18 =C13-C17

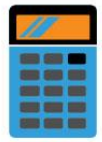
Chan Ltd

Statement of Retained Earnings

Particulars	Amount (in $)	Amount (in $)
Retained Earnings as of 1st January 2014		$2,340
Add: Net Income Earned During 2015		$14,890
		$17,230
Less:		
Dividend Paid to the Preferred Shareholders	$4,210	
Dividend Paid to the Equity Shareholder	$3,670	
Prior Period Adjustment	$2,400	**$10,280**
Retained Earnings as of 31st December 2015		**$6,950**

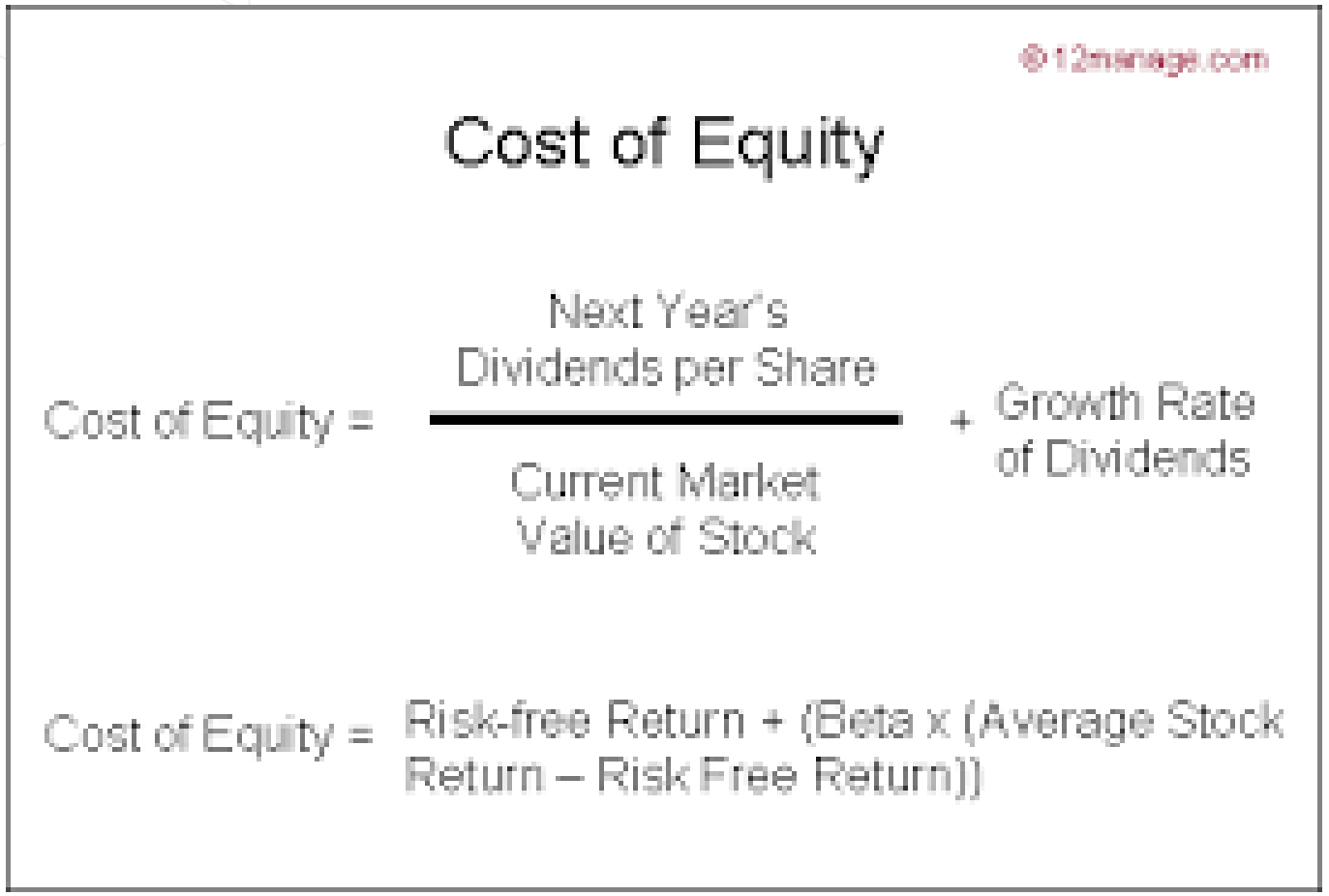
Cost of Equity

The cost of preferred stock to a company is effectively the price it pays in return for the income it gets from issuing and selling the stock. In other words, it's the amount of money the company pays out in a year, divided by the lump sum they got from issuing the stock.



Cost of Equity Formula $(K_e) = R_f + \beta(E(R_m) - R_f)$

Cost of Equity



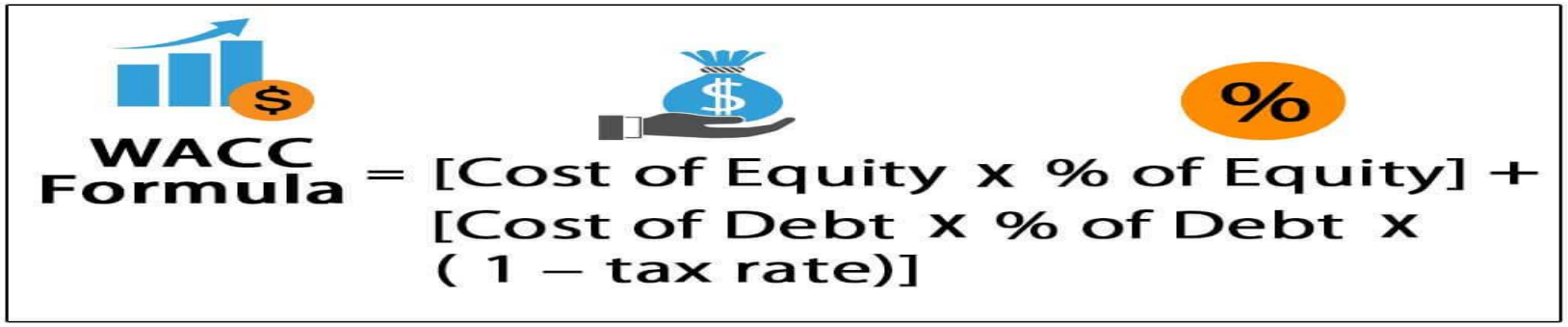
Cost of Equity

	A	B	C	D
1				
2		**Company A**		
3				
4		Risk Free Rate	10%	
5		Beta	1.2	
6		Equity Risk Premium	8%	
7				
8		Cost of Equity is calculated using below formula		
9		**Cost of Equity (ke) = $R_f + \beta (E(R_m) - R_f)$**		
10				
11		**Cost of Equity Formula**	=C4+C5*C6	
12		**Cost of Equity**	**19.60%**	
13				

Weighted Average Cost of Capital

The weighted average cost of capital (WACC) is a calculation of a firm's cost of capital in which each category of capital is proportionately weighted. All sources of capital, including common stock, preferred stock, bonds, and any other long-term debt, are included in a WACC calculation.

A firm's WACC increases as the beta and rate of return on equity increase because an increase in WACC denotes a decrease in valuation and an increase in risk.



Weighted Average Cost of Capital

C9 =(C3/C5*C6)+(C4/C5*C7)*(1-C8)

	A	B	C	D
1				
2		**Refers to**	**Value**	
3		Cost of equity	500000	
4		Cost of Debt	500000	
5		**Total Market Value**	1000000	
6		% Cost of Equity	0.07	
7		% Cost of Debt	0.06	
8		tax rate	0.35	
9		**WACC**	5.45%	
10				

Thank You