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## **A study of cost of capital – financial management**

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### **ABSTRACT:**

cost of capital is very wider term in the financial management. When a company take the best decision related to cost of the capital so it's very helpful to achieve the success in business. This is help not only for-profit maximization infect it helps wealth maximization. This creates a great impact on the business goodwill and the profit of the firm. Financial manager needs to take the decision related to the cost of capital. Every firm want to growth in long term that is possible with the take's decision related to cost of capital. That is also called minimum requirement rate of return. Every firm raise the fund from many sources. So, we are adjusted and raise fund from different sources according to the business level, growth, opportunities and their cost. Mainely, we have two source of fund debts and equity. So, we need to take both in the best ratio. Already many theories published but all are not able to show the best relationship and all are not applied for all the firms. We also see the relation in the long term and short-term benefits and the cost. So, we need to study the cost of capital because we need to pay interest and dividend and also see the benefit of the tax. All the firms invest those project that help to provide us this minimum requirement rate of return. When the project is not covering the minimum cost so we not select those projects. That is very big decision to all the firms. When we not be able to take decision related to the cost of capital so we are not be able to achieve the high position. We need to take a relevant decision. Infact, when company retain the amount of the profit so that is also create a cost of the firm. Because equity share holder want to extra amount in the future. So, we need to take a suitable action to minimize the cost that help to increase the wealth of the firm.

Keywords: cost of the debts, cost of the preference, cost of the equity, cost of retain earning, cost of retain earning.

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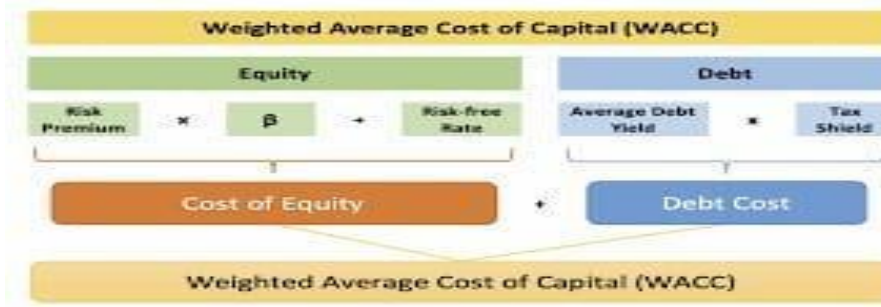
### **Introduction:**

cost of the capital is the first decision in the business when we are not be able to take the best decision so we not be able to achieve the high profit in the future and not be able to wealth maximization. Without this not be firm growth. Finance management without this step is not possible. Financial manager needs to raise the too much amount at the minimum cost. When we select only debts so equity shareholders not invest in the firm because all the amount only for debts and after interesting paying amount is so less for equity shareholders. so, when their risk is increase so they want high return on their high risk. So, we need to take some portion of the debts, equity, retain earning and preference share. So, we need to adjust the ration of the source and the raise fund. Without take the suitable action our cost is increase that is increase the risk and decrease the profit. Real owners invest after see the cost of the capital because project output and input are not our hand but cost of capital is overall in our hand. Every investor sees that the purchasing power of the money, business risk and financial risk. This factor is also influencing the investment decision and these factors affect the raise fund. investor also see the asset liquidity and see that when we are able to sale in future, we want high return. When we are able to sale these securities easily so our risk is minimum and we are et the minimum return. So that time firm not need to give high rate and that is the reason of minimize the cost. May scholars create many theories and describe the cost of the capital that is help the business to minimize the cost of debt. In this paper we are study some source of the raise fund their benefits and the losses. All the feature and other tax benefits decision in this that is helpful to create a best capital structure. So now we see the relationship between the cash inflow and the cash outflow. This research paper is beneficial for all the new scholars to propound the new theories and the create some alteration in the existing theories.

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### **Calculation methods of the cost of capital:**

All the firms have some option to select the source and get the fund as they want. So, in bellow we are see the benefit and the uses of the source. Every firm need to consider all the source are available in the market. So, every financial manager needs to take the decision where cost is minimum and the raise the such amount.in future we need to select those projects whose output is greater than the cost of the capital. When our cost of capital is high so we are not be cover the cost of the capital and all the business activities gives only loss. So, we need to see the cost of the sources and select the best option. WACC (weighted average cost of capital) help to calculate the cost of the capital it provides the weightage of the debts and the equity. But every scholar thinking and theory provide the different relationship between the equity and the debts.



### Debt capital cost:

This is very lower cost price and all the firms to get this because we have a fixed cost and after give the fixed rate of interest all the rest amount firm reinvest in the project. We need to pay a fixed amount in the same period so after this rest amount we use. But we're not be able to get all the fund in the debts because it is very risky for us. This is the very risky for all the firm. In the time of loss, we are need to pay fixed rate of interest so that is not possible to the firm. So, all the debt holders complain in the court and our business is close. So, we need to select those debt portion that is easily pay in the future. We select lower interest debts and select debts according to the power of the business cash inflow and outflow. Debts are two type redeemable and irredeemable so according to the pay \_ back period we need to select those debt who's are available for long period and those periods we need to required. Some firm issue debts at par, discount and premium that is also affect the firm. So, we need to select the debt but it is important to select the suitable amount that is great helpful to increase the wealth of the firm. We need to select the debt according to the capacity of the firm. When we select the lower debts so we not be able the raise fund at the cheaper rate and when we select the high debts so it is very risky and its effect on the equity investment decision and preference shareholder decision. in starting all the scholars think that debt is the best way and all the firm need to take the advantage of the debts and get the fund from the debts. but now scholars think that it is very risky and when we select this so its charge a fixed rate of interest in the time of loss when we select the debts so we need to pay the high amount in the loss position that is the big reason to close the business. So before select the debts we need to consider the cost of the debts so following the formula help to consider the cost of the capital.

#### Post tax Cost of Perpetual/ Irredeemable Debt ( $K_p$ )

$$= \frac{I \times (1-t)}{NP}$$

#### Post tax Cost of redeemable Debt ( $K_d$ )

$$= \frac{\text{Interest} (1-t) + \frac{RV - NP}{n}}{\frac{RV + NP}{2}}$$

#### Cost of Debt (for DCF Valuation)

$$\text{Cost of Debt (Pre-Tax)} = \frac{\text{Total Interest Cost Incurred}}{\text{Total Debt}} \times 100$$

$$\text{Cost of Debt (Post-Tax)} = \frac{\text{Total Interest Cost Incurred} \times (1 - \text{Effective tax rate})}{\text{Total Debt}} \times 100$$

### .Cost of preference share:


It's very best for the company we need to select these also because we want to increase our wealth so this is the best option, we will give only a decided rate and rest amount use in the re investment and increase the business. We will give only the predetermined rate they are not be able to get extra amount. In the situation of loss, we not need to give any amount we will give the benefit only when the firm get profit when the firm get loss so we not give any amount of the profit. But all the preference shares charge big amount as compare to the debts because they take risk so according to the risk, they want return. after the payment of the interest of all the debts and outsider payment preference share get the rest benefit but they have advantage to get the profit before the equity shareholders. This is very beneficial of the firm one time and fix amount pay by the company so company retain the rest amount and re-invest on the other hand, preference shareholders also get the advantage of the fixed amount of the profit. but they not the real owner and not get the voting right so they haven't controlled the activities of the firm. Every firm need to calculate the cost of the preference shares so following formula help to provide the preplan and all the information related to the cost. Two types of preference share redeemable and irredeemable so we need to select according the nature of the business we need to select the preference shares and raise the fund.

$$\begin{aligned} & \text{Cost of Irredeemable Preference Share (K}_P\text{)} \\ &= \frac{\text{Preference Dividend}}{NP} \\ & \text{Cost of Redeemable Preference Share (K}_P\text{)} \\ &= \frac{PD + \frac{RV - NP}{n}}{\frac{RV + NP}{2}} \end{aligned}$$


### Cost of equity:

Cost of equity is not pre decided so we are not be able to tells that the cost of the capital so we are not considered fully sure. But we are able to see the cost of the equity. Some formula's help us to select the best formula according to the business. In the equity not any fixed rate so it is very difficult to see the cost of the equity. Its cost is very high because shareholders take high risk so according to the risk, they want high rate of the return. So, we need to select the equity according to the power of the business. Every firm need equity shareholders but in the correct manner is very difficult. When we raise high fund from the equity so we not increase our wealth and when we not take the fund from the from the equity so we not get the fund according to the need of the firm so all the firm need to take the correct decision related to the equity shares. Equity shareholder owner the firm and the right related to the fir activities. When we select the equity high level so control of the firm goes in the hand of the too much people that is badly effect of the firm. When we select the equity too much so firm not take the best decision and all the people conflict in the decision related to the activities related to the activities so need to select only limited equity shareholder. these some formula help to calculate the cost of the equity shares.

**Method #1 (Dividend Companies)**

Cost of Equity (ke) =  $\frac{DPS}{MPS} + r$  

**Method #2 (CAPM Model)**

E(Ri) = R(f) +  $\beta$  [E(m) - R(f)] 

### Cost of retain earning:

Some scholar thinks that when we retain the amount in the firm so we not give any amount outsider and firm have not any pressure but it is not true. When we retain the amount so all the equity shareholder not want to growth, they want present profit. Not give priority of the future profit they want only present profit. And when we retain profit and reinvest in the project so all the shareholder wants the extra amount in the future. So, it creates the burden of the firm and firm need to pay with the extra amount. So, firm need to retain earning when the firm has opportunities and suitable project so we will retain when we are not conformed related to growth so not select the retain earning way. So, we need to select the project its complete the cost the retain earning. In future we need to pay extra amount so we need to retain the amount when we have an investment opportunity in this situation, we need to see the opportunities in the market after that take the decision related to the retain or dividend payout. That is the biggest decision in the firm.

**Formula to calculate cost of Retained earnings:**

$$K_r = \frac{\text{Alternative Dividend}}{\text{Retained Earning}} \times 100$$

**When brokerage cost and taxes are taken into consideration**

$$K_r = \frac{\text{Alternative Dividend} (1-T_d) (1-B)}{\text{Retained Earning} (1-T_c)} \times 100$$

**Where,**  $T_d$  = Tax on dividend on individual shareholder  
 $B$  = Brokerage cost  
 $T_c$  = Capital gains tax rate

When we are not getting the profit in future so all the equity shareholder and market loss the value of the dividend that is badly effect of the profit and also effect the goodwill. This also become the reason of the decrease the value of the share in the market.

**Advantage of the study:**

- ❖ This article provides the information related to the cost of the capital.
- ❖ It provides the information related to the ratio of the sources of the finance.
- ❖ This article helps to give the information of the all sources of finance and provide the information related to this the source of finance. All the advantage and the disadvantage in this article.
- ❖ All the finance manager gets the benefit of the article to us the source in the minimum cost.
- ❖ This is suitable for the students whose want to study about the cost of capital and also helpful to those scholars who want to alteration in the existing theories.

**Conclusion:**

At the end we say that this article is helpful to provide the information related to the cost of capital this is very helpful to all the firm without this not possible to the get wealth maximization this is possible with the help of this article. This article talks about the advantage and disadvantage of the source of the capital raise. All the sources of the fund raise in this article and some formula that help to calculate the cost of the capital. Every firm want to reduce their cost so and increase the profit that is possible with the help of the article and study about the sources of the fund raise. this article helps to the provide the information related to the wealth maximization of the firm. In which include cost of the equity, cost of the debt, cost of the preference shares, and cost of the retain earning, all these are the main sources of the raise fund. We need to select not only a source of fund infect we raise fund use all the source of fund and collect the money. We consider the cost of the capital it helps to minimize the cash outflow and increase the cash inflow. Some article not consider the cost of the retain earning but in this article also consider the retain earning cost that is create a great impact of the firm. All the firms need to the consider cost of retain earning.

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