## **Cost of Capital**

Cost of capital is the cost a firm pays for the funds used to finance its assets and operations. An accurate cost of capital is critically importance to a firm in order for it to make proper capital allocation decisions. And understanding cost of capital is very helpful for investors as well so they can determine if a firm is earning more than its cost of capital and creating value.

Long-term debt, preferred stock, and common equity (including retained earnings) are the primary sources of capital. They are the items normally included in the weighted average cost of capital (WACC) calculation.

$$k_a = w_d k_d (1-T) + w_p k_p + w_s (k_s \ or \ k_e)$$

$$k_a = WACC$$

$$w_d = percentage \ of \ capital \ raised \ from \ debt$$

$$w_p = percentage \ of \ capital \ raised \ from \ equity$$

$$w_s = percentage \ of \ capital \ raised \ from \ equity$$

$$k_d = cost \ of \ debt$$

$$k_p = cost \ of \ preferred \ stock$$

$$k_s = cost \ of \ retained \ earnings$$

$$k_e = cost \ of \ newly \ issued \ stock$$

Long-term debt is tax deductible. Therefore, the cost of debt can be reduced by the tax rate.

The equity component of the WACC is usually the most expensive component. Equity is particularly expensive if it is raised by issuing new common stock instead of by retaining earnings.