

# 35 Lecture - MGT201

## Important Subjective

### 1. What is the purpose of calculating WACC using the net income approach?

The purpose of calculating WACC using the net income approach is to determine the overall cost of capital for a company. This approach considers the cost of equity and debt and takes into account the tax implications of interest payments. By calculating WACC, a company can determine the minimum return it needs to generate in order to satisfy its investors and lenders.

### 2. How is the cost of equity calculated in the net income approach?

The cost of equity in the net income approach is calculated using the capital asset pricing model (CAPM), which takes into account the risk-free rate, the market risk premium, and the beta of the company's stock. The formula for the cost of equity using the CAPM is:  $\text{Cost of equity} = \text{Risk-free rate} + \text{Beta} \times (\text{Market risk premium})$ .

### 3. What is the tax shield in the tax shield approach to WACC?

The tax shield in the tax shield approach to WACC refers to the tax savings a company receives from interest payments on its debt. Since interest payments are tax-deductible, a company can reduce its taxable income by deducting the interest paid on its debt from its taxable income. This tax savings represents a benefit to the company, which is factored into the calculation of WACC.

### 4. What is the purpose of calculating WACC using the tax shield approach?

The purpose of calculating WACC using the tax shield approach is to determine the overall cost of capital for a company while taking into account the tax benefits of using debt. This approach considers the cost of equity and the after-tax cost of debt, and the tax benefits of interest payments on debt. By calculating WACC, a company can determine the minimum return it needs to generate in order to satisfy its investors and lenders.

### 5. How is the cost of debt calculated in the tax shield approach?

The cost of debt in the tax shield approach is calculated as the before-tax cost of debt multiplied by  $(1 - \text{Tax rate})$ . This reflects the tax benefit that a company receives from interest payments on its debt. For example, if a company has a before-tax cost of debt of 8% and a tax rate of 35%, its after-tax cost of debt would be 5.2% ( $8\% \times (1 - 0.35)$ ).

### 6. What is the relationship between the tax rate and the tax shield in the tax shield approach?

The tax shield in the tax shield approach is directly proportional to the tax rate. This means that as the tax rate increases, the tax shield also increases, resulting in a lower overall cost of capital for the company. Conversely, as the tax rate decreases, the tax shield also decreases, resulting in a higher overall cost of capital for the company.

## **7. What are the limitations of using the net income approach to calculate WACC?**

The main limitation of using the net income approach to calculate WACC is that it does not take into account the tax benefits of using debt. This can result in an overestimation of the WACC and may lead to suboptimal decisions regarding capital structure. Additionally, the net income approach may not reflect the actual cost of equity for a company, as it relies on theoretical models like the CAPM.

## **8. What are the limitations of using the tax shield approach to calculate WACC?**

The main limitation of using the tax shield approach to calculate WACC is that it assumes that the tax savings from interest payments on debt are constant over time. In reality, the tax rate and interest rates can fluctuate, which can impact the tax shield and the overall cost of capital for the company. Additionally, the tax shield approach assumes that debt is a permanent source of financing, which may not always be the case.

## **9. How can a company use W**