

What is Capital Structure?

→ **Capital structure** refers to the mix of different sources of funds, such as equity and debt, used by a company to finance its operations and investments. It represents the way a company finances its assets through a combination of various types of capital.

There are two main components of capital structure such as:

1. **Equity:** Equity represents the ownership stake in a company held by its shareholders. It is obtained by issuing shares of stock and does not require repayment. Equity holders have ownership rights and are entitled to a share of the company's profits and voting rights in major decisions.
2. **Debt:** Debt refers to borrowed funds that a company must repay over time, usually with interest. Debt can be obtained through bank loans, bonds, or other forms of borrowing. Debt holders are creditors and have a claim on the company's assets and cash flows. They are entitled to interest payments and the repayment of the principal amount at maturity.

The capital structure decision involves determining the optimal mix of equity and debt that maximizes the company's value and meets its financial objectives. A company's capital structure can have significant implications for its risk profile, cost of capital, financial flexibility, and ability to attract investors.

The choice between equity and debt depends on various factors, including the company's financial condition, profitability, growth prospects, industry norms, and risk tolerance. Some companies may prefer a higher proportion of equity financing to maintain lower debt levels and reduce financial risk, while others may choose more debt financing to leverage their operations and potentially increase returns to shareholders. The optimal capital structure may vary across industries and companies based on their unique circumstances

→ What is WACC

WACC stands for Weighted Average Cost of Capital. It is a financial metric used to estimate the average cost of capital for a company. The WACC takes into account the proportion of different sources of capital (such as equity and debt) and their respective costs.

The formula for calculating WACC is as follows:

$$\text{WACC} = (E/V) \times K_e + (D/V) \times K_d \times (1 - T_c)$$

Where by:

- **E** is the market value of the company's equity
- **V** is the total market value of the company's equity and debt
- **Ke** is the cost of equity
- **D** is the market value of the company's debt
- **Kd** is the cost of debt
- **Tc** is the corporate tax rate

The **WACC** considers the cost of equity, which represents the return expected by shareholders, and the cost of debt, which includes the interest expense associated with borrowing. The weights assigned to equity and debt are determined by their respective proportions in the company's capital structure.

The **WACC** is an important concept in corporate finance because it represents the minimum return that a company should generate on its investments to satisfy both equity and debt investors. It is commonly used in capital budgeting decisions, such as evaluating potential projects or determining the discount rate for future cash flows.

It's worth noting that the **WACC** is an estimate and may not reflect the actual cost of capital faced by a company. It serves as a useful benchmark and is influenced by various factors, including market conditions, interest rates, the company's risk profile, and the overall cost of capital in the economy.

→ What is Capital Project

A **capital project** refers to a significant investment made by a company or organization in assets that are expected to generate long-term benefits or contribute to the company's growth and profitability. Capital projects typically involve the acquisition, construction, or improvement of fixed assets such as buildings, machinery, equipment, infrastructure, or technology.

Capital projects are often undertaken with the aim of expanding operations, increasing production capacity, improving efficiency, or implementing new technologies. They are typically larger in scale and involve substantial financial resources and planning.

Some examples of capital projects include:

1. Construction of a new manufacturing plant or facility.
2. Expansion or renovation of existing facilities.
3. Purchase of new machinery, equipment, or technology systems.
4. Development of infrastructure projects such as roads, bridges, or utilities.
5. Implementation of a new software system or information technology infrastructure.

6. Acquisition of another company or strategic investments in joint ventures.

Capital projects typically require careful analysis and evaluation of the potential costs, benefits, risks, and expected returns. The decision to undertake a capital project is often based on financial considerations, including the project's expected cash flows, return on investment, payback period, and impact on the company's overall financial position.

The management of capital projects involves various stages, including project identification, feasibility studies, budgeting, financing, project planning, implementation, monitoring, and evaluation. Project management techniques and tools are often utilized to ensure efficient execution and successful completion of the project within the defined scope, timeline, and budget.

Capital projects play a crucial role in driving business growth, improving competitiveness, and enabling companies to adapt to changing market conditions. They are strategic investments that require careful planning, analysis, and execution to achieve the desired outcomes and deliver long-term value to the organization.

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→ **WHAT IS PROJECT EVALUATION|**

Project evaluation refers, to the systematic assessment and analysis of a project to determine its effectiveness, efficiency, viability, and overall success. It involves measuring the project's performance against predetermined objectives, evaluating its outcomes, and assessing its impact on various aspects, such as financial, social, environmental, and strategic.

The purpose of project evaluation is to provide insights and recommendations that can help stakeholders make informed decisions regarding the project. It helps identify areas of improvement, assess the project's value, and determine whether the project's goals and objectives have been achieved. Project evaluation is typically conducted throughout the project lifecycle, from the planning and design phase to the implementation and post-project stages.

The key components and activities involved in project evaluation may include:

1. **Evaluation criteria:** Establishing specific criteria and performance indicators against which the project's success will be assessed. These criteria may include financial metrics, project objectives, stakeholder satisfaction, risk management, and sustainability considerations.

2. **Data collection:** Gathering relevant data and information to measure the project's performance and outcomes. This can involve conducting surveys, interviews, observations, or reviewing project documentation and records.
3. **Analysis and assessment:** Analyzing the collected data to evaluate the project's achievements, strengths, weaknesses, and potential areas for improvement. This analysis may involve both qualitative and quantitative methods, such as cost-benefit analysis, risk assessment, impact assessment, or stakeholder analysis.
4. **Reporting and communication:** Presenting the evaluation findings in a clear and comprehensive manner to stakeholders. This may involve preparing evaluation reports, presentations, or dashboards that highlight the project's performance, key findings, and recommendations for future actions.
5. **Decision-making and action planning:** Using the evaluation results to make informed decisions about the project's continuation, modification, or termination. Based on the evaluation findings, stakeholders can develop action plans to address identified issues, refine project strategies, and enhance future project planning and implementation.

Project evaluation helps organizations learn from their experiences, improve project management practices, and ensure the efficient and effective use of resources. It contributes to accountability, transparency, and evidence-based decision-making, ultimately leading to better project outcomes and increased success rates.

WHATS IS THE USEFULNESS OF THE FEASIBILITY OF CAPITAL STRUCTURE

The feasibility study of a capital project serves several important purposes and provides valuable insights to stakeholders. Here are some of the key benefits and usefulness of conducting a feasibility study:

1. **Assessing project viability:** A feasibility study helps determine whether a capital project is technically, economically, and operationally feasible. It evaluates the project's potential to achieve its objectives, identifies potential risks and challenges, and assesses its overall feasibility. This information is crucial for decision-makers in determining whether to proceed with the project or explore alternative options.
2. **Risk identification and mitigation:** The feasibility study allows for the identification and assessment of potential risks and uncertainties associated with the project. By examining factors such as market conditions, competition, regulatory requirements, technical feasibility, and financial considerations, the study helps in identifying potential risks and developing risk mitigation strategies. This helps to minimize unexpected setbacks and increase the project's chances of success.
3. **Cost-benefit analysis:** Feasibility studies include detailed financial analysis, estimating both the costs involved in the project and the potential benefits it can generate. This allows stakeholders to evaluate the financial viability of the project, calculate return

on investment (ROI), assess payback periods, and make informed decisions based on the expected financial outcomes.

4. **Resource allocation and planning:** Feasibility studies provide insights into the resources required for the project, including financial, human, and material resources. This helps in effective resource allocation and project planning, ensuring that the necessary resources are available when needed and that the project can be executed efficiently.

5. **Stakeholder alignment:** Feasibility studies involve engaging relevant stakeholders, including investors, management, customers, employees, and regulatory bodies. This engagement helps in aligning the project objectives with stakeholder expectations and gaining their support. It also provides a platform for gathering valuable input, addressing concerns, and building consensus among stakeholders.

6. **Decision-making and project justification:** Feasibility studies provide a solid foundation for decision-making by presenting comprehensive and evidence-based information about the project's feasibility and potential outcomes. The study helps stakeholders make informed choices about project initiation, continuation, modification, or termination. It also serves as a justification for the project, ensuring that resources are allocated to projects with the highest potential for success.

Overall, the feasibility study of a capital project is a crucial tool for assessing viability, managing risks, conducting financial analysis, aligning stakeholders, and making informed decisions. It helps stakeholders evaluate the project's potential benefits and challenges, ensuring that resources are invested in projects with a higher likelihood of success and delivering the desired outcomes.

➔ Below is an illustration of wacc of capital structure for APIX company assuming they invested in a plant machinery so that they can be able to have effective workflow of their products hence they will be able to meet the demand of the market in the long run without any hitches of breakdown of the machinery

- Equity: The market value of equity is \$10 million, and the cost of equity (K_e) is estimated at 12%.
- Debt: The market value of debt is \$5 million, the cost of debt (K_d) is 6%, and the corporate tax rate (T_c) is 30%.
- Total capital: The total market value of equity and debt combined is \$15 million.

Now, we can calculate the WACC using the formula: $WACC = (E/V) \times K_e + (D/V) \times K_d \times (1 - T_c)$.

Step 1: Calculate the weights:

- Weight of equity (E/V) = Market value of equity / Total market value = \$10 million / \$15 million = 0.67 (rounded to two decimal places).
- Weight of debt (D/V) = Market value of debt / Total market value = \$5 million / \$15 million = 0.33 (rounded to two decimal places).

Step 2: Calculate the WACC: $WACC = (0.67) \times 12\% + (0.33) \times 6\% \times (1 - 30\%) = 0.08 + 0.0132 = 0.0932$ or 9.32% (rounded to two decimal places).

Therefore, the calculated WACC for APIX Corporation's capital structure is 9.32%.

- Please note that this is a simplified example for illustrative purposes. In practice, calculating WACC involves more complex considerations, such as the specific weights, costs, and tax rates of various sources of financing. Additionally, the WACC can vary over time as market conditions and the capital structure of the company change.
- In summary, understanding the capital structure and calculating the WACC provides insights into a company's cost of capital, risk profile, funding availability, and optimal financing mix. These factors are crucial in assessing