**MODULE 3 ASSIGNMENTS:**

1. **Why is the cost of capital the minimum acceptable rate of return on an investment?**

Because is a useful way of weighing up whether an investment is worth the risks associated with it. To calculate the MARR, you need to look at different aspects of the investment opportunity, including the opportunities for expanding operation and rate of return on investments.

An investment has been a successful one if the actual rate of return is above the minimum acceptable rate of return. If it is below, it's seen as an unsuccessful investment and you might, as an [investor](https://capital.com/investor-definition), pull out of the investment

1. **How is the Cost of Debt Capital ascertained? Give examples**

The cost of debt is the effective interest rate a company pays on its debts. It’s the cost of debt, such as bonds and loans, among others. The cost of debt often refers to after-tax cost of debt, which is the company's cost of debt before taking taxes into account. However, the difference in the cost of debt before and after taxes lies in the fact that interest expenses are deductible.

Calculating the cost of debt involves finding the average interest paid on all of a company’s debts. a company must determine the total amount of interest it is paying on each of its debts for the year. Then it divides this number by the total of all of its debt. The result is the cost of debt.

The cost of debt formula is the effective interest rate multiplied by (1 - tax rate). The effective tax rate is the weighted average interest rate of a company’s debt.

For example, say a company has a $1 million loan with a 5% interest rate and a $200,000 loan with a 6% rate. The effective interest rate on its debt is 5.2%. The company’s tax rate is 30%. Thus, its cost of debt is 3.64%, or 5.2% \* (1 - 30%).

The interest on the first two loans is $50,000 and $12,000, respectively, and the interest on the bonds equates to $140,000. The total interest for the year is $202,000. The company's cost of debt is 6.31%, with a total debt of $3.2 million

1. **How will you calculate the Cost of Preferences Share Capital?**

**Cost of preference** share **capital** is that part of **cost** of **capital** in which we calculate the amount which is payable to **preference shareholders** in the form of dividend with fixed rate.

**Calculating the preference share capital**

**The formula for pref. share capital is**

**Cost of the pref. share (Kp)= amount preference dividend /preference share capital**

4. The following details are available:

Equity (Expected Dividend 12%) Rs. 1000000

Tax Rate 50%

10% Preference Rs. 500000

8% Loan Rs. 1500000

You are required to calculate Weighted Average Cost of Capital?

**5.What is Net Present Value and how does it change by variation in discount rate.**

Net Present Value (NPV) is the sum of the present values of the cash inflows and outflows.

Yes, the present value is effected by the account rate

An increase in the discount **rate** decreases the **present value** factor and the **present value**. This is because a higher **interest rate** means you **would** have **to** set less aside today **to** earn a specified amount in the future. A decrease in the time period increases the **present value** factor and increases the **present value.**

6. **Distinguish between NPV and PI. Which of these you consider better?**

As NPV and PI techniques of capital investment decisions are closely related to each other, both provide the same result as far as accept-reject decisions are concerned. This is so because under NPV method a proposal is acceptable if it gives positive net present value and under PI method a proposal is acceptable it the profitability index is greater than one.

The P.I. will be greater than one only when the NPV is positive and hence they give identical accept-reject decisions. However, in case of mutually exclusive proposals having different scales of investment, i.e. where the initial investment in the alternative proposals is not the same, a conflict in NPV and PI rankings may occur.

7. What are the limitations of using the NPV and IRR methods in practice? Give your

assessment.

IRR (Internal Rate of Return) can be defined as the discount rate at which the NPV value of the project is equal to 0. If the IRR is higher than the required return of rate, this often means that the project will have a profitable outcome. It is a relative measure and is expressed in percentage value. This method helps in understand the return of the project and is thus commonly used by the business manager.

NPV (Net Present Value) is calculated by subtracting the present value of cash outflow from the present value of cash inflow. It gives the return in currency which the company expects to make out of the project. This method helps in effective decision making for projects with changes in cash flow (Martin, 2018). As the expression is in the form of currency, this is better understood by any people in general.

IRR assumes that all the future cash flow during the project lifetime is reinvested into the project while earning the same IRR over the remaining life of the project. IRR moves money back into the past instead of future with this method so this method is neither realistic nor feasible. This could give inaccurate outcome for projects and a different outcome in the reality. IRR also doesn’t account for the additional shareholder wealth while doing a calculation for the profitability of the project (Dudley, 1972). Another assumption it makes is that any project would require the same amount of investment and based on this itself the project with the highest IRR is considered to be the best one.

NPV, on the other hand, takes into consideration the time value of money. The method assumes that the reinvestment rate is equal to the cost of capital while future cash flows are discounted at the cost of capital (Beaves, 1988). NPV makes a different assumption which is that it is reinvested but at the required rate of return. It takes into account the additional wealth that the stakeholder accommodates while calculating the project’s profitability. NPV assumes that the discount rate is unchanged during the project lifeline as with a different discount rate, the project would have multiple NPV values. It also assumes that the investment is instantly made once the cash flow is recovered. With NPV, the decision to accept a project can’t be revisited meaning if the project is taken today based on it giving positive cash flow but a year down the line once the project shows a negative return to a point the company is better off abandoning the project, traditional NPV assumes that these kinds of outcome isn’t possible.

If a project has both positive and negative cash flow is lots of changes, it gives multiple IRR for the same project. This makes it impossible to select a project simply based on IRR. The result/outcome is displayed in percentage value which is also deceiving. For example, if a project with has an IRR value of 20% for the project with an initial investment of NRs. 100, and the other project just has an IRR value of 15% but with an initial investment of NRs. 10,000. The first project should be selected as per the calculation of IRR but if we look at the value generation, the second one is a lot higher. IRR not accounting for the discount rate changes makes it even less suitable for long-term projects.

NPV fails into taking account the resources that are required to implement the project. It also fails to take into account the risk related to discount rate as the discount rate of today can very well be different during any year of the project lifetime. NPV calculations require us to calculate the future cash flow, most of which are unknown. No matter how well one calculates this, there’s always uncertainty in cash flow forecast further points back at uncertainty in NPV.

Taking into account what NPV and IRR have to offer along with the assumptions and limitations they stand on for the evaluation of two or more mutually exclusive project, it’s better to go with NPV over IRR. As IRR gives multiple values during the lifetime of the project and makes the selection process further complicated whereas NPV makes a realistic assumption (comparatively) and gives a better measure of profitability.

8. What purpose do capital markets serve?

The **capital markets** are a source of financing for companies around the world. The most famous of the capital markets are the stock market and bond market.

Companies utilize capital markets to raise [money](https://investinganswers.com/dictionary/m/money) for projects by issuing [stock](https://investinganswers.com/dictionary/s/stock) IPOs, [bonds](https://investinganswers.com/dictionary/b/bond) and short-term money [market](https://investinganswers.com/dictionary/m/market) securities. Individual investors wish to earn interest or dividends on their [savings](https://investinganswers.com/dictionary/s/savings) can meet companies looking to raise [funds](https://investinganswers.com/dictionary/f/fund) by issuing securities.  
  
To illustrate how a corporate bond moves through capital markets, suppose AB Co. needs to raise $1000. AB Co. offers a 10-year [bond](https://investinganswers.com/dictionary/b/bond) on the bond market with a [par value](https://investinganswers.com/dictionary/p/par-value) of $1000. The bond is purchased by someone wishing to earn interest on the $1000 that they have available. AB Co. receives the $1000 in [cash](https://investinganswers.com/dictionary/c/cash) and the investor receives a bond and the promise of [repayment](https://investinganswers.com/dictionary/r/repayment) plus interest. Should the [bondholder](https://investinganswers.com/dictionary/b/bondholder) later decide he no longer wants the bond, he can sell it to another investor in the marketplace.  
  
To illustrate using [stocks](https://investinganswers.com/dictionary/s/stock), suppose AB Co. decided to raise more funds by issuing ten new [shares](https://investinganswers.com/node/2011) of stock for $100 per share. AB Co. offers these shares in the market and someone purchases all ten for $1000 total. This time, the investor obtains stock certificates giving him partial ownership of the company. AB Co. gets the $1000 in funds they wanted to raise. As in the example above, should this investor wish to no longer hold these stocks, he can sell them to another investor in the stock market for the current [market price](https://investinganswers.com/dictionary/m/market-price). Should the company have extra cash, it could buy the stock back as well

9. What are the factors that would go into deciding whether a company should resort to debt

or equity for financing its requirement of long-term funds?

1. Long-Term Goals

As the owner of your new business, it will be critical for you to think about what you actually hope to achieve in the long-run. What is the purpose of starting your business? Where do you hope for your business to be in ten years? Twenty years? By answering these questions, it will be easier for you to decide how financially entrenched in your business you will actually be. Though you don’t need to come up with a future “exit strategy” this very minute, it is certainly a good thing to think about.

2. Available Interest Rates

Naturally, the opportunity cost of choosing equity over debt finance will be largely determined by how much you will actually need to pay to borrow money. If your business has access to low-interest rates or specialty loans (such as an SBA loan), the total cost of borrowing will be relatively lower. In order to make sure you are getting competitive quotes from potential lenders, it will be a good idea to compare multiple options before making any final decisions. Working to improve your business’ current credit score can also make a major difference.

3. The Need for Control

By surrendering partial ownership of your business you are, to a certain extent, giving up control. In order to make sure they can still outvote all other stakeholders, many business owners will maintain 51 percent ownership of the business while selling the remaining 49 percent. If having total or significant control of your business is something that’s important to you, be sure to limit the amount of equity you end up distributing.

4. Borrowing Requirements

There are many different things lenders will look at when deciding whether to issue a loan. In addition to a general financial background check, lenders will also want to see some hard numbers on paper. The factors they may look at include things such as your debt-to-equity ratios, your fixed monthly expenses, your overall business plan, and various others. These requirements can often be rather rigid, which is why your business needs to plan its financing strategy in advance.

5. Current Business Structure

Another variable that will impact the opportunity cost of borrowing (or issuing equity) is your *business structure*. If your business is already formally structured as a partnership, for example, this may complicate the process of selling equity. Additionally, if you hope to secure your equity finance via public means—such as selling stocks on the open market—you will need to formally declare your business to be a public corporation. Though your business structure is something that can (and likely should) be changed in the future, there is no doubt that the preexisting structure will have a major impact on your short-term financing decisions.

6. Future Repayment Terms

While many business loans are simple, flat loans with a fixed interest rate, there are many loans with repayment terms that are notably more complicated. For example, some loans will not require any repayment for several years down the loan. When this is the case, you will need to calculate both the average total interest rate *as well* as the time value of money. If you are hoping to borrow from a single venture capitalist or angel investor, they may be able to dictate additional terms that are not found in traditional bank loans. Sometimes, these investors will offer a complex mix of debt and equity financing for new businesses.

7. Access to Equity Markets

If you do hope to finance your business via equity, it will be crucial that you have access to people who are *actually interested* in buying. Contrary to what some entrepreneurs initially assume, there isn’t a readily available “counsel” of venture capitalists, ready to give fund new businesses without scrutiny. If you do hope to finance via equity, you will need to significantly develop your business plan, meet with a wide range of individuals, and also be willing to make compromises. For some business owners, the time it takes to do this is justified by the lack of debt that only equity financing can provide. For others, traditional lending is a more appealing option.

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10. Discuss the role of an underwriter in managing an IPO.

The **underwriter** in a new stock offering serves as the intermediary between the company seeking to issue shares in an **initial public offering** (**IPO**) and investors. ... Often, there is a group of **underwriters** for an **IPO** that shares in the risk for the offering, called the syndicate.

The [underwriter](https://www.investopedia.com/ask/answers/06/underwriteripo.asp) in a new stock offering serves as the intermediary between the company seeking to issue shares in an initial public offering (IPO) and investors. The underwriter helps the company prepare for the IPO, considering issues such as the amount of money sought to be raised, the type of securities to be issued, and the agreement between the underwriter and the company

The [underwriting agreement](https://www.investopedia.com/terms/u/underwriting-agreement.asp) can take a number of different shapes. The most common type of underwriting agreement is a firm commitment in which the underwriter agrees to assume the risk of buying the entire inventory of stock issued in the IPO and sell to the public at the IPO price. Often, there is a group of underwriters for an IPO that shares in the risk for the offering, called the syndicate.  
The investment bank then files a [Form S-1](https://www.investopedia.com/terms/s/sec-form-s-1.asp) registration statement with the U.S. Securities and Exchange Commission (SEC), outlining the business of the company, the planned use for the capital raised by the IPO, the basics of the IPO and any legal issues the company may have. The SEC then has a cooling-off period when it investigates to ensure all material information about the IPO has been disclosed.

The underwriter then creates a draft prospectus to take on a [road show](https://www.investopedia.com/terms/r/roadshow.asp) to potential institutional investors. The road show seeks to create excitement for the IPO and involves conferences given to investors around the country. After the road show, the [underwriter](https://www.investopedia.com/ask/answers/020915/how-do-i-become-underwriter.asp) and company determine of the final price for the IPO based on the orders received during the road show. Then, the syndicate allocates shares to investors. The final step is the first day of trading, when the investing public can first buy the stock on an exchange.

11. Why is a stock exchange an important institution of the capital markets?

It plays an important role in the economic development of the country. It is channelizing the savings of the people and making them available for investment purpose. The following are some of the **important functions of a stock exchange**.

## Functions of Stock exchange

### 1. Continuous market for securities

The Investors are able to invest in good securities and in case of any risk, it enables people to switch over from one security to another. So stock markets provides a ready and continuous opportunities for securities.

### 2. Evaluation of securities

It the stock exchange, the prices of securities clearly indicate the performance of the companies. It integrates the demand and supply of securities in an effective manner. It also clearly indicates the stability of companies. Thus, investors are in a better position to take stock of the position and invest according to their requirements.

### 3. Mobilizes savings

The savings of the public are mobilized through mutual funds, investments trusts and by various other securities. Even those who cannot afford to invest in huge amount of securities are provided opportunities by mutual funds and investment trusts.

### 4. Healthy speculation

The stock exchange encourages healthy speculation and provides opportunities to shrewd businessmen to speculate and reap rich profits from fluctuations in security prices. The price of security is based on [supply and demand](https://accountlearning.com/effects-of-interest-rates-in-supply-and-demand-for-bonds) position. It creates a healthy trend in the market. Any artificial scarcity is prevented due to the rules and regulations of the market.

### 5. Mobility of funds

The stock exchange enables both the investors and the companies to sell or buy securities and thereby enable the availability of funds. By this, the [money market](https://accountlearning.com/growth-of-indian-money-market-steps-taken-by-government/) also is strengthened as even short-term funds are available. The banks also provide funds for dealing in the stock exchanges.

### 6. Stock exchange Protect investors

As only genuine companies are listed and the activities of the stock exchange are controlled, the funds of the investors are very much protected.

### 7. Stock exchange helps Capital formation

Stock exchange plays an active role in the capital formation in the country. Companies are able to raise funds either by issuing more shares through rights shares or bonus shares. But when a company wants to go in for [diversification](https://accountlearning.com/impact-of-diversification-on-a-firm), they can issue the shares and raise more funds. Thus, they are able to generate more capital and this promotes economic growth in the country.