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Question 1 Cost of capital is the amount of return an investment could have garnered if that investment was executed. Loosely defined in general, cost of capital can involve debt, equity or any source of capital.

A minimum acceptable rate of return (MARR) is the minimum profit an investor expects to make from an investment, taking into account the risks of the investment and the opportunity cost of undertaking it instead of other investments.

Basically, cost of capital is the opportunity cost of investing the same amount of cash into different investment opportunities, with the real cost of capital the amount of money that could have been earned by choosing one investment over the other.

In defining the cost of capital, it's also helpful to know the different cost of capital categories, as follows:

Cost of equity. This is the cost of leveraging the capital supplied by company shareholder, repayable in (hopefully) stronger capital gains and a higher share price.

Cost of debt. This type of capital represents the cost of a company or individual that borrows money from a bank or financial institution to invest money in a project or other investment opportunity. The financial institution earns its money back in the form of interest paid, along with any appropriate fees and charges as noted in the loan contract.

A company can raise funds in limited ways. It can sell bonds, borrow money and leverage equity financing. By and large, companies often apply their cost of capital in two definitions:

Cost of capital is defined as the financing costs a company has to pay when borrowing money, using equity financing, or selling bonds to fund a big project or investment. In each case, the cost of capital is expressed as an annual interest rate.

When weighing a big investment, like funding a new manufacturing plant, the cost of capital represents the return rate the company could garner if it invested cash in an alternative investment, with the same risk applied. That's why economists equate the cost of capital with the opportunity cost of a company using financial capital for a significant project or investment.

Cost of capital is a useful finance and accounting tool that companies and investors can use to make better decisions on how they allocate their money. How companies will finance a project or make an investment is an important decision, since that choice will determine a firm's capital structure. Ideally, businesses seek a fair balance in this scenario, with enough financing to get a project or investment done, while reducing or limiting the cost of capital.

Cost of capital is regarded as the minimum acceptable rate of return on an investment in the in the following ways:

Capital Budgeting Decision: Refers to the decision, which helps in calculating profitability of various investment proposals.

Capital Requirement: Refers to the extent to which fund is required by an organization at different stages, such as incorporation stage, growth stage, and maturity stage. When an organization is in its incorporation stage or growth stage, it raises more of equity capital as compared to debt capital. The evaluation of cost of capital increases the profitability and solvency of an organization as it helps in analyzing cost efficient financing mix.

Optimum Capital Structure: Refers to an appropriate capital structure in which total cost of capital would be least. Optimal capital structure suggests the limit of debt capital raised to reduce the cost of capital and enhance the Value of an organization.

Resource Mobilization: Enables an organization to mobilize its fund from non-profitable to profitable areas. Resource mobilization helps in reducing risk factor as an organization can shut down its unproductive projects and move the resources to productive projects to earn profit.

Determination of duration of Project: Refers to evaluating whether the project, for which the capital is raised, is long term or short term. If the project is long term in nature then the organization decides to raise equity capital. However, if the project is short term in nature then the organization determines to raise debt capital.

The cost of capital aids businesses and investors in evaluating all investment opportunities. It does so by turning future cash flows into present value by keeping it discounted.

The cost of capital can also aid in making key company budget calls that use company financial sources as capital.

In a cost of opportunity scenario, the cost of capital can be used to evaluate the progress of ongoing projects and investments by matching up the progress of those investments against the cost of capital.

Question 2. The cost of debt is the minimum rate of return that debt holder will accept for the risk taken. Cost of debt is the effective interest rate that company pays on its current liabilities to the creditor and debt holders. Generally, it is referred to after-tax cost of debt. The difference between before-tax cost of debt and after tax cost of debt is depended on the fact that interest expenses are deductible. The Cost of debt formula is:- Cost of Debt = Interest Expense (1 – Tax Rate) For example,

A company named MV Investment Co. Ltd took loan of $200,000 from a Bank at the rate of interest of 8% to issue company bond of $200,000. Based on the loan amount and rate of interest, interest expense will be $16,000 and the tax rate is 30%.

Cost of Debt capital is calculated as below,

Cost of Debt = Interest Expense (1- Tax Rate)

Cost of Debt = $16,000(1-30%)

Cost of Debt = $16000(0.7)

Cost of Debt = $11,200

Cost of debt of the company is $11,200.

Cost of debt is lower as a principal component of loan keep on decreasing, if loan amount has used wisely and able to generate net income more than $2,586 then taking loan was useful.

 Conclusion, Cost of debt formula is a tool which helps one to know that loan availed is profitable for business or not as we can compare the cost of debt with income generated by loan amount in business. The loan can be taken for multiple reasons from the issuance of a bond to buying of machinery prime reason for it is to generate revenue and grow business. It also helps to know the cost of capital of a business. Cost of debt formula helps to know the actual cost of debt and also helps to justify the cost of debt in business.

Question 3 Cost of Preference Share Capital: This refers to the amount paid by company as dividend to preference shareholder. Preference share is a small unit of a company’s capital which bears fixed rate of dividend and holder of it gets dividend when company earn profit. Dividend payable is not a tax deductible amount. So, there is no tax adjustments required for comparing with cost of debt.

Formula for Cost of Preference Share capital is as below:eemable Preference Share

|  |  |
| --- | --- |
| Irredeemable Preference Share | Redeemable Preference Share |
| Kp = Dp/NP | Kp = Dp+((RV-NP)/n )/ (RV+NP)/2 |

Where,

Kp = Cost of Preference Share

Dp = Dividend on preference share

NP = Net proceeds from issue of preference share (Issue price – Flotation cost)

RV = Redemption Value

N = Period of preference share

Example: Company ABC a small company issued 50, 000 shares of 10 each and pays SSP.8 per shares as dividend. Further issue 10, 000 debentures of SSP. 100 each and the interest pays by the company is 8%. Company wants to expand its business by opening a new branch in different cities. It wants to finance its expansion project through 6% preference shares. The Cost of preference share if issues 100 of SSP. 80 each at 3% discount and redeem at 5% premium after 8 years will be,

Solution:

Discount= 80\*0.03 = 2.4

Issue price= 80-2.4 = 77.6

Net proceeds = 77.6 – 2.4 = 75.2

Dividend = 0.06\*80 = 4.8

Premium amount = 80\*0.05 = 4

Redemption value = 80 + 4 = 84

Irredeemable Preference share:

Kp = Dp/NP

= 4.8 / 75.2

= 6.38%

Redeemable Preference share:

Net proceeds = 80 – 2.4 - 10 = 67.6

Kp = Dp+ ((RV-NP)/n)/ (RV+NP)/2

= 4.8 + ((84-67.6)/8)/ (84+67.6)/2

= 4.8 + (2.05 / 75.8)

= 4.8 + 0.027

= 4.827%

The cost of redeemable preference shares is less than irredeemable preference share by 1.55%. So, the redeemable preference share is beneficial for the Company ABC.

Question 4 WACC is the weighted average of cost of a company’s debt and the cost of its equity. Weighted Average Cost of Capital analysis assumes that capital markets (both debt and equity) in any given industry require returns commensurate with perceived riskiness of their investments. But does WACC help the investors decide whether to invest into a company or not?

In this article, we discuss Weighted Average Cost of Capital (WACC) in detail.

To understand Weighted Average Cost of Capital, let’s take a simple example.

Suppose, you want to start a small business! You go to the bank and ask that you need a loan to start off. Bank looks at your business plan and tells you that it will lend you the loan, but there is one thing that you need to do. Bank says that you need to pay 10% interest over and above the principal amount that you are borrowing. You agree and the bank lends you the loan.

Now to avail the loan, you agreed to pay a fee (interest expense). This “fee” is the “cost of capital” in simple terms.

Equity (expected Dividend 12%) = Rs. 1000000

Tax rate = 50%

10% Preference = 500000

8% Loan 1500000

Solution cost of Debts after tax (1-T)\*RX100

1-0.05X10%X100 = 5%

Cost of Equity D/MP=G\*100

8/100=8% X100

0.08=0.08X100 =16%

Cost of WACC = 1(12/100 +0.21 \*100

1(0.12+0.21)\*100

1\*0.33\*100

WACC =33

Question 5 Net present value (NPV) is the calculation used to find today's value of a future stream of payments. The NPV relies on a discount rate of return that may be derived from the cost of the capital required to make the investment. Any project or investment with a negative NPV should be avoided.

The NPV calculation involves discounting all cash flows to the present based on an assumed discount rate. When the discount rate is large, there are larger differences between PV and FV (present and future value) for each cash flow than when the discount rate is small. Thus, when discount rates are large, cash flows further in the future affect NPV less than when the rates are small. Conversely, a low discount rate means that NPV is affected more by the cash flows that occur further in the future.

The relationship between NPV and the discount rate used is calculated in a chart called an NPV Profile. The independent variable is the discount rate and the dependent is the NPV. The NPV Profile assumes that all cash flows are discounted at the same rate.

The NPV profile usually shows an inverse relationship between the discount rate and the NPV. While this is not necessarily true for all investments, it can happen because outflows generally occur before the inflows. A higher discount rate places more emphasis on earlier cash flows, which are generally the outflows. When the value of the outflows is greater than the inflows, the NPV is negative.

A special discount rate is highlighted in the IRR, which stands for Internal Rate of Return. It is the discount rate at which the NPV is equal to zero. And it is the discount rate at which the value of the cash inflows equals the value of the cash outflows.

Question 6 A profitability index presents a parallel between the costs and profits of a certain project. By dividing the present value of the property’s future cash flows by the initial investment, we get the profitability index. If the profitability index is over 1.0, then the profitability is positive, but if it is below 1.0 then the investment will probably fail. To put it another way, profitability index is constituted of the ratio between the present value of future cash flows and the initial investment.

A profitability index measure of 1.0 is likely the lowest desired number, and if it is lower than that, it signifies that the present value of the project is lower than the initial investment. Therefore, the project would probably be discarded.

Actually, both measures consider an investment property’s future CASH FLOW. However, net present value gives you the dollar difference, while the profitability index gives the ratio.

For example, let’s say that a commercial real estate investment property requires an investment of 1 million dollars. Its present worth with a revenue stream is $1,100,000. The net present value (NPV) would be $100,000, while the ratio would be 1.10. This demonstrates that the project is likely to be successful.

Even though these appear the same, understanding the difference between the two can help you compare commercial income properties quickly and easily. Because profitability index is a ratio, it is absolute: it tells you the proportion of dollars returned to dollars invested( instead of a specific amount). Profitability index allows you to compare the profitability of two properties without regard to the amount of money invested in each.

The profitability index shows how much value we would gain by investing. Here, each dollar gives $1.10. The profitability index is an alternative of the net present value. Profitability Index would be bigger than 1.0 if the net present value appears positive. Otherwise, it would be negative.

These two calculations are crucial to determine whether the project would succeed or fail. They are often referred to as being similar because of their close relationship. However, there is a slight difference between these two terms: that is, the profitability index does not suggest the amount of the actual cash flows.

You should be careful when using both methods together, as it has been detected that they can rate projects differently. A certain project could be classified first with one method whereas last with the other method. For an investor making one or a few property investments, NPV may provide a better insight by giving the total expected return. For an investor making multiple investments in multiple properties, profitability index may provide for better decision-making in that it delivers, in essence, a percentage of return on the investment per property. These two measures, when used in harmony, may help with diversification decisions as well.

Net present value (NPV) is the difference between the present value of cash inflows and the present value of cash outflows over a period of time. NPV is used in capital budgeting and investment planning to analyze the profitability of a projected investment or project.

Profitability index (PI), also known as profit investment ratio (PIR) and value investment ratio (VIR), is the ratio of payoff to investment of a proposed project. It is a useful tool for ranking projects because it allows one to quantify the amount of value created per unit of investment.

Profitability index is a ratio between the discounted cash inflow to the initial cash outflow. It presents a value which says how many times of the investment is the returns in the form of discounted cash flows. The disadvantage associated with this method again is its relativity. A project can have the same profitability index with different investments and the vast difference in absolute dollar return. NPV has an upper hand in this case.

Net Present Value is considered as one of the most desirable types of evaluation, analysis, and selection of great investments because of the following reasons.

Almost all the difficulties are survived by net present value and that is why it is considered to be the best way to analyze, evaluate, and select big investment projects. At the same time, the estimation of cash flows requires carefulness because if the cash flow estimation is wrong, NPV is bound to be misleading.

The obvious advantage of the net present value method is that it takes into account the basic idea that a future dollar is worth less than a dollar today. In every period, the cash flows are discounted by another period of capital cost.

The Net Present Value method also tells us whether an investment will create value for the company or the investor, and by how much in terms of dollars. In the example above, we found that the $15,000 investment would increase the company's value by $3,443.70 when all cash flows were discounted back to today. The Net Present Value method takes into consideration the cost of capital and the risk inherent in making projections about the future. In general, a projection of cash flows 10 years into the future is inherently less certain than cash flows projected next year. Cash flows that are projected further in the future have less impact on the net present value than more predictable cash flows that happen in earlier periods.

Assumption of Reinvestment: Using NPV makes sense because it does not assume that the cash flows will be reinvested at IRR which is almost impossible. How can your cash flows get reinvested at the project’s rate of return? Reinvesting the cash flows at IRR would mean you are investing back the cash flows from your project into the market at the equivalent rate as that of your project’s rate of return. You need to find another investment yielding same as your project for the reinvestment. Well, that’s really difficult.

Assumption of Reinvestment: Unlike IRR, using NPV makes sense because it does not assume that the cash flows will be reinvested at IRR which is almost impossible. How can your cash flows get reinvested at the project’s rate of return? Reinvesting the cash flows at IRR would mean you are investing back the cash flows from your project into the market at the equivalent rate as that of your project’s rate of return. You need to find another investment yielding same as your project for the reinvestment. Well, that’s really difficult.

Good Measure of Profitability: If you wish to choose one single project from amongst many then NPV will be a good measure of profitability. If you use IRR for mutually exclusive projects you might end up selecting small projects with higher IRR and of a short-term nature at the expense of long-term (long-term value creation is good for shareholders and higher NPV projects.

Consideration of all Cash Flows: Net Present Value takes into account each and every cash flow unlike the other methods which ignores cash flows beyond the payback period.

Factors Risks: Discount rates are used in calculating NPV; the risk of undertaking the project (Business risk, financial risk, operating risk) gets factored into this method.

In conclusion, Net Present Value is considered as one of the most desirable types of evaluation, analysis, and selection of great investments. However, one should be very careful when estimating cash flows, since an incorrect cash flow estimation may lead to deceptive Net Present Value. Another thing you should take into account is that the discount rate is the same for both cash inflows and outflows, and the thing here is that the rates are different when lending or borrowing. (Beaves R. 1988)

Question 7 Net Present Value: is the difference between the present value of the cash inflows to the present value of the cash outflows. It is like the difference between the values of the dollar today to the value of the dollar in the future. The formula for NPV is: If the NPV of the project comes out to be positive then it is acceptable but if the value comes out to be negative then that project is not recommended as the cash flows will also be negative.

However, Net Present Value Method has the following limitations:

Prone to Forecasting Errors: There are estimates used in the Net Present Value largely. The longer the tenure of the project the more will be the risk in the errors. The estimate for a short project can be fairer than the estimates for a longer tenured project. Therefore the forecasting errors may render the NPV Method inefficient.

Reliability on Discount Rate: The basis for the Net Present Value Method is the discounting factor. This discounting factor is basically the rate which is calculated on an estimation basis. If by any chance this rate is incorrect the whole result will be misleading.

No Set guidelines to Calculate Required Rate of Return: The entire computation of Net Present Value rests on discounting the future cash flows to its present value using the required rate of return. However, there are no guidelines as to the determination of this rate. This percentage value is left to the discretion of companies and there could be instances wherein the NPV was inaccurate due to an inaccurate rate of return

Cannot be used to Compare Projects of Different Sizes: Net Present Value method cannot be used to compare projects of different size. The Net Present Value is an absolute figure and not a percentage. Therefore, the Net Present Value of larger projects would inevitably be higher than a project of a smaller size. The returns of the smaller project may be higher in relation to its investment but overall the NPV value might be lower.

Hidden Costs: Net Present Value only takes into account the cash inflows and outflows of a particular project. It does not take into account any hidden costs, sunk costs or other preliminary costs incurred in relation to that particular project. Therefore, the profitability of the project may not be highly accurate.

Internal Rate of Return: IRR is the discount rate used in the capital budgeting. This discount rate is used to bring the present value of all the cash flows of the project to zero. Thus higher the expected rate of return the higher will be the IRR. Higher IRR is always preferable to the one with a lower Internal Rate of Return. The Internal Rate of Return can be used to rank the proposed projects in the business. Therefore it shows that how much rate of growth a project can make. The actual result can be different from the estimated Internal Rate of Return. This could be due to unexpected market conditions. But the project with a higher IRR is always expected to have higher returns than the others.

The method of internal rate of return does not prove very fruitful under some special types of conditions, which are discussed below:

Economies of Scale Ignored: One pitfall in the use of the Internal Rate of Return method is that it ignores the actual dollar value of benefits. For example, a business will always prefer a project value of $1,000,000 with an 18% rate of return over a project value of $10,000 with a 50% rate of return because the dollar benefit of the former project is $180,000, whereas the latter project’s dollar benefit is only $5,000. Therefore the former project is more worthy but the Internal Rate of Return method will rank the latter project with a much lower dollar benefit first, simply because the IRR of 50% is higher than 18%.

Impractical Implicit Assumption of Reinvestment Rate: While analyzing a project with the Internal Rate of Return method, it implicitly assumes the reinvestment of the positive future cash flows at IRR for the remaining time period of the project. If a project has a low IRR, it will assume reinvestment at a low rate of return; on the contrary, if the other project has a very high IRR, it will assume a reinvestment rate at the very high rate of return. This situation is not practically valid. When cash flows are received, having the same level of investment opportunity is rarely possible. In addition to that, making the assumption that at one point in time, one company will have more than one reinvestment rate, is simply not possible. If a company has more than one reinvestment rate opportunity, then it will invest at a higher rate.

Dependent or Contingent Projects: Many times, finance managers come across a situation when the project under evaluation creates a compulsion of investing in other projects. For example, if one invest in a big transporting vehicle, one will also need to arrange a place for parking it. Such projects are called dependent or contingent projects and must be considered by the manager. IRR may permit the buying of the vehicle, but if the total proposed benefits are wiped off by having to arrange the parking space, there’s no point in investing.

Mutually Exclusive Projects: Sometimes investors come across mutually exclusive projects, which means that if one is acceptable, then the other is not. Building a hotel or a commercial complex on a particular plot of land is an example of a mutually exclusive project. In such situations, knowing whether they are worth investing in is not enough. The challenge is to know which investment is the best. The IRR method will give a percentage interpretation value, but that is not enough.

Different Terms of Projects: Consider two projects with different project durations. One ends after 2 years and the other ends after 5 years. The first project has an additional point of reinvesting the money, which is unlocked at the end of the 2nd year for another 3 years until the other project ends. This point is not considered by the IRR method.

A mix of Positive and Negative Future Cash Flows: When a project has some negative cash flow between other positive cash flows, the equation of the IRR method is satisfied with more than one rate of return, i.e., it reaches the trap of Multiple IRR. In the case of multiple IRR situations, it’s possible to make a decision with IRR, but one should know what NPV is at one cost of capital at least.

Calculation of IRR is not possible: If later cash inflows are not sufficient to cover the initial investment, in that case, Internal Rate of Return cannot be found. IRR is then a discounted rate at which the Present Value of Cash Inflow equals the Investment or Present value cash outflow.

The objective of wealth maximization: Importantly, when there is a conflict in the ranking of mutually exclusive projects between net present value and IRR, at that time, NPV criteria supersede IRR criteria because NPV criteria exactly measure the amount by which the value of the firm will increase. The objective of financial management in terms of wealth maximization is met, to which extent it can be measured by NPV. IRR will only be able to decide whether a project is worth accepting or not, but what increase in wealth will occur cannot be measured by IRR.

After a critical assessment of the two methods (Internal Rate of Return and the Net Present Value), It clearly shows that,

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.

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.

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. 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.

If a project has both positive and negative cash flow, it gives multiple IRR for the same project. This makes it impossible to select a project simply based on IRR. The outcome is displayed in percentage value which is also deceiving.

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 one 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.

In conclusion, taking into account what Net Present Value and Internal Rate of Return 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. (Martin Y. 2018)

Question 8 Definition of Capital Market: Capital Market, is used to mean the market for long term investments that have explicit or implicit claims to capital. Long term investments refers to those investments whose lock-in period is greater than one year. The below are the purpose of the capital markets.

Mobilization of Savings: Capital market is an important source for mobilizing idle savings from the economy. It mobilizes funds from people for further investments in the productive channels of an economy. In that sense it activate the ideal monetary resources and puts them in proper investments.

Capital Formation: Capital market helps in capital formation. Capital formation is net addition to the existing stock of capital in the economy. Through mobilization of ideal resources it generates savings; the mobilized savings are made available to various segments such as agriculture, industry and many others. This helps in increasing capital formation.

Provision of Investment Avenue: Capital market raises resources for longer periods of time. Thus it provides an investment avenue for people who wish to invest resources for a long period of time. It provides suitable interest rate returns also to investors. Instruments such as bonds, equities, units of Mutual Funds, insurance policies and others. definitely provides diverse investment avenue for the public.

Speed up Economic Growth and Development: Capital market enhances production and productivity in the national economy. As it makes funds available for long period of time, the financial requirements of business houses are met by the capital market. It helps in research and development. This helps in, increasing production and productivity in economy by generation of employment and development of infrastructure.

Proper Regulation of Funds: Capital markets not only helps in fund mobilization, but it also helps in proper allocation of these resources. It can have regulation over the resources so that it can direct funds in a qualitative manner.

Service Provision: As an important financial set up capital market provides various types of services. It includes long term and medium term loans to industry, underwriting services, consultancy services, export finance, etc. These services help the manufacturing sector in a large spectrum.

Continuous Availability of Funds: Capital market is place where the investment avenue is continuously available for long term investment. This is a liquid market as it makes fund available on continues basis. Both buyers and seller can easily buy and sell securities as they are continuously available. Basically capital market transactions are related to the stock exchanges. Thus marketability in the capital market becomes easy.

**Liquidity**: Liquidity is the ability to convert shares or bonds into cash by selling within the shortest time possible without losing much value.  When one needs funds urgently, listed securities could be very useful because they are more liquid than most other forms of assets. Link between Savers and Investors: The capital market functions as a link between savers and investors. It plays an important role in mobilizing the savings and diverting them in productive investment. In this way, capital market plays a vital role in transferring the financial resources from surplus and wasteful areas to deficit and productive areas, thus increasing the productivity and prosperity of the country.

Stability in Security Prices: The capital market tends to stabilize the values of stocks and securities and reduce the fluctuations in the prices to the minimum. The process of stabilization is facilitated by providing capital to the borrowers at a lower interest rate and reducing the speculative and unproductive activities.

Conclusion, the lack of an advanced and vibrant capital market can lead to underutilization of financial resources. The developed capital market also provides access to the foreign capital for domestic industry. Thus capital market definitely plays a constructive role in the overall development of an economy. Conclusion It is a market where buyers and sellers interact and transact. Though it performs functions similar to the money market, it is different in the sense that it deals usually with long-term securities. It is an organized and well-regulated market and has the power to move savings from a less productive means to a route where there is a need for capital and where capital is also rewarded. Though it may be very risky in terms of providing significant fixed returns periodically, it is very much preferred because of the anticipation of a long term propitious performance.

## Question 9 Debt financing: This is a business financing method where the borrower accepts funds from an outside source and promises to repay the principal plus interest, which represents the "cost" of the money borrowed.

## Equity financing refers to selling a stake in a company to investors that hope to share in the future profits of the business. There are several ways to obtain equity financing, such as through a deal with a venture capitalist or equity crowd funding.

Generally speaking, all business financing options fall into one of two categories. With debt financing, the business borrows from a lender and plans to pay that amount back plus interest over time. With equity financing, on the other hand, is selling partial ownership of the business. While this type of financing does not need to be “paid back” in the future, the owner lose some control of the business and portion of the profits.

Both debt and equity financing have advantages and disadvantages. The choice that is right for the business depends on considering the following factors:

 Long term goals: As the owner of a business, it will be critical for to think about what one actually hope to achieve in the long-run. What is the purpose of starting a business? Where should the business be in ten years? Twenty years? By answering these questions, it will be easier for one to decide how to finance his or her business.

Available interest rates: Naturally, the opportunity cost of choosing equity over debt finance will be largely determined by how much one will actually need to pay to borrow money. If the business has access to low-interest rates or specialty loans, the total cost of borrowing will be relatively lower. In order to make sure that the business is getting competitive quotes from potential lenders, it will be a good idea to compare multiple options before making any final decisions.

The need for control: By surrendering partial ownership of the business, one is 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 the business is something that’s important to owner, then he or she should limit the amount of equity.

 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 business debt-to-equity ratios, business fixed monthly expenses, overall business plan, and various others.

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

 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, one will need to calculate both the average total interest rate as well as the time value of money

Access to equity markets: If you do hope to finance the business via equity, it will be crucial that one 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 to new businesses without scrutiny. If one do hope to finance via equity, one will need to significantly develop a business plan, meet with a wide range of individuals, and also be willing to make compromises.

The cost of finance. Debt finance is usually cheaper than equity finance. This is because debt finance is safer from a lender’s point of view. Interest has to be paid before dividend. In the event of liquidation, debt finance is paid off before equity. This makes debt a safer investment than equity and hence debt investors demand a lower rate of return than equity investors. Debt interest is also corporation tax deductible unlike equity dividends making it even cheaper to a taxpaying company.

Conclusion, after consideration of the above points the company will be in a position to decide between the use of debt or equity finance. The last major decision is what type of finance should be used and where should it be raised? With equity financing, you lose some control over your business, but you are able to continue operating without debt. With debt financing, you will increase your future liabilities, but the future of your business will remain in your hands. As you can see, both decisions have clear appeals and trade-offs. Many business owners also use a mixed financing model that is better tailored to their specific needs. Regardless, be sure to remember these seven factors before making any permanent decisions. Dudley, C. (1972)

Question10 IPO underwriters are financial specialists who work closely with the issuing body to determine the initial offering price of the securities, buy the securities from the issuer, and sell the securities to investors via the underwriter's distribution network.

An initial public offering represents the first opportunity members of the investing public have to invest in a company. Prior to an IPO, shares of companies are bought, sold, and transferred in private transactions with little or no transparency. After an IPO, anyone can buy shares of any traded company. Detailed information about all public companies is freely available to anyone who cares to look it up.

An underwriter is any party that evaluates and assumes another party's risk for a fee. The fee is often a commission, premium, spread, or interest. Underwriters are critical to the financial world including the mortgage industry, insurance industry, equity markets, and common types of debt security trading.

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.

Underwriters are the main link between an insurance company and an insurance agent. Insurance underwriters use computer software programs to determine whether to approve an applicant. They take specific information about a client and enter it into a program. The program then provides recommendations on coverage and premiums. Underwriters evaluate these recommendations and decide whether to approve or reject the application. If a decision is difficult, they may consult additional sources, such as medical documents and credit scores. Underwriters analyze the risk factors on an application. For instance, if an applicant reports a previous bankruptcy, the underwriter must determine whether this is relevant for the current policy. They would consider how far in the past this occurred, and how the applicant’s financial situation has changed since the applicant filed for bankruptcy.

Insurance underwriters must achieve a balance between risky and cautious decisions. If underwriters allow too much risk, the insurance company will pay out too many claims. But if they don't approve enough applications, the company will not make enough money from premiums.

Most insurance underwriters specialize in one of three broad fields: life, health, and property and casualty. Although job duties are similar, the criteria that underwriters use vary. For example, for someone seeking life insurance, underwriters consider age and financial history. For someone applying for car insurance (a form of property and casualty insurance), underwriters consider the person's driving record.

Within the broad field of property and casualty, underwriters may specialize even further into commercial (business insurance) or personal insurance. They may also specialize by the type of policy, such as insuring automobiles, boats (marine insurance), or homes (homeowners’ insurance).

Screen Applicants: Underwriters review applications for insurance and screen them based on the criteria of the insurance company. Applicants who do not meet the basic requirements are instantly denied insurance. For example, some auto insurance companies will not cover boats or motorcycles, so applicants seeking coverage for those are immediately denied coverage.

Analyze Risk: An insurance underwriter analyzes the risks associated with applications that meet the minimum criteria. For example, a home insurance underwriter considers whether a home or property is in a high-risk flood or earthquake zone. Health insurance underwriters consider medical risks such as a family history of cancer or heart disease, or an individual with a history of smoking. Underwriters may communicate with medical doctors, credit bureaus and other agencies to gather additional information as needed.

Approve Applications: Underwriters use computer programs and software to help them determine an applicant's eligibility and risk factors. The underwriter must understand what facts to enter into the program. Based on the recommendations from the software and risk analysis, the underwriter decides whether to approve or reject an application. He may also choose to consider more information, such as credit history or additional medical records, if an applicant is on the border of being rejected or accepted.

Write Policies: Underwriters determine the coverage limits and premiums for approved policies. Higher-risk applicants pay higher premiums than those with lower risk. In addition, they may receive less coverage. Insurance underwriters write insurance policies explaining client coverage and premiums, while minimizing potential losses for the insurance company.

For riskier or less established companies, an underwriter may offer a best efforts arrangement for the initial public offering. A best efforts contract requires the underwriter to buy only enough shares to fill investor demand. Under this arrangement, the underwriter accepts no responsibility for unsold shares.  
  
Aside from fees and sales arrangements, most underwriters are fairly similar in their roles. An underwriter will assist in the preparation and submission of all appropriate SEC filings, helping potential investors make informed decisions about your offering. All underwriters are required to exercise due diligence in verifying the information they submit, so a certain amount of investigation should be expected from any responsible underwriter.   
  
In addition to Securities and Exchange Commission registration filings, the underwriter will create a preliminary prospectus that will become a major part of the issue's marketing campaign. This document is also referred to as the red herring, after a small red passage in the document that states that the company is not attempting to sell shares prior to Securities and Exchange Commission approval.  
  
Once Securities and Exchange Commission approval is obtained, the underwriter and the corporation will embark on a road show to gauge and attract interest from investors. While the road show does not involve getting binding commitments from investors, it helps the underwriter determine the best strategies for pricing and issuance.   
  
In conclusion, because an initial public offering is so complex and expensive, it's important to have a good understanding of what to expect from an underwriter. Without knowing what to expect, it's impossible to make a wise and informed selection. Soliman, A. (2004),

## Question 11 Stock exchange is a facility where stock brokers and traders can buy and sell securities, such as shares of stock and bonds and other financial instruments.

## Capital market is a market where buyers and sellers engage in trade of financial securities like bonds, stocks, etc. The buying/selling is undertaken by participants such as individuals and institutions.

Stock exchange is important in the following ways

Liquidity and Marketability: One of the main drawing factors of the stock exchange is that it enables high liquidity. The securities can be sold at a moment’s notice and be converted to cash. It is a continuous market and the investors can divest and reinvest with ease as per their wishes.

Price Determination: In a secondary market, the only way to determine the price of securities is via the rules of supply and demand. A stock exchange enables this process via constant valuation of all the securities. Such prices of shares of various companies can be tracked via the index call the Sensex.

Safety: The government strictly governs and regulates the stock exchanges. The Securities Board is always the government body. All transactions occur within the legal framework. This provides the investor with assurances and a safe place to transact in securities.

Contribution to the Economy: Stock exchange deals in already issued securities. But these securities are continuously sold and resold and so on. This allows the funds to be mobilized and channelized instead of sitting idle. This boosts the economy.

Spreading of Equity: The stock exchange ensures wider ownership of securities. It actually educates the public about the safety and the benefits of investing in the stock market. It ensures a better quality of transactions and smooth functioning. The idea is to get more public investors and spread the ownership of securities for the benefit of everyone.

Speculation: Stock exchange is a speculative market. And while this is true, the speculation is kept within the legal framework. For the stake of liquidity and price determination, a healthy dose of speculative trading is necessary, and the stock exchange provides the public with such a platform.

Fair Dealing in Securities Transactions: Depending on the standard rules of demand and supply, the stock exchange needs to ensure that all interested market participants have instant access to data for all buy and sell orders thereby helping in the fair and transparent pricing of securities. Additionally, it should also perform efficient matching of appropriate buy and sell orders.

Efficient Price Discovery: Stock markets need to support an efficient mechanism for price discovery, which refers to the act of deciding the proper price of a security and is usually performed by assessing market supply and demand and other factors associated with the transactions.

Liquidity Maintenance: While getting the number of buyers and sellers for a particular financial security are out of control for the stock market, it needs to ensure that whosoever is qualified and willing to trade gets instant access to place orders which should get executed at the fair price.

Security and Validity of Transactions: While more participants are important for efficient working of a market, the same market needs to ensure that all participants are verified and remain compliant with the necessary rules and regulations, leaving no room for default by any of the parties. Additionally, it should ensure that all associated entities operating in the market must also adhere to the rules, and work within the legal framework given by the regulator.

Support All Eligible Types of Participants: A marketplace is made by a variety of participants, which include market makers, investors, traders, speculators, and hedgers. All these participants operate in the stock market with different roles and functions. For instance, an investor may buy stocks and hold them for long term spanning many years, while a trader may enter and exit a position within seconds. A market maker provides necessary liquidity in the market, while a hedger may like to trade in derivatives for mitigating the risk involved in investments. The stock market should ensure that all such participants are able to operate seamlessly fulfilling their desired roles to ensure the market continues to operate efficiently.

Investor Protection: Along with wealthy and institutional investors, a very large number of small investors are also served by the stock market for their small amount of investments. These investors may have limited financial knowledge, and may not be fully aware of the pitfalls of investing in stocks and other listed instruments. The stock exchange must implement necessary measures to offer the necessary protection to such investors to shield them from financial loss and ensure customer trust.

For instance, a stock exchange may categorize stocks in various segments depending on their risk profiles and allow limited or no trading by common investors in high-risk stocks. Derivatives, which have been described by Warren Buffett as financial weapons of mass destruction, are not for everyone as one may lose much more than they bet for. Exchanges often impose restrictions to prevent individuals with limited income and knowledge from getting into risky bets of derivatives.

Balanced Regulation: Listed companies are largely regulated and their dealings are monitored by market regulators, like the Securities and Exchange Commission of the United States. Additionally, exchanges also mandate certain requirements – like, timely filing of quarterly financial reports and instant reporting of any relevant developments - to ensure all market participants become aware of corporate happenings. Failure to adhere to the regulations can lead to suspension of trading by the exchanges and other disciplinary measures.

Economies of Scale: One of the advantages of the stock exchange is that is enjoys economies of scale because so much money passes through it. This helps to keep costs low, making it less expensive to buy and sell stocks.

A stock exchange can use millions of transactions to spread fixed costs of setting up and maintaining orderly and secure trading, whether it&#039;s done on the computer or the exchange floor. The bigger a stock exchange is, the cheaper it is to trade an individual stock on it.

Investor Protection: Stock exchanges require listed companies to meet strict regulatory requirements with regard to financial reporting, corporate governance and disclosure. In the U.S., the regulatory agency is the Securities and Exchange Commission. Investors get access to all relevant information about the listed companies so they can make informed decisions about whether to buy or sell shares.

Secure Clearing: A stock exchange provides a reliable and secure clearing mechanism. You can be sure that the stocks you buy will be delivered to you, no matter what happens to the party you bought them from.

Stock exchange is a market place where stock, shares and other types of securities are bought and sold. It is market where the owners may purchase or sell/ dispose off their securities as per certain well defined rules and regulations. Such securities include shares and debentures issued by public companies, bonds and debentures issued by government, public corporation and municipal and port trust Board of Directors.

CONCLUSIONS: The importance of the financial market is given by the significant role it plays in the finances (financing) of the enterprises and of the state, by the percentage the direct financing has among the methods for financing. Beyond what is apparently important - the high volume of transactions on the stock market - what really counts is the place the (primary) market holds in the development first of the stock companies (direct financing), and this is sometimes forgotten, or appears secondary. The well-functioning of the financial market is a strong fundament for ensuring a lasting growth, on the long term and the national economy.(Levine R. 1997)

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