MGT201 Financial Management

Important subjective

Lec 1 - Introduction to financial management

- 1. What is financial management? Explain its importance in an organization. Answer: Financial management is the process of managing an organization's financial resources, including planning, organizing, directing, and controlling financial activities. It is important in an organization as it helps in making financial decisions that are critical to its success.
- 2. What is the difference between financial management and accounting? Answer: Accounting is the process of recording, classifying, and summarizing financial transactions, while financial management is concerned with planning and controlling an organization's financial resources.
- 3. Explain the concept of time value of money.

Answer: Time value of money refers to the idea that money received today is worth more than the same amount of money received in the future due to its potential earning capacity over time.

4. What are the three main financial statements, and what information do they provide? Answer: The three main financial statements are the balance sheet, income statement, and cash flow statement. The balance sheet provides information on an organization's assets, liabilities, and equity. The income statement provides information on revenue, expenses, and profit or loss. The cash flow statement provides information on an organization's cash inflows and outflows.

5. What is working capital, and why is it important?

Answer: Working capital is the difference between an organization's current assets and current liabilities. It is important as it represents the funds that an organization can use to meet its short-term financial obligations and to support its daily operations.

6. Explain the concept of financial leverage.

Answer: Financial leverage refers to the use of debt to finance an organization's operations or investments. It can increase an organization's potential returns but also increases its financial risk.

7. What is the role of a financial manager in an organization?

Answer: The role of a financial manager in an organization is to manage the organization's financial resources, including planning, organizing, directing, and controlling financial activities.

8. What is the difference between financial planning and budgeting?

Answer: Financial planning involves developing long-term financial goals and strategies, while budgeting involves allocating financial resources to specific activities or projects within a given time frame.

9. What is capital budgeting, and what are some methods used to evaluate investment opportunities?

Answer: Capital budgeting is the process of evaluating investment opportunities and deciding which projects to pursue. Some methods used to evaluate investment opportunities include the payback period, net present value, and internal rate of return.

10. What are some financial ratios used to analyze an organization's financial performance? Answer: Some financial ratios used to analyze an organization's financial performance include the current ratio, quick ratio, debt-to-equity ratio, return on equity, and earnings per share.

Lec 2 - Objectives of financial management, financial assets and financial markets

1. What is the primary objective of financial management?

Answer: The primary objective of financial management is to maximize shareholder wealth and ensure long-term financial viability.

2. What are financial assets?

Answer: Financial assets are instruments that represent ownership or debt in an entity, such as stocks, bonds, and real estate.

3. What are the different types of financial assets?

Answer: The different types of financial assets include stocks, bonds, derivatives, and real estate.

4. What is a financial market?

Answer: A financial market is a platform where buyers and sellers trade financial assets, such as stock exchanges and bond markets.

5. What factors affect financial asset prices in financial markets?

Answer: Economic conditions, political instability, interest rates, and company performance are some of the factors that affect financial asset prices in financial markets.

6. What is the difference between stocks and bonds?

Answer: Stocks represent ownership in a company, while bonds represent a debt owed by a company or government entity.

7. What are the characteristics of financial assets?

Answer: Financial assets have a high degree of liquidity, are easily transferable, have the potential for high returns, and are subject to varying degrees of risk.

8. What are the functions of financial markets?

Answer: Financial markets provide a platform for companies to raise capital, facilitate the buying and selling of financial assets, and provide a means for investors to diversify their portfolios.

9. Why is understanding financial markets important for effective financial management? Answer: Understanding financial markets is important for effective financial management as it enables informed investment decisions that align with business objectives and risk tolerance.

10. What are the risks associated with investing in financial assets?

Answer: The risks associated with investing in financial assets include market risk, credit risk, liquidity risk, and inflation risk.

Lec 3 - Analysis of financial statements

1. What is financial statement analysis, and why is it important?

Answer: Financial statement analysis is the process of examining an organization's financial reports to gain insight into its financial health and performance. It is important because it helps investors, creditors, and managers make informed decisions about investments, loans, and business operations.

- 2. What are the three main financial statements used in financial statement analysis? Answer: The three main financial statements used in financial statement analysis are the balance sheet, income statement, and cash flow statement.
- 3. What is the difference between horizontal and vertical analysis? Answer: Horizontal analysis compares financial data over multiple periods, while vertical analysis compares financial data within a single period.
- 4. What is the current ratio, and what does it measure? Answer: The current ratio is a financial ratio that measures an organization's ability to pay off its short-term debt obligations. It is calculated by dividing current assets by current liabilities.
- 5. What is the debt-to-equity ratio, and what does it measure? Answer: The debt-to-equity ratio is a financial ratio that measures an organization's leverage. It is calculated by dividing total debt by total equity.
- 6. What is the return on assets ratio, and what does it measure? Answer: The return on assets ratio is a financial ratio that measures an organization's efficiency in using its assets to generate revenue. It is calculated by dividing net income by total assets.
- 7. What is the gross profit margin, and what does it measure? Answer: The gross profit margin is a financial ratio that measures an organization's profitability. It is calculated by dividing gross profit by total revenue.
- 8. What is liquidity, and why is it important in financial statement analysis? Answer: Liquidity refers to an organization's ability to meet its short-term debt obligations. It is important in financial statement analysis because it helps investors and creditors assess an organization's financial health and ability to pay off its debts.
- 9. What is the operating cash flow, and why is it important in financial statement analysis? Answer: The operating cash flow is the cash flow generated from an organization's core business operations. It is important in financial statement analysis because it helps investors and creditors assess an organization's ability to generate cash from its core business activities.

10. What are some limitations of financial statement analysis? Answer: Some limitations of financial statement analysis include the use of historical data, the possibility of accounting manipulation, and the impact of external factors that are beyond an organization's control.

Lec 4 - Time value of money

1. What is the time value of money?

Answer: The time value of money is the idea that money received or paid out at different times has different values due to the potential earning power of money over time.

2. What is present value?

Answer: Present value is the current value of future cash flows, calculated using a discount rate.

3. What is future value?

Answer: Future value is the value of an investment at a specific point in time in the future, calculated using an expected rate of return.

4. What is an annuity?

Answer: An annuity is a series of equal payments made at regular intervals.

5. What is compounding?

Answer: Compounding is the process of earning interest on interest.

6. What is discounting?

Answer: Discounting is the process of calculating the present value of future cash flows.

7. What is the formula for calculating future value?

Answer: $FV = PV \times (1 + r)^n$, where FV is the future value, PV is the present value, r is the expected rate of return, and n is the number of years.

8. What is the formula for calculating present value?

Answer: $PV = FV / (1 + r)^n$, where PV is the present value, FV is the future value, r is the discount rate, and n is the number of years.

9. What is the time period used in time value of money calculations?

Answer: The time period used in time value of money calculations is usually in years.

10. Why is time value of money important in finance?

Answer: Time value of money is important in finance because it allows for the comparison of cash flows over time, and helps in making investment decisions based on the value of money at different points in time.

Lec 5 - Financial forecasting & financial planning

1. What is financial forecasting and how is it useful for organizations?

Answer: Financial forecasting involves predicting future financial outcomes based on historical data. It is useful for organizations as it helps in budgeting, decision making, and setting financial goals.

- 2. What are the common financial forecasting techniques used by organizations? Answer: The common financial forecasting techniques used by organizations are trend analysis, regression analysis, and ratio analysis.
- 3. What is financial planning and why is it important for organizations? Answer: Financial planning is the process of creating a roadmap for achieving financial goals. It is important for organizations as it helps in identifying financial resources, allocating funds, and managing financial risks.

4. What are the steps involved in financial planning?

Answer: The steps involved in financial planning are setting financial goals, identifying financial resources, developing a financial plan, implementing the plan, and monitoring and evaluating the plan.

5. What is a financial budget and how is it useful for organizations?

Answer: A financial budget is a detailed plan that outlines the expected revenues and expenses for a specific period. It is useful for organizations as it helps in allocating resources, tracking financial performance, and making informed decisions.

6. What is cash flow forecasting and why is it important for organizations? Answer: Cash flow forecasting is the process of predicting the inflow and outflow of

Answer: Cash flow forecasting is the process of predicting the inflow and outflow of cash for a specific period. It is important for organizations as it helps in managing cash flow, identifying potential cash shortages, and making financial decisions.

7. What is break-even analysis and how is it useful for organizations? Answer: Break-even analysis is the process of determining the point at which to

Answer: Break-even analysis is the process of determining the point at which total revenues equal total costs. It is useful for organizations as it helps in identifying the minimum level of sales required to cover costs and make a profit.

8. What is sensitivity analysis and why is it useful for organizations?

Answer: Sensitivity analysis is the process of analyzing how changes in key variables affect financial outcomes. It is useful for organizations as it helps in identifying risks, evaluating financial performance, and making informed decisions.

9. What is financial modeling and how is it useful for organizations?

Answer: Financial modeling is the process of using mathematical formulas to simulate financial scenarios. It is useful for organizations as it helps in predicting financial outcomes, evaluating the impact of different financial decisions, and identifying risks.

10. What is the role of financial forecasting and planning in the overall financial management of an organization?

Answer: Financial forecasting and planning are crucial components of financial management. They help in setting financial goals, identifying financial resources, allocating funds, managing risks, and making informed financial decisions.

Lec 6 - Present value and discounting

1. What is present value?

Answer: Present value is the current worth of a future sum of money, discounted at a specific rate of return.

2. What is discounting?

Answer: Discounting is the process of determining the present value of a future sum of money by applying a discount rate.

- 3. How is the present value of a future sum of money affected by the discount rate? Answer: The present value of a future sum of money decreases as the discount rate increases.
- What is the formula for calculating present value? Answer: Present Value = Future Value / (1 + Discount Rate)^n, where n is the number of periods.

5. Why is present value important in finance?

Answer: Present value is important in finance because it allows us to compare the value of cash flows that occur at different points in time.

6. How does inflation affect the present value of money?

Answer: Inflation decreases the purchasing power of money, which means that the present value of a future sum of money is reduced.

7. What is the relationship between the discount rate and the risk associated with an investment?

Answer: The higher the risk associated with an investment, the higher the discount rate used to calculate its present value.

8. How do interest rates affect present value?

Answer: Higher interest rates increase the discount rate, which reduces the present value of a future sum of money.

9. How does compounding affect present value?

Answer: Compounding increases the future value of an investment, which in turn increases its present value.

10. What is the difference between simple interest and compound interest when it comes to present value?

Answer: Simple interest assumes that interest is only earned on the principal amount, while compound interest assumes that interest is earned on both the principal and any accumulated interest. As a result, compound interest typically results in a higher present value than simple interest.

Lec 7 - Discounted cash flow analysis, annuities and perpetuities

- What is the purpose of Discounted Cash Flow (DCF) analysis? Answer: The purpose of DCF analysis is to estimate the present value of an investment's future cash flows.
- 2. What is the difference between an annuity and a perpetuity? Answer: An annuity has a finite number of equal payments made at regular intervals, while a perpetuity has an infinite series of equal payments.
- 3. What is the formula for calculating the present value of an annuity? Answer: PV = PMT * (1-(1+r)^-n) / r, where PV is the present value, PMT is the payment amount, r is the discount rate, and n is the number of payments.
- 4. What is the formula for calculating the present value of a perpetuity? Answer: PV = PMT / r, where PV is the present value, PMT is the payment amount, and r is the discount rate.
- How does the discount rate affect the present value of an investment? Answer: The higher the discount rate, the lower the present value of an investment's future cash flows.
- 6. What is the difference between simple interest and compound interest? Answer: Simple interest is calculated only on the principal amount, while compound interest is calculated on both the principal and any accrued interest.
- 7. What is the time value of money? Answer: The time value of money is the concept that money is worth more today than the same amount of money in the future due to its potential earning capacity.
- 8. **How does the length of time affect the present value of an investment?** Answer: The longer the time until the investment's cash flows are received, the lower the present value of those cash flows.
- 9. What is the difference between a fixed annuity and a variable annuity? Answer: A fixed annuity provides a guaranteed fixed rate of return, while a variable annuity's rate of return is based on the performance of underlying investments.
- 10. What are the limitations of using DCF analysis to value an investment? Answer: The limitations of DCF analysis include the accuracy of cash flow projections, the choice of discount rate, and the uncertainty of future events that may affect cash flows.

Lec 8 - Capital budgeting and capital budgeting techniques

1. What is capital budgeting?

Answer: Capital budgeting is the process of evaluating and selecting long-term investment projects that will generate the highest returns for a business.

2. What is the difference between capital budgeting and operational budgeting? Answer: Capital budgeting focuses on long-term investment decisions while operational budgeting focuses on short-term decisions related to day-to-day operations.

3. What is the payback period method and what are its limitations?

Answer: The payback period method is a capital budgeting technique that calculates the length of time it takes to recover the initial investment. Its limitations include ignoring cash flows beyond the payback period and not considering the time value of money.

4. What is the net present value (NPV) method and how is it calculated?

Answer: The NPV method is a capital budgeting technique that calculates the present value of expected cash inflows minus the present value of expected cash outflows. It considers the time value of money and helps determine the profitability of a project.

5. What is the internal rate of return (IRR) method and how is it calculated?

Answer: The IRR method is a capital budgeting technique that calculates the discount rate at which the present value of expected cash inflows equals the present value of expected cash outflows. It considers the time value of money and helps determine the rate of return of a project.

6. What is the profitability index (PI) method and how is it calculated?

Answer: The PI method is a capital budgeting technique that calculates the ratio of the present value of expected cash inflows to the initial investment. It helps determine the profitability of a project relative to its cost.

7. What is the cost of capital and how is it determined?

Answer: The cost of capital is the rate of return required by investors to invest in a project. It is determined by calculating the weighted average of the cost of debt and the cost of equity.

8. How can risk be incorporated into capital budgeting decisions?

Answer: Risk can be incorporated by adjusting the discount rate used in capital budgeting techniques to reflect the riskiness of the project. A higher discount rate is used for riskier projects.

9. What is the difference between the net present value (NPV) and internal rate of return (IRR) methods?

Answer: The NPV method calculates the present value of expected cash inflows minus the present value of expected cash outflows while the IRR method calculates the discount rate at which the present value of expected cash inflows equals the present value of expected cash outflows.

10. What are the advantages and disadvantages of the payback period method?

Answer: The advantages of the payback period method include its simplicity and ease of use. The disadvantages include ignoring cash flows beyond the payback period and not considering the time value of money.

Lec 9 - Net present value & internal rate of return

1. What is net present value (NPV) and how is it calculated?

Answer: Net present value is the difference between the present value of expected cash inflows and the present value of expected cash outflows. It is calculated by discounting all future cash flows to their present values and subtracting the initial investment.

2. What is internal rate of return (IRR) and how is it calculated?

Answer: Internal rate of return is the discount rate at which the present value of expected cash inflows equals the present value of expected cash outflows. It is calculated by trial and error or by using a financial calculator or spreadsheet function.

3. How is the required rate of return determined and why is it important in capital budgeting?

Answer: The required rate of return is the minimum rate of return an investor expects to earn on an investment. It is determined based on the investor's risk tolerance and opportunity cost of capital. It is important in capital budgeting because it is used as the discount rate to calculate the present value of future cash flows.

4. What are the advantages and disadvantages of using NPV as a capital budgeting technique?

Answer: The advantages of using NPV are that it considers the time value of money and provides an absolute dollar value for the project's profitability. The disadvantages are that it can be difficult to interpret for projects with multiple cash flows and it does not consider the risk associated with the project.

5. What are the advantages and disadvantages of using IRR as a capital budgeting technique?

Answer: The advantages of using IRR are that it is easy to understand and provides a percentage rate of return for the project. The disadvantages are that it can have multiple solutions and is more sensitive to changes in the discount rate.

6. How does the size and timing of cash flows affect NPV and IRR?

Answer: The size and timing of cash flows can affect the NPV and IRR calculations. A larger cash flow will have a greater impact on the NPV and IRR calculations than a smaller cash flow. Cash flows received earlier have a greater impact on NPV and IRR than cash flows received later.

7. What is the relationship between NPV and IRR?

Answer: NPV and IRR are both methods used to evaluate the profitability of investment projects. A project is considered acceptable if its NPV is positive or if its IRR is greater than the required rate of return. However, there can be situations where the two methods lead to different decisions.

8. How does the cost of capital affect NPV and IRR?

Answer: The cost of capital is used as the discount rate in the NPV and IRR calculations. A higher cost of capital will result in a lower NPV and a higher required rate of return for the project to be acceptable using the IRR method.

9. What are the limitations of using NPV and IRR in capital budgeting?

Answer: The limitations of using NPV and IRR include their sensitivity to changes in the discount rate, their assumptions about cash flows, and their inability to consider non-financial factors such as environmental impact or social responsibility.

10. How can sensitivity analysis be used to evaluate the risk associated with a capital investment project?

Answer: Sensitivity analysis involves examining how changes in assumptions, such as cash flows or discount rates, affect the NPV or IRR of a project. It can be used to evaluate the risk associated with a project by identifying which assumptions have the greatest impact on the project's profitability.

Lec 10 - . Project cash flows, project timing, comparing projects and modified internal rate of return

- 1. What is the difference between sunk costs and opportunity costs in project cash flows? Answer: Sunk costs are costs that have already been incurred and cannot be recovered, while opportunity costs are potential benefits that are lost when one alternative is chosen over another.
- 2. Why is it important to consider the timing of cash flows in capital budgeting? Answer: The timing of cash flows is important because money received or paid out at different times has different values. It is necessary to adjust for the time value of money to ensure that cash flows are comparable and reflect their true value.
- 3. What is the difference between the net present value and the internal rate of return methods for evaluating projects?

Answer: The net present value (NPV) method measures the present value of future cash flows, while the internal rate of return (IRR) method calculates the discount rate that makes the NPV equal to zero. NPV is better for comparing different projects, while IRR is better for ranking projects in terms of profitability.

4. What is the payback period method and how is it calculated?

Answer: The payback period method is a capital budgeting technique that calculates the length of time it takes for a project to recover its initial investment. It is calculated by dividing the initial investment by the annual cash inflows.

5. How does sensitivity analysis help in evaluating project risk?

Answer: Sensitivity analysis involves testing the effect of changing certain assumptions or variables on the project's net present value or internal rate of return. It helps identify which assumptions or variables have the greatest impact on the project's profitability, and thus helps evaluate project risk.

- 6. What is the difference between the profitability index and the net present value methods? Answer: The profitability index (PI) is calculated by dividing the present value of future cash flows by the initial investment, while the net present value (NPV) method calculates the present value of future cash flows minus the initial investment. PI is useful for comparing projects with different initial investments, while NPV is better for comparing different projects.
- 7. How is the modified internal rate of return (MIRR) different from the regular internal rate of return (IRR)?

Answer: The modified internal rate of return (MIRR) takes into account the reinvestment rate of the project's future cash flows, while the regular internal rate of return (IRR) assumes that future cash flows are reinvested at the same rate as the project's initial investment. MIRR is considered a more realistic measure of a project's profitability.

8. How can the profitability of a project be improved through the use of accelerated depreciation?

Answer: Accelerated depreciation allows for a larger portion of the initial investment to be written off in the early years of a project, reducing taxable income and increasing cash flow. This increased cash flow can improve the project's profitability.

9. What is the difference between mutually exclusive and independent projects? Answer: Mutually exclusive projects are projects where only one can be accepted, while independent projects are projects that can be accepted or rejected independently of each other.

10. Why is the cost of capital an important factor in capital budgeting decisions? Answer: The cost of capital represents the opportunity cost of investing in a project, and thus is used as the discount rate in net present value and internal rate of return calculations. The cost of capital is important in determining whether a project will generate returns greater than its cost, and thus whether it is a good investment.

Lec 11 - Some special areas of capital budgeting

1. What are strategic investment decisions in capital budgeting?

Answer: Strategic investment decisions in capital budgeting are long-term investment decisions that are made to achieve a company's strategic objectives. These decisions are based on an assessment of the company's current position and future goals.

2. What is real options analysis in capital budgeting?

Answer: Real options analysis in capital budgeting is an approach that considers the value of management flexibility in making investment decisions. It involves assessing the value of potential future opportunities that may arise from the investment and the ability of the company to respond to them.

3. What are green investment decisions in capital budgeting?

Answer: Green investment decisions in capital budgeting are investments made in projects that have a positive impact on the environment. These projects may involve reducing greenhouse gas emissions, using renewable energy sources, or implementing sustainable practices.

4. What are joint ventures in capital budgeting?

Answer: Joint ventures in capital budgeting refer to partnerships between two or more companies to undertake a project or investment. Joint ventures may be formed to share risk or to combine complementary resources and expertise.

5. What is risk analysis in capital budgeting?

Answer: Risk analysis in capital budgeting involves identifying and evaluating the various risks associated with a project or investment. This may include financial, operational, market, and other risks that could impact the success of the investment.

6. What are divestitures in capital budgeting?

Answer: Divestitures in capital budgeting refer to the sale of a portion of the company or a business unit. This may be done to raise funds, streamline operations, or to focus on core business activities.

7. What is the profitability index in capital budgeting?

Answer: The profitability index in capital budgeting is a financial ratio that measures the return on investment for a project. It is calculated as the present value of future cash flows divided by the initial investment.

8. How does project timing impact capital budgeting decisions?

Answer: Project timing is an important factor in capital budgeting decisions as it can impact the timing and magnitude of cash flows. Projects with shorter payback periods or higher net present values may be preferred over longer-term projects, depending on the company's goals and objectives.

9. What are the key factors to consider when evaluating the environmental impact of a capital budgeting project?

Answer: When evaluating the environmental impact of a capital budgeting project, key factors to consider include the potential for greenhouse gas emissions, resource usage, and waste generation. Companies may also consider the impact on local communities and natural habitats.

10. What is the role of uncertainty in capital budgeting decisions?

Answer: Uncertainty is an inherent part of capital budgeting decisions as it is impossible to

predict future events with certainty. Companies must consider the potential impact of uncertain factors, such as changes in market conditions or unexpected costs, when making investment decisions.

Lec 12 - Capital budgeting and interpretation of IRR and NPV with limited capital

1. What is the difference between the NPV and IRR methods? Which method would you prefer when investing in a new project and why?

Answer: The NPV method calculates the net present value of cash inflows and outflows, while the IRR method calculates the rate of return that equates the present value of cash inflows with the present value of outflows. I would prefer the NPV method when investing in a new project because it takes into account the time value of money and provides a more accurate picture of the project's profitability.

2. How can a company decide which projects to invest in when there is limited capital available?

Answer: The company can use various techniques such as ranking projects by their profitability index (PI) or by their NPV per dollar of investment. This will help the company to choose the projects that provide the highest return on investment with the limited capital available.

3. How do sunk costs and opportunity costs affect capital budgeting decisions?

Answer: Sunk costs are costs that have already been incurred and cannot be recovered, and should not be considered when making capital budgeting decisions. Opportunity costs are the costs of the next best alternative foregone, and should be taken into account when making capital budgeting decisions.

4. What is the difference between mutually exclusive and independent projects? How would you choose between two mutually exclusive projects?

Answer: Mutually exclusive projects are projects where choosing one project precludes the selection of other projects. Independent projects are projects that can be selected regardless of the choice of other projects. To choose between two mutually exclusive projects, we would select the project with the highest NPV.

5. What is the difference between the payback period and discounted payback period? Which method do you think is better and why?

Answer: The payback period is the time required for the initial investment to be recovered from the cash inflows. The discounted payback period takes into account the time value of money. I think the discounted payback period is better because it accounts for the time value of money and provides a more accurate picture of the project's profitability.

6. How does sensitivity analysis help in capital budgeting decisions?

Answer: Sensitivity analysis helps in assessing the risk associated with a project by determining the effect of changes in key variables on the project's profitability. This helps in making more informed decisions by identifying the most critical variables and the extent to which they affect the project's profitability.

7. What is the difference between capital budgeting and operational budgeting? How are they related?

Answer: Capital budgeting involves making long-term investment decisions, while operational budgeting involves planning short-term operational expenses. The two are related because operational budgets are used to forecast cash inflows and outflows for capital budgeting decisions.

8. How can a company deal with uncertainty in capital budgeting decisions?

Answer: A company can deal with uncertainty by using techniques such as scenario analysis, sensitivity analysis, and real options analysis. These techniques help in identifying potential risks and uncertainties associated with a project and provide a more accurate picture of the project's profitability.

9. What are the advantages and disadvantages of using the modified internal rate of return (MIRR) method over the traditional IRR method?

Answer: The advantage of using the MIRR method is that it assumes that cash inflows are reinvested at a rate equal to the cost of capital, which is more realistic than the IRR method, which assumes that cash inflows are reinvested at the IRR rate. The disadvantage of using the MIRR method is that it can be more difficult to calculate than the IRR method.

10. How can a company determine the optimal level of capital investment in a given period?

Answer: A company can determine the optimal level of capital investment by comparing the expected return on investment to

Lec 13 - Bonds and classification of bonds

1. What is a bond? Explain its basic features.

Ans: A bond is a type of debt security that allows the issuer to raise capital by borrowing funds from investors. The basic features of a bond include the face value, coupon rate, maturity date, and issuer.

2. What is the difference between a coupon rate and a yield?

Ans: The coupon rate is the fixed rate of interest paid on a bond, while the yield is the overall return on the bond, taking into account the purchase price and the coupon payments.

3. What is a callable bond?

Ans: A callable bond is a bond that can be redeemed by the issuer before its maturity date. This option is typically included in the bond's terms and conditions, and the issuer can choose to exercise it if interest rates decline.

4. What is a convertible bond?

Ans: A convertible bond is a type of bond that can be converted into a specified number of shares of the issuer's stock. This feature provides investors with the opportunity to benefit from potential stock price increases, while also providing the security of a fixed-income investment.

5. What is a zero-coupon bond?

Ans: A zero-coupon bond is a type of bond that does not pay regular interest payments. Instead, it is sold at a discount to its face value and redeemed for the face value at maturity, providing investors with a capital gain.

6. What is the difference between a secured and an unsecured bond?

Ans: A secured bond is backed by specific assets of the issuer, while an unsecured bond is not. This means that in the event of default, holders of secured bonds have a higher claim on the issuer's assets.

7. What is a junk bond?

Ans: A junk bond is a type of bond that is rated below investment grade, indicating a higher risk of default. These bonds typically offer higher yields to compensate investors for this risk.

8. What is the difference between a government bond and a corporate bond?

Ans: A government bond is issued by a government entity, while a corporate bond is issued by a company. Government bonds are generally considered to be lower risk, while corporate bonds offer higher yields.

9. What is a municipal bond?

Ans: A municipal bond is a type of bond issued by a state or local government entity to fund public projects, such as schools or roads. These bonds are typically exempt from federal income tax and may also be exempt from state and local taxes.

10. What is a bond rating? How is it determined?

Ans: A bond rating is an assessment of the creditworthiness of a bond issuer, indicating the risk of default. Bond ratings are typically assigned by rating agencies, such as Standard & Poor's or Moody's, and are based on a variety of factors, including the issuer's financial health, industry trends, and economic conditions.

Lec 14 - Bonds valuation

1. What is the definition of bond valuation?

Bond valuation refers to the process of calculating the fair market value of a bond. It involves analyzing various factors such as the bond's coupon rate, yield to maturity, time to maturity, and the current market interest rate to determine its worth.

2. What are the main factors that affect bond valuation?

The main factors that affect bond valuation include the bond's coupon rate, yield to maturity, time to maturity, and the current market interest rate. Changes in any of these factors can impact the bond's value.

3. What is the relationship between bond prices and interest rates?

Bond prices and interest rates have an inverse relationship. When interest rates rise, bond prices fall, and when interest rates fall, bond prices rise.

4. What is the difference between yield to maturity and current yield?

Yield to maturity is the total return anticipated on a bond if it is held until maturity, while current yield is the annual income generated by a bond divided by its current market price.

5. How does the time to maturity affect a bond's valuation?

The time to maturity of a bond affects its valuation because it determines the number of interest payments that will be received and the amount of principal that will be repaid at maturity.

6. What is the difference between a premium bond and a discount bond?

A premium bond is a bond that is priced above its face value, while a discount bond is priced below its face value.

7. How does the credit rating of a bond issuer affect its valuation?

The credit rating of a bond issuer affects its valuation because it reflects the issuer's ability to repay the bond's principal and interest. Higher credit ratings generally result in lower risk and higher valuations.

8. What is the significance of the par value of a bond?

The par value of a bond represents the amount of principal that will be repaid at maturity. It is also used to calculate the bond's coupon payments.

9. What is a callable bond?

A callable bond is a bond that can be redeemed by the issuer before its maturity date. This can result in a loss of income for the bondholder.

10. How does the yield curve affect bond valuations?

The shape of the yield curve can affect bond valuations. When the yield curve is steep, long-term bonds generally have higher yields than short-term bonds, while the opposite is true when the yield curve is flat. This can impact the valuation of different types of bonds.

Lec 15 - Bond valuation & yield on bonds

1. Define bond valuation and explain the components of a bond's price.

Answer: Bond valuation refers to the process of determining the fair market value of a bond. The components of a bond's price include the coupon rate, the face value, the maturity date, and the current market interest rate. The price of a bond is calculated by discounting the future cash flows generated by the bond to the present value using the current market interest rate.

2. What is the yield to maturity of a bond? Explain its importance in bond valuation.

Answer: The yield to maturity of a bond is the rate of return an investor can expect to receive if they hold the bond until maturity. It is important in bond valuation because it is used to determine the fair market value of a bond. The yield to maturity takes into account the current market price of the bond, the face value, the coupon rate, and the number of years to maturity.

3. What is meant by the term "bond yield"? How is it calculated?

Answer: Bond yield refers to the rate of return an investor can expect to receive on a bond. It is calculated by dividing the annual interest payment by the current market price of the bond. The resulting percentage represents the bond yield.

4. What is the difference between current yield and yield to maturity?

Answer: The current yield of a bond is the annual income generated by the bond divided by its current market price. It is a simple calculation that does not take into account the time value of money. The yield to maturity, on the other hand, is the rate of return an investor can expect to receive if they hold the bond until maturity. It takes into account the time value of money and factors in the current market price of the bond, the face value, the coupon rate, and the number of years to maturity.

5. Explain the concept of interest rate risk in relation to bond valuation.

Answer: Interest rate risk refers to the risk that the value of a bond will decrease as a result of a change in the market interest rate. When the market interest rate increases, the value of existing bonds decreases because the coupon rate on those bonds becomes less attractive to investors. This means that bond prices are inversely related to interest rates. As interest rates rise, bond prices fall, and vice versa.

6. What is a zero-coupon bond? How is it valued?

Answer: A zero-coupon bond is a bond that does not pay any interest during its life. Instead, the investor receives the face value of the bond at maturity. Zero-coupon bonds are valued by discounting the face value to the present using the current market interest rate. Since zero-coupon bonds do not pay any interest, their value is highly sensitive to changes in the market interest rate.

7. How is the yield curve used in bond valuation?

Answer: The yield curve is a graphical representation of the relationship between bond yields and their respective maturities. The shape of the yield curve is important in bond valuation because it provides information about the current and future state of the economy. A steep yield curve indicates that investors expect interest rates to rise in the future, while a flat yield curve indicates that interest rates are expected to remain stable.

8. What is the difference between a callable bond and a putable bond?

Answer: A callable bond is a bond that allows the issuer to redeem the bond before its maturity date. This means that the investor's cash flows can be interrupted if the bond is called. A putable bond, on the other hand, is a bond that allows the investor to redeem the bond before

its maturity date. This means that the investor has the right to sell the bond back to the issuer at a predetermined price.

9. What is the difference between a premium bond and a discount bond? Answer

Lec 16 - Introduction to stocks and stock valuation

- 1. What is a stock exchange and how does it work? Answer: A stock exchange is a marketplace where stocks and other securities are bought and sold. Buyers and sellers place orders through brokers who execute the orders on the exchange.
- 2. What is market capitalization and how is it calculated? Answer: Market capitalization is the total value of a company's outstanding shares of stock. It is calculated by multiplying the number of shares outstanding by the current market price of the stock.
- 3. What is the difference between growth stocks and value stocks? Answer: Growth stocks are companies that are expected to grow at a faster rate than the overall market, while value stocks are companies that are considered to be undervalued by the market.
- 4. What is the price-to-earnings (P/E) ratio and how is it used in stock valuation? Answer: The P/E ratio is the current stock price divided by the earnings per share (EPS) of a company. It is used to determine whether a stock is overvalued or undervalued relative to its earnings.
- 5. What is the difference between fundamental analysis and technical analysis in stock valuation? Answer: Fundamental analysis involves analyzing a company's financial statements and economic factors to determine its intrinsic value, while technical analysis uses charts and other tools to identify patterns and trends in a stock's price and trading volume.
- 6. What is a dividend yield and how is it calculated? Answer: Dividend yield is the percentage of a company's current stock price that is paid out annually in dividends. It is calculated by dividing the annual dividend per share by the current stock price.
- 7. What is the difference between common stock and preferred stock? Answer: Common stock represents ownership in a company and gives shareholders voting rights, while preferred stock typically has a fixed dividend rate but no voting rights.
- 8. What is the efficient market hypothesis and how does it relate to stock valuation? Answer: The efficient market hypothesis suggests that all available information is already reflected in a stock's price, making it impossible to consistently outperform the market through analysis or research.
- 9. What is the difference between a primary market and a secondary market? Answer: The primary market is where new securities are issued and sold to investors for the first time, while the secondary market is where previously issued securities are bought and sold among investors.
- 10. What are some risks associated with investing in the stock market? Answer: Some risks associated with investing in the stock market include market volatility, economic and political instability, company-specific risks, and the possibility of fraud or insider trading.

Lec 17 - Common stock pricing and dividend growth model

1. What is the dividend growth model?

Answer: The dividend growth model is a method used to estimate the fair value of a stock based on its expected future dividend payments, which are discounted to their present value using an appropriate discount rate.

2. What is the formula for the dividend growth model?

Answer: The formula for the dividend growth model is V0 = D1 / (ke - g), where V0 is the current value of the stock, D1 is the expected dividend payment one year from now, ke is the company's cost of equity, and g is the expected dividend growth rate.

3. How does the dividend growth model help investors evaluate stocks? Answer: The dividend growth model helps investors evaluate stocks by estimating their fair value based on the expected future cash flows from dividend payments.

4. What are the limitations of the dividend growth model?

Answer: The limitations of the dividend growth model include its reliance on assumptions about the stability of dividend growth rates and the discount rate used, and its inability to account for non-dividend cash flows.

- 5. What is the relationship between a company's dividend yield and its stock price? Answer: The dividend yield and stock price have an inverse relationship, meaning that as the stock price increases, the dividend yield decreases, and vice versa.
- 6. How does a company's cost of equity impact its stock valuation using the dividend growth model?

Answer: The cost of equity is used as the discount rate in the dividend growth model, so an increase in the cost of equity will result in a lower stock valuation, and vice versa.

7. What is the difference between a constant growth and non-constant growth dividend model?

Answer: A constant growth dividend model assumes a steady and predictable dividend growth rate, while a non-constant growth model allows for fluctuating dividend growth rates.

8. How can a company's historical dividend payments be used in the dividend growth model?

Answer: A company's historical dividend payments can provide insights into its past dividend growth rates and help investors make assumptions about its future dividend growth potential.

- 9. How does the dividend growth model relate to the concept of intrinsic value? Answer: The dividend growth model is used to estimate the intrinsic value of a stock based on its expected future cash flows, which is the theoretical value of a stock that represents its true worth.
- 10. What are the advantages of using the dividend growth model in stock valuation? Answer: The advantages of using the dividend growth model include its simplicity, transparency, and ability to focus on a company's fundamental value drivers.

Lec 18 - Common stock - rate of return & EPS pricing model

1. What is the common stock - rate of return and EPS pricing model?

Answer: The common stock - rate of return and EPS pricing model is a method used to estimate the fair value of a stock based on its expected earnings per share (EPS) and the investor's required rate of return.

- 2. What is EPS in the common stock rate of return and EPS pricing model? Answer: EPS stands for earnings per share, which is the company's net income divided by the number of outstanding shares of stock.
- 3. What is the required rate of return in the common stock rate of return and EPS pricing model?

Answer: The required rate of return represents the investor's expected rate of return on the stock, which takes into account the risk associated with the investment.

4. How is the fair value of a stock calculated using the common stock - rate of return and EPS pricing model?

Answer: The fair value of a stock is calculated by dividing the expected EPS by the investor's required rate of return, adjusted for expected growth in EPS.

5. What does the expected growth rate represent in the common stock - rate of return and EPS pricing model?

Answer: The expected growth rate represents the expected rate of increase in the company's earnings per share over time.

6. Does the common stock - rate of return and EPS pricing model assume a constant or variable growth rate in EPS?

Answer: The model assumes a constant growth rate in EPS.

7. How is the EPS used in the common stock - rate of return and EPS pricing model determined?

Answer: The EPS used in the model is the projected EPS for the next five years.

8. What factors influence the required rate of return in the common stock - rate of return and EPS pricing model?

Answer: The required rate of return is influenced by market conditions and the perceived risk associated with the investment.

- 9. What is the main limitation of the common stock rate of return and EPS pricing model? Answer: The main limitation is that it assumes a constant growth rate in EPS, which may not reflect the actual growth rate of the company.
- 10. Can the common stock rate of return and EPS pricing model be used in conjunction with other valuation methods?

Answer: Yes, the model can be used in conjunction with other valuation methods to compare and verify the results.

Lec 19 - Introduction to risk., risk and return for single stock investment

1. What is risk in the context of single stock investment, and why is it important to consider?

Answer: Risk refers to the likelihood that an investment may not achieve its expected return or may even experience a loss. It is important to consider because higher returns are usually associated with higher risks. Therefore, investors must balance their risk tolerance with their investment goals.

- 2. What is the measure of risk associated with a stock, and how is it calculated? Answer: The measure of risk associated with a stock is typically calculated using standard deviation, which reflects the extent of fluctuations in the stock's returns over a given period.
- 3. What factors can contribute to risk in single stock investment, and how can investors manage it?

Answer: Factors that can contribute to risk in single stock investment include market volatility, company-specific risks, and external factors like political instability. Investors can manage risk through diversification, which involves spreading investments across different stocks or asset classes.

4. What is the relationship between risk and return in single stock investment, and why is it important to understand?

Answer: The relationship between risk and return in single stock investment is generally positive, meaning that higher returns are usually associated with higher risks. It is important to understand this relationship because investors must weigh the potential for higher returns against the potential for higher risks.

5. How do investors typically measure the risk of a single stock investment, and what is the significance of this measure?

Answer: Investors typically measure the risk of a single stock investment using standard deviation, which reflects the extent of fluctuations in the stock's returns over a given period. The significance of this measure is that it provides investors with a sense of how much the stock's returns might vary over time.

- 6. What is the meaning of return in single stock investment, and how is it calculated? Answer: Return in single stock investment refers to the profit or loss generated by an investment, which can be positive or negative. Return is typically calculated as the difference between the purchase price and the selling price of the stock, plus any dividends received.
- 7. What are some common sources of company-specific risk in single stock investment, and how can investors manage this risk?

Answer: Common sources of company-specific risk in single stock investment include changes in leadership, unexpected legal or regulatory changes, and shifts in consumer preferences. Investors can manage this risk by researching the company's history, leadership, financial health, and other factors that may impact its success.

8. What is the primary concern of investors when considering single stock investment, and how can this concern be addressed?

Answer: The primary concern of investors when considering single stock investment is to balance the potential for higher returns with the potential for higher risks. This concern can be addressed by diversifying investments across different stocks or asset classes.

9. What is market risk in single stock investment, and how is it different from companyspecific risk?

Answer: Market risk in single stock investment refers to the risk of a stock's price falling due to overall market trends. It is different from company-specific risk, which refers to risks specific to a particular company, such as changes in leadership or unexpected legal or regulatory changes.

10. What is the significance of risk management in single stock investment, and what are some common strategies for managing risk?

Answer: Risk management is significant in single stock investment because it allows investors to balance risk and return and achieve their investment goals. Common strategies for managing risk include diversification, setting stop-loss orders, and utilizing hedging techniques.

Lec 20 - Risk for single a stock investment probability graph and co-efficient of variation

1. What is the probability distribution of a stock investment?

Answer: The probability distribution of a stock investment is a graphical representation that shows the likelihood of different outcomes based on different levels of risk.

2. What is the risk-return tradeoff for a single stock investment?

Answer: The risk-return tradeoff for a single stock investment is the relationship between the level of risk associated with the investment and the potential return that can be earned.

3. What is the coefficient of variation?

Answer: The coefficient of variation is a statistical measure that is used to measure the risk of an investment relative to its expected return.

4. How is the probability distribution of a stock investment related to its risk? Answer: The probability distribution of a stock investment is related to its risk because it shows the range of potential outcomes and the likelihood of each outcome based on the level of risk associated with the investment.

5. How does the coefficient of variation help investors evaluate risk?

Answer: The coefficient of variation helps investors evaluate risk by measuring the risk of an investment relative to its expected return. The higher the coefficient of variation, the higher the risk associated with the investment.

6. What is the expected return of a stock investment?

Answer: The expected return of a stock investment is the amount of return that an investor can expect to earn on the investment based on the level of risk associated with the investment.

7. What is the significance of the probability graph in stock investment?

Answer: The probability graph in stock investment is significant as it helps investors to visualize the range of potential outcomes and the likelihood of each outcome based on the level of risk associated with the investment.

8. How can an investor calculate the coefficient of variation?

Answer: An investor can calculate the coefficient of variation by dividing the standard deviation of the investment by its expected return.

9. How does the coefficient of variation help investors compare the risk of different investments?

Answer: The coefficient of variation helps investors compare the risk of different investments by providing a standardized measure of risk that can be used to compare investments with different expected returns.

10. What is the relationship between risk and return for a single stock investment?

Answer: The relationship between risk and return for a single stock investment is that higher levels of risk are generally associated with higher potential returns, but also with a greater likelihood of losses.

Lec 21 - Two stock portfolio theory, risk and expected return

1. What is a portfolio in the context of stock investments?

Answer: A portfolio is a collection of stocks or other securities held by an investor.

 What is diversification, and why is it important in stock portfolio theory? Answer: Diversification means spreading your investments across different types of stocks or securities to reduce risk. It is important in portfolio theory because it helps to minimize the impact of any single stock's performance on the overall portfolio.

3. What is the difference between systematic and unsystematic risk? Answer: Systematic risk refers to risks that are inherent in the entire market or economy, while unsystematic risk is specific to a particular company or industry.

4. How is expected return calculated in the context of portfolio theory? Answer: Expected return is calculated by taking the weighted average of the expected returns of each stock in the portfolio, where the weights are the proportions of the portfolio invested in each stock.

5. What is the correlation coefficient, and how is it used in portfolio theory? Answer: The correlation coefficient measures the degree to which two stocks move together. In portfolio theory, it is used to determine the degree of diversification achieved by adding a stock to an existing portfolio.

6. What is the efficient frontier in portfolio theory?

Answer: The efficient frontier is the set of portfolios that achieve the highest possible return for a given level of risk, or the lowest possible risk for a given level of return.

7. What is the Capital Asset Pricing Model (CAPM), and how is it used in portfolio theory? Answer: The CAPM is a model that describes the relationship between risk and expected return. It is used in portfolio theory to calculate the expected return of a stock or portfolio given its level of risk.

8. What is the difference between a market portfolio and a risk-free asset? Answer: A market portfolio is a portfolio that contains all stocks in the market, while a risk-free asset is an investment with no risk of loss.

9. What is the Sharpe ratio, and how is it used in portfolio theory? Answer: The Sharpe ratio measures the excess return earned by a portfolio per unit of risk. It is

used in portfolio theory to compare the performance of different portfolios.

10. What is the importance of regularly rebalancing a stock portfolio?

Answer: Regularly rebalancing a stock portfolio helps to maintain the desired level of risk and return, as well as ensure that the portfolio remains diversified. It also helps to avoid the risk of overconcentration in any one stock or sector.

Lec 22 - Portfolio risk analysis and efficient portfolio maps

1. What is the difference between systematic and unsystematic risk?

Ans: Systematic risk is the risk that affects the entire market, while unsystematic risk is the risk that only affects a specific company or industry.

- What is portfolio diversification? Ans: Portfolio diversification is the strategy of investing in a variety of assets with different levels of risk to reduce overall investment risk.
- 3. What is the efficient frontier in portfolio theory?

Ans: The efficient frontier is the set of optimal portfolios that offer the highest expected return for a given level of risk.

4. How is portfolio risk measured?

Ans: Portfolio risk is measured by the standard deviation of returns, which is a statistical measure of the degree to which returns vary from the expected value.

5. What is the Capital Asset Pricing Model (CAPM)?

Ans: The Capital Asset Pricing Model (CAPM) is a financial model that measures the relationship between risk and expected return in a portfolio.

6. What is the Sharpe ratio?

Ans: The Sharpe ratio is a measure of risk-adjusted return that considers the excess return of an investment relative to its risk.

7. What is the difference between a market portfolio and a diversified portfolio? Ans: A market portfolio is a portfolio that contains all assets in the market, while a diversified portfolio contains a variety of assets with different levels of risk.

8. What is the concept of correlation in portfolio analysis?

Ans: Correlation is a statistical measure that indicates the degree to which two assets move in relation to each other. In portfolio analysis, correlation is used to determine the diversification benefits of including multiple assets in a portfolio.

9. What is the difference between a minimum variance portfolio and a maximum return portfolio?

Ans: A minimum variance portfolio is a portfolio that has the lowest possible risk for a given level of return, while a maximum return portfolio is a portfolio that has the highest possible return for a given level of risk.

10. What is portfolio optimization?

Ans: Portfolio optimization is the process of selecting the optimal combination of assets to achieve a specific investment goal, such as maximizing returns or minimizing risk.

Lec 23 - Efficient portfolios, market risk, & CML

1. What is the efficient portfolio?

Answer: An efficient portfolio is a portfolio that provides the highest return possible for a given level of risk.

2. What is market risk?

Answer: Market risk is the risk of an investment caused by factors that affect the entire market, such as economic downturns, political instability, and natural disasters.

3. What is the Capital Market Line (CML)?

Answer: The Capital Market Line (CML) is a line that represents the risk-return tradeoff for efficient portfolios. It is a graphical representation of the Capital Asset Pricing Model (CAPM).

4. What is the difference between systematic and unsystematic risk?

Answer: Systematic risk is the risk that is inherent in the entire market, while unsystematic risk is the risk that is specific to a particular security or industry.

5. What is the beta of a security?

Answer: The beta of a security is a measure of its volatility in relation to the overall market.

6. What is the Security Market Line (SML)?

Answer: The Security Market Line (SML) is a graphical representation of the Capital Asset Pricing Model (CAPM) that shows the expected return for a given level of risk.

7. What is the Sharpe Ratio?

Answer: The Sharpe Ratio is a measure of risk-adjusted performance that takes into account the return of an investment relative to its risk.

8. What is the difference between a passive and an active investment strategy?

Answer: A passive investment strategy involves investing in a portfolio that tracks the performance of a market index, while an active investment strategy involves attempting to outperform the market by picking individual stocks.

9. What is the difference between a forward contract and a futures contract?

Answer: A forward contract is a customized agreement between two parties to buy or sell an asset at a specific price on a specific date, while a futures contract is a standardized agreement to buy or sell an asset at a specific price on a specific date.

10. What is diversification?

Answer: Diversification is a strategy that involves investing in a variety of assets in order to reduce risk. By spreading investments across different asset classes, sectors, and industries, investors can minimize the impact of any single investment on their portfolio.

Lec 24 - . Stock beta, portfolio beta and introduction to security market line (SML)

1. What is the stock beta, and how is it calculated?

Answer: Stock beta measures the sensitivity of a stock's returns to the market returns. It is calculated as the covariance of the stock returns with market returns divided by the variance of the market returns.

2. How is the portfolio beta calculated for a given set of stocks in a portfolio? Answer: The portfolio beta is calculated as the weighted average of the individual stock betas in the portfolio. The weight of each stock is its proportion of the total portfolio value.

3. What is the significance of beta in investing?

Answer: Beta is significant in investing because it measures the risk of a stock or portfolio relative to the overall market. Investors can use beta to adjust their portfolio risk exposure based on their risk tolerance.

4. What is the Security Market Line (SML), and how is it used in portfolio analysis? Answer: The Security Market Line (SML) is a graphical representation of the Capital Asset Pricing Model (CAPM), which shows the expected return on an investment as a function of its beta. It is used in portfolio analysis to determine whether an investment is undervalued or

overvalued based on its expected return and beta.

5. What is the difference between systematic risk and unsystematic risk?

Answer: Systematic risk is the risk associated with the overall market and cannot be diversified away, while unsystematic risk is the risk associated with a specific company or industry and can be diversified away by investing in a diversified portfolio.

6. How does diversification affect portfolio risk?

Answer: Diversification reduces portfolio risk by spreading investments across different asset classes, sectors, and companies. This helps to reduce the impact of individual stock or sector risk on the overall portfolio.

7. What is the difference between beta and standard deviation?

Answer: Beta measures the risk of a stock or portfolio relative to the market, while standard deviation measures the volatility of returns around the mean. Beta measures systematic risk, while standard deviation measures total risk.

8. What is the Capital Asset Pricing Model (CAPM), and how is it used in portfolio analysis? Answer: The Capital Asset Pricing Model (CAPM) is a model that describes the relationship between risk and expected return in a portfolio. It is used in portfolio analysis to determine the expected return of an investment based on its beta and the market risk premium.

9. What is the market risk premium, and how is it calculated?

Answer: The market risk premium is the additional return that investors expect to receive for taking on the risk of investing in the overall market. It is calculated as the difference between the expected return on the market and the risk-free rate of return.

10. What are some limitations of the CAPM and the SML in portfolio analysis?

Answer: Some limitations of the CAPM and the SML in portfolio analysis include the assumption of market efficiency, the use of historical data, and the lack of consideration of non-market risk factors.

Lec 25 - Stock betas & risk, SML and return and stock prices in efficient markets

1. Define stock beta and explain its relevance in risk analysis of individual stocks.

Answer: Beta is a measure of a stock's volatility in relation to the overall market. It is used to analyze the risk of a stock and is a critical component of the Capital Asset Pricing Model (CAPM). A beta of 1.0 indicates that the stock's price will move with the market, while a beta greater than 1.0 means the stock will be more volatile than the market, and a beta less than 1.0 means it will be less volatile.

2. What is the Security Market Line (SML) and how is it used to determine the expected return of a stock?

Answer: The Security Market Line (SML) is a graphical representation of the relationship between risk and expected return of stocks. The SML is used to determine the expected return of a stock by comparing its beta to the market risk premium. The SML is a line that connects the risk-free rate of return to the market rate of return and represents the minimum required return that investors should expect for a given level of risk.

3. How do efficient markets impact the pricing of stocks?

Answer: Efficient markets are characterized by the rapid and accurate dissemination of information, leading to prices that quickly reflect all available information. In such markets, stock prices are determined by the fundamental values of the companies, and stocks are priced such that the expected return on a stock is equal to its risk-adjusted required return.

4. What is portfolio beta, and how is it calculated?

Answer: Portfolio beta is the weighted average of the betas of the individual stocks held in a portfolio. It is calculated by multiplying the beta of each stock by its proportionate weight in the portfolio and adding up the results.

5. How does the SML relate to the Capital Asset Pricing Model (CAPM)?

Answer: The SML is a key component of the Capital Asset Pricing Model (CAPM), which is a widely used model to estimate the expected return of an asset based on its risk. The CAPM uses the SML to determine the required rate of return for a given level of risk and the expected return of a stock.

6. What is the risk-free rate, and how is it used in the SML?

Answer: The risk-free rate is the rate of return an investor can earn with certainty, such as from a government bond. It is used as the starting point for the SML, as it represents the minimum expected return an investor should receive for taking on any amount of risk.

7. What is the market risk premium, and how is it used in the SML?

Answer: The market risk premium is the additional return investors require to invest in a risky asset over and above the risk-free rate. It is used in the SML to determine the required return for a given level of risk.

8. How do changes in market conditions, such as interest rates and inflation, impact the SML?

Answer: Changes in market conditions, such as interest rates and inflation, can impact the SML by shifting the line up or down. An increase in interest rates or inflation will result in an increase in the risk-free rate, which will shift the SML up. Conversely, a decrease in interest rates or inflation will shift the SML down.

9. How is the expected return of a stock determined using the SML?

Answer: The expected return of a stock is determined by finding the point where the stock's beta intersects with the SML. The expected return is equal to the risk-free rate plus the stock's beta multiplied by the market risk premium.

10. How does the SML relate to the concept of efficient portfolios?

Answer: Efficient portfolios are those that offer the highest expected return for a given level of risk

Lec 26 - SML graph & CAPM

1. What is the Security Market Line (SML)? Explain its significance in the Capital Asset Pricing Model (CAPM).

Answer: The SML is a graphical representation of the CAPM equation, which plots the expected return of a security or portfolio against its beta, the measure of systematic risk. The significance of the SML in the CAPM is that it provides a benchmark for evaluating whether a security is undervalued or overvalued based on its expected return and level of systematic risk.

2. What is the difference between systematic risk and unsystematic risk? Give an example of each.

Answer: Systematic risk is the risk that is inherent in the overall market or economy and cannot be diversified away, whereas unsystematic risk is the risk that is specific to a particular company or industry and can be diversified away. An example of systematic risk is a recession or a market crash, while an example of unsystematic risk is a company-specific event, such as a product recall or a lawsuit.

3. Explain the Capital Asset Pricing Model (CAPM) and how it is used to determine the expected return on an investment.

Answer: The CAPM is a model that uses the expected return of the market, the risk-free rate, and the beta of a security or portfolio to determine its expected return. The model assumes that investors are rational and risk-averse and that they require a higher return for taking on higher levels of systematic risk. The CAPM formula is: Expected Return = Risk-Free Rate + (Beta x Market Risk Premium).

4. What is the beta of a stock, and how is it calculated?

Answer: The beta of a stock is a measure of its systematic risk, or how much it moves in relation to the overall market. It is calculated by comparing the returns of the stock to the returns of the overall market and dividing the covariance by the variance of the market returns.

5. What is the market risk premium, and how is it calculated?

Answer: The market risk premium is the excess return that investors require to invest in the stock market over and above the risk-free rate. It is calculated by subtracting the risk-free rate from the expected return of the market.

6. **Explain the concept of diversification and how it relates to risk reduction in a portfolio.** Answer: Diversification is the process of spreading investments across different asset classes, industries, and companies to reduce risk. By investing in a diverse portfolio, an investor can reduce the impact of any individual security or sector on the overall performance of the portfolio.

7. What is the risk-free rate, and why is it important in the CAPM?

Answer: The risk-free rate is the rate of return that an investor can earn on a risk-free investment, such as a U.S. Treasury bond. It is important in the CAPM because it represents the minimum return that an investor requires to take on any risk, and it is used as a baseline for determining the expected return of a security or portfolio.

8. What is the difference between alpha and beta in the CAPM?

Answer: Beta is a measure of systematic risk, or how much a security or portfolio moves in relation to the overall market, while alpha is a measure of the excess return that a security or portfolio generates over and above its expected return based on its level of systematic risk.

9. Explain the concept of efficient markets and how it relates to the CAPM.

Answer: Efficient markets are markets in which all available information is already reflected in the prices of securities, making it impossible to consistently outperform the market through stock selection or market timing. The CAPM assumes that markets are efficient and that all investors have access to the same information.

10. What is the significance of the intercept of the SML in the CAPM? Answer: The

Lec 27 - Risk and portfolio theory & CAPM, criticism of CAPM and application of risk theory.

1. What is the difference between systematic and unsystematic risk?

Answer: Systematic risk, also known as market risk, is the risk that affects the entire market or a broad segment of it, such as changes in interest rates, economic conditions, or geopolitical events. Unsystematic risk, on the other hand, is specific to a particular company or industry, such as a management scandal, product recall, or supply chain disruption.

2. What is the Capital Asset Pricing Model (CAPM) and how does it work?

Answer: The CAPM is a financial model that describes the relationship between risk and expected return. It suggests that the expected return on a security is equal to the risk-free rate plus a premium for bearing market risk, which is determined by the security's beta. Beta is a measure of a security's systematic risk relative to the overall market. According to the CAPM, a security's expected return should be proportional to its beta, with higher beta securities having higher expected returns.

3. What are the assumptions of the CAPM?

Answer: The CAPM makes several key assumptions, including that investors are rational and risk-averse, that markets are efficient and all investors have the same information, that there are no transaction costs, taxes or other frictions, and that investors have homogeneous expectations about the future.

4. What is portfolio theory and how does it relate to risk management?

Answer: Portfolio theory is the study of how investors can construct portfolios of assets to optimize their expected return for a given level of risk. The theory emphasizes the importance of diversification, which can reduce unsystematic risk and increase returns through a combination of assets with different correlations. By constructing a portfolio of assets with different levels of risk and return, investors can manage their exposure to risk while potentially earning higher returns.

5. What is the Sharpe Ratio and how is it used in risk management?

Answer: The Sharpe Ratio is a measure of risk-adjusted return that takes into account both the return and the risk of an investment. It is calculated by subtracting the risk-free rate from the portfolio or investment's return, and dividing by the portfolio or investment's standard deviation. The higher the Sharpe Ratio, the better the risk-adjusted return of the investment. The Sharpe Ratio can be used to compare the risk-adjusted returns of different investments or portfolios.

6. What is beta and how is it used in the CAPM?

Answer: Beta is a measure of a security's systematic risk, or the risk that cannot be diversified away. It measures how much a security's returns move relative to the market as a whole. Beta is used in the CAPM to determine the expected return of a security, with higher beta securities expected to have **higher returns**.

7. What is diversification and how does it reduce risk?

Answer: Diversification is the process of investing in a variety of assets that have different risk and return characteristics. By holding a diversified portfolio, an investor can reduce unsystematic risk, or the risk specific to a particular company or industry, because losses in one area can be offset by gains in another. Diversification can increase the overall return of a portfolio for a given level of risk.

8. What are the limitations of the CAPM?

Answer: The CAPM has several limitations, including that it assumes perfect information and efficient markets, which may not always be the case. It also assumes that investors are rational and risk-averse, which may not always be true. In addition, the CAPM does not take into account other factors that may affect a security's returns, such as liquidity, size, or momentum.

9. What is the relationship between risk and return?

Answer: In general, the higher the risk of an investment, the higher the potential return.

Lec 28 - Introduction to debt, efficient market & cost of capital

1. What is debt financing?

Answer: Debt financing involves borrowing money from lenders in exchange for a promise to repay the borrowed amount with interest over a specific period.

2. What is an efficient market?

Answer: An efficient market is a financial market where all relevant information is publicly available and incorporated into the stock prices, making it difficult for investors to earn excess profits.

3. What is the cost of debt?

Answer: The cost of debt is the interest rate that a company must pay on the money it borrows through debt financing.

4. What is the cost of equity?

Answer: The cost of equity is the rate of return that a company must pay to its equity investors to compensate them for the risk they take by investing in the company.

5. What is the cost of capital?

Answer: The cost of capital is the weighted average cost of a company's debt and equity financing.

6. What is the relationship between debt and risk?

Answer: Debt increases a company's financial risk because the company has an obligation to pay back the borrowed amount with interest. If the company is unable to meet its debt obligations, it may face bankruptcy.

7. What are the advantages of debt financing?

Answer: The advantages of debt financing include lower cost of capital, tax-deductible interest payments, and greater control for the company's owners.

8. What are the disadvantages of debt financing?

Answer: The disadvantages of debt financing include increased financial risk, potential for bankruptcy, and reduced flexibility in the company's financial decisions.

9. How does the efficient market hypothesis impact investors?

Answer: The efficient market hypothesis suggests that it is difficult for investors to earn excess profits by trading in financial markets. Therefore, investors must rely on fundamental analysis to make informed investment decisions.

10. How does the cost of capital impact a company's investment decisions?

Answer: A company's cost of capital is the minimum return it must earn on its investments to satisfy investors' expectations and maintain its market value. If the company's cost of capital is high, it may be more selective in its investment decisions to ensure that its projects can generate sufficient returns to meet its cost of capital.

Lec 29 - WACC (Weighted Average Cost of Capital)

1. What is the formula for calculating WACC?

Answer: WACC = $(E/V \times Re) + (D/V \times Rd \times (1 - Tc))$, where E is equity, V is the total value of the company, Re is the cost of equity, D is debt, Rd is the cost of debt, and Tc is the corporate tax rate.

2. What is the significance of WACC in capital budgeting decisions?

Answer: WACC is used as a discount rate to evaluate investment projects. It represents the minimum rate of return that a company must earn on its investments to maintain its market value.

3. What factors affect the cost of debt?

Answer: The factors that affect the cost of debt include the creditworthiness of the borrower, the prevailing interest rates, the maturity period of the debt, and the collateral or security offered by the borrower.

4. What factors affect the cost of equity?

Answer: The factors that affect the cost of equity include the risk-free rate of return, the equity risk premium, the company's beta, and the market risk premium.

5. What is the impact of a high WACC on a company's valuation?

Answer: A high WACC indicates that the company has a high cost of capital, which can negatively impact the company's valuation, as it reduces the net present value of future cash flows.

- 6. What is the relationship between WACC and the capital structure of a company? Answer: WACC is affected by the capital structure of a company, as it is calculated based on the weights assigned to debt and equity in the company's capital structure.
- 7. What is the impact of a change in the corporate tax rate on WACC? Answer: A change in the corporate tax rate can impact WACC, as it affects the after-tax cost of debt, which is a component of WACC.

8. What is the impact of a high debt-to-equity ratio on WACC? Answer: A high debt-to-equity ratio increases the weight of debt in the capital structure, which increases the cost of capital and thus increases WACC.

9. What is the impact of a high cost of equity on WACC? Answer: A high cost of equity increases the overall cost of capital, which increases WACC.

10. What is the impact of a change in interest rates on WACC? Answer: A change in interest rates can impact the cost of debt, which is a component of WACC, and thus can impact WACC.

Lec 30 - . Business risk faced by firm, operating Leverage (OL), break-even point & ROE

- 1. What is business risk, and how does it impact a company's financial performance? Answer: Business risk refers to the uncertainties associated with a company's operations that may affect its ability to generate profits. It impacts a company's financial performance by affecting its revenue and costs.
- 2. What is operating leverage, and how does it impact a company's risk profile? Answer: Operating leverage is the degree to which fixed costs are present in a company's cost structure. It impacts a company's risk profile by making it more sensitive to changes in sales volume, which can either increase or decrease the company's profitability.
- 3. How is break-even point calculated, and why is it important for a company to know its break-even point?

Answer: Break-even point is calculated by dividing fixed costs by the contribution margin per unit. It is important for a company to know its break-even point because it helps to determine the minimum amount of sales required to cover its costs and generate a profit.

4. What is ROE, and how is it calculated?

Answer: ROE is a financial ratio that measures a company's profitability by calculating the amount of net income returned as a percentage of shareholders' equity. It is calculated by dividing net income by total equity.

- 5. How does a company's capital structure impact its risk profile and cost of capital? Answer: A company's capital structure impacts its risk profile and cost of capital by affecting its debt-to-equity ratio, which can increase or decrease its financial risk and cost of capital.
- 6. What are some factors that affect a company's operating leverage, and how do they impact the company's financial performance?

Answer: Some factors that affect a company's operating leverage include the mix of fixed and variable costs, pricing strategy, and sales volume. They impact the company's financial performance by affecting its revenue and costs.

- 7. How does a company's break-even point change when its variable costs increase? Answer: When a company's variable costs increase, its break-even point increases because it needs to sell more units to cover its costs and generate a profit.
- 8. What is the relationship between a company's break-even point and its operating leverage?

Answer: The higher a company's operating leverage, the lower its break-even point because it has a higher contribution margin per unit, which means it needs to sell fewer units to cover its fixed costs.

9. What is the impact of a company's business risk on its cost of capital? Answer: The higher a company's business risk, the higher its cost of capital because investors require a higher return to compensate for the increased risk.

10. How can a company increase its ROE?

Answer: A company can increase its ROE by increasing its net income or decreasing its total equity. This can be achieved through various strategies, such as increasing sales revenue, reducing expenses, or increasing profit margins.

Lec 31 - Operating leverage and financial leverage , ROE, break even point and business risk

• What is operating leverage and how does it affect a company's profitability? Answer: Operating leverage is a measure of how much a company's fixed costs contribute to its overall cost structure. A company with high operating leverage has a higher proportion of fixed costs, which means that a small change in sales can lead to a larger change in profits. This can work both ways, resulting in higher profits during good times and larger losses during bad times.

• What is financial leverage and how does it affect a company's risk? Answer: Financial leverage refers to the use of borrowed funds to finance a company's operations. This can increase a company's return on equity (ROE) by magnifying the effect of its earnings on shareholders' equity. However, it also increases the company's financial risk, as it must make regular interest payments and repay principal on its debts.

• How do you calculate the break-even point for a company? Answer: The break-even point is the level of sales at which a company's revenues equal its total costs. It can be calculated by dividing the company's fixed costs by its contribution margin, which is the difference between its sales revenue and variable costs.

- How does a company's business risk affect its cost of capital? Answer: A company with higher business risk will typically have a higher cost of capital, as investors will demand a higher return to compensate for the increased risk. This is because the company's future earnings are less certain, which makes it riskier to invest in.
- How does a company's use of leverage affect its return on equity (ROE)? Answer: A company's use of leverage can magnify its ROE by increasing the amount of profit that is attributable to shareholders' equity. However, it also increases the risk of the company's earnings, which can result in larger losses for shareholders.
- What is the difference between operating leverage and financial leverage? Answer: Operating leverage refers to the use of fixed costs in a company's cost structure, while financial leverage refers to the use of borrowed funds to finance a company's operations. Both types of leverage can affect a company's profitability and risk.
- How can a company reduce its business risk? Answer: A company can reduce its business risk by diversifying its operations, reducing its debt levels, or implementing risk management strategies such as hedging.
- How does a company's break-even point affect its profitability? Answer: A company's break-even point represents the level of sales at which it is neither making a profit nor a loss. Any sales above the break-even point will result in a profit for the company, while any sales below it will result in a loss. Therefore, the lower the break-even point, the more profitable the company will be.
- How does a company's cost of capital affect its investment decisions? Answer: A company's cost of capital represents the minimum return that it must earn on its investments to satisfy its investors. If a potential investment has a return that is lower than the company's cost of capital, it will not be undertaken, as it will result in a loss for the company.

• How can a company use leverage to increase its return on equity (ROE)?

Answer: A company can use leverage to increase its ROE by borrowing funds to finance its operations. This magnifies the effect of its earnings on shareholders' equity, resulting in a higher ROE. However, it also increases the risk of the company's earnings, which can result in larger losses for shareholders.

Lec 32 - Financial leverage and capital structure

 What is financial leverage and how does it impact a company's return on equity (ROE)? Answer: Financial leverage refers to the use of debt financing to fund a company's operations. When a company uses debt, it can amplify its returns on equity, but it also increases the risk of losses. The impact of financial leverage on ROE depends on the company's ability to generate returns that exceed the cost of debt.

2. How does a company's capital structure impact its cost of capital?

Answer: A company's capital structure, or the mix of debt and equity financing it uses, can impact its cost of capital. Generally, using more debt financing can lower a company's cost of capital, but also increase its risk. Using more equity financing can increase a company's cost of capital, but also decrease its risk.

3. What is the break-even point and how does it relate to a company's capital structure? Answer: The break-even point is the point at which a company generates enough revenue to cover its fixed and variable costs. A company's capital structure can impact its break-even point by affecting the amount of fixed costs it has. Using more debt financing can increase a company's fixed costs, while using more equity financing can decrease them.

4. What are the benefits of using debt financing?

Answer: Some benefits of using debt financing include lower cost of capital, tax advantages, and the ability to leverage returns on equity.

5. What are the risks of using debt financing?

Answer: Some risks of using debt financing include the potential for bankruptcy, the need to make interest payments, and the risk of default if the company is unable to make payments.

6. How does a company's financial leverage impact its risk profile?

Answer: Financial leverage can increase a company's risk profile by increasing the risk of bankruptcy or default. However, it can also increase the potential for returns on equity.

7. How can a company determine its optimal capital structure?

Answer: A company can determine its optimal capital structure by balancing the benefits and risks of debt and equity financing. This may involve considering factors such as its cost of capital, risk profile, and ability to make interest payments.

8. How does a company's capital structure impact its ability to raise funds?

Answer: A company's capital structure can impact its ability to raise funds by affecting its perceived riskiness to lenders and investors. Generally, a company with more debt financing may be seen as riskier and may have a harder time raising funds than a company with more equity financing.

9. How can a company adjust its capital structure over time?

Answer: A company can adjust its capital structure over time by raising or lowering the amount of debt or equity financing it uses. This may involve refinancing debt, issuing new equity, or repurchasing existing equity.

10. How does a company's cost of debt and cost of equity financing impact its overall cost of capital?

Answer: A company's cost of debt and cost of equity financing are both components of its overall cost of capital. The relative weight of each component in the company's capital structure

can impact its overall cost of capital. Generally, the higher the proportion of debt financing, the lower the overall cost of capital, but also the higher the risk.

Lec 33 - Modifications in Millar Modigliani capital structure theory

1. What is the traditional view of capital structure, and how does it differ from the modern view?

Answer: The traditional view of capital structure assumes that there is an optimal capital structure that maximizes the firm's value by minimizing the cost of capital. The modern view recognizes that there is no single optimal capital structure, but rather a range of acceptable structures, and that a firm's capital structure decisions are influenced by a variety of factors, i **ncluding market conditions, tax considerations, and the firm's risk profile.**

2. What is the pecking order theory of capital structure, and how does it relate to asymmetric information?

Answer: The pecking order theory of capital structure suggests that firms prefer to finance their investments using internal funds first, then debt, and finally equity. This preference arises because of the asymmetric information between managers and outside investors, which makes external financing more expensive. By relying on internal funds and debt, firms can avoid the adverse selection problem associated with issuing equity.

3. What is the trade-off theory of capital structure, and how does it balance the benefits and costs of debt financing?

Answer: The trade-off theory of capital structure suggests that firms balance the benefits and costs of debt financing to determine their optimal capital structure. The benefits of debt financing include the tax shield from interest payments and the ability to increase the return on equity for the firm's shareholders. The costs of debt financing include bankruptcy costs and agency costs from conflicts between managers and shareholders.

4. What is the agency cost of debt, and how can it be mitigated?

Answer: The agency cost of debt arises from the conflict of interest between debtholders and shareholders, where shareholders may pursue actions that increase the value of their equity but harm the interests of debtholders. The agency cost of debt can be mitigated by using covenants in debt contracts, requiring collateral or guarantees, and monitoring by creditors.

5. How does the presence of financial distress costs affect a firm's capital structure decisions?

Answer: The presence of financial distress costs, such as bankruptcy costs and the loss of reputation, can influence a firm's capital structure decisions by making it more reluctant to take on additional debt. This may lead the firm to choose a lower debt-to-equity ratio than it would otherwise prefer.

6. How does the market timing theory of capital structure differ from the pecking order and trade-off theories?

Answer: The market timing theory of capital structure suggests that firms are opportunistic in their financing decisions and that they time their debt issuances to take advantage of favorable market conditions. This theory differs from the pecking order and trade-off theories in that it assumes that firms have more control over their capital structure decisions and are more strategic in their approach.

7. How do taxes influence a firm's capital structure decisions, and what is the effect of the tax shield?

Answer: Taxes can influence a firm's capital structure decisions by providing a tax shield on interest payments that reduces the cost of debt financing relative to equity financing. The tax shield increases the after-tax cash flows available to equity holders and can lead to an increase

in the value of the firm.

8. What is the effect of asymmetric information on a firm's capital structure decisions, and how can the problem be mitigated?

Answer: Asymmetric information between managers and outside investors can make external financing more expensive and influence a firm's capital structure decisions. The problem can be mitigated by using signaling mechanisms, such as dividend policy, and by providing transparency through disclosure and financial reporting.

9. What is the role of financial flexibility in a firm's capital structure decisions? Answer: Financial flexibility allows a firm to respond to unexpected changes in market conditions or investment opportunities. This flexibility can be enhanced by maintaining a lower debt-to-equity ratio or by using convertible debt, which can be converted

Lec 34 - Application of Millar Modigliani and other capital structure theories

1. What is the Millar Modigliani theory, and how can it be applied to a company's capital structure decision?

Answer: The Millar Modigliani theory states that the value of a firm is independent of its capital structure. Companies can use this theory to determine the optimal mix of debt and equity financing to minimize their cost of capital and maximize their value.

2. How do taxes affect a company's capital structure decision, and what is the trade-off theory of capital structure?

Answer: Taxes can make debt financing more attractive because interest payments are taxdeductible. The trade-off theory of capital structure suggests that there is an optimal level of debt financing that balances the benefits of tax shields with the costs of financial distress.

3. What is the pecking order theory of capital structure, and how can it be used to explain a company's financing decisions?

Answer: The pecking order theory suggests that companies prefer to finance investments with internal funds first, then with debt, and finally with equity. This theory can be used to explain why companies may be hesitant to issue new equity, which can be perceived as a signal of poor investment opportunities.

- 4. How does the agency cost theory of capital structure explain the potential conflicts of interest between a company's shareholders and debt holders? Answer: The agency cost theory suggests that conflicts can arise when managers prioritize their own interests over those of shareholders or debt holders. Debt holders may be concerned that managers will take excessive risks that could harm the company's ability to repay debt.
- 5. What is the signaling theory of capital structure, and how can it be used to explain a company's decision to issue new equity?

Answer: The signaling theory suggests that companies may issue new equity to signal their confidence in their future prospects. By raising new equity, companies are effectively putting their money where their mouth is and signaling to investors that they believe they have good investment opportunities.

6. How does the market timing theory of capital structure explain a company's decision to issue new debt or equity?

Answer: The market timing theory suggests that companies may issue new debt or equity when market conditions are favorable, such as when interest rates are low or when there is high demand for new issuances.

7. How does the cost of capital affect a company's capital structure decision, and how can it be minimized?

Answer: The cost of capital is the minimum return that investors require to invest in a company. Companies can minimize their cost of capital by finding the optimal mix of debt and equity financing that maximizes their value and minimizes their risk.

8. What is the trade-off between debt and equity financing, and how can it be managed by companies?

Answer: The trade-off between debt and equity financing involves balancing the benefits of debt financing, such as tax shields, against the costs of financial distress, which can result from high levels of debt. Companies can manage this trade-off by finding the optimal level of debt financing that minimizes their cost of capital and maximizes their value.

- 9. How can a company's growth prospects affect its capital structure decision? Answer: Companies with high growth prospects may prefer to use more equity financing to avoid the risk of financial distress associated with high levels of debt. On the other hand, companies with stable cash flows may be more comfortable using debt financing to take advantage of the tax benefits.
- 10. What is the relationship between a company's capital structure and its risk profile? Answer: A company's capital structure can affect its risk profile by influencing the amount of financial leverage it uses. Companies with high levels of debt may be more susceptible to financial distress and bankruptcy, while companies with lower levels of debt may be more stable but have a higher cost of capital.

Lec 35 - Net income & tax shield approaches to WACC

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: Cost of equity = Risk-free rate + Beta x (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 - 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% x (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

Lec 36 - Management of capital structure

• What is capital structure, and why is it important for companies?

Answer: Capital structure refers to the way a company finances its operations through a combination of debt and equity. It is important because it impacts a company's cost of capital, financial risk, and overall financial stability.

• What are the different types of debt financing that companies can use to fund their operations?

Answer: Companies can use a variety of debt financing options, including bank loans, bonds, and other types of debt securities.

• How do companies determine their optimal capital structure?

Answer: Companies typically analyze a variety of factors, including their cost of capital, risk profile, and market conditions, to determine their optimal capital structure.

- What is the role of financial leverage in capital structure management? Answer: Financial leverage refers to the use of borrowed funds to finance investments. It plays a key role in capital structure management because it can impact a company's cost of capital and overall financial stability.
- What are the advantages of using debt financing for a company? Answer: Debt financing can offer lower interest rates than equity financing, and interest payments are tax-deductible, resulting in a lower cost of capital for the company.
- What are the disadvantages of using debt financing for a company? Answer: Debt financing can increase a company's financial risk, as it requires regular interest payments and eventual repayment of principal.
- What are the advantages of using equity financing for a company? Answer: Equity financing doesn't require repayment and doesn't increase a company's financial risk. It can also improve a company's credit rating and provide flexibility in funding future growth.
- What are the disadvantages of using equity financing for a company? Answer: Equity financing can dilute existing shareholder ownership and can result in higher costs of capital than debt financing.
- How does a company's credit rating impact its cost of debt financing? Answer: A company's credit rating can impact its cost of debt financing because lenders use the rating to assess the company's creditworthiness and default risk.
- How can companies optimize their capital structure to maximize shareholder value? Answer: Companies can optimize their capital structure by analyzing their cost of capital, risk profile, and market conditions and balancing the costs and benefits of different sources of funding to maximize shareholder value.

Lec 37 - Dividend payout

1. What is a dividend payout?

Answer: A dividend payout is the amount of money that a company pays to its shareholders as a distribution of profits.

 Why do companies pay dividends? Answer: Companies pay dividends to distribute profits to shareholders, signal financial health and stability, and attract investors.

3. What are the different types of dividend payouts?

Answer: The different types of dividend payouts include regular dividends, special dividends, and dividend reinvestment plans.

- 4. What factors can impact a company's dividend payout decision? Answer: A company's financial performance, economic conditions, regulatory environment, and investor preferences can impact its dividend payout decision.
- 5. **How do shareholders benefit from dividend payouts?** Answer: Shareholders benefit from dividend payouts by receiving a source of income and potentially realizing capital gains from a higher stock price.

6. What is a dividend yield?

Answer: A dividend yield is the percentage of dividend payout relative to the stock price.

- What is a dividend reinvestment plan (DRIP)? Answer: A dividend reinvestment plan (DRIP) is a plan where shareholders can reinvest their dividends to purchase additional shares of stock.
- 8. What is the difference between regular and special dividends? Answer: Regular dividends are paid out at a fixed interval, while special dividends are paid out irregularly and usually indicate a company's exceptional financial performance.
- Can companies choose to not pay dividends? Answer: Yes, companies can choose to not pay dividends if they prioritize reinvesting profits in the business or paying down debt.
- 10. What are the potential disadvantages of high dividend payout for a company? Answer: High dividend payout can reduce a company's access to capital and limit its flexibility for future growth and investment opportunities.

Lec 38 - Application of residual dividend model

- What is the residual dividend model, and how is it different from other dividend models? Answer: The residual dividend model is a dividend payment approach that involves distributing only the remaining profits as dividends after the company has met its investment needs. It differs from other models, such as the stable dividend model, which pays a fixed dividend amount regardless of earnings.
- 2. What are the advantages of using the residual dividend model for dividend payments? Answer: The residual dividend model ensures that the company retains sufficient funds for future growth while rewarding shareholders with surplus profits. It also provides a flexible framework for dividend distribution that can accommodate changing circumstances.
- 3. **How does the residual dividend model prioritize future growth?** Answer: The residual dividend model prioritizes future growth by ensuring that the company retains sufficient funds for investment in projects with positive net present value before paying dividends to shareholders.
- 4. What type of companies are best suited for the residual dividend model? Answer: Companies with fluctuating earnings or those in high-growth industries are best suited for the residual dividend model.
- 5. What are the key steps involved in implementing the residual dividend model? Answer: The key steps involved in implementing the residual dividend model include identifying the company's investment needs, determining the surplus profits after investment needs are met, and distributing the remaining profits as dividends to shareholders.
- 6. What are some of the disadvantages of using the residual dividend model for dividend payments?

Answer: One of the disadvantages of the residual dividend model is that it may result in inconsistent dividend payments. It may also be difficult to predict the surplus profits accurately, which can lead to uncertainty for shareholders.

- 7. What is the role of net present value (NPV) in the residual dividend model? Answer: The residual dividend model is based on the principle of investing in projects with positive net present value. NPV is used to evaluate the profitability of investment projects and determine whether they meet the company's investment needs.
- 8. What are the potential risks of using the residual dividend model for dividend payments? Answer: One of the potential risks of using the residual dividend model is that it may lead to underinvestment in the company's future growth if surplus profits are consistently low. It may also result in a decrease in the company's stock price if shareholders perceive inconsistent dividend payments as a negative signal.
- 9. How can a company balance dividend payments and future growth under the residual dividend model?

Answer: A company can balance dividend payments and future growth under the residual dividend model by adjusting the investment criteria for new projects, which can increase or decrease the amount of surplus profits available for dividend distribution.

10. How does the residual dividend model align with shareholder interests? Answer: The residual dividend model aligns with shareholder interests by prioritizing the retention of funds for future growth, which can lead to increased shareholder value in the long run. It also rewards shareholders with surplus profits through dividend payments.

Lec 39 - Working capital management

1. What is working capital management?

Working capital management is the process of managing a company's short-term assets and liabilities to ensure that it has sufficient cash flow to meet its operational needs.

2. What are the components of working capital?

The components of working capital are current assets, which include cash, accounts receivable, inventory, and other short-term assets, and current liabilities, which include accounts payable, accrued expenses, and other short-term liabilities.

3. Why is working capital management important?

Working capital management is important because it helps ensure that a company can meet its short-term financial obligations and operate efficiently.

4. What are some strategies for managing working capital?

Strategies for managing working capital include improving cash flow, reducing inventory levels, accelerating accounts receivable collections, and negotiating more favorable payment terms with suppliers.

5. How does working capital management affect a company's profitability?

Effective working capital management can improve a company's profitability by reducing the cost of financing short-term assets and liabilities and increasing operational efficiency.

6. What are the risks of poor working capital management?

Poor working capital management can lead to cash flow problems, missed payment deadlines, and increased financing costs. It can also affect a company's credit rating and ability to obtain financing.

7. What are some tools used in working capital management?

Tools used in working capital management include cash flow forecasting, inventory management software, accounts receivable and payable software, and financial ratio analysis.

8. How can a company optimize its working capital management?

A company can optimize its working capital management by setting clear goals, improving its cash conversion cycle, implementing effective inventory management, and using technology to streamline its financial processes.

9. How does the size of a company affect its working capital management needs?

The size of a company can affect its working capital management needs because larger companies generally have more complex operations and larger cash flows, which require more sophisticated working capital management strategies.

10. What role does a company's industry play in its working capital management?

The industry a company operates in can affect its working capital management needs and strategies because different industries have different cash flow patterns and financial risks. For example, a manufacturing company may have higher inventory levels than a service-based company, which can affect its working capital needs.

Lec 40 - . Cash management & working capital financing

- 1. What is the difference between cash management and working capital financing? Answer: Cash management involves managing a company's cash inflows and outflows to optimize cash flow, while working capital financing involves obtaining financing to support shortterm operational needs.
- 2. What are the primary sources of short-term financing for working capital? Answer: The primary sources of short-term financing for working capital are trade credit, bank loans, lines of credit, and factoring.
- 3. Why is cash flow forecasting important in cash management? Answer: Cash flow forecasting helps businesses anticipate future cash inflows and outflows, allowing them to make informed decisions about cash management and working capital financing.
- 4. What is the purpose of a cash budget?

Answer: A cash budget is a tool used in cash management to project cash inflows and outflows for a specified period, allowing businesses to plan their cash needs and avoid cash shortages.

5. What is the cash conversion cycle, and why is it important in working capital management?

Answer: The cash conversion cycle is the time it takes for a company to convert its inventory and accounts receivable into cash. It is an important metric in working capital management as it helps businesses determine how long it takes to generate cash from their assets.

6. How does a line of credit work in working capital financing?

Answer: A line of credit is a pre-approved loan amount that a business can draw from as needed to support short-term cash flow needs. Interest is only charged on the amount of credit used, making it a flexible and cost-effective option for working capital financing.

- 7. What are some common techniques used in cash management to optimize cash flow? Answer: Some common techniques used in cash management include accelerating collections of accounts receivable, negotiating favorable payment terms with suppliers, and reducing inventory levels.
- 8. What is the role of factoring in working capital financing?

Answer: Factoring is a financing technique where a business sells its accounts receivable to a factoring company at a discount in exchange for immediate cash. It can be a useful option for businesses with slow-paying customers or limited access to traditional financing.

- 9. What is the difference between operating expenses and capital expenses? Answer: Operating expenses are expenses related to a company's day-to-day operations, while capital expenses are expenses related to long-term investments in assets such as property, plant, and equipment.
- 10. How can businesses use financial ratio analysis to improve cash management and working capital financing?

Answer: Financial ratio analysis can help businesses identify areas where they can improve cash management and working capital financing, such as by improving inventory turnover or reducing accounts payable days.

Lec 41 - Short term financing, long term financing and lease financing

1. What is short term financing and what are some common examples of short term financing?

Answer: Short term financing refers to borrowing money for a period of up to one year. Common examples of short term financing include bank loans, lines of credit, and trade credit.

2. What is long term financing and what are some common examples of long term financing?

Answer: Long term financing refers to borrowing money for a period of more than one year. Common examples of long term financing include mortgages, bonds, and term loans.

- 3. What is lease financing and what are some common types of leased assets? Answer: Lease financing involves the use of a leased asset in exchange for regular payments, without actually owning the asset. Common types of leased assets include equipment, vehicles, and real estate.
- 4. What are the advantages of short term financing? Answer: The advantages of short term financing include flexibility, ease of obtaining, and the ability to meet short term cash flow needs.

5. What are the disadvantages of short term financing?

Answer: The disadvantages of short term financing include higher interest rates, the need for frequent renewals, and the potential for cash flow problems if the financing is not used appropriately.

6. What are the advantages of long term financing?

Answer: The advantages of long term financing include lower interest rates, the ability to make large investments, and the ability to plan for the long term.

7. What are the disadvantages of long term financing?

Answer: The disadvantages of long term financing include the potential for higher overall costs due to interest, the need for collateral, and the potential for restrictions on how the funds can be used.

8. What are the advantages of lease financing?

Answer: The advantages of lease financing include the ability to use an asset without actually owning it, the ability to upgrade equipment regularly, and the potential for tax benefits.

9. What are the disadvantages of lease financing?

Answer: The disadvantages of lease financing include the potential for higher costs over time, restrictions on the use of the asset, and the potential for long term commitments.

10. How can a business determine which type of financing to use?

Answer: A business can determine which type of financing to use by considering factors such as the purpose of the financing, the length of time the funds will be needed, and the business's overall financial situation.

Lec 42 - Lease financing and types of lease financing

1. What is lease financing, and how does it differ from traditional financing methods? Answer: Lease financing is a method of obtaining the use of an asset without owning it, in exchange for regular payments. Unlike traditional financing methods, such as bank loans or lines of credit, lease financing does not involve borrowing money or taking on debt.

2. What are the advantages of lease financing for businesses?

Answer: Lease financing can offer a number of advantages for businesses, including the ability to acquire assets without committing to long-term ownership, flexibility in equipment upgrades, and potential tax benefits.

3. What is an operating lease, and how does it work?

Answer: An operating lease is a type of lease in which the lessee uses an asset for a short period of time without assuming any of the risks of ownership. The lessor retains ownership of the asset and is responsible for maintenance and repairs.

4. What is a finance lease, and how does it differ from an operating lease?

Answer: A finance lease is a type of lease in which the lessee assumes most of the risks and benefits of ownership. The lessee typically has the option to purchase the asset at the end of the lease term. In contrast, an operating lease is a shorter-term arrangement in which the lessor retains ownership and responsibility for maintenance and repairs.

5. What is a sale and leaseback arrangement, and how does it work?

Answer: A sale and leaseback arrangement involves the sale of an asset to a lessor, who then leases the asset back to the original owner. This can be a way for businesses to obtain cash while still retaining the use of the asset.

6. What factors should businesses consider when choosing between different types of lease financing?

Answer: Businesses should consider factors such as the purpose of the financing, the length of time the funds will be needed, and the overall financial situation of the business when choosing between different types of lease financing.

7. How can lease financing help businesses to conserve cash and improve their cash flow? Answer: Lease financing can allow businesses to acquire assets without tying up cash in longterm ownership. This can improve cash flow and help businesses to preserve capital for other uses.

8. What risks are associated with lease financing, and how can businesses mitigate these risks?

Answer: Risks associated with lease financing include potential long-term commitments, restrictions on the use of the asset, and potential for unexpected maintenance or repair costs. Businesses can mitigate these risks by carefully reviewing the terms and conditions of the lease agreement and considering alternative financing options.

9. How can lease financing be used to support business growth and expansion?

Answer: Lease financing can be used to acquire new equipment, vehicles, or real estate, allowing businesses to expand their operations without committing to long-term ownership. This can support business growth and help businesses to remain competitive.

10. How does lease financing fit into a broader financial strategy for businesses?

Answer: Lease financing can be an important part of a broader financial strategy for businesses, allowing them to balance their need for capital with their desire to conserve cash and manage risk. Businesses should carefully consider their options and seek advice from financial professionals when developing a comprehensive financial strategy.

Lec 43 - Mergers & acquisitions

1. What are the main benefits of M&A?

Answer: The main benefits of M&A include increased market share, economies of scale, access to new markets and technologies, and cost savings.

2. What are the main risks of M&A?

Answer: The main risks of M&A include cultural clashes, integration issues, financial risks, and regulatory issues.

3. What is the difference between a merger and an acquisition?

Answer: A merger is the combination of two or more companies to form a new entity, while an acquisition is the purchase of one company by another.

4. What is the role of due diligence in M&A?

Answer: Due diligence is the process of evaluating the financial and legal aspects of a company before acquisition. It is essential to identify any potential issues that could affect the value or success of the acquisition.

5. What is the difference between a horizontal and a vertical merger?

Answer: A horizontal merger involves two companies in the same industry, while a vertical merger involves two companies in different stages of the supply chain.

6. What is a friendly takeover?

Answer: A friendly takeover is a takeover in which the acquiring company and the target company mutually agree to the acquisition terms.

7. What is a poison pill defense?

Answer: A poison pill defense is a strategy used by a target company to discourage a hostile takeover by making the acquisition less attractive to the acquirer.

8. What is a reverse merger?

Answer: A reverse merger is a process in which a private company acquires a public company, allowing the private company to become publicly traded without going through the traditional IPO process.

9. What is a roll-up acquisition?

Answer: A roll-up acquisition is a strategy in which a company acquires several smaller companies in the same industry, consolidating them to achieve economies of scale and increase market share.

10. What is a cross-border merger?

Answer: A cross-border merger is a merger between companies from different countries. It can be challenging due to differences in culture, regulations, and legal systems.

Lec 44 - International finance (Multinational Finance)

1. What is the difference between a fixed and a floating exchange rate?

Answer: A fixed exchange rate is when a country's currency is tied to the value of another currency, a basket of currencies, or to gold. A floating exchange rate, on the other hand, is when a currency's value is determined by the market forces of supply and demand.

2. What is the importance of foreign direct investment (FDI) in international finance?

Answer: Foreign direct investment (FDI) plays a significant role in international finance as it allows multinational corporations to invest directly in a foreign country, enabling them to gain access to new markets, resources, and technology. FDI also stimulates economic growth and creates employment opportunities in the host country.

3. How does economic exposure differ from transaction exposure?

Answer: Economic exposure is the risk that a company's cash flows and profitability will be affected by changes in exchange rates, while transaction exposure is the risk that arises from the actual transactions that the company engages in with foreign entities.

4. What are the benefits and drawbacks of using derivatives to manage foreign exchange risk?

Answer: The benefits of using derivatives to manage foreign exchange risk include increased certainty in cash flows and reduced exposure to exchange rate fluctuations. However, the drawbacks can include the potential for losses if the exchange rate moves in an unexpected direction and the possibility of counterparty risk.

5. How does political risk affect multinational corporations operating in foreign countries?

Answer: Political risk refers to the potential impact of political and legal factors on a company's operations and profitability. Political risk can manifest in various forms, such as expropriation, nationalization, civil unrest, and terrorism, and can have a significant impact on multinational corporations operating in foreign countries.

6. What is the role of international financial institutions in facilitating international finance?

Answer: International financial institutions, such as the International Monetary Fund (IMF) and the World Bank, play a critical role in facilitating international finance by providing financial assistance, technical support, and policy advice to member countries. These institutions also help to promote global economic growth and stability.

7. What is the significance of the foreign exchange market in international finance?

Answer: The foreign exchange market is a crucial component of international finance, as it provides a platform for the exchange of currencies and facilitates international trade and investment. It is also a key factor in determining exchange rates and managing foreign exchange risk.

8. How do cultural differences affect multinational corporations operating in foreign countries?

Answer: Cultural differences can have a significant impact on the success of multinational corporations operating in foreign countries. These differences can affect business practices, communication styles, and management approaches, and can lead to misunderstandings and conflicts if not managed effectively.

9. What are the advantages and disadvantages of financing international operations through debt versus equity?

Answer: The advantages of financing international operations through debt include lower costs and greater flexibility, while the advantages of financing through equity include reduced financial risk and increased control. The disadvantages of debt financing include the potential for default and higher interest rates, while the disadvantages of equity financing include dilution of ownership and lower returns.

10. What are the key factors that multinational corporations need to consider when making foreign direct investment decisions?

Answer: Multinational corporations need to consider a range of factors when making foreign direct investment decisions, including political and economic stability, legal and regulatory frameworks, market potential, labor costs, and infrastructure. They also need to consider the potential risks associated with investing in a foreign country and the availability of financing options.

Lec 45 - . Final review of entire course of financial management

1. What is the difference between capital budgeting and working capital management? Answer: Capital budgeting is the process of identifying investment opportunities that will generate long-term returns, while working capital management involves managing a company's day-to-day cash flows and short-term assets and liabilities.

2. Why is the time value of money important in financial management? Answer: The time value of money is important because it recognizes that money has a different value over time due to factors such as inflation and the opportunity cost of investing that money elsewhere.

- 3. What is financial statement analysis, and why is it important? Answer: Financial statement analysis involves examining a company's financial statements to evaluate its financial performance and make investment decisions. It is important because it provides insight into a company's profitability, liquidity, and solvency.
- 4. What are the advantages and disadvantages of debt financing? Answer: The advantages of debt financing include lower cost of capital and tax benefits, while the disadvantages include increased financial risk and the potential for default.
- 5. What are the sources of long-term financing for a company? Answer: Sources of long-term financing for a company include bonds, preferred stock, and common stock.
- 6. What is the optimal capital structure for a company? Answer: The optimal capital structure for a company is the mix of debt and equity financing that maximizes shareholder value while balancing the risks and benefits of each type of financing.
- 7. What are the ethical considerations in financial management? Answer: Ethical considerations in financial management include accurate and transparent financial reporting, avoiding conflicts of interest, and treating stakeholders fairly.
- 8. **How can a company manage its working capital effectively?** Answer: A company can manage its working capital effectively by managing its cash flows, inventory, accounts receivable, and accounts payable.
- 9. What are the different methods of capital budgeting, and how do they differ? Answer: The different methods of capital budgeting include net present value (NPV), internal rate of return (IRR), payback period, and profitability index. They differ in the way they calculate the expected returns and risks of different investment opportunities.
- 10. What is the role of technology in financial management? Answer: Technology plays a critical role in financial management by providing tools for financial analysis, forecasting, and reporting, as well as facilitating electronic transactions and communication with stakeholders.