Exam

Practice Exam Questions

1) **Describe the investment process and the different types of investors.**

The investment process is the bringing together of suppliers and demanders of funds. In other words, those who want money are paired with those who are willing to provide money. Typically, households are net suppliers of funds while the government and businesses are net demanders of funds. Households do have a need for loans, such as home and auto loans, yet typically they supply more funds than they demand. Governments need money to pay for federal, state, and local projects and operations. Businesses need money to invest in the production of their goods and services.

Suppliers and demanders of funds are brought together in 2 main ways: financial institutions and financial markets. Financial institutions are organizations that take money from suppliers of funds (households) and use the money to make loans and invest in securities. Examples of financial institutions include banks, credit unions, insurance companies, and mutual funds. Financial markets are markets where investors can purchase financial investments. Examples of financial markets include money and capital markets, which includes the stock and bond markets.

The two main types of investors are individual investors and institutional investors. Individual investors trade securities with their own money and make their own decisions to achieve their financial goals. I would be considered an individual investor since I invest my own money on behalf of myself with the intention of making sizable long-term returns. Institutional investors are firms that hire professionals to manage other people's money. An example of an institutional investor is a bank, mutual fund or pension fund that trades large volumes of money on behalf of those who contributed capital to the fund.

2) **Discuss the principal types of financial investments.**

- Short-term investments: an investment with high liquidity, last 1 year or less and bear little risk. T-Bills are an example. Short-term investments are used for savings and for diversifying an investment portfolio. They can be very useful if you want an emergency fund which can easily be converted to cash
- Common stock: a security which represents a claim of ownership of a specific company. The returns tend to be higher than fixed-income securities, yet common stocks will bear higher risk. Common stock provides returns through dividends and capital gains, and an example of a common stock is a share of Apple.
- Fixed-income securities: Fixed income refers to the returns associated with these types of securities which are consistent both in the rate of return and with the timing of the payments. The most popular fixed-income securities are bonds. Bonds represent an "I owe you" where a company has agreed to pay regular installments of interest payments for X years and a one-time payment of the face value of the bond.
- Mutual funds: a diversified portfolio of stocks, bonds and other assets that have been selected by an investment company on behalf of its clients. Clients fund the pool of money, and the investment company charges clients for using their service. This charge is typically equal to a few percent of the total investment the client has contributed to the fund.

- Exchange-traded funds (ETFs): similar to mutual funds in the way that there is a diversified portfolio of stocks, bonds and other assets picked by an investment company. However, ETF shares trade publicly on exchanges, so investors can buy or sell the shares at any time. This means that the funds are less “stuck” than in mutual funds
- Hedge funds: similar to a mutual fund, yet at the same time very different. High net worth individuals provide large amounts of capital to a hedge fund, and professional investors will diversify the pool of funds. Hedge funds are less regulated than mutual funds, so they often exercise practices that otherwise would not be legal
- Derivatives: securities that derive value from another underlying asset such as a stock or commodity. Options and futures contracts are examples of derivatives. An option gives an investor the opportunity to buy or sell an asset at a specified price. A future is a legally binding contract that essentially guarantees that the seller will provide an asset at a specific date and price

3) **Describe the steps in investing, review fundamental tax considerations, and discuss investing over the life cycle.**

Write an investment policy statement. You should take a step back and understand your current financial situation. Ask yourself: “what assets do I currently own?”, “how much income do I make?”, “how much money do I spend?”

Now, decide on what your investment goals are. Do you want to buy a car in 5 years? Do you want to save for retirement in 40 years? The amount of money and time horizon are very important considerations.

Next, figure out your risk tolerance. Are you willing to take a big risk in hopes of making a big reward? Or would you be more comfortable taking less risk and knowing you may be missing out on high growth opportunities?

It is crucial to consider personal taxes. In the United States, there are progressive federal income taxes. Therefore, as you earn more money, you will be taxed at a higher rate. High income earners should especially take advantage of tax planning since it can mean you can maximize returns by paying minimal amounts of taxes. Tax planning means projecting your future taxable earnings and creating strategies to lower your tax burden. Strategies such as tax advantaged retirement savings plans will help you pay less taxes on the returns you make. As a low-income college student, I save money for retirement in a Roth IRA account. This means I pay very little taxes on the contributions I make now since I am in a low tax bracket, and when I finally withdraw funds from the account, I won’t need to pay taxes at the higher tax rate I would otherwise need to pay.

Investing over the life cycle is another very important consideration. Generally, investors are willing to take on more risk when they are younger. Younger investors, often called “growth-oriented youth,” will have more time to earn back any money they may lose from a poor investment decision. At the same time, younger investors are excited by the idea of taking on risky investments in hopes of making large returns. Growth oriented youth are usually between the ages of 20-45 years, and they favor growth oriented and speculative investments such as high-growth common stocks and cryptocurrencies. Once investors reach middle-age, they should shift their portfolio towards less risky investments such as growth and income stocks. These securities still offer a smaller return, yet there is also less risk. This life cycle stage is called “middle-age consolidation” and these investors are usually between the ages of 46-60 years. Once investors are retired, they prefer to adjust their portfolios to be less risky and to pay out a steady income. The “income-oriented retirement years” stage is characterized by a portfolio of low-risk income stocks and bonds.

4) **Describe the most common types of short-term investments.**

Short-term investments have a life of 1 year or less and are characterized by high availability, safety, liquidity, and generally low rates of return. Short-term investments are used for savings and for diversifying an investment portfolio. The three types of short term investments are Deposit-type accounts, Federal government issues, and Non Government issues.

Deposit type accounts are when an investor deposits money into a financial institution. In return, the investor earns a relatively low amount of interest. The investor has the ability to withdraw the funds at any point, therefore deposit type accounts offer instant liquidity. The deposits are FDIC insured and there typically a zero or very low minimum balance. Some deposit type accounts grant check-writing privileges. The most common deposit-type accounts are passbook savings accounts, which are savings accounts offered by a bank. Negotiable order of withdrawal (NOW) is a bank checking account which pays interest. Money market deposit accounts (MMDAs) are bank deposit accounts that offer check-writing privileges. Asset management accounts are deposit accounts at banks, brokerage houses, mutual funds or insurance companies.

Federal government issues are government bonds. They pay interest, and they have virtually zero risk since they are backed by the full faith of the US government. Treasury bills are bonds issued by the US Treasury which have a maturity of 1 year or less. An I Bond is a savings bond offered by the US Treasury which is redeemable after 1 year yet has a maturity of 30 years. There is a strong secondary market for federal government issues. In addition, federal government issues are state and local tax exempt.

Non Government issues are issued by financial institutions or corporations. They have more risk than federal government issues. Certificates of deposit (CDs) are cash deposits in a commercial bank. Commercial papers are issued by trusted corporations with high credit worthiness, yet they are unsecured notes. Money market mutual funds (money funds) are issued by portfolio management companies. The firm manages a portfolio of securities, and money funds offer instant liquidity.

5) **Describe some of the main careers open to people with financial expertise and the role that investments play in each.**

- Commercial banking- someone who works at a commercial bank such as Chase Bank. A commercial bank is a financial institution that accepts deposits from the public and offers loans to individuals and businesses. A person who works at a commercial bank will offer individuals or businesses credit based on their credit worthiness, and they may deal with cash management. Commercial banks employ the greatest number of people in the financial services industry. Commercial bankers must have knowledge of fixed income loans, such as mortgages, and although they may not directly trade bonds, knowledge of this type of security makes it easier to understand the loans that commercial banks may offer
- Corporate finance- someone who works at a corporation such as Coca Cola. Someone who works in corporate finance is responsible for managing the company’s money, and this includes raising funds through stock offerings or bond offerings. Someone who works in this field

must have a strong understanding of stocks and bonds, especially their own company's stocks and bonds. In addition, this field requires a broad understanding of how a business works

- Financial planning- someone who works with clients and gives recommendations on how they should invest their money. A Certified Financial Planner certification is recommended for financial planners. Only around 20% of financial planners are certified, and a CFP is very significant in showing that an individual is qualified and knowledgeable about investment planning.
- Insurance- someone who works at an insurance firm such as Prudential. Insurance firms deal a lot with risk management and asset management, and insurance firms invest large pools of money. It is therefore important for those working in insurance to understand how to manage risk
- Investment banking- someone who works at an investment bank such as Goldman Sachs. Investment banks help clients raise capital through stock or bond offerings, and therefore it is important for investment bankers to have a strong understanding of IPOs, stocks, bonds, and financial markets
- Investment management- someone who manages money for clients. Investment managers make a career out of managing their clients' assets. They help decide which securities to invest in, and therefore they must have a great understanding of different types of investments and how to create investment plans.

6) Identify the basic types of securities markets and describe their characteristics.

Securities markets are markets where funds can be traded in exchange for financial assets. There are two types of securities markets, money markets and capital markets. Both are regulated by the SEC. The money market is the market where short-term debt securities are bought and sold. Securities traded on money markets are characterized by high liquidity, low risk and low return. This is where T Bills, CDs, and Commercial Bills trade. The capital market is the market where long-term securities are bought and sold. This is where stocks and bonds trade.

Primary- the market where new issues of securities are sold to investors. When a company goes public and has an IPO, the new shares are sold on the primary market. There are three types of offerings on the primary market. A public offering is when securities can be purchased by public investors. Rights offerings are when shares can be bought by existing shareholders based on the number of shares they currently hold. Private placement is when only a select group of private investors can purchase the securities.

Secondary- the market where securities are resold. The same share of a company can be bought and sold multiple times on the secondary market. This is where the average individual investor will purchase shares of a company.

7) Explain the initial public offering (IPO) process.

An IPO is the process a private company takes when it works with an investment bank to go public. A company that is small and fast growing that wants to raise capital may decide to go public through the IPO process. The company must first get approval from its current shareholders. Then the company must have auditors and lawyers review the firm's financial disclosure documents to ensure they are accurate. The company now finds an investment bank that wants to underwrite the offering, this means that the investment bank agrees to promote the stock and facilitate sales of the shares. The company then works with the investment bank to fill out a prospectus which will go to the SEC. The prospectus is a registration document that outlines what securities will be issued, how it will be managed, and the firm's financial position. After the prospectus is filed with the SEC, the quiet period begins which means the company must be careful with what it says publicly. While the company waits for the SEC's approval, a tentative prospectus called a red herring is given to potential investors. Once the SEC declares the prospectus to be effective, the quiet period officially ends. The investment bank and company now have a series of presentations to potential investors so that they can promote the company's stock offering. This happens during the registration period and before the IPO date. The SEC then needs to approve the final prospectus which outlines all issue terms, including the final offer price which usually will be underpriced and below market value.

8) **Describe the difference between broker markets and dealer markets.**

In a broker market, a buyer and seller are paired together by a broker and the trade directly occurs between the buyer and seller. In every transaction there must be a defined buyer and a seller for a trade to occur. Broker markets include regional and national exchanges. There is usually a commission or fee every time a security is bought or sold. The NYSE is the largest broker market.

In a dealer market, trades occur with a dealer (market maker) who acts as an intermediary. The seller sells the security to the market maker at the bid price. The market maker then turns around and offers the security to a buyer at the ask price which will be higher than the bid price. The difference between the ask and bid price is called the bid/ask spread and the market maker will pocket that money. Unlike broker markets, in a dealer market there is no centralized trading floor. Rather it is made up of market makers who are linked through an electronic network. The Nasdaq is the largest dealer market.

9) **Review the key aspects of the globalization of securities markets and discuss the importance of international markets.**

Diversification helps increase returns while minimizing risk. One way to diversify your portfolio is by purchasing foreign securities from one of the foreign security exchanges located in over 100 countries. By purchasing foreign securities, you have the opportunity to profit from rapidly expanding economies. It is important to consider that foreign securities are riskier than US securities, they experience government policy risk (risk of political instability or the enactment of unfavorable laws) and currency exchange risk (fluctuations in exchange rates). Yet, foreign securities also move differently than US securities, so this can be a benefit of added diversification. It is important to consider purchasing securities from international markets since US equities only make up 39% of the total market value of equity markets. If you do not purchase foreign securities, you can miss out on great opportunities for diversification and the potential of high returns.

There are multiple ways to invest in international markets. Purchase a US based multinational company that has operations abroad. Purchase securities directly from a foreign stock exchange. Purchase a security of a foreign company that trades on US markets. Purchase American Depositary Shares (ADSs) which allow for US investors to own shares of foreign companies and trade them on US stock exchanges. Purchase a yankee bond, which is a bond offered by a foreign government or company which is sold in US markets and is in US dollars.

10) **Discuss trading hours and the regulation of securities markets.**

The regular trading hours of US exchanges and the Nasdaq is 9:30am to 4pm EST. Most trading occurs during regular trading hours. It is possible to trade outside of regular trading hours in what is called the pre-market and the after-hours market. These extended trading hours allow for US securities to compete with foreign securities markets outside of regular trading hours. During extended trading hours, there is less liquidity, lower volume, and higher volatility.

US securities are regulated in order to protect investors and other participants in the market. The Sarbanes-Oxley Act of 2002 reformed accounting practices and how information is released in an effort to stop corporate fraud. The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 increases accountability and transparency in order to promote financial stability. Blue sky laws ensure that investors are not sold nothing when purchasing a security. Overall, there are many laws that together increase transparency, prevent fraud, and promote financial stability and trust in the securities markets.

11) **Explain and provide examples of long purchases, margin transactions, and short sales.**

A long purchase is a transaction where an investor buys a security with the hope that it will increase in value. This is the most common type of transaction. When someone thinks about a traditional individual investor buying shares of Apple and waiting years with the hope that they make money, it will be a long purchase. The idea is to purchase the security at a low price and to sell it in the future at a higher price. Return from a long purchase comes from capital gains and dividends. In addition, it is not possible for shares to have a negative value, so the most amount of money you can lose through long purchases is the amount you bought the security for. Stocks also theoretically have no upper bound of how much they are worth, so there is theoretically an unlimited earning potential.

Margin transactions are when an investor takes upon debt and uses the debt to purchase securities. The investor hopes to use financial leverage to magnify returns. The minimum amount of equity an investor must provide when trading on margin is called the margin requirement, and this is set by the federal reserve board. Purchasing on margin will magnify your returns, yet at the same time, they will magnify your losses. An example of margin trading is when an investor has $10,000 in cash and they take out a $10,000 loan from the bank, and they purchase $20,000 worth of securities. If the securities increase by 25% and are now worth $25,000, the investor made $5,000 and this is equal to a 50% return on the cash he originally held.

Short selling is when you sell a security that you borrow. An investor will borrow a security from a broker and sell it at the current price. The investor also must make a deposit with the broker which is equal to the minimum margin requirement. The investor waits and hopes that the value of the security will decrease. The investor then purchases the security at a later time in order to return the stock they owe to the broker. When you short sell, you make a profit when the value of the security decreases. Short selling can have unlimited risk since the share price theoretically has no upper bound, and at the same time, there is a limit to how much gain you can make with short selling since a share's price cannot go below $0. An example of this is when institutional investors held a short position of GameStop. The institutions believed that GameStop's share price would decrease, so they took a short position so that they would be able to sell the stock at a higher price than they would be able to repurchase it later in the future.

12) **Discuss the growth in online investing and the pros and cons of using the Internet as an investment tool.**

13) Identify the major types and sources of traditional and online investment information.

Descriptive information- factual data based on past performance (balance sheets and income statements)
Analytical information- projections and recommendations (company sales projections)

Economic and current event info – financial journals (Wall Street Journal, Barron's), institutional news (Dow Jones, Bloomberg Financial Services, Marketwatch), business periodicals (Forbes, The Economist)
Industry and company info – trade publications (American Banker, Computerworld), company websites, annual reports and filings
Price info – quotations

14) Explain the key aspects of the commonly cited stock and bond market averages and indexes.
What are they used for - *uses of averages (measure past behavior and something to compare portfolio to)*

Averages: the arithmetic average price of a group of securities which is used to measure price behavior. An example is the Dow Jones Industrial Average (DJIA) which is made up of 30 stocks which together represent the general trends in the market. Individual industries also have averages, such as the Dow Jones Transportation Average which is made up of 20 companies from the transportation industry
Indexes: the price fluctuations of a group of securities in relation to a base value from an established, earlier point in time. Indexes are also used to measure price behavior. Investors believe that indexes offer a better representation of the market conditions. The S&P 500 Index is an index of 500 large companies.

Bond indexes

15) What risks do investors face in short term stock trading?
Short-term stock trading is highly speculative and highly risky. Investors will make numerous transactions per day, and this can lead to the accumulation of transaction fees which can take away from any profits. In addition, the short-term capital gains tax is higher than the long-term capital gains tax. This means that investors will pay higher taxes on the profits they make from day trading. Other risks include the risk of poor decision making and timing. Since short term trading is highly speculative, it is possible that an investor purchases a stock at a high price and must sell it at a loss. Also, the market has a cyclical nature which repeats over years. If the market is in a downturn, it is more difficult for day traders to turn a profit and it is possible they can wipe out a year's worth of earnings in just a day.

Practice Case Study
a. Discuss the pros and cons of option 1, and prioritize your thoughts. What are the most positive aspects of this option, and what are the biggest drawbacks?

- Pro
    - Keeps companies private
        - Don't need to publicly disclose financial statements with SEC
        - Don't need to face regulations that are exclusively for public companies
    - Won't give up equity
        - Company keeps more of its earnings
        - Lesser risk of shareholders that don't have best interest of firm at heart
    - Tax write offs

        - Tax writeoff benefits equal to up to 30% of the business's adjusted taxable income
        - "Under the Tax Cuts and Jobs Act (TCJA) enacted for tax years beginning in 2018, interest expense that exceeds the amount of a business's interest income is only deductible to the extent of 30 percent of that business's adjusted taxable income (ATI)"
    - Ability to raise bonds by selling equity in the future
- Con
    - Limit to further borrowing
        - Banks may demand that Merit limit further borrowing and provide periodic financial disclosures
        - Firm may have difficulty raising funds in the future
    - Will need to pay back loan + interest
        - The firm is liable for repaying the entire $4 billion plus interest
    - Increased leverage can be more risky
        - If company faces financial hardship, it may have difficulty repaying loan

b. Do the same for option 2.

- Pro
    - Won't need to repay amount raised and won't pay interest
        - All money raised is Merit's to use
        - Won't be a long term financial burden with one time repayment and interest payments
    - Ability to raise further funds by taking on debt
    - IPO at high share price maximizes value when raising money
        - As opposed to selling shares at a low price, the firm capitalizes on a high valuation
        - Firm expects dramatic expansion of production capacity, investors see as growth stock and give higher valuation
    - Can offer stock compensation to employees
        - Strong incentive for employees
        - Better worker morale
- Con
    - Brings companies public
        - Will need to publicly disclose financial statements with SEC
        - Will need to face regulations that are exclusively for public companies
    - Gives up equity
        - Keeps less of earnings
        - Can be influenced by shareholders with different interests than company
    - Less of an ability to raise funds through equity sales in the future
        - Will need to give up even more equity if wants to sell more shares in the future
        - Don't want to dilute ownership
    - IPOs are expensive and time consuming

c. Which option do you think Sara should recommend to the board, and why?

- Option 1: raise money through debt
    - Company is good with cash management
        - Has $2 billion excess cash on hand
        - Will be able to pay off loan
    - Company can stay private
        - Won't face burdens of public company