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

Investing is finding ways to grow your money to achieve financial goals. With an investment being an asset that one hopes will generate income or increase in value, a portfolio is a collection of multiple of these investments. The investment process revolves around a collection of suppliers and demanders of funds. Households are common net suppliers of funds, while the government and businesses are net demanders of funds. Financial markets and institutions bring these two groups together by offering financial services. Institutions use funds provided by households to make investments and give out loans, and financial markets control the trade of financial assets. An example of a financial institution would be a bank, as they use the money given to them by their clients to invest in other projects while also giving loans out to their own clients. An example of a financial market would be the stock market, which are exchanges where shares of public companies are traded.

There are two common types of investors. Individual investors are those who act on their own, putting their own money on the line. Commonly known as retail investors, these people may buy smaller quantities of stocks as a part of their personal portfolio. My friends and I, who invest in small quantities of shares on our own behalf, would be considered retail investors. Institutional investors, on the other hand, are those who work to manage other people's funds. These professionals trade large quantities of securities on behalf of clients. Clients for institutional investors are not just limited to individuals, as they can be other businesses and governments. An example of institutional investors are financial institutions such as banks and hedge funds.

2. Discuss the principal types of financial investments.

There are a multitude of financial investments. Short-term investments such as US treasury bills, or T-bills, have a lifespan of 1 year or less and are meant to have high liquidity. Common stock is a very widely known financial investment, as it represents the part ownership of a company. As compared to T-bills, stocks contain more risk and further have a higher possibility for returns. Common stocks may also pay dividends, and an investor can also make money off the increase in value of a share. An example of common stock would be a share of tesla. Fixed-income securities, such as bonds, are debt instruments that pay coupon payments, or fixed interest payments, to holders. Convertible securities also fall under the fixed-income securities category. Mutual funds and exchange-traded funds are both portfolios of assets purchased with funds pooled from various investors. These funds are managed by investment companies on behalf of their clients. Exchange-traded funds, unlike mutual funds, can only be traded when the exchanges are open. Similarly to mutual funds, hedge funds are made up of pooled resources, although they require a higher minimum investment and are less regulated. Derivatives are the next form of financial investment, and they are securities that, as the name suggests, derive their value from an asset such as a stock. Options and futures contracts are other examples of common derivatives. Finally, popular investments that don't sort into the previous categories are tax-advantaged investments, real estate, and tangibles. Tax-advantage investments, such as municipal bonds, are ones where investors pay less tax on their capital

gains based off the nature of the investment. Real estate and tangibles are physical investments that are purchased with the goal of watching the value increase.

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

Investing consists of making a plan and taking certain steps to achieve one's financial goals. A good investment plan is a strategic guide towards mapped out decisions over a period of time. Firstly, a policy statement sets the foundation of an investing plan. Here, the current situation is summarized and any goals or guidelines are laid out. One must consider their income and assets when figuring out how much they can afford to invest. It is important to lay out these investment goals, as not everyone has the same strategy and there will be different steps taken by everyone. Risk tolerance should definitely be discussed during this step. Following the policy statement, it is important to consider basic taxes. Considering the three types of income of active, portfolio, and passive, there will be different federal, state, and local taxes regarding each. It is also important to understand that capital gains are taxes in accordance with time frame, and capital losses can be used to offset income. Tax plans should aim to maximize after-tax returns. Next, the stage of life that an investor is at will greatly affect their investment strategy. From 20-45, an investor will mostly focus on growth-oriented investments. Growth oriented stocks as well as speculative stocks may be a good idea between these ages. From 46-60, when an investor would want to be more risk averse, they may focus on middle-age consolidation. There will be a balance between growth and income stocks during this stage. After 61, seeking the least amount of risk and adopting a conservative investment strategy, investors will seek income-oriented investments.

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

Short-term investments have lifespans of less than 1 year and have high liquidity. Typically, these investments are used for otherwise unused funds because of their liquid nature. There are multiple types of common short-term investments. The three common categories of these investments are deposit-type accounts, federal government issues, and non-governmental issues.

Deposit accounts offer low interest rates for typically low minimums. Passbook savings accounts, or savings accounts offered by banks, are very convenient and although they offer low interest rates, they are often only used for an investor's leftover funds. A negotiable order of withdrawal, or a NOW, is a checking account that pays interest. Money market deposit accounts are another example of a short-term investment, and it provides some check-writing services on a deposit account. Finally, asset management accounts are ones that combine checking, investing, and borrowing, in a deposit account.

Federal government issues are considered some of the least risky investments due to their relation to the American government. I bonds are savings bonds with interest that is exempt

from state and local taxes. These bonds are redeemable after a year and have maturities of thirty years. Similarly to I Bonds, Treasury bills, or T-Bills, are debt obligations that are also exempt from state and local taxes. T-Bills have maturities of less than a year.

Non-government issues are the final category of short-term investments. Certificates of deposit, or CDs, are cash deposits issued by commercial banks tailored to the needs of investors. Commercial papers are forms of unsecured debt that are typically issued at a discount from face value. Money market mutual funds, also known as money funds, are portfolios of securities that have instant liquidity.

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

There are many career options open to people with financial expertise that are related to investments.

Commercial banking is the most common employer in the financial services industry. Working at a commercial bank would involve providing clients with lines of credit and term loans, as well as other credit products. Further, a commercial bank analyst or loan officer provides clients with financial advice on both the person and business level. An example of a commercial bank is Bank of America.

Jobs in corporate finance involve handling the finances of an organization. The responsibilities can range from budgeting and payments to investment decisions. Investing related responsibilities are true of treasury positions, where employees manage the financial health of a business while also managing cash flows and making investment decisions. Further, investor relation positions are ones where workers manage dividend and buyback policies. An example of a corporate finance employer is Tesla.

Financial planners help clients sort through financial matters. Unlike financial advisors, who focus on helping clients manage money, planners have a more broad view. In more depth, planners devise long-term goals for their clients, taking into account factors such as age, risk, and potential investments. Furthermore, they help their customers choose insurance as well as other financial products such as investments.

Insurance is another career open to people with financial expertise. Actuaries work for insurance companies by estimating and minimizing risk for their clients. This also goes for insurance policies as well as financial investments, which actuaries work to manage and assess. An example of an actuary employer is Berkshire Hathaway.

Investment banking is a popular and highly sought out career for those with financial expertise. Investment bankers create capital for other companies through the act of underwriting. Investment banks help with the sale of securities, the merging of companies, and broker trades for other institutions as well as investors. Investment banks are part of larger banking

institutions, meaning they are fully intertwined with the world of investing. An example of an investment bank is Goldman Sachs.

Investment management is yet another career open to those with financial expertise. Investment managers encompass a wide range of sectors, such as banks, credit unions, and insurance companies. These managers work to give others advice on investments. With the ever changing world, investment managers must come up with new investing strategies for their clients in order to direct funds and turn a profit.

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

Securities markets are ones in which buyers and sellers of securities come together to make financial transactions. There are two basic types of securities markets, all of which are regulated by the Securities and Exchange Commission (SEC). The first type of security market is a money market, which is where very short-term debt securities are traded. Money markets are known to have a high degree of safety and low rates of return, as well as high liquidity. Capital markets are the other type of security market. In capital markets, long-term securities are traded. In more depth, both stocks and bonds, either primary or secondary, are bought and sold. Primary markets are ones where new shares of a company are sold, such as those from an initial public offering (IPO). Rights offerings are the second type of offering in the primary market, where investors are offered the rights to buy certain stocks based off their current holdings. A third type of offering in the primary market is private placement, where only a select group of investors have the option to buy shares. The secondary market is where shares are resold, and this is where retail investors will do most of their investing. These markets provide a place for suppliers and demanders of funds to exchange securities.

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

An IPO, or an initial public offering, is the process by which a company goes public and is offered for sale to public investors for the first time. Firstly, a company must promote stock and sell company shares through underwriting. An investment bank is part of the process at this step, since it will typically purchase the security at a discount and bears the risk of selling it to the public. Next, a prospectus, or a registration statement going over the issue, is filed. The prospectus contains financial information as well as the future of the firm. This is an important document with all IPO documentation. Next, there is a period of time where the company must keep quiet, known as the quiet period. The preliminary prospectus is then made available at the 'red herring'. Finally, the company goes on a road show to convince potential investors about their stock benefits. The SEC will then approve the final prospectus. Overall, the IPO process is a great way for the company to raise capital while also generating some hype around the company and increasing the public image.

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

Broker markets are a place where buyers and sellers are brought together by a broker. These markets are made up of national and regional exchanges. An example of a broker market is the New York stock exchange, the largest stock exchange in the world. Dealer markets are places where dealers execute trades between sellers and buyers. A market maker in a dealer market will make money off of the bid/ask spread, which is the difference between the bid price and the ask price. In their case, they offer a seller's stated price to buyers. Nasdaq is an example of a dealer market. Unlike broker markets, dealer markets do not have a centralized trading floor, and are otherwise made up of market makers connected with an electronic network. In broker markets, there must be defined buyers and sellers for a trade to be completed, while buyers and sellers go directly through market makers in dealer markets.

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

The globalization of securities markets has led to another way for investors to increase the diversification of their investments. Not only has it led to increased accessibility for a wider range of securities, it also has increased the number of markets as well as the number of currencies these markets trade with. Foreign exchanges are a great way to profit off a growing financial economy. With the growing importance of international markets, due to the steps towards a worldwide stock exchange, investing can be more accessible for all. US markets make up less than half of the worldwide markets so it is important not to miss out on opportunities outside the US. As foreign markets do not move with the US markets, they tend to be more risky and have opportunities for higher returns. In order to participate in foreign markets, one can indirectly invest through US shares based off foreign operations. This means that one can invest in foreign exchanges with the US dollar, without bearing any possible currency exchange risk. Further, one can directly purchase shares on foreign stock exchanges through American Depositary Shares, backed by American depositary Receipts. However, risks such as unstable foreign governments, economic conditions, and currency exchange rates should be considered.

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

The trading hours and regulation of securities markets lay the foundation for the world of investing. The US exchanges as well as Nasdaq are open from 9:30am - 4:00pm eastern time. This is because in the past, traders took 30 minutes to set up in the morning and an hour to clean up in the afternoon during their 9-5 jobs. Although the exchanges are only open for a short period of time every day, in order to stay competitive with foreign markets many American exchanges offer extended hours. Here, orders are filled if exactly the opposite exists in what is known as crossing markets.

Regulation in the securities markets has advanced over the years, in order to protect investors and other participants. Starting with the securities act of 1933, which was the first federal legislation put in place to regulate the market, investors were protected against fraud through the requirement of information disclosure. The following year, the securities exchange act of

1934 established the SEC, continuing to ensure less fraud for all participants in the securities market. In the years after, the Maloney Act, Investment Company Act, and Investment Advisors Act built upon the securities market regulations through the establishment of trade associations, regulation of mutual funds, and requirement for advisors to register with the SEC, respectively. More recently, the securities acts amendments helped make pricing more competitive and in line with electronic advancements. The inside trading and fraud act, regulation fair disclosure, sarbanes-oxley act, and dodd-frank act are the most recent additions to the regulation of securities markets. They work to make trading more fair and transparent, while also decreasing corporate fraud and promoting financial stability.

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

Long purchases, margin transactions, and short sales are examples of security transactions that an investor can make. Long purchases are one of the most common types of transactions, in which an investor buys a security with the hope that it will increase in value. As this security changes in value, an investor is able to sell and hopefully make a profit. Returns come from both dividends, or payments during the ownership period, and the difference between the purchase price and the sell price of the security. A long transaction has unlimited potential as the price of the stock can rise infinitely, while it has limited risk as if the price of the stock goes to 0, you lose only what you put in. An example of a long purchase would simply be buying a share of Tesla stock. Margin transactions are ones where investors borrow from a brokerage to make purchases. The federal reserve board sets a margin requirement, or the minimum amount of equity that must be of the investor's personal funds. Margin transactions are an example of a way to use debt financing to magnify returns. However, this means that both returns and losses are magnified. The margin loan must be repaid at an interest rate, so if an investor loses money on their investment they will have to also pay back the loan with interest. An example of margin transactions would be buying 2 shares of Tesla stock with your own money and buying 1 share with a margin loan. Short selling is another security transaction, and one of the riskiest. Selling short consists of selling borrowed securities, or selling shares that one does not own. Here, investors borrow the security from a broker and agree to pay for the share when they cover their short position. As the price of a share goes down, an investor makes money due to their bearish prediction that the price in the future will be worth less. However, these transactions contain unlimited risk as the stock price does not have a ceiling the same way it has a floor (of 0). If the stock price rises to infinity, there is no bound to the losses that a short seller may encounter. An example of this would be selling a share of Tesla stock short, assuming that the price will go down.

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

With technological advancements, online investing has naturally grown in popularity. With a range of options for investment research and resources, investing has become more accessible than ever. Due to internet trading, the cost of executing trades and accessing certain tools has gone down significantly. Online tools will help an investor plan, screen, chart, and track their

investments. However, online investing comes with the same risks as regular investing. Unlike traditional investing methods, trading online leaves an investor to their own devices, as there is no live broker acting as a safe net. Frequent trading online can lead to higher transaction costs, and high taxes on short term gains still exists. With the internet acting as a means for anyone to trade, it naturally has many risky aspects on that very basis.

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

There are multiple types and sources of traditional and online investment information. The two main types of investment information are descriptive and analytical. Descriptive information covers past performance of the economy, industry, market, or any investment data. Conversely, analytical information is current data as well as projections about potential investments. These types of information range from economic and current events, to industry and company, to price and investment strategies.

Common traditional information sources are financial journals, institutional news, and business periodicals. Financial journals are some of the most popular sources, as they are widely available. The Wall Street Journal, Barron's, and Investor's Business Daily contain detailed market information on a frequent basis. Institutional news ranges from government economic information to online websites covering financial information, such as CNN Business and Marketwatch. Business periodicals cover general business and economic information, and can be found on Bloomberg Businessweek, Fortune, and The Economist. Further, government publications and industry publications provide more narrow information on the state of the economy as well as specific industries. Plenty of online sources and portals are common for specific financial information related to different services and markets.

14. Explain the key aspects of the commonly cited stock and bond market averages and indexes.

Market averages and indexes allow an investor to gauge market conditions while also giving them a source to compare their portfolio's performance to. Averages and indexes can also be used to study the historical performance of a market and use it as a guide for future behavior. Stock market averages reflect the average price behavior of a group of stocks at any point in time, while indexes measure the relationship between the current price behavior to the past price behavior. There are multiple common Dow Jones averages and indexes. The DJ averages show the price behavior of stocks of companies of many different sizes and in many different industries. The Dow Jones indexes also vary by cap size of companies or by industry. Standard & Poor's has similar averages and indexes across company sizes and industries.

Similarly to stocks, common bond market indicators are bond yield and indexes. Bond yield is the return an investor would receive on a bond if it were held to maturity, showing the result of the interest payments as well as initial payment. Bond indexes are a way for investors to evaluate the performance of their security against the standard. An example of a bond index is the Bloomberg Government/Corporate Bond Index, which consists of debt instruments of issues longer than a year and for over \$100 million.

15. What risks do investors face in short term stock trading?

Short term stock trading is extremely risky, meaning many investors have to understand what they are getting themselves into before they partake. Speculation and short-term trading is a strategy with a sole objective of capital gains as compared to dividend yield. This strategy is most risky, due to the emphasis on these gains in such a short time period. In order to achieve fast gains in the short term, investors will have to focus on speculative, small-cap, tech, or foreign stocks. Investors are also looking for 'big scores' on lesser known stocks, as they switch from one position to another very quickly. Without any guaranteed earnings, they have to pay high trading costs and consume a lot of time, as well as pay a lot of taxes on short-term capital gains. Further, during a bear market, it is much harder for a short-term trader to turn over a profit. At any point, the constant gains over a long period of time can be lost over a much smaller period of time.

CASE

1. 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?

Sara's first option is to get a \$4 billion loan from a group of banks, while limiting their borrowings and providing said banks with financial disclosures. The largest positive from this option is that the company will not have to give up equity that they normally would have if they were to go public. Building off this, another positive by taking this option is that, by staying private, the company will not need to file financial statements with the SEC. Merit will also have a good relationship with these banks in the future, given that this deal is successful. However, while the company is kept private, the largest negative about this option is that there is a larger financial burden by taking on interest payments for a \$4 billion total loan. Further, Merit will not be able to borrow more money from the banks should they run into financial troubles. This may put too much stress on the company at the expense of keeping it private.

2. Do the same for option 2.

Sarah's second option is to convert to public ownership, and raising funds for the project through the issuing of stock. The largest positive from this option is the fact that there would be no financial burden from issuing stock, as there would be no need to repay any loans. This would keep the company financially stable and allow them to take on more loans at the same time. Further, due to Merit's strong performance as a company, they may command a high stock price. Another positive aspect is the ability to provide employee compensation, which would incentivize them and build a stronger firm. However, one of the worst negative effects of this option is that making the company public will force them to file documents and follow regulations

with the SEC, and to give up part of their company for large institutions who may not have the best in mind for the company. By purchasing a larger piece of the company, people other than Merit may have a large say in company matters.

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

I would recommend Sara takes option 2. Although debt is cheaper than equity, paying back the interest for loans that total to \$4 billion and remaining financially dependent on the loan is a very risky move for the company. By taking the public route, Merit can raise additional funds in the future through more rounds of stock sales. This can also be possible through dilution. The negative of having to file documents to stay in line with SEC guidelines for option 2 is a much better option than having to rely on loans and not being able to raise additional funds with debt. Additionally, Merit will be able to build employee strength through compensation rewards. In conclusion, option 2 keeps Merit more financially free and give them the ability to incentivize employees, and is the option that Sara should recommend to the board.