**AIM:** How are stocks, bonds and personal finance affected by the macro economy?

**TOPIC:** Stocks, Bonds, Macro Economics, Financial Literacy

**Document #1 – What are stocks and the stock market?**

**Stocks** or **shares** are very simply part ownership of a company. When a company wants to expand (such as open up a new store, factory, etc), it needs to raise a lot of money fast. Companies do this by selling **stock,** or ownership of their company. Large banks known as underwriters (such as Chase and Goldman Sachs) tell a company how much it is worth, and how many shares of stocks they can create to sell to the public, and then help the company sell their stocks to the public. The owner must buy a certain percentage of stocks themselves (owners want to keep at least 51% so they control the majority of the company), and then sells the rest to the public. However, this is difficult because they have to buy the stock themselves.

Now that owner has created stocks, s/he needs to sell them in order to raise money! This takes place in the **Stock Market** – a place where **brokers** (stock traders) come together to buy and sell stocks for their clients. **The Stock Exchange** is the official list of stocks available for trading on the stock market. The stock market is like a giant flea market, where sellers of stock try to find people to buy the stock at a price where they are both happy. This is how stocks get their price – it is the average price that the stock is trading for throughout the day. Stocks can only be bought and sold at the stock market/stock exchange, and the **Securities and Exchange Commission** protects both buyers and sellers. The price of stocks is very similar to supply and demand. This is done by **stock brokers;** either professional ones who do the analysis and recommendations for you at a **brokerage firm** or thanks to modern technology, you can be your own broker via an **online brokerage firm.** The average price of stock is what people who sell the stock are able and willing to sell their stock for against how much people demand the stock – what people are willing and able to buy the stock for. Stocks are sold hundreds, if not thousands of times a day; the average asking and selling price is the market price of the stock. The market price of the stocks changes throughout the day as the supply and demand of the stock changes. There is no formula as to why stocks change value, but **change based on confidence in the company and economy**.

1. **What is the definition of a stock?**
2. **Why do companies create stock?**
3. **Where do the companies go to create stocks?**
4. **Why should an owner never sell more than 51% of shares of stock in his company?**
5. **What is a stock market and stock exchange?**
6. **What is a broker? Why are they important?**

1. **How is the stock exchange like a “giant flea market?”**
2. **How do stocks get their prices? How is it similar to the laws of supply and demand?**

**Document #3 – Financial Literacy and Macroeconomics**

Stocks are securities; they are financial assets that have both current and future value. Stocks are financial assets; they are neither goods nor services, so do not count for production. If you make a profit or make a loss, it does not change GDP – the nation’s measurement of spending on newly produced goods and services. However, the service provided by stockbrokers (such as being charged a fee for doing a person’s stock transaction) **is counted** because that is a service. However Wall Street is often paid attention to as a reflector of the “the market’s” confidence in how the economy is performing or expected to perform. A tremendous amount of personal wealth and business and banks financial wealth can also be tied to how the market is performing, so the market can be responsible for causing economic problems depending on how much wealth from different important entities (like banks) have their money in the stock market.

On a personal finance level, stocks offer people the chance to make more money than they normally could in a bank. There is also no magic formula for which stocks to buy, but Warren Buffet, an expert stock investor always said to “pick a company that does one thing well” and “put your money where your mouth is” (to buy companies that make products that people use every day; like food). These are known as **blue chip stocks;** stocks you can hold onto for a while and last the market’s ups and downs. Riskier stocks (less established companies) tend to have higher ceilings in terms of price value and quickness to go up in price, but are usually subject to more volatility. People can also lessen their risks by investing in **mutual funds** which are securities that represent a collection of stocks. Stock charts are helpful overview indicators, but do not necessarily show the full picture and are not fully accurate predictors of future performance.

People make money by buying stocks two different ways:

1. **Buying and selling stocks:** If a person sells a stock over the stock market for more than they bought it, that person pockets the difference! Example: Sam bought a stock for $20, but since the company was doing very well, he sold it for $30, making $10 on each stock.
2. **Dividends:** Because a person owns part of the company, they are entitled to a share in the companies’ profits. Every quarter (3 months), ½ year or year, the company gives the stock holders a small percentage of its profits known as dividends. (Example, if a stock is $20, and the company has a 1% dividend, they give the stock holders a 20 cent **dividend** every year, which could be divided up into quarters). Dividends can be converted in cash or reinvested to buy more stocks (known as a **Dividend Reinvestment Program).**
3. **How are the buying and selling of stocks measured by the macro-economy?**
4. **Why do economists pay attention to the stock market?**
5. **How do people make money off stocks by just buying and selling stocks?**
6. **How do people make money off stocks by just holding onto stocks?**
7. **Based on this, why might stocks offer people a chance to make more money than by keeping money in a bank?**
8. **What are the risks associated with buying stocks? How can the macro-economy potentially affect the value of a stock?**

**Document #3: Bonds, Financial Literacy and Macroeconomic application of Bonds**

Bonds are “IOU’s” from the government, corporations and the Federal Reserve. People give these entities loans and are paid back after a certain period of time (**called a maturity date**) with the **principal (initial amount)** plus a yearly **compounded interest**. For example, a **$1,000 5% bond** over the course of 5 years = **year 1:** 1,050; **year 2:** 5% interest of$1,050 = $1,152 and so forth up until year 5. \***For the AP Test; always assume that bonds have fixed interest rates.** To make money off of a bond you can either keep the bond until it **matures** and then cash out for your principal plus compounded interest or you can sell your bond to another person (in a secondary bond market; like how stocks are bought and sold by people to each other through brokers) before your maturity date. Bonds are a “safer” investment than stocks because they have a guaranteed profit and do not fluctuate in value on the primary market (waiting for your bond to mature). There are different levels of Bonds rated from AAA-down; with the higher the risk reflecting a higher interest rate and shorter maturity date, and the lower risk reflecting longer maturity date and lower interest rate.

Inflation can erode a bonds’ value in two ways:

1. Remember that real rate = nominal – inflation rate. Depending if your interest rate keeps up with or is outpaced by inflation, the real purchasing power of your bond can decrease in value.
2. Also remember, that due to Fischer’s Hypothesis, with inflation, the **interest rate will increase**. This has important implication on the **secondary bond market; where people buy and sell to each other.** This means that [previously issued] **bonds are worth less** (since the new bonds will be at a higher interest rate). If inflation decreases (and thus interest rate decreases), the (previously issued) **bonds are worth more** since their interest rate will be higher than new bonds. So:

**Inflation increases: (previously issued) bonds decrease in value**

**Inflation decreases: (previously issued) bonds increase in value.**

**\*\*\*When the Federal Reserve uses its powers to manipulate the interest rate, this will affect bonds in the same way as well:**

Interest rate increases: previously issued bonds decrease in value

Interest rate decreases: previously issued bonds increase in value.

1. **How are bonds a safer investment that stocks?**
2. **How can inflation affect the value of bonds?**
3. **Why is important to have both bonds and stocks in a portfolio?**