



Financial Literacy with Mr. 401(k)
Winter Term 2024 - 2025
December 9, 2024

Making & Spending Money

Class 4: Making Money I: Exploring Passive & Portfolio Income



Monday Money Matter\$

NVIDIA Corporation, one of the world's largest microchip makers, saw its stock price drop by 2% after China began investigating whether NVIDIA followed fair competition laws. The investigation is focused on NVIDIA's 2020 purchase of Mellanox, a company that builds technology for data centers. This reflects growing trade tensions between the U.S. and China, including restrictions on advanced chip sales. This example shows how global news can affect the value of a company's stock and, in turn, an investor's income potential.

Source: CNBC; <https://www.cnbc.com/2024/12/09/nvidia-shares-fall-after-china-opens-investigation-over-possible-violation-of-antimonopoly-law.html>; Reference Date: December 9, 2024.



Class Discussion

Why do you think NVIDIA's stock price dropped? If you owned NVIDIA stock, how might this news affect your decision to keep or sell the stock?



Class Discussion

Why do you think events in one country (like China) can affect the stock price of a company in another country (like the U.S.)?



Class Discussion

What types of news or events might make a company's stock price go up or down?

Important Financial Terms



Income

Making Money



Expenses

Spending Money



Profit (Loss)

= Income - Expenses



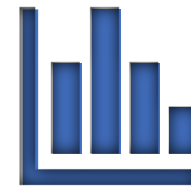
Assets

The Stuff You Own



Liabilities

The Stuff You Owe



Equity

= Assets - Liabilities

Three (3) Types of Income



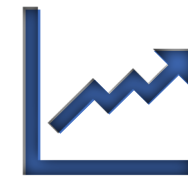
Earned Income

Money made from your work. Often referred to as compensation, salary, or wages.



Passive Income

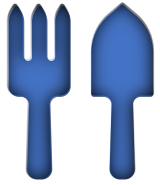
Money made from the stuff you own, which are assets, like renting out your bicycle to others.



Portfolio Income

Also known as Capital Gains. Money made from appreciation in value of the stuff you own, which are assets.

Examples of the 3 Types of Income



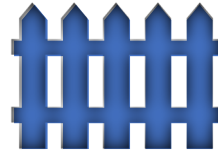
Earned Income

A teenager charges \$15 per hour for yard care services.

After working 40 hours for different households, the teenager's earned income is:

$$\text{\$15 *Per Hour*} \times \text{40 *Hours Worked*} =$$

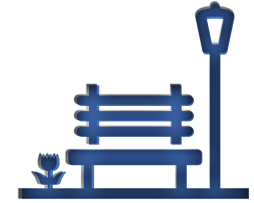
\$600



Passive Income

A teenager owns a yard care business. The business makes \$2,000 in revenue and spends \$1,800 on expenses. The profit of \$200 is distributed to the owner as passive income:

\$200



Portfolio Income

A teenager starts a yard care business with an initial investment of \$1,000. After finishing high school, the teenager sells the business for \$1,500. The portfolio income, or capital gain, is:

\$500



Class Discussion

Which type of income—earned, passive, or portfolio—do you think is the most important for achieving financial freedom? Why?



Class Discussion

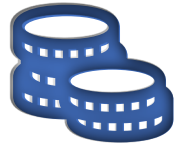
If you wanted to start generating passive income today, what's one idea you could realistically try before you graduate from high school?

Typical Forms of Passive Income



Dividends

Money received when a business shares its income with its owners.



Interest

Money received for allowing others to use your money (e.g., savings accounts, bonds, or money market funds).



Rents

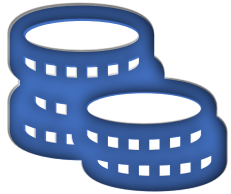
Money received by letting others use the stuff you own (e.g., renting out apartments, cars, or land).



Royalties

Money received when others use something you created (e.g., books, music, or inventions).

Receiving Interest on Bank Savings



Interest

The money a bank pays you for letting them hold and use your money

When you deposit money in a bank, you are basically loaning the bank your money



How is Interest Calculated?

Usually, it is a % of the amount you save, called the principal.

The % is called the interest rate.

$$\text{Interest} = \text{Principal} \times \text{Interest Rate}$$



Why Do Banks Pay You Interest?

To entice new depositors
Banks use your deposits to make loans to other people.
Banks earn more on those loans than what they pay to you in interest.

Practical Application

A student has some money from gifts and weekend jobs.

The student opens a savings account at two different banks. The student deposits \$300 at Bank A and \$500 at Bank B.

Bank A and Bank B pay different interest rates, noted below.

In your Money Journals, calculate how much annual interest the student expects to earn on the savings account at each bank.

Bank A

1%

Annual Interest Rate

Bank B

2%

Annual Interest Rate

Practical Application

Let's explore a real-world example by looking at one of the largest banks in the world—Bank of America.

We will identify the interest rates Bank of America offers on its savings accounts. We will then estimate how much money you could make by keeping your savings there.

This will show how interest rates can help your savings grow.



Practical Application



The table on the left identifies the Annual Percentage Yield (APY).

APY is what savers can expect to receive on savings deposits over a year.

A student deposits \$2,000 into this Bank of America Savings Account.

In your Money Journals, calculate how much annual interest the student expects to receive on the deposit.



Account balance	Standard Annual Percentage Yield (APY) ^[7]
Less than \$2,500	0.01%
\$2,500 and over	0.01%

[7] Annual Percentage Yield is accurate as of 12/09/2024. Applicable only to Bank of America Relationship Banking, which is a variable rate account. Rates may change at any time without prior notice. Fees could reduce earnings on the account. The minimum opening deposit for this account is \$100.



Class Discussion

What do you think about the APY on the Bank of America Savings Account? Do you think this is a good deal for the student? Why or Why not?

Diving Into Dividends



Dividends

A portion of a business's income paid to its owners.

Much like a “thank you” from a company to its investors.

Not all companies pay dividends; some reinvest their money back into the business.

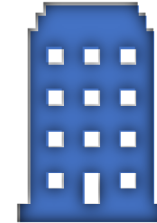


How Do Dividends Work?

Companies decide how much and when to pay a dividend.

Investors receive the dividend just for being investors. No work is required by investors.

The more you own, the more dividends you can receive.



Why Do Companies Pay Dividends?

To reward investors

To show the company is doing well financially

The company has no better use for the money



Class Discussion

*What does this
company do?*

Coca-Cola®



Dividend Payout Example



Scenario

- A student decides to invest in the Coca-Cola Company.
- The student buys **10 shares** of stock in the Coca-Cola Company for **\$60 per share**

Dividend Payout

- Coca-Cola pays its shareholders an **annual dividend of \$1.80** per share of stock (example only).

How It Works

- Each year, the student receives **\$18.00** in dividends from Coca-Cola, just for owning the stock.
- This amount is posted to the student's brokerage account. This is a form of passive income.



$$\textit{Dividend Yield} = \textit{Dividend} \div \textit{Share Price}$$

$$\textit{Dividend Yield} = \$1.80 \textit{ Dividend} \div \$60 \textit{ Share Price} =$$

3%



Practical Application

The Coca-Cola Company had a great year!

The company decides to increase its annual dividend from \$1.80 per share to \$2.40 per share.

In your Money Journals, calculate the new dividend “yield” for the Coca-Cola Company at \$60 per share.

$$\textit{Dividend Yield} = \textit{Dividend} \div \textit{Share Price}$$

Practical Application



Investors are very happy with the news about Coca-Cola's dividend increase to \$2.40 per share!

Soon after the news was announced, Coca-Cola's stock price increases from \$60 per share to \$64 per share.

In your Money Journals, calculate the new dividend "yield" for the Coca-Cola Company at a \$64 price per share.

$$\textit{Dividend Yield} = \textit{Dividend} \div \textit{Share Price}$$



Class Discussion

*What happened
to the dividend
yield when the
stock price
increased?*



Class Discussion

Suppose a company has a very bad year. Do you think they will still pay dividends?

Portfolio Income Example



Scenario

- After a few years, the student decides to sell Coca-Cola Company Stock.
- The student sells the stock at \$80 per share.

Portfolio Income Analysis

- The student purchased 10 shares of stock for \$60 per share.
- \$600 was the student's cost, which is known as the **cost basis**.
- \$800 represents the student's **proceeds** from the stock sale.



$$\textit{Portfolio Income} = \textit{Proceeds} - \textit{Cost Basis}$$

$$\textit{Portfolio Income} = \$800 - \$600 =$$

\$200



Class Discussion

*Besides stocks,
what are some
other things that
people might buy
and sell to
generate portfolio
income?*



Class Discussion

*Might portfolio
income proceeds
be less than a
person's cost
basis? Why or
why not?*



Portfolio Loss or Capital Loss



What is a Capital Loss?

- A capital loss occurs when you sell something for less than you paid for it, also known as your cost basis



Why Did the Console Lose Value?

- Obsolescence due to use and age.
- Newer versions of gaming consoles make older versions less desirable.
- Limited demand for older gaming systems.

What Can We Learn?

- Some items, like electronics, lose value quickly. This is called depreciation.
- Unlike some assets (e.g., stocks or real estate), not all purchases appreciate or retain value over time.

Gaming Console

A teenager saves \$500 to purchase a video game console. After a few years, the teenager sells the video game console for \$100. The teenager had a capital loss of...

\$400



Class Discussion

Think about something you own now (like an old smart phone or a bike). Could you sell it for more or less than what you paid? Why or why not?



Three Key Takeaways

1. There are three types of income—earned, passive, and portfolio—and understanding these helps you think strategically about making money.
2. Passive income is money you receive from the stuff you own, like savings interest or stock dividends, without needing to work for it regularly.
3. Portfolio income or capital gains is money you make when the value of the stuff you own increases, like selling stocks or other investments for more than their cost.



Where to Learn More

- Article: [19 Passive Income Ideas For Students](#) by Blair Bedford at Clever Girl Finance
- Article: [15 Passive Income Ideas to Build Wealth in 2024](#) by Ramsey Solutions
- Book: [Investing Made Easy for Young Adults](#) by Dakota A. McQueen