



Financial Literacy with Mr. 401(k)
Winter Term 2024 - 2025
December 16, 2024

Making & Spending Money

Class 7: Taxes – the Cost of Freedom



Monday Money Matter\$

BlackRock, the world's largest investment management company, sees a case where people could invest up to 2% of their savings into Bitcoin, a type of digital money. They think Bitcoin can help balance investments because it is different from stocks and bonds. BlackRock also warns that Bitcoin's value can go up and down a lot, making it risky. BlackRock cautioned that above a 2% investment allocation, "bitcoin's share of total portfolio risk becomes outsized." They say it's important also to watch how Bitcoin changes over time.

Source: Reuters; <https://www.reuters.com/markets/us/blackrock-recommends-bitcoin-portfolio-weighting-up-2-interested-investors-2024-12-12/>; Reference Date: December 12, 2024

Freedom is Not Free

Operating our government costs money to pay for...



Employees

Salaries of government employees like firefighters, police officers, and public-school teachers, among others;



Infrastructure

Build and maintain airports, bridges, roads, shipping ports, and other infrastructure;



Military

Maintains a military to defend the nation country and preserve peace throughout the world; and



Services

Provide services and social programs to those eligible, such as income security, Social Security, Medicare, and veterans benefits.



Class Discussion

*Does our
government
earn money by
selling products
or services?*



Class Discussion

*If the
government
doesn't sell
products, how
does it pay for
what it spends?*

Governments Finance their Spending through...



Borrowing

The U.S. Government is the world's largest borrower. The U.S. National Debt is over \$33.8 trillion. The U.S. Government borrows by issuing bonds, which are purchased by investors.



Fees

Governments may charge fees for certain services (ex. vehicle licensing). This is typically a small part of total government income.



Inflation

Inflation can benefit borrowers with high fixed rate debt, like the U.S. Government. Money in the future that repays debts has less purchasing power, so it is worth less in the future than today.



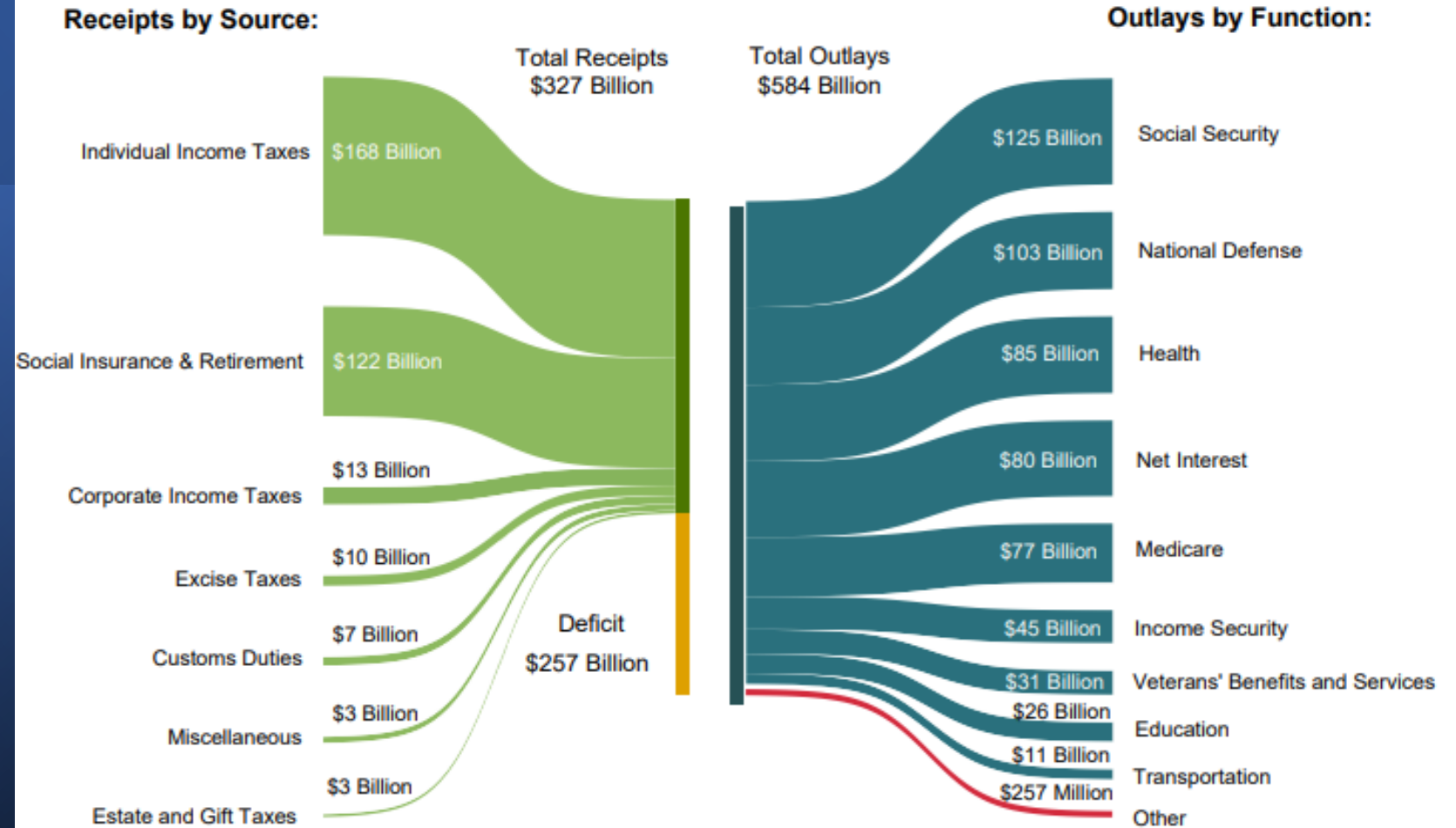
Taxes

This is the largest form of government income. Governments can tax anything. People are obligated to pay taxes or suffer the consequences.

Taxes are mandatory payments collected by governments -- local, state, or national. These payments cover the costs of government services, programs, and obligations.

Taxes

U.S. Federal Government Receipts & Outlays for October 2024



Source: [Monthly Treasury Statement October 2024](#)

U.S. Government Outlays & Receipts



- Last year, the U.S. Government had...
 - \$6.75 Trillion of outlays, and
 - \$4.92 Trillion of receipts, $\approx 49\%$ of which came from income taxes.
- A **\$1 bill** is 0.0043 inches thick.
 - \$1 bills stacked to **\$1 trillion** would be **67,866 miles tall**.
 - \$1 bills stacked to **\$6.75 trillion** would be **458,097 miles tall**.

Enough to wrap
around the Earth
 ≈ 2.7 times!



That extends
 $\approx 219,242$ miles
past the moon,
which is 238,855
miles away from
earth!

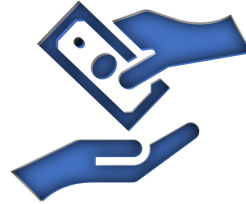


Examples of Common Taxes



Excise Tax

Taxes on specific goods



Income Taxes

Taxes on money made



Estate Tax

Taxes on the estate of a deceased person



Payroll Tax

Taxes on earning money through employer payroll



Property Taxes

Taxes on the stuff you own



Sales Tax

Taxes on what people buy

Practical Application

Sales taxes increase total cost of purchases. In your Money Journals, calculate the total cost of the following:



\$4.95

Latte

Sales Tax Rate is 10.0%



\$7.95

Cheeseburger Meal

Sales Tax Rate is 8.0%



\$99.95

Cashmere Sweater

Sales Tax Rate is 10.5%

Practical Application

In your Money Journals, answer the following questions:

Sales Tax on a Smartphone

A student saved \$800 to purchase a smartphone. The smartphone costs \$795. The government assesses a 10% sales tax rate. Can the student afford the smartphone after sales tax is added?

Income Tax on Part Time Job

A student works part time at a fast-food company. The student earned \$20 per hour and worked 25 hours. Income taxes of 12% are withheld from the student's pay. How much income tax was taken out of the student's paycheck??

Total Income Taxes Owed for the Year

A student earns income from an internship and from childcare services. The student's taxable income is \$15,000. The income tax rate is 10% up to \$11,000, plus 12% on the income over \$11,000. How much income taxes does the student owe?

Do Not Ignore Tax Effects



\$3,995

Gaming Computer

A student wants to purchase a high-end gaming computer that has a retail price of \$3,995.



\$380

!! Sales Taxes !!

At a 9.5% sales tax rate, the total retail cost of the gaming computer is

\$4,375.



\$486

!! Income Taxes !!

At a 10% income tax rate, to have net income of **\$4,375**, the student needs gross income of

\$4,861.

Money Mavericks

Objective: Work together in your Money Mavericks Workgroups to calculate the total income tax owed in your assigned scenario. Use the information provided, show your calculations, and be ready to explain your solution to the class.



Alpha: Money Mavericks Tax Activity

Elena's Childcare Business



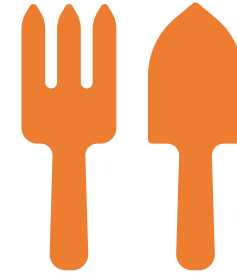
Scenario: Elena has three sources of income: Babysitting: \$8,000 (earned income), Interest from her savings account: \$12 (passive income); Stock sale: Sold 1 share of SPY after 2 years: \$640 cost basis with \$720 in proceeds (portfolio income)

Tax Rates: 5% income tax rate on capital gains of 1-year or more; 10% ordinary income tax rate for all other income

Question for the Group: Elena earned money from babysitting, a little interest from savings, and a small profit from selling a stock she held for two years. How much income tax does Elena owe in total?

Beta: Money Mavericks Tax Activity

Riley's Yard Care Services



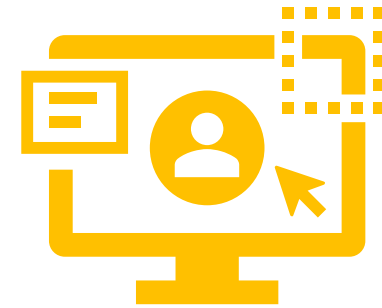
Scenario: Riley has three sources of income: Yard care services: \$6,000 (earned income); Interest from savings account: \$20 (passive income); Sold 1 share of AAPL after 1.5 years: \$130 purchase price, sold for \$160 (portfolio income)

Tax Rates: 5% income tax rate on capital gains of 1-year or more; 10% ordinary income tax rate for all other income

Question for the Group: Riley earned money from yard care services, a little interest from savings, and a small profit from selling a stock held for 1.5 years. How much income tax does Riley owe in total?

Gamma: Money Mavericks Tax Activity

Marco's Graphic Design Side Hustle



Scenario: Marco has three sources of income: Graphic design projects: \$7,000 (earned income); Interest from savings: \$25 (passive income); Sold 1 share of TSLA after 6 months: \$500 cost basis; \$580 proceeds (portfolio income)

Tax Rates: 5% income tax rate on capital gains of 1-year or more; 10% ordinary income tax rate for all other income

Question for the Group: Marco earned money from a graphic design side hustle, a little interest from savings, and a small profit from selling a stock held for 6 months. How much income tax does Riley owe in total?



Three Key Takeaways

1. Taxes help the government pay for essential services, like schools, roads, and public safety.
2. Different types of taxes serve different purposes and apply to different activities, like making money or buying things.
3. Learning to estimate taxes—like sales tax or income tax—can help you plan your budget and make smarter financial choices.



Where to Learn More

- Handout: Sizing bitcoin in portfolios by BlackRock
- [Federal Revenue: Where Does the Money Come from](#) by National Priorities Project
- [Tax Definition: What is a Tax? Why Do We Pay Taxes?](#) By the National Tax Foundation
- [Teens and Income Taxes](#) by Logan Allec