

# *Welcome to* AAPI Insights in Progressive Income Taxation



# EconEdLink Membership

---



Enjoy the perks of being an EconEdLink (EEL) member:

- New webinars, lesson plans, and activities added every month
- Learn from personal finance and economics experts in K-12 education
- Easily download free high-quality presentations, lessons, and activities
- Instant downloads of your webinar certificates for PD hours
- Get 20% discount at [CEE's Store](#) to purchase our bestsellers, Financial Fitness for Life and AP Economics. Use the code: EEL20

# Presenter

---



## Tom Barrella

LinkedIn:	Thomas Barrella
Personal email:	tj_barrella@hotmail.com
YouTube:	FinanciaLit
Twitter / X:	@FinanciaLit_
Instagram:	financialit_

# Objectives

---

You will be able to:

- Understand how our brackets actually work, including the difference between the average and marginal rates people pay.
- Understand how deductions and credits are responsive to the individual stations of tax filers.
- Understand how the tax burden falls on people with different income levels

# Session Agenda

---

1. Provide an overview of the personal Federal Income Tax
  - Its establishment and initial rates
  - How much in taxes it currently generates for the treasury
2. Illustrate via spreadsheet how taxes are actually calculated, with:
  - portions of our income being taxed at different rates
  - deductions and credits showing that the system “cares”
  - a look at average vs. marginal tax rates

# AAPL insights

---

You will be able to:

- Understand how our brackets actually work, including the difference between the average and marginal rates people pay.
- Understand how deductions and credits are responsive to the individual stations of tax filers.
- Understand how the tax burden falls on people with different income levels

# Connecting on Peardeck

---

joinpd.com

y g j r u s

Young Grapes Joyfully Raise Underwhelmed  
Submarines

---

Please introduce yourself by responding with your name, city/state where you teach, what subjects you teach, and what you're hoping to learn today.



Students, write a response!

Pear Deck Interactive Slide  
Do not remove this bar



**This is a Pear Deck Text Slide.**

To edit the type of question, go back to the "Ask Students a Question" in the Pear Deck sidebar.



# National Standards

---

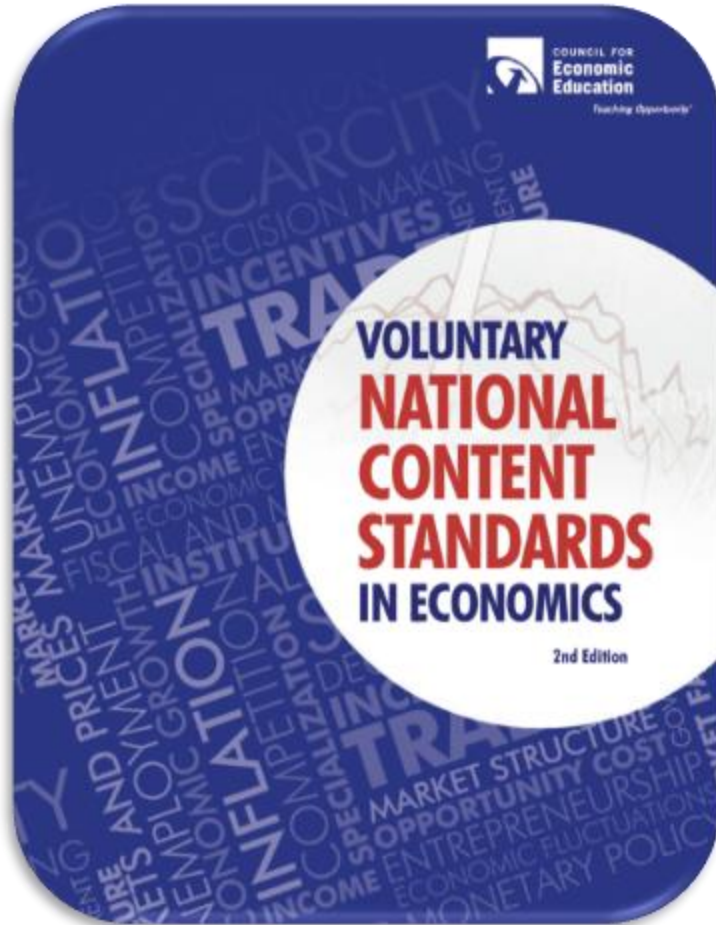


**National Standards  
for  
Personal Financial  
Education**

- Income Earning 4-7
- Income Earning 8-5, 8-7
- Income Earning 12-6, 12-8, 12-9

<https://www.councilforeconed.org/policy-advocacy/k-12-standards/>

# National Standards



Standard 4 - Incentives

- Benchmark 12-1

Standard 7 – Markets and Prices

- Benchmark 12-1

Standard 10 - Institutions

- Benchmark 8-4

Standard 16 – The Role of Government and Market Failure

- Benchmarks 8-1, 8-2, 8-3, 8-4, 12-10

Standard 17 – Government Failure

- Benchmark 8-1

# Agenda item 1: Overview of the personal Federal Income Tax



# The personal federal income tax

---

- Began with the passage in 1913 of the 16th Amendment to the Constitution
- “In 1913, due to exemptions and deductions, less than 1 percent of the population paid income taxes.”
- “Tax rates began at 1 percent and rose to 6 percent on income over \$500,000.” - Archives.gov
- Next, we’ll look at the first form 10 40 (not 1,040, or 1 0 4 0)

# The personal federal income tax

Form 1040.

**INCOME TAX.**

THE PENALTY FOR FAILURE TO HAVE THIS RETURN IN THE HANDS OF THE COLLECTOR OF INTERNAL REVENUE ON OR BEFORE MARCH 1 IS \$20 TO \$4,000. (SEE INSTRUCTIONS ON PAGE 4.)

UNITED STATES INTERNAL REVENUE.

**RETURN OF ANNUAL NET INCOME OF INDIVIDUALS.**  
(As provided by Act of Congress, approved October 3, 1918.)

RETURN OF NET INCOME RECEIVED OR ACCRUED DURING THE YEAR ENDED DECEMBER 31, 191....  
(FOR THE YEAR 1913, FROM MARCH 1, TO DECEMBER 31.)

List No. \_\_\_\_\_ District of \_\_\_\_\_ Date received \_\_\_\_\_

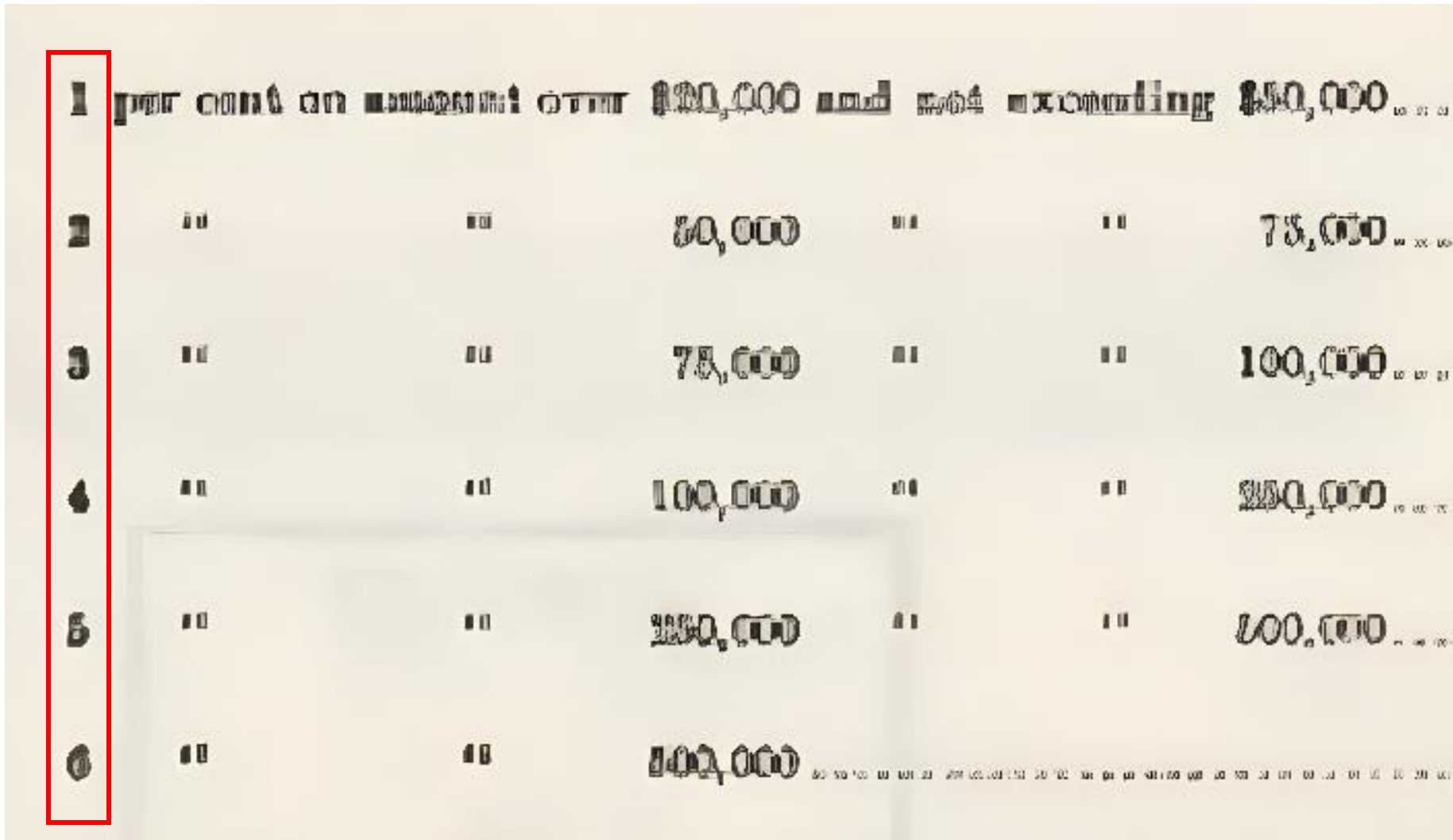
File No. \_\_\_\_\_ Assessment List \_\_\_\_\_ Page \_\_\_\_\_ Line \_\_\_\_\_

Filed by (or for) \_\_\_\_\_ of \_\_\_\_\_  
(Full name of individual.) (Street and No.)

in the City, Town, or Post Office of \_\_\_\_\_ State of \_\_\_\_\_  
(Fill in page 2 and 3 before making entries below.)

1. GROSS INCOME (see page 2, line 12) .....	\$			
2. GENERAL DEDUCTIONS (see page 3, line 7) .....	\$			
3. NET INCOME .....	\$			
Deductions and exemptions allowed in computing income subject to the normal tax of 1 per cent.				
4. Dividends and net earnings received or accrued, of corporations, etc., subject to like tax. (See page 2, line 11) .....	\$			
5. Amount of income on which the normal tax has been deducted and withheld at the source. (See page 2, line 9, column A) .....				
6. Specific exemption of \$3,000 or \$4,000, as the case may be. (See Instructions 3 and 19) .....				
Total deductions and exemptions. (Items 4, 5, and 6) .....	\$			
7. TAXABLE INCOME on which the normal tax of 1 per cent is to be calculated. (See Instruction 3) .....	\$			
8. When the net income shown above on line 3 exceeds \$20,000, the additional tax thereon must be calculated as per schedule below:				
		INCOME		TAX
1 per cent on amount over \$20,000 and not exceeding \$50,000 .....	\$			\$
2 " " 50,000 " " 75,000 .....				
3 " " 75,000 " " 100,000 .....				
4 " " 100,000 " " 250,000 .....				
5 " " 250,000 " " 500,000 .....				
6 " " 500,000 .....				
Total additional or super tax .....	\$			\$
Total normal tax (1 per cent of amount entered on line 7) .....	\$			\$
Total tax liability .....	\$			\$

# The personal federal income tax



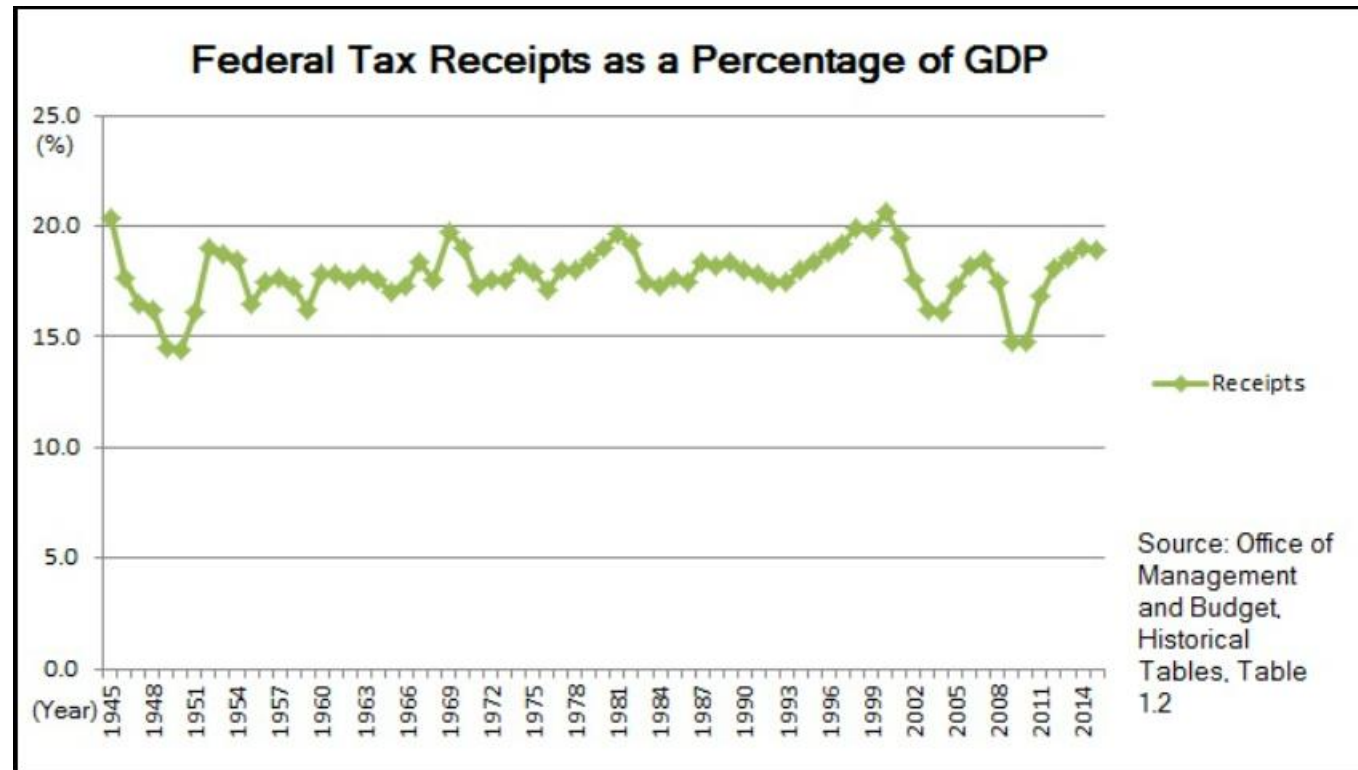
1	per cent on amounts over \$20,000 and not exceeding \$50,000	\$20,000	\$50,000
2	" " " " " "	30,000	75,000
3	" " " " " "	75,000	100,000
4	" " " " " "	100,000	250,000
5	" " " " " "	250,000	500,000
6	" " " " " "	500,000	

# The personal federal income tax

---

- Rates currently range from 10% to 37%
- The *standard deduction* (whose amount is determined by a person's *filing status*) is actually a 0% tax bracket
- Deductions and credits consider the station of the tax filer
- It is expected to generate \$2.5 trillion in taxes in 2024
  - Corporate income taxes will generate about \$0.4 trillion in taxes
- The top rate has been as high as 90% during World War II.
- President Kennedy presided over it being lowered to 70%.
- Under President Reagan, the top rate was lowered to 38.5%.
- How do rates affect tax collections? Let's see.

# The personal federal income tax



- Lesson: The fraction staying about the same shows that income tax rates affect people's behavior.



Agenda item 2: How  
are taxes actually  
calculated?



What income tax rate will a couple filing jointly pay if their taxable income totals \$100,000 in 2024?

Income from	Income to	Income in bracket	* Bracket tax rate	= Tax owed
\$1	\$23,200		10%	\$0
\$23,201	\$94,300		12%	\$0
\$94,301	\$201,050		22%	\$0
\$201,051	\$383,900		24%	\$0
\$383,901	\$487,500		32%	\$0
\$487,501	\$731,200		35%	\$0
\$731,201	and above		37%	\$0



Students, select an option!

Pear Deck Interactive Slide  
Do not remove this bar



Multiple Choice Options: **A** 10% **B** 12% **C** 22% **D** 24% **E** 32% **F** 35%

To edit the type of question, go back to the "Ask Students a Question" in the Pear Deck sidebar.

# What's the correct answer?

---

- It appears the rate is 22%, as we can show next.
- Now, let's move to over to an area that calculates the tax properly
  - The tax rate is 12.11%
- Why is the system structured this way? Let's look at the case of a couple that has \$94,000 in taxable income, who are given a \$1,000 raise.
- OK, let's post the following link in the chat so you can work with it:
  - <https://docs.google.com/spreadsheets/d/1nPGw96B2tuKW5H3v-Xz9yVH3mKaSgZyngtE5x4Y7sdA/edit?usp=sharing>

With all basic deductions and credits considered, the income tax rate a family of four (with one child in elementary school and one in middle school) who are earning the federal median household income of \$69,717 will be closest to:



Students, select an option!

Pear Deck Interactive Slide  
Do not remove this bar



Multiple Choice Options:  A 5%  B 10%  C 15%  D 20%  E 25%  F 30%

To edit the type of question, go back to the "Ask Students a Question" in the Pear Deck sidebar.

# Case studies

---

- Dr. Sanjay Gupta, CNN medical correspondent, who has an annual income of \$4 million.
- Sundar Pichai, Google CEO, whose annual salary is just shy of \$8 million.
- Satya Nadella, Microsoft CEO, who has an annual income is just over \$9 million.
- Cellist Yo-Yo Ma, whose annual income is estimated to be \$58 million.
- Actor Dwayne Johnson (aka “The Rock”), whose annual income is estimated to be about \$100 million.

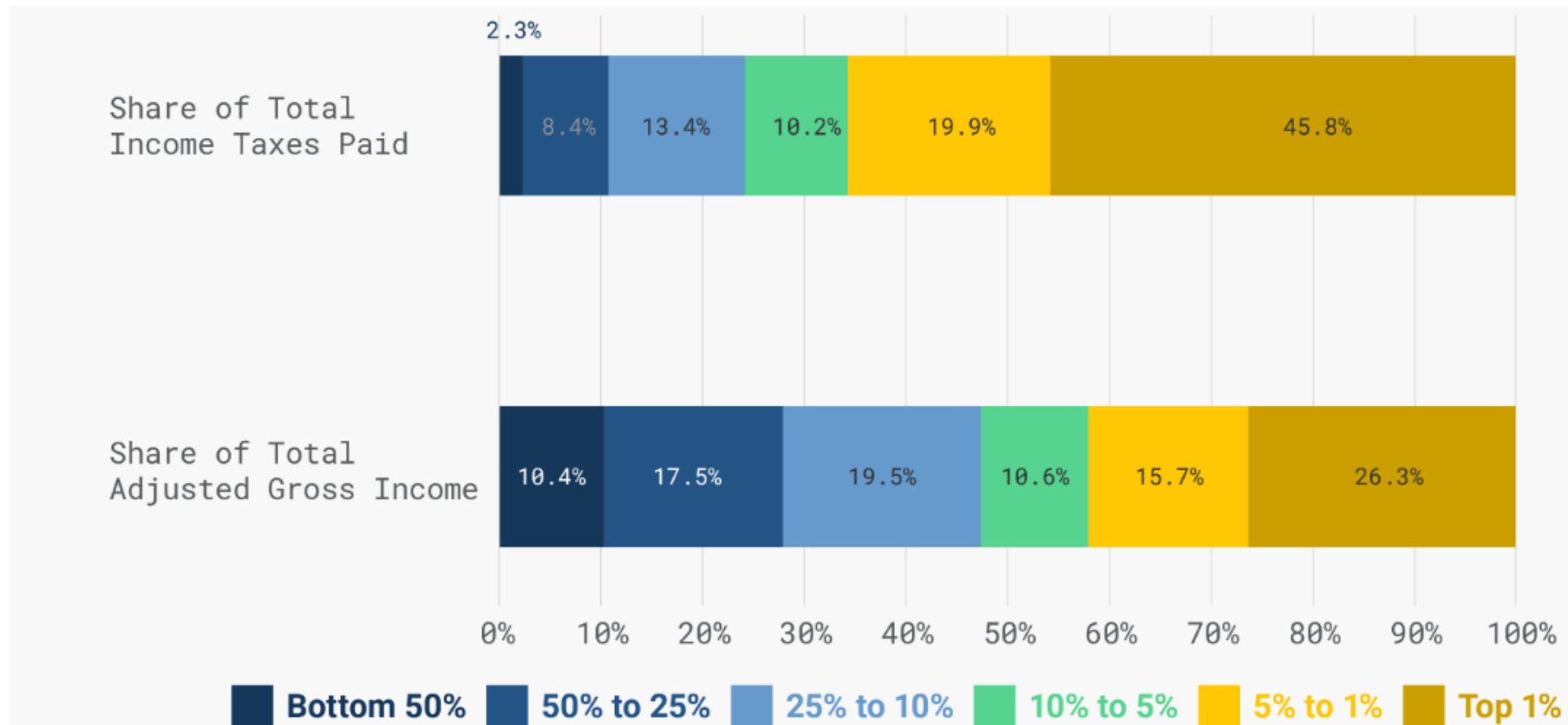
# How taxes are calculated - Takeaways

---



- Every bracket must be fully filled with income before moving on to the next bracket, resulting income being taxed at different rates.
- The standard deduction constitutes a 0% tax bracket.
- Filers may believe they're paying a higher rate than they are.
- A family earning the median income with two children under 17 gets \$4,000 in tax credit in addition to the standard deduction.
  - About 40% of income tax filers pay no federal income tax at all and may actually be receiving payments from the IRS.
  - It is heavily progressive, as the next slide illustrates.

# How taxes calculated – Income vs. Tax



Source: IRS, "SOI tax stats - individual statistical tables by tax rate and income percentile."

Agenda item 3:  
Understand how the  
system adjusts for  
inflation.





# Adjusting for inflation

---

- Bracket income ranges **do** rise by the rate of inflation.
- The standard deductions **do** rise by the rate of inflation.
- Credits such as the child tax credit **do not** rise with inflation.
- Let's illustrate how this works by clicking on the spreadsheet tab "2023 vs. 2024 inflation adjusted"
- Takeaways:
  - Inflation indexing preserves the rate of taxation we pay on wages that are rising by the rate of inflation
  - If a person's income does not rise by the rate of inflation, which is unfortunate, then the tax rate actually falls.

Agenda item 4:  
Examine how different  
types of income are  
given different  
tax treatment



# Different types of income and taxation

---



- The “Capital Gains” tax applies to:
  - Dividends received from owning shares in corporations that pay a dividend
  - Profit on stock owned sold after being held at least one year
- The capital gains tax rate a person pays depends on the sum of all the person’s other sources of income.
- Let’s now use the last tab on the spreadsheet titled “Capital Gains” Income Tax to see how it works.

# The Capital Gains tax

---

On PearDeck, answer:

We have just seen that income from our investments is taxed at a lower rate than income we earn. Stated another way, *we tax income from capital less than we tax income from labor*. Is this fair or not fair, and why?

---

We have just seen that income from our investments is taxed at a lower rate than income we earn. Stated another way, *we tax income from capital less than we tax income from labor*. Is this fair or not fair, and why?



Students, write a response!

Pear Deck Interactive Slide  
Do not remove this bar



This is a Pear Deck Text Slide.

To edit the type of question, go back to the "Ask Students a Question" in the Pear Deck sidebar.

# Contact me

---



## Tom Barrella

LinkedIn:	Thomas Barrella
Personal email:	tj_barrella@hotmail.com
YouTube:	FinanciaLit
Twitter / X:	@FinanciaLit_
Instagram:	financialit_

# Find A Local State Program

---



CEE's affiliated network of 200 organizations educates the educators: providing the curriculum tools, the pedagogical support, and the community of peers that instruct, inspire, and guide. They are the ears on the street and a voice in the community for our programs.

[Search our Directory](#)

<https://www.councilforeconed.org/about/state-affiliates/>

# Our Generous Sponsors and Partners

---





# CEE Student Programs



Invest in Girls



National Economics Challenge



National Personal Finance Challenge

---

Thank you!

