

THE CHALLENGE

Mia and Liam both earn \$70,000 annually, but Mia lives in California (with state income tax) while Liam lives in Texas (no state income tax). After federal and state income taxes, Mia's take-home pay is approximately \$51,100, while Liam's is \$54,900—a difference of \$3,800. However, if both owned \$300,000 homes, Liam would pay \$3,180 more in property taxes, nearly eliminating his advantage.

How do different state tax structures create different financial advantages depending on individual circumstances?

Learning Objectives

- Distinguish between federal and state taxes and their purposes.
- Explain how progressive tax brackets work.
- Compare tax structures across different states.

CORE CONCEPTS

Term	Definition
Federal Income Tax	Tax collected by the federal government based on income, using progressive tax brackets.
Progressive Tax	System where higher-income earners pay a higher percentage of income in taxes.
Payroll Taxes (FICA)	Employment taxes that fund Social Security (6.2%) and Medicare (1.45%).
State Income Tax	Tax collected by states, varying from 0% (some states) to over 13% (highest brackets).
Tax Bracket	Income range subject to a specific tax rate in a progressive system.

Background: The U.S. uses a progressive federal income tax system where rates increase with income—but only the income within each bracket is taxed at that bracket's rate. Seven states have no income tax: Alaska, Florida, Nevada, South Dakota, Tennessee, Texas, and Wyoming. States without income tax often rely more on sales taxes and property taxes. Payroll taxes (7.65% total) fund Social Security and Medicare regardless of which state you live in.

APPLY IT

PART A: TAX TYPE CLASSIFICATION

Classify each tax as PROGRESSIVE, REGRESSIVE, or PROPORTIONAL, and explain why.

Tax 1: Federal Income Tax

Type: _____ (Progressive / Regressive / Proportional)

Why: _____

Tax 2: Sales Tax (8% on all purchases)

Type: _____ (Progressive / Regressive / Proportional)

Why: _____

Tax 3: Social Security Tax (6.2%)

Type: _____ (Progressive / Regressive / Proportional)

Why: _____

Hint: Consider who pays a higher PERCENTAGE of their income. Progressive = higher earners pay higher %. Regressive = lower earners pay higher %. Proportional = everyone pays same %.

PART B: STATE TAX COMPARISON

Compare annual taxes for a \$60,000 salary in two states.

Tax Type	California (Income Tax State)	Texas (No Income Tax State)
Federal Income Tax (approx)	\$6,000	\$6,000
State Income Tax	\$2,400 (4% avg)	\$0
Social Security + Medicare	\$4,590 (7.65%)	\$4,590 (7.65%)
Total Taxes		
Take-Home Pay		

4. How much more take-home pay does the Texas resident have? What might offset this advantage?

PART C: PERSONAL APPLICATION

5. If you were choosing between job offers in California vs. Texas with identical salaries, what factors beyond state income tax would you consider?

CHECK YOUR UNDERSTANDING

1. FICA taxes fund which two programs?

- ☐ A. Federal income tax and state income tax
- ☐ B. Social Security and Medicare
- ☐ C. Property tax and sales tax
- ☐ D. Education and transportation

2. Explain why a sales tax is considered "regressive" even though everyone pays the same rate.

3. **Calculation:** Alex earns \$50,000 and falls into the 22% tax bracket. Using the simplified brackets below, calculate Alex's federal income tax. First \$11,000 at 10%, next \$33,725 at 12%, remainder at 22%.

Show your work:

Total Federal Tax: \$_____

4. Mia moved from California to Texas to avoid state income tax. Under what circumstances might this move NOT result in significant tax savings?

5. **Reflection:** How might understanding different state tax structures influence your decisions about where to live and work after graduation?
