

Activity: Equity Implications of Taxation

Econ 308

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1 Gruber 19.4: Computing Tax Incidence

The demand for football tickets is $D(P) = 360 - 10P$ and the supply of football tickets is $S(P) = 20P$. Calculate the gross price paid by consumers after a per-ticket tax of \$4. Calculate the after-tax price received by ticket sellers.

$$360 - 10(P+4) = 20P$$

$$320 - 10P = 20P$$

$$P_s = \frac{32}{3}$$

$$P_o = \frac{44}{3}$$

2 Gruber 19.7: Tax Incidence Factors

You have determined that producers, rather than consumers, will bear the lion's share of the burden associated with a new tax. How does the elasticity of labor supply influence whether this tax burden will, in turn, be borne more by workers or more by property owners?

Labor supply inelastic \rightarrow more incidence on workers

Labor supply elastic \rightarrow more incidence on landowners

3 Incidence of US Federal Taxes

The Congressional Budget Office (CBO) analysis considers the incidence of the full set of taxes levied by the *federal* government. The CBO assumes that:

- **Individual Income taxes** are borne fully by the households that pay them.
- **Payroll taxes** (i.e., Social Security and Medicare taxes) are borne fully by workers, regardless of whether these taxes are paid by the workers or by the firm.
- **Excise taxes** (e.g., gas, alcohol, tobacco taxes) are fully shifted to consumer prices and so are borne by individuals in proportion to their consumption of the taxed item.
- **Corporate taxes** are borne by both workers and owners of capital (but more so for the latter). *Note: This is subject to debate.*

- a. What do these assumptions imply for what the CBO must think about the relative elasticities for supply and demand in the labor market? In the markets for goods subject to excise taxes? And the relative elasticities for the supply of labor and capital to the corporate sector?

IFT: fully elastic labor supply

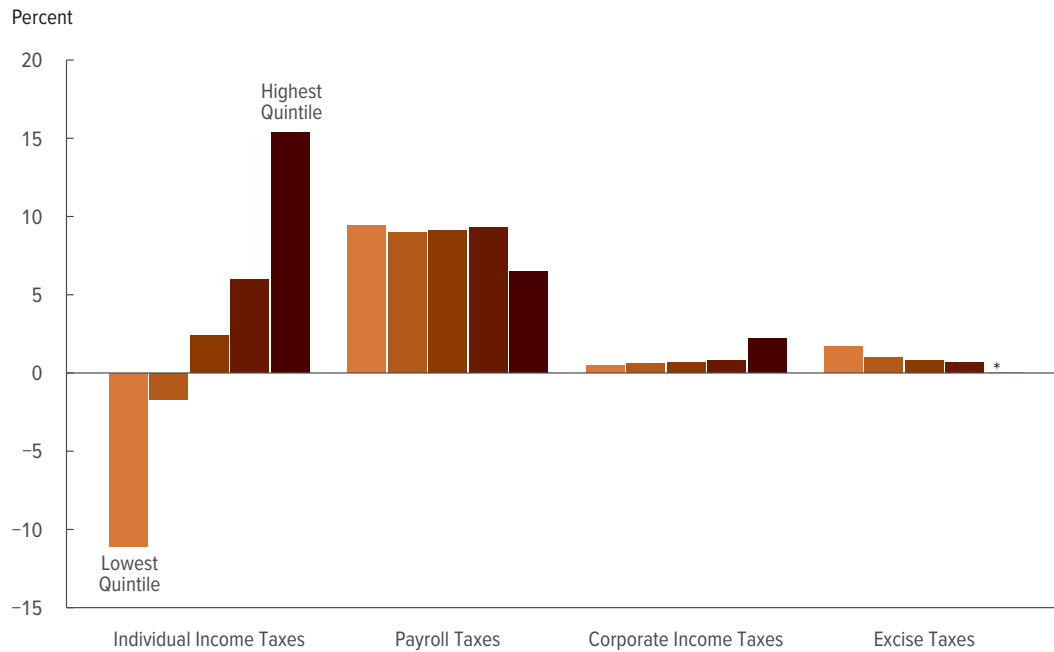
Payroll: fully elastic labor supply

Excise: fully elastic consumer demand

Corporate: relatively elastic capital, relatively elastic labor.

- b. The results of the CBO analysis are pictured below. Which federal taxes are progressive, regressive, and neutral?

Average Federal Tax Rates, by Tax Source, 2019



IT: corporate - progressive

Payroll - neutral

Excise - regressive