

# Public Finance: Taxes, Transfers, and Government Choices

An exploration of how governments tax, spend, and shape economic outcomes through fiscal policy

01

## Why governments tax and spend

Understanding the economic rationale behind fiscal intervention and revenue collection

02

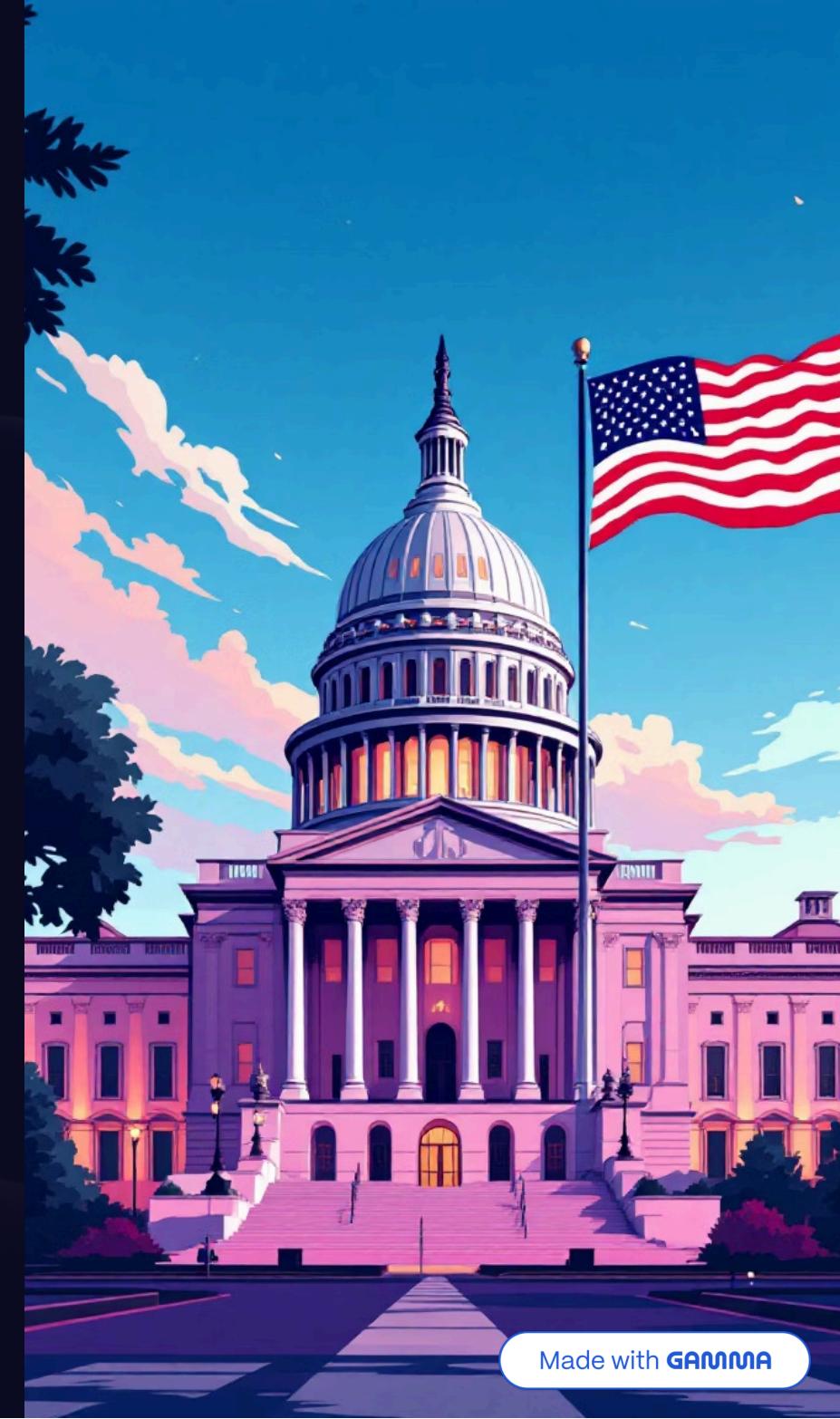
## How to evaluate taxes and transfers

Frameworks for assessing efficiency, equity, and revenue adequacy

03

## Core trade-offs in fiscal design

Navigating constraints and competing objectives in policy choices



# Three Classic Roles of Government

Public finance addresses a fundamental question: how can government actions improve social outcomes given scarcity and behavioral responses? These three roles define the scope of fiscal intervention.



## Allocation

Provide public goods and correct market failures. Markets undersupply certain goods and services—like national defense, clean air, and basic research—that benefit society broadly.



## Redistribution

Reduce inequality and insure against risk. Fairness, social cohesion, and diminishing marginal utility of income justify transfers from those with greater capacity to those with greater need.



## Stabilization

Smooth recessions and booms. Automatic stabilizers and discretionary fiscal policy cushion households and firms against shocks that private insurance may not cover.

- These roles exist because markets can be efficient but not always fair or complete. Constraints always matter: administrative capacity, political feasibility, and budget limits shape what's possible.

# The Government Budget Constraint

## A Reality Check on Fiscal Choices

Every fiscal proposal must answer one question: where does the money come from, and who bears the burden?

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### Spending Side

- Government purchases ( $G$ )
- Transfer payments ( $TR$ )
- Interest on debt ( $i \cdot \text{Debt}$ )

### Financing Side

- Tax revenue ( $T$ )
- Other revenue sources
- Borrowing ( $\Delta \text{Debt}$ )

Every program is paid for **now or later**. Borrowing shifts financing to the future, plus interest.

Borrowing can be sensible for stabilization or long-lived investments, but persistent deficits erode fiscal space and constrain future policy options.

# Tax Bases: What Can Be Taxed?

The choice of tax base fundamentally shapes incentives, enforcement challenges, and distributional outcomes. Different bases differ in measurability, enforceability, and economic effects.

## 1 Income

Wages, self-employment earnings, and capital income. Broad base but subject to evasion and avoidance through deductions and offshore strategies.

## 2 Consumption

VAT, sales taxes, and excises. Can be efficient but regressive relative to current income unless offset by well-designed transfers.

## 3 Wealth & Property

Property taxes, inheritance taxes, net wealth taxes. Land is immobile (often efficient) but politically difficult to tax heavily.

## 4 Corporate Profits

Business income taxation. Interacts with global mobility and profit shifting; incidence depends on capital and labor elasticities.

## 5 Payroll & Social Contributions

Earmarked for social insurance programs. Strong link to benefits but can create labor market distortions at high rates.

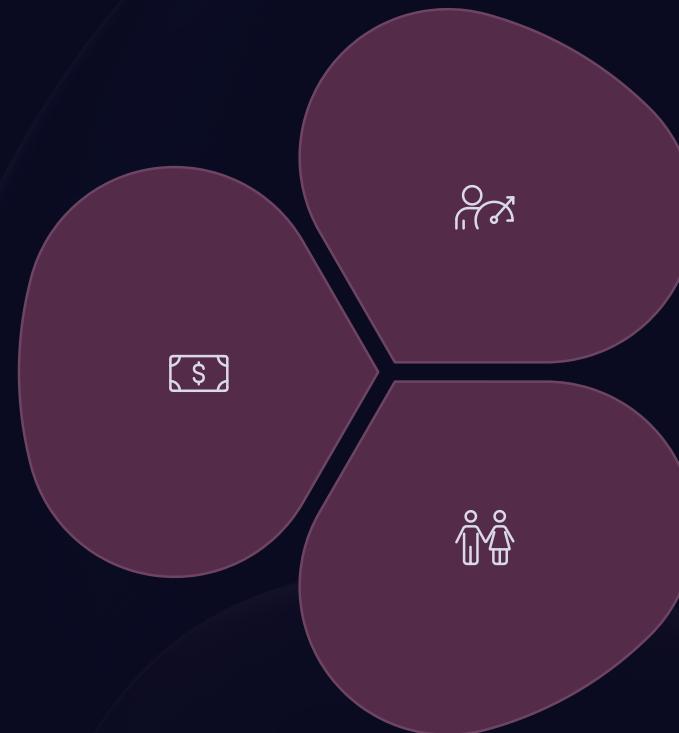
# The Tax Design Triangle

## Choosing Trade-offs Explicitly

Fiscal design is the art of choosing trade-offs explicitly. You rarely maximize all three objectives at once—good policy writing states which corner you prioritize and how you mitigate weaknesses.

### Revenue

Is the tax base sufficient and stable across economic cycles? Cyclical versus stable bases matter for fiscal planning.



### Efficiency

How much behavioral distortion does the tax create? Aim to raise revenue with minimal harm to economic activity.

### Equity

Who pays, and is it fair? Fairness depends on principles, values, and institutional context—not a single number.



# Equity: What Does "Fair" Mean?

People talk past each other because they use different fairness principles. Understanding these competing frameworks is essential for productive policy debate.

## Ability-to-Pay

Those with greater economic capacity should contribute more. Progressive taxation reflects this principle.

## Horizontal Equity

Equals should be treated equally. Raises practical issues around dependents, disability, and varying needs.

## Benefits Principle

Pay proportional to benefits received. User fees and tolls exemplify this approach.

## Vertical Equity

Higher-income individuals should pay more. Implemented via progressive rates, credits, and transfers.

- ☐ Equity is not one number—it depends on values and institutions. The challenge is making your equity principle explicit and defending it coherently.



# Efficiency Costs: Distortions and Deadweight Loss

Taxes create efficiency costs not because taxation itself is harmful, but because taxes change relative prices and alter economic behavior. Understanding deadweight loss is about raising revenue with minimal economic damage.

- 1 **Taxes change relative prices**

A labor tax lowers the net wage; a sales tax raises consumer prices
  - 2 **People substitute away**

Workers supply fewer hours; consumers buy less of taxed goods
  - 3 **Trades are lost**

Some mutually beneficial exchanges no longer happen

**Deadweight loss** is the loss in total economic surplus beyond the revenue collected by government.

Often grows more than proportionally as tax rates rise—roughly following a "quadratic" intuition. This means doubling a tax rate can more than double the efficiency cost.

# Tax Incidence: Who Really Pays?

Looking Beyond Who Writes the Check



## Statutory Incidence

Who is legally required to remit the tax payment to government

## Economic Incidence

Who actually bears the burden through changes in prices, wages, and returns

**Core rule in competitive markets:** The tax burden falls more heavily on the side of the market that is **more inelastic**—meaning less responsive to price changes.



### Inelastic Demand

Consumers bear more of the burden as prices rise. They can't easily substitute away.

### Inelastic Supply

Suppliers bear more of the burden. Example: land can't "move away" from taxation.

- ☐ Corporate tax incidence is empirical: the burden can fall on workers, consumers, or shareholders depending on capital mobility and market conditions. Simple stories are often wrong.

# Progressivity and Incentives

## Understanding ATR versus MTR



### Average Tax Rate (ATR)

$$ATR = \frac{\text{Total tax paid}}{\text{Income}}$$

Measures overall burden. A progressive system has ATR rising with income.

### Marginal Tax Rate (MTR)

$$MTR = \frac{\text{Tax on additional \$1 earned}}{\$1 earned}$$

Measures marginal incentive. High MTRs can discourage work or investment at the margin.

### Key Distinctions

- **Progressive:** ATR rises with income
- **Regressive:** ATR falls with income
- **Proportional:** ATR stays constant

A high MTR is not automatically "unfair"—it depends on the full distribution of burdens and benefits.

- **Communication best practice:** Show net burdens (taxes plus transfers) by income group. Benefit phase-outs can create high effective MTRs for low-income households even when statutory tax rates are low.

# Transfers, Administration, and Applied Lab

## Putting It All Together

Strong tax and transfer designs align the tax triangle with feasibility. Revenue and equity goals must fit administrative capacity and political realities.



### Universal Benefits

Simple, high take-up, but costly. Can still be progressive if financed progressively.

### Means-Tested Benefits

Targeted to need, reducing costs. Creates admin burdens, potential stigma, and high effective MTRs through phase-outs.

### Social Insurance

Linked to contributions and risk pooling. Balances individual responsibility with collective protection.

## Administrative Capacity is Policy

The **tax gap** (owed minus paid) reflects enforcement capacity. Compliance costs and informality shape what works in practice, not just in theory.

### Mini-Lab Exercise: Design a Reform Brief

**Scenario:** Raise +1% of GDP revenue while poverty is rising and informality is high

**Your Task:** Choose (1) base changes, (2) enforcement improvements, (3) transfer design adjustments

**Output:** 6-bullet "minister brief" showing winners and losers by income group