

THE CHALLENGE

Malik is debating his friend about government's role in the economy. His friend says government should stay out of business entirely—let the free market decide everything. But Malik remembers his family's water being poisoned by factory runoff before environmental regulations existed. He also uses public roads daily and attended public schools. Meanwhile, his older brother is frustrated by occupational licensing that requires 1,500 hours of training to cut hair.

When should government intervene in markets, and when does it do more harm than good? How can you evaluate whether a policy's benefits exceed its costs?

Learning Objectives

- Identify market failures that justify government intervention (monopoly, externalities, public goods, information asymmetry).
- Analyze how government policies (taxes, subsidies, regulations) affect market outcomes.
- Apply cost-benefit analysis to evaluate specific policies.
- Recognize how government policies directly affect your personal finances.

CORE CONCEPTS

Term	Definition
Market Failure	When free markets fail to allocate resources efficiently, potentially justifying government intervention.
Externality	A cost or benefit affecting third parties not involved in a transaction (pollution = negative; vaccines = positive).
Public Good	A good that is non-excludable and non-rivalrous—everyone can use it, and one person's use doesn't reduce availability for others.
Subsidy	Government payment to encourage production or consumption, shifting supply right and lowering prices.
Price Control	Government-mandated maximum (ceiling) or minimum (floor) price, causing shortages or surpluses.

Background: Every government policy has trade-offs. Taxes fund services but reduce disposable income. Regulations protect consumers but raise prices. Subsidies encourage certain activities but cost taxpayer money. Understanding when government intervention improves outcomes versus when it creates new problems is essential for being an informed citizen and making smart financial decisions.

APPLY IT

PART A: MARKET FAILURE IDENTIFICATION

For each situation, identify the market failure and whether government intervention is justified.

Scenario 1: Factory Pollution

A chemical plant dumps waste into a river, contaminating drinking water for downstream residents. The plant profits while others bear the health costs.

Market Failure Type: _____ (monopoly / externality / public good / info asymmetry)

Intervention Justified? _____ (Yes / No)

Best Solution: _____

Scenario 2: National Defense

The military protects all Americans, but private companies can't profit from defense because people would "free ride"—benefiting without paying.

Market Failure Type: _____ (monopoly / externality / public good / info asymmetry)

Intervention Justified? _____ (Yes / No)

Best Solution: _____

Scenario 3: Used Car Sales

A seller knows their car has hidden engine problems, but the buyer can't easily detect them. Buyers worry every car might be a "lemon" and won't pay fair prices.

Market Failure Type: _____ (monopoly / externality / public good / info asymmetry)

Intervention Justified? _____ (Yes / No)

Best Solution: _____

Scenario 4: Local Utility Company

One company provides all electricity in your area. Building competing power lines would be wasteful and impractical, so the company can charge whatever it wants.

Market Failure Type: _____ (monopoly / externality / public good / info asymmetry)

Intervention Justified? _____ (Yes / No)

Best Solution: _____

Hint: Externalities = third-party costs/benefits. Public goods = non-excludable, non-rivalrous. Info asymmetry = one party knows more.

PART B: POLICY IMPACT ANALYSIS

Analyze how government policies affect market prices and quantities. Use supply/demand thinking from L-50.

Policy	Effect on Supply/Demand	Effect on Price	Effect on Quantity
Tax on gasoline	Supply shifts ____	Price ____	Quantity ____
Subsidy for solar panels	Supply shifts ____	Price ____	Quantity ____
Rent control (price ceiling)	Creates ____	Price stays ____	Shortage of ____
Minimum wage (price floor)	Creates ____	Wage stays ____	Surplus of ____

5. The gas tax is \$0.50/gallon. If you drive 10,000 miles/year at 25 MPG, how much do you pay annually in gas tax?

Show your work:

Answer: \$_____ per year in gas tax

6. What do you get in return for gas taxes? List 3 government services funded by these taxes.

PART C: COST-BENEFIT ANALYSIS

7. Should your state raise the minimum wage to \$15/hour? Complete the cost-benefit analysis:

Benefits	Costs

Your verdict: _____ (Support / Oppose / Modify)

8. Identify one government regulation that affects your daily life. What market failure does it address? Do benefits exceed costs?

CHECK YOUR UNDERSTANDING

1. A cost or benefit affecting parties not involved in a transaction is called:

- ☐ A. Public good
- ☐ B. Externality
- ☐ C. Market structure
- ☐ D. Price control

2. Explain why private markets cannot efficiently provide national defense.

3. **Calculation:** A pollution tax of \$50/ton is imposed on a factory that emits 1,000 tons annually. The tax reduces emissions by 40%. Calculate the tax revenue and remaining emissions.

Show your work:

Tax Revenue: \$_____ | Remaining Emissions: _____ tons

4. Rent control sets apartment prices below market level. Why does this cause a housing shortage?

5. Reflection: Do you believe your state has too much, too little, or about the right amount of government intervention in the economy? Explain with specific examples.
