Taxes

Practice I

All states impose excise taxes on gasoline. According to data from the Federal Highway Administration, the state of California imposes an excise tax of $0.18 per gallon of gasoline. In 2005, gasoline sales in California totaled 15.6 billion gallons.

- What was California's tax revenue from the gasoline excise tax?
- If California doubled the excise tax, would tax revenue double? Why or why not?

Answers

- Tax revenue is $0.18 per gallon x 15.6 billion gallons = $2.8 billion.

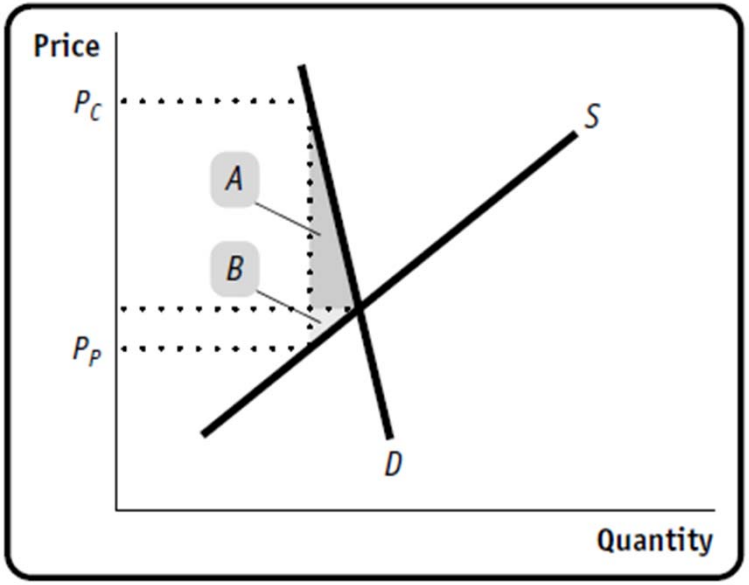
- Doubling the excise tax would reduce the amount of gasoline bought and sold, and tax revenue would less than double. The exception would be a case in which either demand or supply is perfectly inelastic; only in that special case would the quantity transacted not change as a result of the imposition of the excise tax, and tax revenue would- in this special case only- double as a result of a doubling in the excise tax rate.

Practice II

Assume that the demand for gasoline is inelastic and supply is relatively elastic. The government imposes a sales tax on gasoline. The tax revenue is used to fund research into clean fuel alternatives to gasoline, which will improve the air we all breathe.

- Who bears more of the burden of this tax, consumers or producers? Show in a diagram who bears how much of the excess burden.

Answers



The diagram shows an inelastic demand curve for gasoline. The tax, whether imposed on consumers or producers, drives a wedge between the price paid by consumers and the price received by producers

The burden is borne predominantly by consumers.