

# End-of-chapter Questions

## Chapter 18: Tax Incidence - Theoretical Issues

1. Why, in general, do both consumers and producers bear a burden of a per unit excise tax levied on the producers?
2. What is the distinction between the impact (statutory incidence) and incidence (economic incidence) of a tax?
3.
  - a. Using supply and demand analysis, show the effects of a per unit excise tax,  $t$ , on a good paid by the suppliers on: the equilibrium price and quantity, the tax revenue collected, and the burden of the tax to consumers and producers. (Use the reduction in consumer and producer surplus to demonstrate the burden).
  - b. How would your answers change if the same tax were levied on the consumers as they purchased the good rather than on the suppliers? Demonstrate using supply and demand analysis.
4.
  - a. Under what conditions do consumers bear the full burden of an excise tax levied on the producers?
  - b. Under what conditions do producers bear the full burden of an excise tax levied on the producers?
  - c. Under which of these two conditions would the impact of the tax equal the incidence of the tax?  
(Use supply and demand analysis to answer these questions)
5. If, in principle, it does not matter which side of a market is taxed, why might governments prefer to tax one side or the other? Give a specific example or two to support your answer.
6. Comment on the following statement: 'The market, not the government, determines the incidence of a tax.' Give an example or two to support your response.
7. What is balanced budget incidence? What are its strengths and weaknesses as a framework for tax incidence analysis?
8. In his general equilibrium approach to tax incidence analysis, Arnold Harberger assumed that the government simply returns the tax revenues lump-sum to

consumers. Why is this a reasonable assumption for the analysis of the incidence of a single tax? What are some of its weaknesses?

9.
  - a. Why can Arnold Harberger's framework of returning tax revenues lump-sum be applied only to distorting taxes?
  - b. Given that the tax revenue is returned lump-sum, how is the incidence of a distorting tax measured?
  - c. What is considered to be the incidence of a non-distorting (lump-sum) tax?
10. What is differential tax incidence? Would governments ever be interested in measuring differential tax incidence?
11. What is the distinction between a general and a specific tax? Give some examples of each.

*For the next two questions, assume a static, one-period, perfectly competitive economy with identical consumers and constant-returns-to-scale production.*

12. If all goods and services are taxed at an *ad valorem* rate of 50%, what *ad valorem* tax rate on all factors of production would have the same incidence? Explain.
13. Why do the following taxes have the same incidence: personal income tax; personal expenditures (consumption) tax; general sales tax; and value added tax?