

## Chapter 11

1. Consider the rivalry and excludability of each of the following goods. Use this information to determine whether the goods are public goods, private goods, common resources, or produced by a natural monopoly. Explain.
  - a. Fish in a private pond
  - b. Fish in the ocean
  - c. Broadcast television signals
  - d. Cable television signals
  - e. Basic research on lifestyle and cholesterol levels
  - f. Specific research on a cholesterol lowering drug for which a patent can be obtained
  - g. An uncongested highway (no tolls)
  - h. A congested highway (no tolls)
  - i. An uncongested toll road
  - j. A hot dog served at a private party
  - k. A hot dog sold at a stand owned by the city government
  
2. Suppose the city of Roadville is debating whether to build a new motorway from its airport to the city centre. The city surveys its citizens and finds that, on average, each of the one million residents values the new highway at a value of €50 and the highway costs €40 million to construct.
  - a. Assuming the survey was accurate, is building a new motorway efficient? Why?
  - b. Under what conditions would private industry build the road?
  - c. Should the city build the road? On average, how much should it increase each resident's tax bill to pay for the road?
  - d. Is it certain that building the motorway is efficient? That is, what are the problems associated with using cost-benefit analysis as a tool for deciding whether to provide a public good?