

Discussion Questions/Exercises

1. Suppose you own an apartment building that does not generate enough rental revenue to cover your costs. You have two options: either demolish the building and set up a parking lot; or abandon the building. Suppose the cost of demolition is \$20,000 and the annual profit from the parking lot would be \$1500. What piece of information would you need to make the decision as to whether to demolish or abandon, and how would you use it?
2. In city A, all households have the same income and real income is constant over time. Will there be filtering in the city?
3. The real estate brokers in city B are baffled. Although dwellings are subject to the normal physical and fashion deterioration over time, there is little filtering. In contrast to most cities, in which the typical house changes hands every 7 years (usually going to a household with a lower income than the previous owner), the typical house in this city changes hands every 50 years. Explain this phenomenon.
4. What are the effects of a subsidy for medium-quality housing on the higher-quality housing market and on the lower-quality housing market?
5. Consider city C, which has a fixed population. In an attempt to decrease total residential energy consumption, the city has adopted a new policy: All new housing in the city must be equipped with an energy-saving device that decreases the dwelling's energy consumption by 10 percent.
  - a. Evaluate the effects of this policy on the city's new and used housing markets. What happens to the prices of new and used housing, and to the quantities of new and used housing?
  - b. Under what circumstances will total energy consumption in the city increase?
  - c. Can you describe and justify a more effective conservation policy?
6. Comment on the following statement: "Property values in city D are increasing rapidly, rising at an annual rate of about 20 percent. This will cause many households to switch from renting to owning."
7. The owners of rental property can deduct routine maintenance cost from their gross income, while homeowners cannot. Does the deductibility of maintenance cost decrease the relative cost of renting, thus creating a bias toward renting?
8. In city E, landlords charge a security deposit of \$900 and do not refund the money when the tenant leaves. Suppose that a new deposit law is passed. The law requires that all landlords refund 100 percent of the security deposit unless the landlord can prove that the tenant damaged or dirtied the dwelling. Comment on the following statement: "The new law will save the typical tenant \$900."
9. Comment on the following statement: "I live in an apartment complex built in a year when interest rates were relatively low. My rent is lower than the rent on other apartments because the cost of financing the complex is relatively low."

10. Comment on the following statement of Mr. Taxpayer: “I support public housing rather than cash transfers because I want to be sure that the recipients of public assistance increase their housing consumption. If we give them cash, they will spend the money on something else.”
11. According to a realtor in Modville: “If my assumptions are correct, the long-run market effects of public housing are nil. The building of 200 public housing dwellings will affect neither the equilibrium price of housing nor the quantity of housing.”
  - a. What are the realtor’s assumptions?
  - b. Use the realtor’s assumptions to predict the long-run market effects of housing vouchers.
12. In Figure 15-2, the offer of public housing increases housing consumption (as measured in units of housing service).
  - a. Draw an alternative case of a public housing offer (say, 280 units at a rent of \$100) that decreases housing consumption.
  - b. Now, using a similar graph, suppose that the government increases the rent on a 280-unit dwelling from \$100 to \$200. Draw a set of indifference curves such that the household would accept the offer of \$100 public housing, but is indifferent between its original choice and \$200 public housing.
13. Suppose that the household in Figure 15-2/problem 12 starts with a housing consumption of 400 units of housing service instead of 300. Is this household more or less likely to decrease its housing consumption to get public housing of 280 units at a rent of \$100? Explain.
14. For Figure 15-2, show that the household prefers receiving \$300 in cash rather than \$300 as a housing subsidy for consuming 540 units of public housing.
15. Your answer to problem 14 assumed that a system of cash transfers would not increase the price of housing.
  - a. Draw the initial budget line on a graph.
  - b. Redraw the new budget line on this graph under the assumption that the cash transfer of \$300 per household increases the price of housing from \$1 to \$1.50 per unit.
  - c. Draw a set of indifference curves such that the consumer prefers the subsidized public housing of 540 units to the cash transfer (with the associated change in price).