

Discussion Questions/Exercises

1. Under the incubator process, when industries mature they move from single-activity clusters to areas with lower land and labor costs. Explain this process in terms of changes in the orientation of firms as they mature.
2. Most of the dresses made in the United States are produced by large firms in suburban areas, not by small firms in city centers. Is this consistent with the notion of industry externalities and clusters? (Hint: Is there a difference between a Kmart dress and a dress produced by a small dressmaker?)
3. The conventional wisdom for urban economic development is: “Don’t put your eggs in one basket. Diversify the economy.” To explain the idea of diversification, consider carrying a dozen eggs from the barn to the house. The ground between the barn and the house is slippery, so there is a 50 percent chance that you will slip on any given trip and break all the eggs in your basket. Consider two strategies: a one-basket strategy (a single trip with all twelve eggs) and a two-basket strategy (two trips, with six eggs per trip). What are the trade-offs between the two strategies? Which would you adopt?
4. Consider a 10-firm industry that has the following characteristics:
 - i) They produce output using labor and raw materials.
 - ii) Raw materials are ubiquitous.
 - iii) Each firm produces one new product per year, and each product becomes obsolete after a year.
 - iv) Only 3 of the 10 new products will be successful (i.e., sell more than a trivial amount).
 - v) The monetary and time costs of switching a worker from one firm to another are zero, regardless of the spatial distribution of firms.
 - a. Will the firms in the industry form a cluster? Why or why not?
 - b. How would your answer to a change if workers incur moving costs when they switch from one firm to another?
5. Suppose that the outputs of beauty shops and pet-grooming salons are complementary, providing one-stop shopping for personal and pet maintenance. Betty is thinking about moving her beauty shop from an isolated location to a vacant building next to Peter’s pet-grooming shop. In making her decision she makes the following assumptions:
 - i) If she moves, she will keep all her current customers (20 people per week) and attract 25 percent of Peter’s current customers.
 - ii) Peter currently has 60 customers per week.
 - iii) Excluding rent, Betty’s profit per beauty treatment is \$10.
 - iv) The weekly rent at the new location is \$200 higher than Betty’s current rent.
 - a. If Betty moves her beauty shop, will her profits increase or decrease?
 - b. Suppose that if Betty makes the move, 50 percent of her original customers will switch from George’s grooming salon to Peter’s. If Peter’s profit per treatment is \$8, how much would he be willing to pay Betty to make the move? Will the payment be enough to induce Betty to make the move?

6. Consider a city with two auto sellers, a Subaru dealer and a Toyota dealer. Initially the distance between the sellers is three miles. The Subaru dealer wants to relocate to a site adjacent to the Toyota dealer and submits a rezoning request to the city council. The Toyota dealer responds to the rezoning request with the following statement: “One of the lessons from Econ 110 is that an increase in supply will decrease price. If the Subaru dealer moves to the site adjacent to my dealership, the local supply of cars will increase and I’ll have to cut my prices to sell the same quantity of cars.” Critically appraise the Toyota dealer’s statement.