

Urban - Regional Economics
Review Questions
First Exam

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1. Explain how the combination of regional comparative advantage and scale economies in transportation combine to produce trading firms and market cities.
2. Manufacturing innovations of the industrial revolution led to increased production economies of scale. Using the concepts of net cost and market area, explain how increased production economies of scale led to the development of industrial cities.
3. One of the reasons for the existence of agglomeration economies is scale economies in intermediate inputs. Answer the following.
 - (a) What are the 3 conditions that are required for the emergence of agglomeration economies from the sharing of input suppliers?
 - (b) Explain this source of agglomeration economies using each of the following as an example.
 1. The New York dressmaking industry
 2. High technology firms
4. Another reason for the existence of agglomeration economies is labor market economies. Answer the following:
 - (a) What must be true of the labor market demand of industries in order for labor market economies to occur?
 - (b) Explain why the clustering of firms facilitates the shift of workers from unsuccessful to successful firms.
5. Answer the following concerning the benefits and costs of labor pooling:
 - (a) What are the benefits to a firm of locating in an industry cluster as opposed to an isolated site?
 - (b) What are the costs to a firm of locating in an industry cluster as opposed to an isolated site?
 - (c) Explain why the benefits exceed the costs if the firm locates in the cluster
6. In class we discussed how large cities result in better matching of worker skills and firm skill requirements.
 - (a) Using the model discussed in class, write the equation for the worker's net wage.

- (b) Assuming the gross wage is \$12/hour and the unit training cost is \$24, compute the net wage for a skills gap of $\frac{1}{8}$ and a skills gap of $\frac{1}{12}$. Which results in a higher net wage?
- (c) How does the clustering of firms and workers benefit the firms? How does it benefit the workers?
7. Another reason for the existence of agglomeration economies is communication economies. Explain communication economies by using the computer industry as an example.
8. (a) Define urbanization economies
(b) How do urbanization economies differ from localization economies?
(c) Discuss 3 different examples of urbanization economies.
9. (a) Define shopping externality
(b) Explain the locational effect of imperfect substitutes
(c) Explain the locational effect of compliment goods
10. Transfer oriented industrial firms select locations that minimize transport costs. Answer the following.
- (a) Define procurement cost and distribution cost
- (b) Define the monetary weight of input and output
- (c) Using the concepts of procurement cost, distribution cost, and monetary weights, explain why resource oriented firms locate at resource sites. In your answer, discuss the cases of relative differences in physical weight of input and output as well as relative differences in transport prices of input and output.
- (d) Using the concepts of procurement cost, distribution cost and monetary weights, explain why market oriented firms locate at markets. In your answer, discuss the cases of relative differences in physical weight of input and output as well as relative differences in transport prices of input and output.
11. The analysis of the transfer oriented firm suggests that the firm will locate at the input source or the market
- (a) Under what conditions could intermediate location compete with the input source or the market
- (b) What prevents (a) from occurring?
12. The principle of median location can be employed to analyze the locational decisions of transfer oriented firms with several input sources and markets. Answer the following.
- (a) Define the median transport location

- (b) What assumptions are necessary for the principle of median location to apply?
 - (c) Why does the median transport location minimize transportation costs?
13. Using the principle of median location, explain why some industrial firms locate in trans-shipment points.
14. Labor oriented firms locate in cities and regions with low labor cost per unit of output
- (a) What are the two variables that affect labor cost per unit of output and how are they each related to labor cost?
 - (b) Explain 4 reasons for spatial variation of labor costs.
 - (c) Explain how amenities affect locational decisions of labor oriented firms.
15. In the post WWII era, many firms switched from transfer orientation to local input orientation. Describe the transportation and production innovations that produced this result. Give examples.
16. Cities attempt to attract firms by offering them subsidies. Explain 4 types of inducements.
17. According to the empirical studies, what effect do state and local taxes and public services have on location choices?