

ECONOMIC BRIEF NO. 8

Economies of Scale Can Reduce Costs

This series of economic briefs explores fundamental concepts in economics and community and economic development.

One of the most compelling reasons given for local government consolidation is that it offers opportunities to achieve economies of scale. What, then, are economies of scale?

Economies of scale are reductions in average costs that are usually realized by spreading costs over a larger number of users of a service or product. Examples of economies of scale are easy to cite. Consider police services.

If the cost to equip and employ a full-time police officer to deal with law enforcement problems arising in a community of 1,000 persons is \$50,000 a year, the annual average cost of police services is \$50 per person. But if the population of the community is only 100, the average annual cost of maintaining one full-time police officer will be \$500 per person.

The practical difficulties in estimating economies of scale can sometimes be overwhelming. But some of the things that affect economies of scale are easy to identify.

Anything that increases overhead costs for a police department, like a computer, is likely

to mean that the community must get bigger to reap the potentialities for lower average costs. For instance, reporting requirements in police work can often be most efficiently handled with a computer, but a computer in a one-person police department would be underused.

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Similarly, anything that increases fixed relative to variable costs is also likely to mean that a community must get bigger to reap the potentialities for lower average costs. Radio-dispatching technology allows police officers to work more efficiently, but the cost of installing this technology is about the same no matter how many officers are in a department. That is why some localities have found it attractive to develop joint municipal/county dispatching operations.

The general trend of technology for the past hundred years or so has been to open up cost savings only if scale increased. But, not all technological developments increase economies of scale.

Some new computer technologies, such as the desktop publishing packages used to produce this newsletter, reduce economies of scale by enabling us to reduce the unit cost of production without increasing the number of readers.

New federal environmental regulations, civil rights and employment laws, as well as new technology are all causing economies of scale in local government operations to increase. To cope with these new requirements, local governments either will have to come together to increase scale or taxpayers will face higher and higher tax bills.

For governments there is a special down side to getting bigger. Bigger may mean lower per unit costs, but it can also mean governments so big that they are out of touch with the people they serve. Often there is a trade-off between realizing economies of scale and accountability to citizens.