

April 5, 2020

Together and Apart – Economies and Diseconomies of Scale and COVID-19

Simply defined, economies of scale mean that if we double the inputs in a process, we more than double the output. Economies of scale are important to modern society. Cities exhibit economies of scale, which is why people move to them, for higher wages, partially offset by higher land (and housing) rents. Hospitals exhibit economies of scale; one sees very few 10-bed hospitals, because common resources such as operating rooms, intensive care units, or testing facilities, require large volume to cover costs. Large corporations exhibit economies of scale in research and development, and in marketing; making 10,000 cars per day does not cost 10 times as much as making 1,000 cars per day.

Are scale economies boundless? Emphatically not. Mumbai or Kolkata have massive populations, and severe urban problems, but then so have New York and Detroit. At what point, analysts must ask, do the economies of scale give way to too much crowding, leading to pollution, congestion, breakdown of public service, or of social order. Metropolitan New York City is the most densely populated area in the United States, but Metropolitan Detroit is not. The crowded streets, buildings, and elevators in New York City signify the vitality of commerce, business, and entertainment, but they also put people very close to each other, and potentially in harm's way for contagious diseases. Certainly factors other than density, such as poverty (making people more susceptible to disease), and availability of health care resources (helping to prevent or cure disease), must be addressed to provide full explanations of the COVID-19 pandemic in local US metropolitan areas.

Economies of scale also work at the micro level. A couple living together does not need two kitchens, two water meters, or two furnaces (although they may require two bathrooms!). Living together saves money. Staying at home, and working apart from colleagues, can be less productive. Tech wizards, University professors, or office workers are now finding that they can work from home, although many are finding the results to be less satisfactory than working together in the same place. Economies of scale matter.

There are rare silver linings. A friend's son has been commuting several hundred miles every week and keeping a separate apartment, in order to do his graduate studies in a different city. Staying in place, and social distancing means that he can do his teaching and research from "home", and be together all the time with his partner ... and saving several thousand dollars. This, too, exemplifies economies of scale.

Allen C. Goodman
Professor of Economics