

The Costs of Higher Education

How big is your college or university? Is it a large school, such as Ohio State, or a smaller one, such as Northwestern? At which school is the cost per student likely to be lower? Does university size affect the long-run average and marginal cost of “producing” education?

Rajindar and Manjulika Koshal have studied how school size affects the average and marginal cost of education.⁴ They collected data on the average cost per student from 195 U.S. universities from 1990 to 1991 and estimated an average cost curve for these universities.⁵ To control for differences in cost that stem from differences among universities in terms of their commitment to graduate programs, the Koshals estimated average cost curves for four groups of universities, primarily distinguished by the number of Ph.D.s awarded per year and the amount of government funding for Ph.D. students these universities received. For simplicity, we discuss the cost curves for the category that includes the 66 universities nationwide with the largest graduate

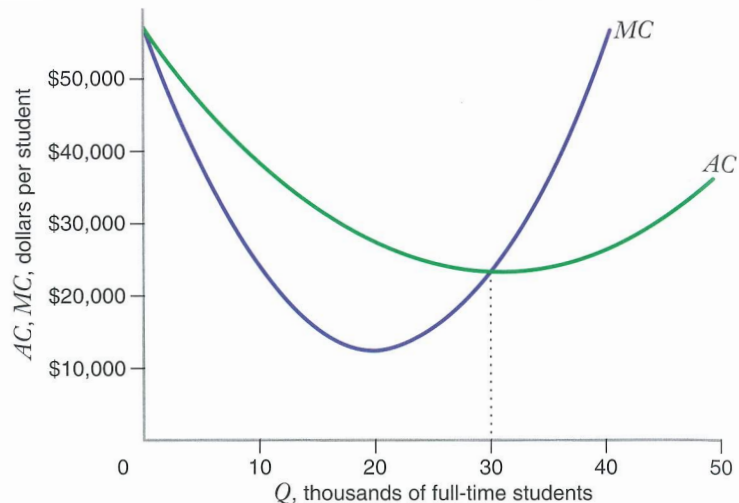
programs (e.g., schools like Harvard, Northwestern, and the University of California at Berkeley).

Figure 8.10 shows the estimated average and marginal cost curves for this category of schools. It shows that the average cost per student declines until enrollment reaches about 30,000 full-time undergraduate students (about the size of Indiana University, for example). Because few universities are this large, the Koshals’ research suggests that for most universities in the United States with large graduate programs, the marginal cost of an additional undergraduate student is less than the average cost per student, and thus an increase in the size of the undergraduate student body would reduce the cost per student.

This finding seems to make sense. Think about your university. It already has a library and buildings for classrooms. It already has a president and a staff to run the school. These costs will probably not go up much if more students are added. Adding students is, of course, not costless. For example, more classes might have to be added. But it is not *that* difficult to find people who are

FIGURE 8.10 The Long-Run Average and Marginal Cost Curves for Undergraduate Education at U.S. Universities

The marginal cost of an additional student is less than the average cost per student until enrollment reaches about 30,000 students. Until that point, average cost per student falls with the number of students. Beyond that point, the marginal cost of an additional student exceeds the average cost per student, and average cost increases with the number of students.



able and willing to teach university classes (e.g., graduate students). Until the point is reached at which more dormitories or additional classrooms are needed, the extra costs of more students are not likely to be that large. Thus, for

the typical university, while the *average* cost per student might be fairly high, the *marginal* cost of matriculating an additional student is often fairly low. If so, average cost will decrease as the number of students increases.