

Is the U.S. Losing Its Preeminence in Higher Education?

*A Problem of Erosion in the Technology Transfer Base **

By

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Abstract

The expansion of U.S. universities after World War II gained from the arrival of immigrant scientists and graduate students, the broadening of access to universities, and the development of military research and high technology industry. Since the 1980s, however, growth of scientific research in Europe and East Asia has exceeded that of the U.S., suggesting convergence in world science and engineering and a falling U.S. share.

But the slowdown of U.S. publication rates in the late 1990s is a different matter, in that the rise of science elsewhere does not in an obvious sense imply a U.S. slowdown. Using a panel of U.S. universities, fields and years, evidence is found of a slowdown in resources, which has slowed growth of research output in public universities and in university-fields falling into the middle and bottom 40 percent of their disciplines. These developments can be traced in part to slower growth in tuition and state appropriations in public universities compared to revenue growth, including from endowment, in private universities. The resulting decline in the growth rate of scientific output has eroded the technology transfer base compared to its potential or counterfactual level.