

Session 5

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Measuring the Education Function of Government in the United States

I present preliminary volume measures of the output of the education function of government in the United States. The combined volume measures that I calculate for all levels of public education grow at a rate of between 1.1 and 1.5 percent per year over 1980-2001. This is notably slower than the 2.5 percent annual growth rate for public education measured under the currently used input approach. The combined volume measures are more accurately described as approximately 90/10 volume/input measures, as I use input rather than volume measures for the non-instructional component of higher education and for education output outside of elementary, secondary, and higher education.

The volume measures for elementary and secondary education output that I estimate are based on counts of enrolled students. I consider a wide range of approaches to adjusting for the quality of elementary and secondary education over time, including approaches that use changes in the employment of school inputs or changes in standardized test scores over time. The annual growth rates of the volume measures I estimate for public elementary and secondary education for 1980-2001 range from 0.7 percent to 1.2 percent, which is considerably slower than the 2.4 percent annual growth rate of the analogous input measure.

When measuring volume measures for the output of public higher education in the United States, I distinguish between the instructional and non-instructional components of higher education. I use an index of enrollments and degrees earned to measure the output of the instructional component, which makes up between 70 and 75 percent of output, and continue to use the input measure for the non-instructional component. A Fisher index that combines the two components into an overall measure for higher education grows at an annual rate of between 1.9 and 2.0 percent over 1980-2001, which is marginally lower than the 2.7 percent growth rate of the pure input measure.