

The Measurement of Nonmarket Sector Outputs and Inputs Using Cost Weights

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Discussion Paper 08-03,
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Revised March 15, 2008.

Abstract

In many sectors of the economy, governments either provide various services at no cost or at highly subsidized prices. Examples are the health, education and general government sectors. The *System of National Accounts 1993* recommends valuing these nonmarket outputs at their costs of production but it does not give much guidance on exactly how to do this. In this paper, an explicit methodology is developed that enables one to construct these marginal cost prices. However, in the main text, an activity analysis approach is taken in order to simplify the analysis, so in particular, constant returns to scale, no substitution production functions for the specific activities in the nonmarket sector are assumed. It is shown that it is possible to obtain meaningful measures of Total Factor Productivity growth in this framework. An Appendix relaxes some of the restrictive assumptions that are used in the main text.

Keywords

Measurement of output, input and productivity, nonmarket sector, health, education, general government, cost functions, duality theory, marginal cost prices, activity analysis, technical progress, total factor productivity, outlet substitution bias.

JEL Classification Numbers

C43, D24, D57, E23, H40, H51, H52, I10, I20, O47.