On the Measurement and Causes of Technical Inefficiency in Local Public Services: With an Application to Public Education

Abstract - Local governments (including school districts) face increasing fiscal stress due to rising costs and little growth in intergovernmental aid and property tax revenues. In this tight fiscal environment, the measurement of and identification of causes for technical inefficiency in the provision of local public services becomes all the more important. Although there is a growing body of literature on the estimation of technical efficiency using linear programming methods, the production models underlying these estimates often are not consistent with the process of local public service provision. In particular, previous studies have not properly controlled for socioeconomic variables that affect service outcomes but are beyond the control of local government officials. Further, the public choice literature theoretically modeling inefficient behavior by bureaucrats devotes scant attention to empirical analysis of the underlying causes of technical inefficiency in the public sector. The major objective of this article is to present a modified linear-programming method for estimating technical efficiency that distinguishes discretionary inputs and socioeconomic variables affecting public production. This method is applied to examining the level and possible causes of technical inefficiency in the provision of public education in New York State.