Managerial efficiency in local government: 
Implications on jurisdictional consolidation*

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Abstract. Using data from Maine, estimates of size economies in the production of public education services are provided under the alternative assumptions of managerial efficiency and inefficiency. While size economies were identified under the traditional assumption of managerial efficiency, limited or no size economies were identified under the more general assumption of managerial inefficiency. These results question the validity of the traditional economies of size literature and the jurisdictional consolidation policy which follows from the traditional literature.

1. Introduction

The decentralization of public responsibilities to lower levels of government over the past decade has renewed the debate over the operational efficiency of local governments. Arguments are made that the small size of operation for many local governments is inherently inefficient in an economic sense, hence costly (Chicoine and Walzer, 1985; Bish and Ostrom, 1972; and Bish, 1977). The natural policy conclusion which flows from these arguments is jurisdictional consolidation (Baumol and Schornhorst, 1983; and Mercier, 1983). The empirical evidence supporting the presence of size economies in the production of certain public goods and services appears to be well documented (Doeksen and Peterson, 1987; and Fox, 1980).

This line of reasoning is perhaps most evident in the case of public education. In a review of the literature examining the case of public education, Fox (1981) reported that the majority of the 34 studies included in his review identified the presence of size economies. These findings have been systematically translated into policy. Sokolow (1981) observed that in the 35 years between 1942 and

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1977 the total number of school districts in the US declined from 108,000 to just over 15,000.

The policy of consolidation on the premise of capturing size economies, however, ignores a central contention of the public choice school of thought. Specifically, public choice analysts view local government as aggregators of collective preferences on issues requiring public action (Chicoine and Walzer, 1985). Within this framework the degree of heterogeneity of the population living in the jurisdictional boundaries of the local government becomes a driving factor in determining the total public welfare achieved. It has been suggested by Tullock (1969) and later shown within the framework of club goods (Cornes and Sandler, 1986), that smaller governments (or clubs) composed of a more homogenous population are better suited to match levels of the public good with the preferences of the constituents. The policy of jurisdictional consolidation may introduce a sufficient degree of preference heterogeneity such that the preferences of some subgroups will no longer be met and total welfare may decrease.

The issue addressed in this research centers on the consistency of the empirical evidence examining size economies. In particular, embedded in the empirical consolidation literature is the implicit assumption of managerial efficiency. The traditional empirical specification of these models assumes that all local officials are employing inputs into the production process in a cost-minimizing manner. If managerial inefficiencies are present, the validity of the traditional size economies literature may be questioned. In particular, managerial inefficiencies may be incorrectly attributed to size economies. In the extreme, no size economies are present, but rather managerial inefficiencies. The implication on policy is startling: simple consolidation to gain perceived size economies excludes the possibility of managerial inefficiencies.

The research reported in this article examines the implication of managerial inefficiencies on size economies for the case of public education in Maine. The article is divided in six sections. The notion of managerial efficiency within a public setting is described in the second section. The theoretical framework and estimation methods are then described followed by a description of the empirical model and data. The empirical results are then discussed and the concluding section considers the study's policy implications.

2. Managerial efficiency in government

Sokolow (1981) defines managerial capacity, or managerial efficiency, as the skills and experience needed to produce public goods and services in an economically efficient manner. Reid (1984 and 1986) observes that in many areas local government officials may not possess either the professional training or