Abstract:

This paper proposes an innovative approach to evaluate the causal impact of a policy change in a multi-input multi-output setting. It combines varied insights from the econometric impact evaluation techniques and the efficiency analysis. In particular, the current paper accounts for endogeneity issues by introducing a quasi-experimental setting within a conditional multi-input multi-output efficiency framework and decompose the overall efficiency between 'group-specific' efficiency (i.e., reflecting internal managerial inefficiency) and 'program' efficiency (i.e., explaining the impact of the policy intervention on performance). This framework allows the researcher to interpret the efficiency scores in terms of causality. The practical usefulness of the methodology is demonstrated through an application to secondary schools in Flanders, Belgium. By exploiting an exogenous threshold, the paper examines whether additional resources for disadvantaged students impact the efficiency of schools. The empirical results indicate that additional resources do not causally influence efficiency around the threshold.