

**Ella Kallai and Mircea Maniu**

**Input Efficiency in Publicly Provided Education: The Case of Romania**

**NON-TECHNICAL SUMMARY**

The empirical studies leave controversial the issue whether more resources devoted to education generate higher quality of schooling and whether there are school resources more efficient in producing high school quality and thus worthwhile to spend public money on them. The objective of this paper is to analyze the situation in Romanian publicly provided secondary education.

The relationship between school resources and high quality school depends strongly on the incentive system. Therefore, the article has two main focuses:

- To assess the adjustments the schooling system went through the last decade and shaped the evolution of incentives in schools;
- To estimate the educational production function, relating various school resources with school outcome measured by the test scores obtained by secondary education graduates at national standardized evaluation exams.

The findings indicate that there is a close relationship between school resource and test score achievement and that the intensity of the relationship varies upon the student cohort age, the area of school location and students' gender. Among the most effective school resources in generating high test scores are the number and quality of teachers. The student –teacher ratio has a negative and significant effect on graduates' test score, while the share of qualified teachers and full time teachers have a positive and significant effect.

Large schools have a positive and significant effect on test scores of graduates in urban areas as well as on the test scores of girl graduates from rural areas. Thus the fact that school size tends to be positively related to performance is not simply a reflection on schools in isolated or rural areas.

School organization upon modern principle by fragmenting the teaching process within laboratories and workshops seems not suitable for high performance neither in urban nor in rural areas.

Families' wealth effect negatively influences the performance of lower level secondary girl graduates.

The findings suggest that school resources positively affect school performance in Romanian secondary schools. The most efficient ways to spend public money for secondary education in Romania is investing in additional high quality teaching staff and revision of organizational structure of schools.

Keywords: Education Production Function Estimation, Secondary Education, Standardized National Test Scores