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The High Return to Low-Cost Private Schooling in a Developing Country



In brief

- Kenya's private school sector has tripled in size over the past decade, now serving just under 10% of all Kenyan primary school students. Whilst proponents of private schools argue they deliver better quality education and achieve higher value added in terms of test scores, opponents argue that better results are the result of cream-skimming the most able students and funding advantages.
- This study estimates the pure value added effect of sending a child to private school in Kenya, examining the costs in both sectors in terms of fees, salaries and public funding.
- The majority of private schools operate on less money per pupil than public schools and achieve higher KCPE exam result scores. Median expenditure per pupil is just \$41 per annum in the private sector, compared to \$84 in government primary schools.
- Thus, private schools should be made accessible for more students as this would prove a cost-effective way of increasing learning. Furthermore, government should avoid imposing a regulatory burden on private schools which have flourished in an environment of little government interference. Concerns regarding teacher qualifications and curriculum adherence seem misplaced given the above findings.
- Our results focus on private schools' effect on pupil learning on average, and must be weighed against considerations such as equity and the role of public education.
- Questions remain as to whether the private sector can maintain its advantage as it grows, due to the potential of increasing teacher wages in the private sector and other factors. Research is needed to investigate how best to encourage students who cannot afford private schooling to choose this sector.

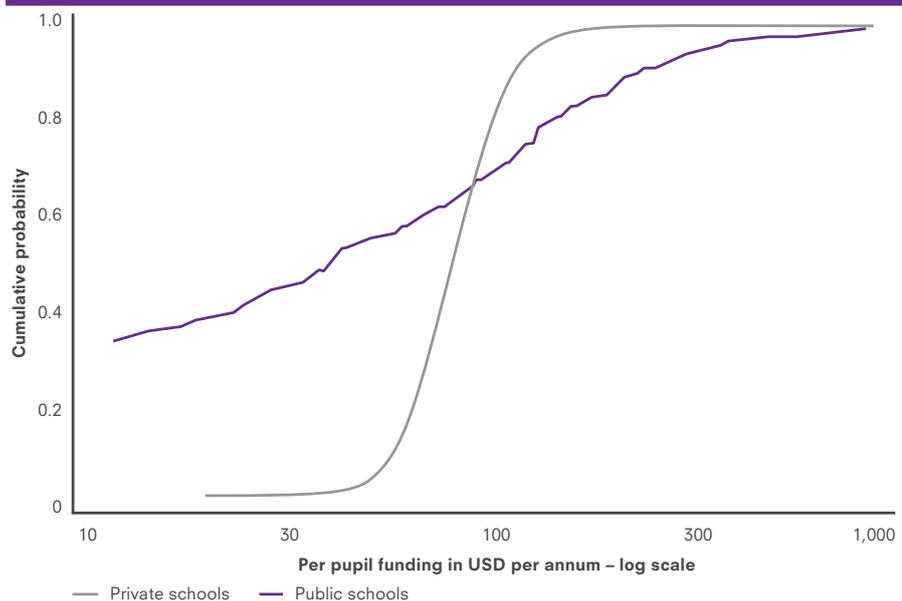
Policy Motivation

“We estimate the pure value added effect of sending one’s child to private school”

The role of market based solutions in providing public services is a hotly debated topic – especially in Kenya, a country that has seen the size of its private school sector triple in the past decade, now serving just under 10% of Kenyan primary school students and whose Ministry of Education recently considered affirmative action in favor of public school (and against private school) students for admission to secondary school. Proponents of private schools argue that they are more effective at delivering quality education – simply put they achieve higher value added in terms of test scores. Opponents argue that better results in private schools are simply a result of cream-skimming – selecting the most able students – and funding advantages. Settling these arguments is not possible through a simple comparison of test scores, as this combines the effect of selection and value added. This is where the contribution of our research lies: we estimate the pure value added effect of sending one’s child to private school. Moreover, we compare the cost per student in private and public school accounting for fees paid by parents, teacher salaries and flows from the public purse.

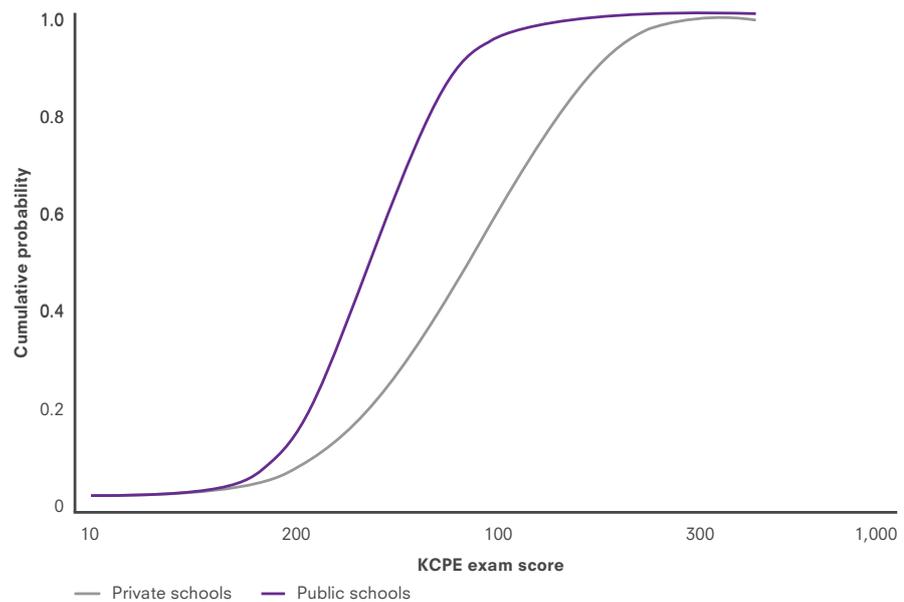
(The figure below shows the distribution of funding levels in public and private schools (top panel) and of scores on the KCPE exam (next page). They show that the majority of private schools operate on less money per pupil than public schools, while exam scores in private schools are considerably higher.)

Figure 1: Per Pupil Funding in Private and Public Schools



“Our results provide important guidance to policy makers debating whether to favor or hinder the expansion of private schools”

Figure 2: Exam Scores in Private and Public Schools



Policy Impact

Our results provide important guidance to policy makers debating whether to favor or hinder the expansion of private schools. Further, it provides important information to the consumers of education – parents and their children – who have to decide which sector to turn to for quality education.

“Kenyan private schools operate at low cost relative to public schools: median expenditure per pupil is just \$41 per annum in the private sector, compared to \$84 in government primary schools”

We note that our results focus on private schools’ effect on pupil learning on average, and must be weighed against other considerations regarding equity and the role of public education in educating citizens.

Audience

This brief addresses policy makers in developing countries and in the donor community working on education policies.

Policy Implications

Make private schools accessible for more students

The results clearly indicate that moving more students into private schools would be a cost-effective way of increasing learning.

Avoid imposing a regulatory burden on private schools

Private schools in Kenya have flourished in an environment of relatively little interference from policy makers. Concerns about teacher qualifications and curriculum adherence seem misplaced when the value added of private schools exceeds that of government schools by one standard deviation.

Brief Summary of Research

The main contribution of the paper lies in estimating the causal effect of private schooling on test performance for Kenyan primary school students using nationwide standardized test scores. An obvious obstacle here is the endogenous sorting of pupils. The key to our identification strategy is aggregation, in the spirit (Hsieh, 2006). The growth of private enrollment will only affect average scores in a district -- aggregating over both public and private schools -- inasmuch as there is a genuine causal force at work. Controlling for time- invariant district characteristics, we document a large performance advantage of Kenyan private schools, equivalent to a full standard deviation of pupil-level test scores. Furthermore, we use survey data on households' education expenditure to show that Kenyan private schools operate at low cost relative to public schools: median expenditure per pupil is just \$41 per annum in the private sector, compared to \$84 in government primary schools.

“Careful research is needed how best to encourage students who currently cannot afford private schooling into the sector. A promising approach would be the distribution of school vouchers to parents”

Coefficient on private schooling in test score regression	51.4 (3.0)***
Coefficient after correcting for schooling bias	64.0 (26.7)**

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Implementation

Our results suggest that promoting, rather than limiting, the expansion of the private sector is a sensible direction for public policy. Of course, questions remain as to whether the private sector can maintain its advantage as it grows further. There are several obstacles here: firstly, while the private sector can currently rely on an oversupply of cheap labor as teacher trainees queue for employment as civil service teachers in government schools, this supply may dwindle as the private sector expands and/or the queue for civil service jobs gets shorter. Conversely, wages in the private sector may have to rise to attract sufficient staff to the sector – thereby reducing the cost advantage of private schools. Similarly, private school teachers may perform better than their public school counterparts because teaching experience may actually accelerate graduation into the civil service teaching corps and these dynamic incentives may weaken as the private sector expands. Finally, careful research is needed how best to encourage students who currently cannot afford

private schooling into the sector. A promising approach would be the distribution of school vouchers to parents – but for this to be effective precise estimates on the price elasticity of private schooling are needed.

Dissemination

- Permanent Secretary, Ministry of Education, Jogo'o House, Nairobi, Kenya
- CEO, Kenya National Examination Council, Nairobi, Kenya

About the authors

Tessa Bold is Chair of Development and International Economics at Goethe University Frankfurt, Germany. Her research interests include: Applied micro- and micro-econometrics, microeconomic foundations of macro-economics, group and network formation, contract theory, public and organizational economics, political economy.

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Germano Mwabu is Professor of Economics at the University of Nairobi. He was co-director of the AERC project on Poverty Income Distribution and Labour Markets in Sub-Saharan Africa. He has also held the position of Senior Research Fellow, Director, Public Goods Project of the World Institute for Development Economics Research at the United Nations University, Helsinki.

Justin Sandefur is a research fellow at the Center for Global Development. His research focuses on the interface of law and development in sub-Saharan Africa. From 2008 to 2010, he served as an adviser to the Tanzanian government to set up the country's National Panel Survey to monitor poverty dynamics and agricultural production.

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