

Policy implications of the returns to education in Zambia

Based on the ZIPAR report *Estimating returns to education in Zambia* by Chrispin Mphuka and Joseph Simumba

A new ZIPAR report estimates the private returns to schooling in Zambia. Results from a Generalised Propensity Score Matching Method show that higher levels of education command higher returns: the returns to primary schooling are 17.2%, the returns to junior secondary schooling (upper basic) are 21.8%, the returns to senior secondary school are 39%, while the highest returns are received when individuals attain tertiary schooling, 47.5%.

These results have important ramifications for education policy and individuals' investment decisions. Specifically, they imply that public provision of schooling should be concentrated at lower levels of education and that private provision of tertiary education should be encouraged. The public sector at tertiary level should: (1) be the regulator of standards and competition; (2) be the provider of strategic skills which the private sector cannot provide; and (3) promote equity by enabling disadvantaged

Education is one of the most significant investments a person makes. Individuals incur costs and forgo income to go to school, but later benefit from increased income earned in the labour market. What can government do to encourage individuals to invest in education and to ensure an equitable system overall?

Economic theory posits that rational individuals acquire extra schooling as long as the expected net benefit to the additional time spent in school is positive. So for schooling levels where private returns are low, individuals may not be willing to invest very much. This means that public provision of education should be more concentrated at schooling levels where private returns are low and which cannot induce individuals to pay.

Studies conducted in the 1980s and 1990s on returns to education in most low-income countries showed that estimated returns to schooling were high at lower levels of education, declining as

education levels rise. These studies may have influenced policy-makers to prioritise public education at tertiary and senior secondary levels. Emerging evidence, however, finds that returns to schooling in a number of African countries *increases* with rising schooling.

Evidence from Zambia

In line with this emerging evidence, a new ZIPAR report uses Living Conditions Monitoring Survey data and the Generalised Propensity Score Matching Method to show that in Zambia high levels of schooling do command higher private returns. Among individuals who complete primary school, returns to schooling are estimated at 17.2%. For individuals completing junior secondary school or senior secondary, returns are found to be 21.2% and 39% respectively. Individuals attaining tertiary education have returns to education of 47.5%. The overall private returns to schooling are estimated at 11.2%.

The results suggest that public provision of education should be concentrated at lower levels of schooling (primary and junior secondary). Indeed, over the last decade the basic education subsector in Zambia received over 50% of the allocation to education. This has undoubtedly helped the nation to meet the Millennium Development Goal of 100% primary enrolment ahead of schedule.

Nevertheless, there are concerns that the expansion in enrolment and progression to higher levels has lacked supporting improvements in the **quality** of schooling. The government needs to improve the quality of education being offered so that parents are more confident about sending their children to public schools.

Improving the quality of early schooling also has important **equity** dimensions. Children from disadvantaged families appear to be the majority learners in public education facilities, while children from wealthy backgrounds often attend private schools. Convergence in schooling endowments early in life should be one of the most powerful weapons in the battle to equalise opportunities in life chances among citizens. The provision of equal access to the same quality of education beginning in early childhood should be prioritised to curb inequality and poverty in the nation.

What role for the state?

While public provision should be concentrated at levels with lower returns – levels which may not be attractive to private financing and provision – much of the provision of tertiary education should be driven by private universities and colleges. The recent proliferation of private high schools, colleges and universities is a good thing for the nation's education sector. Creating more public universities is not a good idea unless there is a clear indication that these universities will be developed to provide strategic skills. Instead, the public sector should focus its resources at tertiary level on enhancing its regulatory role to ensure that private universities or colleges conform to desirable academic and infrastructure standards and do not engage in anti-competitive practices. Private institutions, nurtured properly, have been shown to be more effective in delivering tertiary

education because they are more highly responsive to changes in industrial and academic environments than most public universities operated by governments.

However, private provision may not smoothly balance the provision of skills at tertiary level either because certain skills essential to the public good are extremely expensive to train people in or are otherwise not lucrative enough to attract private provision. To enhance the provision of skills in the nation, the public sector may intervene. Therefore, public provision of tertiary schooling may be justified as long as it is restricted to providing strategic skills that are out of reach to private providers. There are many other interventions that can be exploited to ensure adequate skills are available, such as the creation of a strategic skills fund which private providers can compete for based on specified benchmark criteria.

Lastly, the public sector has an overarching objective to safeguard equity by ensuring that disadvantaged individuals are also able to access tertiary education under private provision. In this regard, we argue that Zambia urgently needs to implement a smart education social policy that can arrest extreme polarisation in school attainment between individuals from wealthy and poorer backgrounds. This approach might be more powerful in equity terms than simply expanding of the number of public universities and colleges.

Notes:

The full-length report estimates the private returns to schooling in Zambia using data collected from the Central Statistical Office's 2010 Living Conditions Monitoring Survey. It relies on estimation methods that attempt to control for the effect of factors which influence the level of schooling an individual acquires and their earnings in the labour market but which cannot be directly measured (such as person's ability towards school and work).

For full methods, references and sources refer to the report: *Estimating returns to education in Zambia* by Chrispin Mphuka and Joseph Simumba