

THE EFFECTS OF EDUCATION ON FERTILITY AND ON LABOUR  
MARKET OUTCOMES: REGRESSION DISCONTINUITY EVIDENCE  
FROM GHANA.

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**ABSTRACT**

This dissertation aims to identify the causal effect of education on reproductive and labour market outcomes, using two educational reforms in Ghana as a natural experiment. The first reform, which was implemented in 1987, shortened pre-tertiary education in Ghana from 17 years to 12 years. In addition to the shortening of the years of pre-tertiary education, vocational and technical subjects were added to the junior secondary school curriculum. The second reform involved the implementation of Free Compulsory Universal Basic Education (FCUBE) in 1996. It aimed to increase enrolment in basic schools by removing tuition fees and all other forms of educational charges at the basic level. I adopt these two policies to construct a regression discontinuity design.

Girls who benefited from the 1996 FCUBE reform received one more year education than those who did not. That increase in years of education led to an increase in age at first time marriage and age at first birth. The impact of the reform on adolescent fertility and early marriage decreases as age increases, and the effect becomes statistically insignificant after age 19. The impact of the FCUBE on adolescent fertility and early marriage affect different subgroups in the population differently.

In my analysis of the 1987 reform, I still find a negative causal relationship between education and fertility and also find that educated women, even though they give birth late, still give longer spacing between any two births. The possible mechanisms through which education affects total fertility and the timing of birth are knowledge acquisition, improved intra-household bargaining and assortative mating.

Turning to labour market effects, introducing 13 percent vocational and technical subjects into the previously purely academic curriculum did not affect the decision of post reform students to enter into vocational related careers after school relative to those who were not affected by the reform. A possible explanation for that zero effect may be associated with the underdeveloped vocational job market in the country. The fact that people pursue careers based on the economic benefits they would receive from that career lends support to the above explanation. The second possible cause of the insignificance may be the small number of JSS workshops that serve as training workshops after classroom lessons.

Nevertheless, It is observed that the reform increased the number of students who had access to secondary and tertiary education, reflecting an overall increase in access to higher education. The impact of the reform on access to secondary education was about three times higher than on access to tertiary schooling. It is also found that the reform reduced labour participation in agriculture and the informal sector, but also led to an increase in the number of professionals, service sector participation and the probability to work for an employer. I hypothesize that the changes in the distribution of the labour market resulting from the reform were brought about by the enhanced access to higher education rather than the introduction of vocational subjects into the JSS curriculum.