



Are Rural Road Investments Alone Sufficient to Generate Transport Flows? Lessons from a Randomized Experiment in Rural Malawi and Policy Implications

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Country	Malawi
Organizing Theme	Voice and Agency
Status	Completed
Intervention Category	Infrastructure
Sector	Infrastructure
Abstract	<p>This paper draws lessons from an original randomized experiment in Malawi. In order to understand why roads in relatively good condition in rural areas may not be used by buses, a minibus service was subsidized over a six-month period over a distance of 20 kilometers to serve five villages. Using randomly allocated prices for use of the bus, this experiment demonstrates that at very low prices, bus usage is high. Bus usage decreases rapidly with increased prices. However, based on the results on take-up and minibus provider surveys, the experiment demonstrates that at any price, low (with high usage) or high (with low usage), a bus service provider never breaks even on this road. This can contribute to explain why walking or cycling is so widespread on most rural roads in Sub-Saharan Africa. In terms of policy implications, this experiment explains that motorized services need to be subsidized; otherwise a road in good condition will most probably not lead to provision of service at an affordable price for the local population.</p>
Gender Connection	Gender Informed Analysis
Gender Outcomes	Gender disaggregated participation or voice in community
IE Design	Randomized Control Trial
Intervention	A meeting was called at each village. At the meeting, one member of each household had to select a ticket from a bucket. Each ticket contained a number to signify the price of one round trip on the project bus. The prices varied from 0 - 500 MK (\$3.57). This was the price that the individual had to pay for a bus pass.
Intervention Period	July-December 2009
Sample population	542 households were listed in the 5 sample villages. 514 were successfully interviewed and eligible to participate.
Comparison conditions	The study compared individuals who, by luck of a lottery, had to pay different fares for the bus.
Unit of analysis	Household level
Evaluation Period	July-December 2009
Results	More than 60% of households used the bus at least once with an average of 2.85 rides. There is a sharp decrease in ridership among those required to pay a positive price, especially above 100 Kwacha. Results are similar amongst men and women.



Primary study limitations	The experiment in this study is the first of its kind in Sub Saharan Africa. The experiment occurred in areas with low density it would be important to see the results of similar experiments in high density areas.
Funding Source	
Reference(s)	Raballand, G., Thornton, R., Yang, D., Goldberg, J., Keleher, N., & Mueller, A. (2011). Are rural road investments alone sufficient to generate transport flows? Lessons from a randomized experiment in rural Malawi and policy implications. Lessons from a R
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