

# Policy Brief

## Do Households in Malawi Use Labor Efficiently?

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### Abstract

This paper explores whether households in Malawi are allocating their labor optimally between farm and non-farm activities. If households are not, they could theoretically increase their incomes by changing how they allocate their time, which would suggest that some force – excessive risk, lack of information, incomplete markets – was preventing them from optimizing. Using LSMS-ISA data for Malawi for years 2010 and 2013, we find that we cannot reject the null hypothesis that households are allocating their time efficiently. This suggests that if policymakers concentrate on raising productivity and the returns to labor in the most cost-effective way possible, households will respond by efficiently reallocating labor between activities.

The primary objective of this project was to use new data to analyze whether households in Malawi are allocating their labor optimally between farm and non-farm activities. Standard economic theory predicts that households should allocate their time across various productive activities such that the return generated by an extra hour worked at each activity would be the same. If households are not doing this, they could theoretically increase their incomes by changing how they allocate their time, which would suggest that some force – excessive risk, lack of information, incomplete markets – was preventing them from optimizing. For this project, we use new panel data

from Malawi that allows us to test for optimal labor allocation by households that both farm and run a non-farm business.

### Key Findings:

Using LSMS-ISA data for Malawi for years 2010 and 2013, we find that we cannot reject the null hypothesis that households are allocating their time efficiently. That is, we find that the return generated from working an extra hour on the farm to be statistically indistinguishable from the return generated by working an extra hour on a non-farm business. This finding suggests that Malawian households are allocating their time optimally.

As with any empirical exercise that requires modeling the return to economic activities, there are some limitations to this finding. First, in order to estimate the return generated from an extra hour of work for each activity, we needed to assume we know how the production process works for each activity. While our assumptions follow standard practice in the academic literature, they may not accurately capture how these businesses operate. Second, our data may not have enough power to identify any potential misallocation of resources. Our result is one of statistical insignificance, which is a lack of evidence against the hypothesis, and is not proof in support of the hypothesis.

### Policy Implications

The finding that households allocate their time efficiently suggests that households cannot in-

crease their incomes by just changing how much time they spend on agriculture or non-farm activities. Instead, these households would have to increase their incomes by increasing the returns they generate from each activity. That means both increasing the productivity of farming activities, and also increasing the productivity of the non-farm businesses. The need for productivity increases is not new: the development community has been worried about increasing farm productivity for many years, and has also more recently focused on business training, and other activities that could increase non-farm productivity. The evidence in this paper suggests that if policymakers concentrate on raising productivity and the returns to labor in the most cost-effective way possible, households will respond by efficiently reallocating labor.

### Endnotes

Based on: "Allocative Efficiency of Non-Farm Enterprises in Agricultural Households: Evidence from Malawi" by Peter Brummund and Joshua D. Merfeld



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