

Integrated CGE-Microsimulation: Quantifying the Cost of Poverty Eradication in Uganda

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Extended Abstract

1. Introduction

After poverty has been reduced very successfully around the globe as a consequence of the efforts made under the framework of the Millennium Development Goals, complete eradication of extreme poverty by 2030 has been set as goal number one for the Sustainable Development Goals. However, intuition says that the cost of reaching a goal often increases more than proportionally with decreasing distance to the goal and that the last bit often is excessively costly.

This study aims (1) to examine how poverty measurement and poverty targets can be adequately integrated in a holistic, integrated CGE-microsimulation model to study the cost of poverty eradication and (2) to provide a sense of the magnitude of poverty eradication costs by contrasting a number of stylized, more or less targeted policies, using Uganda as a case study.

2. Methodology

The study is based on a CGE-microsimulation model and a SAM for Uganda which are rich in the representation of individual households' behaviors on the consumption side as well as the factor supply side. The model illustrates a number of modeling specifics to overcome the challenges arising from integrating the over 7000 households of a representative household survey into the CGE model with substantial behavioral detail and from the integration of poverty targets directly into the model, as will be presented in the full paper. For poverty measurement, different poverty measures based on monetary income or consumption levels as well as on nutrition will be implemented.

3. Expected Results

The first result is a CGE-microsimulation model template for the analysis of poverty reduction and eradication topics which also emphasizes the extensive data needs.

As a second result, various, more or less targeted, stylized policy scenarios, ranging from easy-to-implement to perfect targeting, will provide a sense of the magnitude of the cost of poverty eradication in terms of several measures. The results will highlight the cost differences between the government's policy options and the structural characteristics of Uganda's economy which are underlying those differences.

4. Current Status of the Project

The CGE-microsimulation model and the SAM are already operational and have been tested with one type of poverty measure integrated. Additional poverty measures will be implemented in the next step. After that, policy scenarios can be simulated and the paper be written.