Children and the Fiscal Space in Ethiopia: A Gendered CEQ Analysis

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1. Introduction

The impact of taxes, spending, and public transfers on welfare is a key issue in fiscal policy analysis. These policy instruments have various macroeconomic and microeconomic effects on the population that can be different for different demographic groups. For example, children could be disproportionately affected if taxes add to the cost of child goods and services. This is besides the indirect effects of consumption taxes such as VAT and excises through their parents. Children could also fare poorly in intrahousehold allocation (Dunbar et al. 2013) though they may also benefit from parental altruism (Bhalotra 2004). Public spending on health and education could affect children's school enrollment and access to basic health services

This study will investigate the effects of public transfers, services, and taxes on children's well-being in the context of a sub-Saharan Africa country. The study will conduct a fiscal incidence analysis using the Commitment to Equity (CEQ) methodology. The CEQ approach involves assigning public transfer benefits and tax burdens to the consumer. The methodology compares welfare indicators before (pre-fiscal) and after taxes and/or transfers (post-fiscal) and ultimately evaluates the distributional effects of fiscal policy (Inchauste & Lustig 2017; Lustig 2018). The empirical literature has been growing and documenting inconclusive findings (Ajwad & Wodon 2007; Davoodi, Tiongson & Asawanuchit 2010; Gafar 2006; Lassibille & Tan 2007).

Household is the unit of analysis for most of the available evidence in this area. However, a household-level analysis does not provide a full picture of the distributional effect of fiscal policy due to differences in intrahousehold allocations. A recent study by Brown, Ravallion & Van de Walle (2017) shows that poor individuals do not necessarily live in poor households. Following a recent cohort of studies that extend the CEQ method to children using multidimensional poverty status (Cuesta et al. 2021; Save the Children 2021), our study will examine how children in Ethiopia are affected by fiscal actions. Linking multidimensional wellbeing, fiscal policy, and incidence analysis within a child and gender lens is in line with the consensus that wellbeing is multidimensional, thereby correcting the traditional monetary measure that ignores nonmonetary dimensions of child wellbeing (Alkire & Santos 2013; Gordon et al. 2003). By identifying and assigning public transfers and spending associated with children (such as education, vaccinations, and cash transfers), a child specific CEQ assessment also gives precise impact estimates.

The Ethiopia case study offers an opportunity to examine the fiscal space in a high child poverty and high child undernutrition environment. According to the 2016 UNICEF World Child Poverty estimate, 88% of Ethiopia's children are multidimensionally poor. The most recent Demographic and Health Survey shows that childhood stunting is 37%, which is among the highest in the world (EDHS 2019). Recent studies on fiscal policy and wellbeing in Ethiopia looked at distributional effects of taxes and transfers at household level (Hill, Inchauste, Lustig Tsehaye & Woldehanna 2017; Mogues 2013). Our study extends the literature by exploring the intrahousehold allocation focusing on child wellbeing. The study will answer the following questions: (i) What do government transfers, spending, and taxes contribute to the reduction of child monetary and multidimensional poverty, and inequality? (ii) How do the burdens of taxation and the benefits from government transfers and spending differ between boys and girls?

2. Data and Methods

2.1. The Data

The study will primarily employ data from the 2018/19 panel of Ethiopia Socioeconomic Survey (ESS4) which is part of the World Bank's LSMS-ISA project. ESS4 is nationally representative. Besides survey data from ESS4, administrative data will also be used.

2.2. Methods

The analytical framework will follow the CEQ methodology (Lustig 2018) to estimate the distributional impact of Ethiopia's fiscal policy on children's wellbeing. The CEQ approach begins with calculating prefiscal and postfiscal income concepts by assigning public transfers, spending, and taxes to children. Six income concepts are considered: market income, gross income, net market income, disposable income, consumable income, and final income. Given detailed expenditure data in ESS4, income concepts are proxied by expenditure. Tax burdens borne by parents or the household are passed on to children. The analysis then estimates monetary and multidimensional child poverty and inequality at different income concepts.

Poverty impacts will be assessed by analyzing the changes in child monetary and multidimensional poverty indices at the different income concepts. Monetary poverty is measured according to the FGT class of poverty measures (Foster, Greer & Thorbecke 1984). To adjust to children's needs, we'll calibrate the 2015/16 national adult-equivalent poverty line to fit the 2018/19 ESS data. For multidimensional child poverty, we will adapt the Alkire – Foster method (Alkire & Foster 2011; Alkire & Santos 2014). In this approach, three dimensions (education, health, and living standards) and ten indicators are used to construct the index. To identify multidimensionally-poor children, the dual cut-off approach is pursued.

For gauging inequality, the study will use the Theil index that we additively decompose into within-child-gender and between-child-gender inequalities. Progressivity and pro-poorness of children-related fiscal interventions will be examined using concentration curves and the Kakwani coefficient.