

PAUL SIRMA

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EDUCATION

University of North Carolina (UNC) at Chapel Hill

Chapel Hill, NC

Ph.D. in Public Policy

August 2016-May 2023 (expected)

Dissertation title: Three essays on human capital accumulation, farm households' productivity, and poverty: evidence from cash transfers in Malawi.

Dissertation committee: Sudhanshu Handa (chair), Brigitte Seim, Gustavo Angeles, Amber Peterman, Steven W. Hemelt

Colgate University

Hamilton, NY

B.A. in Quantitative Economics and Econometrics

August 2011-May 2015

RESEARCH INTEREST

International Development, Social Protection, Education, Poverty Reduction, Social Policy

PEER-REVIEWED JOURNAL ARTICLES

Handa, Sudhanshu, Otchere, Frank, & **Sirma, Paul.**; on behalf of the Evaluation Study Team (2022). More evidence on the impact of government social protection in sub-Saharan Africa: Ghana, Malawi, and Zimbabwe. *Development Policy Review*, 40, e12576. <https://doi.org/10.1111/dpr.12576>

WORKING PAPERS

Long-term impacts of unconditional cash transfers on schooling: evidence from Malawi (*Job Market Paper*)

Abstract: Unconditional Cash Transfers (UCTs) are effective at increasing schooling outcomes, but are UCTs effective in the long term? This paper studies this question and presents evidence of how a flagship UCT program in Malawi affected school enrollment and grade completion eight years since the program began. I use three-year panel data from the experimental rollout of the program—after which the control group received the transfers—and a follow-up survey conducted five years later to study the long-term differential impacts of the UCTs on schooling. In the short-term, school enrollment and highest-grade completion are significantly higher for children in the early treatment group. In the long-term, five years after the late treatment group started receiving transfers, the impacts persist only on highest grade completion for older out-of-school girls. For this subgroup, the long-term school enrollment is significantly higher for children living closer to secondary schools than those living farther away. These larger impacts for children with easy access to schools suggest that school-supply constraints contribute to low human capital accumulation in Malawi and that transfers alone cannot overcome these constraints.

The effect of unconditional cash transfers on labor allocation and farm productivity *(with Sudhanshu Handa)*

Abstract: This paper shows liquidity is an important constraint that prevent households from allocating their labor efficiently. We estimate the impacts of unconditional cash transfer program in Malawi, 30 months since baseline, and find large positive impacts on agricultural production and on-farm labor. We also find negative impacts on casual or *ganyu* labor. To explain these results, we test and reject the separation assumption of the agricultural household models. We show that demographic variables are associated with on-farm labor demand. We also show that cash transfer enables treated households to invest in agricultural inputs which increases their on-farm productivity

WORK IN PROGRESS

Catch-up or sustained impact? Evidence from Malawi's national cash transfer program *(with Sudhanshu Handa)*

This paper assesses whether the initial impacts of a national cash transfer program persist once the experimental control group enters the program. While the initial experimental impact results were large and generated sizeable multiplier effects, the control group, which entered after 30 months, essentially catches up in terms of both consumption and assets. These results suggest that basic income support to ultra-poor households by themselves are unlikely to lead to sustained 'graduation' from poverty.

An empirically driven theory of poverty reduction *(with Sudhanshu Handa, Zhiyuan Liu, Gelson Tembo, Clement Adamba, and Peter Mvula)*

We use causal forests and secondary data from four national unconditional cash transfer (UCT) programs (Ghana, Malawi, Zambia, and Zimbabwe) to identify high- and low-flyers. We find that high-flyers (those who translate the cash transfers into the highest gains in consumption) tend to be smaller households with fewer children and those with fewer assets at baseline. We then use an unsupervised machine learning algorithm (K-means clustering) to identify post-treatment behaviors of high-flyers that might explain how they achieved these gains in consumption. In Zambia, where beneficiary households are generally younger, high-flyers engage in the market through non-farm enterprises and cash cropping. While in Malawi and Zimbabwe, where beneficiary households are much older, we do not identify any clear patterns in behavior.

REPORTS (SELECTED)

Baseline evaluation of the Malawi Social Cash Transfer Program (SCTP), funded by UNICEF, 2021-2022 *(with Sudhanshu Handa, Maxton Tsoka, Clare Barrington, Gustavo Angeles, Peter Mvula, Joseph Chunga, Kelvin Balakasi, Juba Kafumba, Marwa Ibrahim, and Susana Fajardo)*

Analyzed baseline data of 18,276 individuals (3418 households) to establish the comparability of the four treatment arms. Specifically, we compared new entrants and a comparison group of alternates, the two groups we will use to assess the impacts of the SCTP over time. We also compared exiting and continuing households to study whether the impacts of the SCTP persist after leaving the program.

Baseline evaluation of Ghana Livelihood Empowerment Against Poverty with Intergrated Social Services (LEAP-ISS) program, funded by UNICEF, 2021-2022 (with Isaac Osei-Akoto, Sudhanshu Handa, Raymond Aborigo, Clare Barrington, Gustavo Angeles, Clement Adamba, Robert Osei, Akalpa Akaliguang, Frank Otchere, Marwa Ibrahim, and Susana Fajardo)

Analyzed baseline data of 13,240 individuals (2,515 households) to assess the similarities between LEAP households receiving cash payments plus a suite of complementary services and LEAP households receiving cash payments only.

RESEARCH EXPERIENCE

Graduate Research Assistant Carolina Population Center, UNC at Chapel Hill
The Transfer Project 2019-present
Assisting in the impact evaluation of Ghana Livelihood Empowerment Against Poverty (LEAP) with Integrated Social Services (ISS) program and Malawi Social Cash Transfer Program (SCTP) Longitudinal Impact Evaluation. Responsibilities include reviewing survey instruments, assisting in the training of enumerators, supervising field work, cleaning data, conducting descriptive analysis, writing Stata programs (ado files), producing tables, graphs, and regression output, and writing sections of the report.

Modelling cash transfer response to Covid-19 shock using national household survey for UNICEF Eastern and Southern Africa Regional Office. Responsibilities include cleaning data, writing microsimulation scripts in Stata, producing final output in Microsoft Excel format.

Quantitative Research Assistant Washington, DC
American Institutes for Research (AIR) July 2015-June 2018
Collaborated with senior researchers in the International Research and Evaluation Division at AIR in evaluating impacts of programs covering broad topics, including agriculture, education, reading and literacy, and social protection

FELLOWSHIPS

UNC Graduate School Dissertation Completion Fellowship August 2022-May 2023

PROFESSIONAL ACTIVITIES

Presentations

Center for the Study of African Economies (CSAE), Virtual

March 2022

Field Work

Nkhata Bay and Zomba, Malawi

May 2022

Rufiji, Tanzania

July 2013

Technical Training Workshop

Organized by African Economic Research Consortium & UNICEF

Nairobi, Kenya

Instructor

May 2019

SKILLS

Programing & Software

Stata, R, Python, QGIS

Languages

Swahili (native), English (fluent)

REFERENCES

Sudhanshu Handa, Kenan Eminent Professor of Public Policy UNC at Chapel Hill
shanda@unc.edu Department of Public Policy

Gustavo Angeles, Associate Professor UNC at Chapel Hill
gustavo_angeles@unc.edu Department of Maternal and Child Health

Joaquin Alfredo-Angel Rubalcaba, Assistant Professor UNC at Chapel Hill
jrubalca@email.unc.edu Department of Public Policy