The Migration Consequences of Input Subsidies

Full Paper Coming Soon: Click Here for Most Recent Version

Binta Zahra Diop*†

University of Oxford

October 17, 2022

Abstract

Input subsidy programs (ISPs) aim to increase agricultural productivity, for many farmers however, outmigration may be preferred and more profitable. Using reduced-form and structural estimations, this paper exploits the variations in the roll-out of the ISP in Zambia to understand the determinants of internal migration for credit constrained farmers. First, I use a difference-in-differences strategy and show that the ISP increases fertilizer adoption but also doubles the rates of individual outmigration. Consistent with farmers being liquidity constrained, I find that 30% of the variance in total outmigration can be explained with farmers monetizing the subsidy in resale markets. Second, I use a structural model to compare ISPs in the presence of resale markets, to a lump sum cash transfer and an in-kind transfer. With resale markets, the ISP is a convex combination of a cash-transfer to resellers and an in-kind transfers to net-buyers. When the model accounts for the externality in adoption, I find that the ISP with resale markets is superior to a cash transfer, and fosters highest levels of specialization and income.

Keywords: Input Subsidies, Migration, Agricultural Productivity, Sorting

JEL Codes: R23, O33, Q12

---

*Department of Economics, University of Oxford, bintazahra.diop@economics.ox.ac.uk

†I am grateful to D. Gollin, M. J. Williams, and I. Ruiz for their continued support, guidance, patience, and advice. I thank J. Labonne, A. Teytelboym, G. Ulyssea, C. McIntosh, H. Low for their detailed comments and discussions on various versions of this manuscript. To N. Moneke, V. Pouliquen, and V. Khandelwal, for their invaluable advice and wisdom. I am indebted to my fellow PhD students G. Schinaia, S. Hou, L. Milsom, H. Zillessen, S. Mukherjee, C. Pougué-Biyong, S. Altmann, and P. Hadunka for numerous conversations and comments. Finally, I thank M. Ngom, S. Quinn, Y. Zylberberg, T. S. Jayne, A. B. Diop, Aysatou Ndiaye, J. Gignoux, R. Lajaaj, F. Schillbach, and numerous seminar participants and discussants.