

The Migration Consequences of Input Subsidies

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Abstract

Input subsidy programs (ISP) aim to increase agricultural productivity. For many farmers, however, outmigration may be preferred and more profitable. Using reduced-form and structural estimations, I exploit variations in the roll-out of an ISP in Zambia to understand the determinants of internal migration for credit-constrained farmers. First, I use a difference-in-differences strategy to show that the ISP increases fertilizer adoption but also doubles the rates of individual outmigration. Consistent with farmers being credit constrained, I find that 30% of the variance in total outmigration can be explained by farmers monetizing the subsidy in resale markets. Second, I estimate a structural model to compare the ISP to alternative policy counterfactuals. Working with a model that incorporates a network externality related to fertilizer adoption and use, I find that the ISP with resale markets fosters specialization. I find that an alternative program of cash transfers targeted to the same households would generate 18% lower outmigration and no change in fertilizer adoption relative to the ISP. In contrast, a revenue-neutral non-targeted cash transfer program would substantially increase outmigration, while in-kind transfers would lead to substantial losses in efficiency, reducing both migration (-15%) and fertilizer adoption (-75%).

Keywords: Input Subsidies, Migration, Agricultural Productivity, Sorting

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