Farmland Concentration and Rural Labor Productivity: Evidence from Tanzania

Abstract

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This work-in-progress is motivated by recent findings of important changes in farm size distributions in many African countries (Africa's changing farm size distribution patterns: the rise of medium-scale farms). Building on the pioneering work on Johnston, Mellor and Lipton, who concluded that relatively egalitarian farm size distributions tend to generate stronger multiplier effects with local rural non-farm economies than highly concentrated patterns of operated farmland, our study evaluates the impact of farmland distribution concentration on rural productivity growth among smallholder households in Tanzania. To our knowledge, this is the first attempt to study the effects of changing farm size distributions on non-farm growth linkages in Africa. We use 2009 Agricultural Sample Census data on over 50,000 farms in Tanzania to construct district-level indicators of operated farm size distributions and land concentration. We hypothesize that agricultural productivity growth may generate relatively weak multiplier effects with the local non-farm economy in districts where a small number of large farms dominates agricultural production. However, if the presence of large farms generates spillover benefits to surrounding smallholders, then positive impacts of greater land concentration on growth may be observed. We find that many plausible indicators of land concentration are only weakly correlated with one another, suggesting that care should be taken in the conceptualization of land concentration and in subsequent empirical analysis. Furthermore, the source of data matters: we find that standard sampling methods for smallholder-focused rural household surveys (e.g., LSMS) systematically under-represent the largest farms. Notwithstanding these points, the weight of the evidence indicates that farm land concentration has important negative impacts on labor productivity growth in the local rural economy.