

# Migration Costs, Sorting, and the Agricultural Productivity Gap

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## Abstract

We use a unique panel dataset and a policy experiment as an instrument to estimate the impact of policy-induced migration cost reductions on rural-urban migration and the associated increase in labor earnings for migrant workers in China. Our estimation shows that the observed labor earnings gap between agriculture and non-agriculture is mainly due to large migration costs and a large underlying productivity difference between the two sectors. Sorting plays only a minor role in accounting for the observed sectoral earnings gap. We also structurally estimate a general equilibrium Roy model to quantify the effects of reducing migration costs. A policy reform that sets the *hukou* liberalization index in all regions of China to the level of the most liberal region would reduce the observed agricultural productivity gap by 30%, increase the migrant share by 9%, and increase the aggregate productivity by 1.1%.

JEL Classification: E24, J24, J61, O11, O15

Keywords: Migration cost; sorting; agricultural productivity gap; panel data; China; general equilibrium Roy model

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