

## **Refugee Inflows, Within-Firm Reorganization, and Productivity in Turkey's Dual Labor Market**

*Murat Kırdar*

We show that large-scale refugee inflows raise firm productivity and formal native wages in the host country rather than displacing native workers---but through a mechanism specific to economies with large informal sectors. Using the arrival of nearly 4 million Syrian refugees in Turkey as a natural experiment, and linking matched employer-employee administrative data to firm balance sheets, we establish three findings. First, formally employed native men shift toward cognitive-intensive occupations and earn higher wages within continuing employment relationships; person-firm fixed effects confirm that these gains reflect genuine increases in workers' marginal products rather than compositional shifts. Second, measured total factor productivity rises by approximately 4% per 10 percentage point increase in the refugee-to-native ratio; capital per unit of sales falls significantly despite rising output, ruling out automation and outsourcing, and productivity effects concentrate in historically high-informality sectors. Together, these patterns identify the operative channel: Syrian refugees, working almost entirely informally, provide low-cost manual labor that substitutes for physical capital and enables firms to reorganize production toward higher-value cognitive activities. Third, Olley-Pakes and Melitz-Polanec decompositions---applied for the first time to an immigration shock---show that productivity gains are broad-based across incumbent firms rather than driven by selection toward frontier producers, with the reallocation component small and negative. These findings imply that large refugee inflows can generate substantial productivity gains and native wage increases in middle-income host countries where institutional barriers channel refugees into informality and task complementarity between manual and cognitive activities allows firms to reorganize production from within.