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Raymond P. Guiteras, B. Kelsey Jack

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Productivity in Piece-Rate Labor Markets: Evidence from Rural Malawi*

Raymond P. Guiteras
North Carolina State University†

B. Kelsey Jack
Tufts University‡

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Abstract

Piece-rate compensation is a common feature of developing country labor markets, but little is known about how piece-rate workers respond to incentives, or the tradeoffs that an employer faces when setting the terms of the contract. In a field experiment in rural Malawi, we hired casual day laborers at piece rates and collected detailed data on the quantity and quality of their output. Specifically, we use a simplified Becker-DeGroot-Marschak mechanism, which provides random variation in piece rates conditional on revealed reservation rates, to separately identify the effects of worker selection and incentives on output. We find a positive relationship between output quantity and the piece rate, and show that this is solely the result of the incentive effect, not selection. In addition, we randomized whether workers were subject to stringent quality monitoring. Monitoring led to higher quality output, at some cost to the quantity produced. However, workers do not demand higher compensation when monitored, and monitoring has no measurable effect on the quality of workers willing to work under a given piece rate. Together, the set of worker responses that we document lead the employer to prefer a contract that offers little surplus to the worker, consistent with an equilibrium in which workers have little bargaining power.

JEL Codes: C93, J22, J24, J33, O12

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†4326 Nelson Hall, Campus Box 8109, Raleigh, NC 27695. Email: rpguiter@ncsu.edu.

‡Corresponding author. 314 Braker Hall, Medford, MA 02155. Email: Kelsey.Jack@tufts.edu.