

Characterizing Worker and Firm Heterogeneity in Low and Middle Income Countries

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Abstract

Matched worker-firm longitudinal data have yielded many insights into labor markets in high-income countries, such as the relative roles of persistent worker versus firm heterogeneity in explaining the overall variance in wages across people. However, such datasets are rarely available in low-income countries, and when available in middle-income countries, they omit the sizable fraction of workers in the informal sector. Nevertheless, available datasets often contain some of the relevant pieces, such as an individual-level panel with firm characteristics and indicators for firm switches between survey rounds, but not exact firm identifiers. We develop a statistical methodology to model components of the data that we don't observe (in this case, firm identifiers) in order to recreate the statistics of interest from matched employer-employee data. We show theoretically that the assumptions we need to do this are often already employed in the analysis of matched employer-employee data. We validate our method using matched worker-firm longitudinal data from the garment sector in Bangladesh (Ahmed, Boudreau, and Heath, ongoing) and show that if we ignore firm identifiers but use firm characteristics, we can recreate key results from the full dataset. We then apply our method to a set of panel datasets from low- and middle-income countries and characterize the relative role of firm heterogeneity in explaining overall wage variance, compared to existing results from matched employer-employee data.