"Impacts of Demand Shocks on Firm Development: Evidence from Public Procurement Lotteries in Ecuador"

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Abstract:

Are SME firms in developing countries inefficiently small? A large literature has described both static and dynamic frictions---such as credit constraints, imperfect competition, regulations, reputation-building or learning-by-doing---that could be size dependent. If such distortions are decreasing in firm size, firms would indeed be inefficiently small, potentially even so much so as to be a source of poverty traps. We exploit variation from public procurement lotteries in Ecuador to investigate the extent of such size dependent distortions (SDDs). Using monthly data on firm-to-firm transactions, we find that firms expand scale by the same magnitude as the amount of random winnings (about 50% of annual sales for the median firm) with no evidence of crowd-out or crowd-in of sales to other entities. Firms quickly scale up production, purchasing more inputs from both new and old suppliers, hiring new workers, and paying existing workers more. Firms expand by proportionally more than their increase in labor inputs, which in models of firm production implies, when coupled with evidence for constant returns to scale, the existence of labor SDDs on the margin. However, these expansions are temporary, dissipating once the demand shock is finished, typically within six months. In addition, in our context, the labor input SDDs appear to be small and actually increasing in firm size. That is, the small firms in our sample are, if anything, too large from the perspective of allocative efficiency.