The Impact of Easing Firm Constraints on Small and Medium Enterprises Growth: Evidence from Uganda

Oriana Bandiera, Vittorio Bassi, Robin Burgess, Imran Rasul, Munshi Sulaiman and Anna Vitali

This study finds that wage subsidy policies that allow firms to choose who to hire and how to spend the subsidy lead to firm expansion and the creation of net employment. Instead, tying the provision of wage subsidies to hiring and sharing the monetary transfer with a specific worker leads firms to replace existing workers with the new hires.

Introduction

Most firms in developing countries employ less than 10 employees, with the typical firm consisting of a self-employed entrepreneur with no paid workers (Hsieh and Olken, 2014; De Mel et al, 2016). Small and Medium Enterprises (SMEs) are a major source of employment and income and an important engine of growth and job creation (Tybout, 2000).

Several studies attribute the existence of a large number of small firms to constraints arising, e.g. from lack of property rights, from managerial skills deficits, from difficulties in finding and retaining workers with the right skills, or from challenges in accessing credit. If these constraints are preventing firm growth, relaxing them should lead to increases in firm size and productivity. However, existing evidence on whether small firms in developing countries face binding constraints is mixed.

This study contributes to the debate on SMEs' growth by providing experimental evidence on the presence of constraints in accessing both labour and credit among a sample of enterprises operating in urban Uganda. To do so, we design and implement a Randomized Controlled Trial (RCT) to facilitate: (i) access to skilled and unskilled workers - via placement of workers into firms; (ii) access to working capital - via provision of wage subsidies to hire new workers; (iii) access to formal credit - via promotion of an existing credit program specifically targeting SMEs.

Context, intervention and data collection

Our RCT took place in 15 urban areas across Uganda and involved a total of 2,306 SMEs. Uganda is a typical developing country in terms of firm size and employment distribution: over 90% of firms have less than 10 employees, and the majority of the labour force is employed in businesses of this size. Similar figures are observed for India, Indonesia and Mexico (Hsieh and Olken, 2014).

This study targeted small businesses employing between 1 and 15 employees, and operating in eight sectors: motor-mechanics, electrical wiring, welding, plumbing, construction, hairdressing, tailoring and catering. Firms were randomly assigned to either one of the treatments described in Table 1, or to the Control group and were tracked over a period of four years.

---

1 Census of Business Establishment, UBOS.
Table 1: Treatment description

<table>
<thead>
<tr>
<th>Treatment Name</th>
<th>Treatment Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skilled Match</td>
<td>Placement of vocationally trained individuals into firms.</td>
</tr>
<tr>
<td>Unskilled Match</td>
<td>Placement of unskilled individuals into firms.</td>
</tr>
<tr>
<td>Apprenticeship</td>
<td>Placement of unskilled individuals into firms plus provision of wage subsidies to provide the matched workers with 6 months of on-the-job training. The program recommended a split of the wage subsidy between the firm and the trainee.</td>
</tr>
<tr>
<td>Wage Subsidy</td>
<td>Provision of wage subsidies to provide 6 months of on-the-job training to an individual recruited by the firm. The program did not recommend a specific split of the subsidy.</td>
</tr>
<tr>
<td>Credit Information</td>
<td>Information on a credit product specifically targeted to SMEs.</td>
</tr>
</tbody>
</table>

Are firms constrained?

At baseline a large fraction of firms in our sample reported being willing to expand, but also being significantly affected by both labour and credit constraints, as shown in Figure 1.

FIGURE 1: Self-reported constraints to expansion

In terms of labour constraints, lack of access to skilled labour was cited as the most important constraint, with close to 70% of firms reporting that they would hire more workers if they received more applications from skilled workers. Other labour constraints related to the ability to find trustworthy workers or to screen workers more generally also appear to be relevant. Capital constraints related to access to assets...
and credit are at least as important as labour constraints, while the incidence of managerial constraints appears to be more limited.

**Impacts on employment, profits and net investments**

Despite the magnitude of self-reported constraints and the high interest in the interventions expressed by firms at baseline, the take-up rates of the matching and credit treatments were extremely low. 0.46% and 1.79% of firms in the Unskilled Match and Skilled Match interventions respectively hired one of the workers that they were matched with. Similarly, 0.94% of firms in the Credit Information treatment applied and obtained one of the loans advertised through the program. The take-up of Apprenticeship and Wage Subsidy was considerably higher: respectively 34.9% and 80.1% of firms hired a worker through the treatments.

Unsurprisingly, the matching and credit offer interventions had no effects on employment, profits and net investments. These findings are a reflection of the low take-up of these treatments. Figure 2 shows that the Wage Subsidy treatment led to a 20.5% increase in the number of employees, corresponding to .45 more workers relative to the Control group. Despite the relatively large take-up, Apprenticeship did not lead to any change in firm size, which provides suggestive evidence of this intervention causing a crowding out of existing workers.

The increase in number of employees in the Wage Subsidy treatment did affect firm profitability, while firms in Apprenticeship experienced a 7.9% increase in profits. None of the treatments had significant effects on net investments.

![Figure 2: Impact on employment and profits](image)

**Notes:** The Figure reports the estimated percentage increase in number of employees and monthly profits, relative to the level in the control group. Impacts are averaged over the three post-intervention surveys.

**Policy implications**

Our results document a very large divergence between perceived constraints to expansion and responsiveness to the relaxation of such constraints. The lack of take-up of the matching and credit
interventions suggest that policies solely increasing the contact rate between firms and workers, or providing firms with information about credit are not likely to enhance SMEs growth.

A comparison of the effects of Wage Subsidy and Apprenticeship provides some insights on the characteristics of wage subsidy policies that might lead to the creation of net employment. Our findings show that when the provision of a subsidy is tied to hiring and sharing part of the monetary transfer with a specific trainee, firms replace existing workers with the new hires. Instead, when they are free to hire an employee of their choice and are not imposed a split of the subsidy, they do not displace existing employees and increase the size of their business.

Figure 3: A motor-mechanic firm in Kampala

Moving Forward…

Looking ahead, we aim to study the impact of our interventions on firms operating within the labour markets affected by our experiment but not directly targeted by the interventions. This will allow us to investigate whether relaxing the constraints of a limited number of firms can have spillover effects on the local economy.