


# Childcare, labor supply, and business development

## Experimental Evidence from Uganda

**Arne Nasgowitz** (NHH)  
**Denise Ferris** (BRAC Uganda)  
**Kjetil Bjorvatn** (NHH)

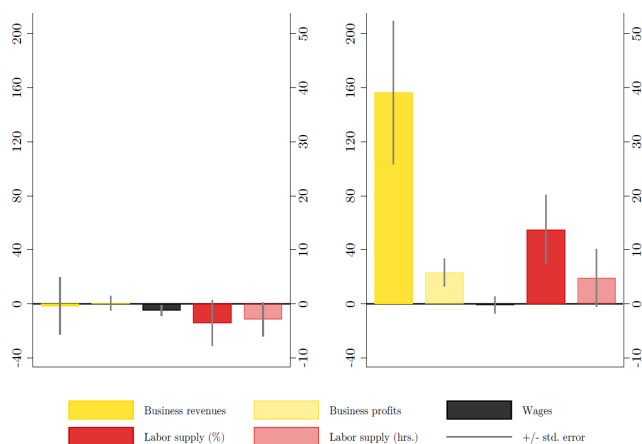
**Lore Vandewalle** (Geneva Graduate Institute)  
**Selim Gulesci** (Trinity College Dublin)  
**Vincent Somville** (NHH & CMI)

 *Subsidized childcare services are at least as effective as cash grants in increasing household income.*

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### Topic at a Glance

Social norms, market imperfections and the structure of the labor market may limit women's labor market opportunities in low-income contexts. While access to childcare has been critical for mothers' labor supply in many high-income countries (Baker et al., 2008; Gelbach, 2002; Goldin, 2021), it remains an open question whether it can improve maternal labor market outcomes in low-income settings and how it affects other household members. We present findings from a field experiment that we designed and implemented in Uganda to understand the impact of free childcare on the mother's business development and labor supply. Moreover, we add to the literature by also considering the impact of childcare on the labor supply of other household members, as well as a range of outcomes related to family welfare, including child development.



*Caption:* The effect of childcare depends on the household composition. For single mothers, childcare increases mothers' labor supply and earnings from self-employment; while within couples, childcare affects not mothers' but their partners' labor supply and earnings.

### New Insights

Childcare can allow household members to increase their labor supply by freeing up their time. As in other countries of Sub-Saharan Africa, the labor market in Uganda is gender-segmented: Women are more likely to be involved in self-employment, and men in wage-employment, and men receive higher wages than women in general. Our objectives in this research is to assess the relative importance of time and credit constraints for labor supply and business development, as well as the cost-effectiveness of subsidized childcare. To do so, we randomly assigned the women in our sample of almost 1500 households to one of four groups. The first group was offered free childcare for one year. The childcare treatment offered to enroll one child of three to five years of age in a nearby childcare center (pre-school) of choice with all costs covered. The second group was offered an unconditional cash grant equal to the cost of the childcare treatment. The cash grants were unconditional but labeled as a business grant and transferred directly to the women. The third group was offered both free childcare and the cash grant. A final group of women served as a control.

We surveyed the participants at baseline and approximately one year later to measure their labor supply and earnings and that of other household members. We also collected information on the child development indicators of the "target child" eligible for the childcare treatment. The implementation of treatments started February 2019 and was completed in December 2019 (one school year). A childhood development survey was conducted in December 2019, using the IDELA tool developed by Save the Children, while a full business and household follow-up survey was conducted in February 2020, right before the COVID-19 lockdown.

We measure household income by summing wages and revenues from self-employment for the mother and her partner, whom we shall refer to as the father (which could imply stepfather). We observe that the childcare intervention caused an increase in household income of 86 thousand Uganda shilling (UGX) (23 USD), a 34 percent increase relative to the control group average. The effect is at least as large as that of the cash grant. We do not find

any complementarity between the childcare and cash treatments on household income: while the point estimate of the combined treatment is larger than that of the single-arm treatment, the difference is not statistically significant.

We find that the childcare subsidy significantly increases mothers' revenues from self-employment, without increasing their average labor supply, productive assets or number of employees. This suggests that childcare enables mothers to be more productive at work, generating higher revenues despite working the same number of hours or employing the same level of inputs. The childcare treatment also increases the fathers' labor supply and earnings from wage labor.

The increase in labor supply for the average father, but not for the average mother highlights the importance of the household composition in determining the effects of a childcare subsidy. At baseline, about a third of the women are single mothers. While the freed-up time from childcare is likely to increase the labor supply of single mothers, the prediction is less clear for mothers who live with a partner. Figure above graphically summarizes the impact of the childcare subsidy on mothers who live with a partner (left panel) versus single mothers (right panel). The left axis indicates income (in UGX 1,000) and labor supply at the intensive margin (in hours per month), and the right axis labor supply at the extensive margin (percent of working mothers). The childcare subsidy does not impact the labor supply or income for women who live with a partner. In those households, the evidence suggests that fathers use the freed-up time to take on additional wage labor, leaving more domestic chores to the mothers. Single mothers, on the other hand, increase their labor supply in self-employment, which is associated with a substantial increase in their business income.

The impact on fathers can be driven by two potential mechanisms. First, childcare relieves the household from part of the domestic work required, resulting in a reallocation of the parents' time to other tasks, such as income-generating activities. If there are capital constraints, the main income-generating option is wage labor. Given the large gender pay gap in the labor market in Uganda, the most lucrative option from the household's point of view seems to be to increase the father's wage labor, with the mother potentially taking over some of his domestic chores. Second, the childcare subsidy may free up resources (as some households would have sent their child to childcare anyhow), allowing the fathers to invest more in costly job search. We provide evidence showing it is unlikely that this latter channel drives the results.

The cash treatments have a similar effect as the childcare subsidy on mothers' revenues from self-employment. Contrary to the childcare subsidy though, the average women's labor supply increases as well. In line with the hypothesis of binding capital constraints, the cash transfers lead to the creation of new businesses, and investments in productive assets and makes it more likely she hires an employee. The cash transfers do not affect fathers' labor

supply, income, business assets or number of employees.

Finally, we document treatment effects on children's development. The childcare subsidy leads to an improvement in early literacy and motor skills. While the point estimates are positive (and probably driven by the fact that some households spent the cash on sending their children to childcare), the cash grants do not have a significant effect on children's development. The impact of the combined treatment is similar to that of childcare alone.

## Policy Recommendations

Our findings indicate that subsidizing childcare can be a cost-effective way to improve household income and child development. The positive effect of childcare on household income and child development is at least as large as that of a cash grant of equivalent cost. However, our findings suggest that in a context where the labor market is gender-segmented (women are more likely to be involved in self-employment, and men in wage-employment), access to capital can be more effective in increasing female labor supply. This highlights how the structure of the labor market shapes the effects of the policy.

## Limitations

One limitation of our study is its short-term nature. The childcare subsidy covered the cost of childcare for one year. For example, more people might have been willing to start a new income-generating activity if the subsidy had lasted longer. Another important feature is the study was spread over a large geographical area, with each participating daycare only receiving one or a couple of children. Scaling up this policy would however entail increasing the number of daycares and their staff. The effects that the subsidy would have on child development would then depend to a large extent on the quality of these centers, which we cannot predict. How to scale up such a policy while maintaining the quality of services remains an open question.

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