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# Childcare, Labor Supply, and Business Development: Experimental Evidence from Uganda

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## ABSTRACT

# Childcare, Labor Supply, and Business Development: Experimental Evidence from Uganda<sup>\*</sup>

In a field experiment in Uganda, mothers of young children are randomly offered a childcare subsidy, an equivalent cash grant, both or nothing. Childcare leads to a 44 percent increase in household income, which is at least as large as the impact of the cash grant and driven by an increase in mothers' business revenues and fathers' wage earnings. The childcare subsidy also improves child development while the cash grant does not. Overall, our findings demonstrate that childcare subsidies can be an effective policy to simultaneously promote child development and reduce poverty in a low-income context.

#### **JEL Classification:**

125, 138, J13, J22

#### **Keywords:**

childcare, pre-school, cash transfers, income, labor supply, entrepreneurship, gender, child development

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## 1 Introduction

In high-income countries, access to childcare is critical for increasing women's labor force participation (Baker et al., 2008; Gelbach, 2002; Goldin, 2021). This is because childcare serves to alleviate time constraints in that women typically spend a large amount of time taking care of young children in the family, and childcare services enable them to dedicate more time to paid work instead. However, it is unclear if these lessons carry over to a low-income context where multiple market imperfections along with social norms may further limit women's labor market opportunities. There is limited causal evidence concerning the impact of childcare subsidies on maternal labor market outcomes and even less regarding those of other household members (Dinkelman and Ngai, 2022; Duflo, 2012; Evans et al., 2021; Jayachandran, 2021). Moreover, evidence on the impact of childcare services on child development is mixed, therefore it is not clear if access to childcare will be beneficial for children in a low-income context.

This paper reports from a field experiment designed to understand the effects of offering childcare and/or cash transfers to mothers of a 3–5 year-old child. In Uganda, as in many other low-income contexts, self-employment is an important source of income.<sup>1</sup> Capital and labor are two key inputs in any business. Yet, entrepreneurs may not be able to invest in capital due to credit constraints, while their labor supply may be constrained by domestic duties, such as childcare. Moreover, there may be important complementarities between capital and labor. For instance, lacking access to capital may severely limit the returns to childcare, as the marginal product of labor can be very low. Similarly, the returns to an increase in capital may be contingent on having access to childcare, allowing the entrepreneur to work more hours, and more productive hours, in the business.

To study these mechanisms, we randomly assigned the women in our sample to one of four groups. The first group was offered free childcare for one year. While private childcare services exist in urban and peri-urban regions of Uganda, these are typically not accessible to the poor, or are limited to a program that runs only in the morning. The childcare treatment offered was to enroll one child aged 3–5 years of age in a nearby childcare center 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 and fourth group of women served as a control. We surveyed the participants at the 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

<sup>&</sup>lt;sup>1</sup>Among women in our sample, a third were running a small-scale business at baseline while only 12% were in wage-employment.

#### the childcare treatment.

Our experimental design allows us 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. A key contribution of our paper is to provide a comprehensive picture of the household dynamics resulting from the different treatments. While our focus is on women's labor market outcomes, we also consider those of the father and the household. In addition, we capture treatment effects across a broad range of outcomes related to family well-being, such as child development, happiness, stress and domestic violence. This is crucial to obtain a more comprehensive understanding of the potential effects of providing access to childcare.

We find that the childcare subsidy leads to a large increase in full-day enrollment of target children. Relative to the control group where only a third of the target children attend full-day childcare, the subsidy leads to an approximately 50 percentage point increase. This corresponds to a nearly 150 percent increase relative to the control. The cash transfer on its own leads to a small 7 percentage points (ppt) (equivalent to 21 percent) increase and this is significantly smaller than the effects of the childcare treatments.

At the household level, we find that access to childcare leads to a significant increase in total labor income, driven by an increase in earnings from self-employment. Overall, childcare results in a 44 percent increase in household income, with the effect being at least as strong as that of the cash grant (which leads to a 36 percent increase in household income). Interestingly, access to childcare does not have significant effects on household labor supply, business assets or the number of employees employed in household businesses. Conversely, cash transfers lead to a significant increase in household labor supply, driven by self-employment. The cash treatment also results in an increase in business assets and some expansion in the number of employees. We do not find any complementarity between the childcare and cash treatments along these dimensions.

When we disaggregate the outcomes to evaluate the treatment effects on individual household members, we find that all three treatments lead to a large and significant increase in mothers' revenues from self-employment, and a smaller reduction in their income from wage employment. For the childcare treatment, we do not find any average effect of childcare on the mother's labor supply, investments in business assets or 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.<sup>2</sup> In contrast, in line with the hypothesis of binding capital constraints, both the cash and the combined treatment lead to investment in productive assets, employment of workers

<sup>&</sup>lt;sup>2</sup>In line with this, Delecourt and Fitzpatrick (2021) show that having a child present at the place of business is associated with lower profitability in female-owned businesses in Uganda.

and the creation of new businesses. We also find that childcare increases the father's labor supply and earnings from wage labor. The other treatments do not have a robust effect on the father's labor supply, and none of the treatments have an impact on the father's business assets or employees.

Finally, when we analyze the treatment effects on child development, we find that childcare has the additional benefit of significantly improving children's development, driven by an improvement in early literacy and motor skills. However, the cash grants do not have a significant effect on children's development. In terms of well-being, both childcare and the cash grants increase the mothers' reported levels of happiness and life satisfaction, along with household consumption and food security. In terms of domestic violence, offering childcare does not have a significant impact on domestic violence, while we cannot exclude that the cash grants increase the reported prevalence of physical violence between partners.

Our study contributes to the research on the effects of access to childcare on labor supply and income. Almost all existing evidence is from middle- or high-income countries, and in general, the studies find positive effects of childcare on the mother's employment.<sup>3</sup> However, there is little evidence concerning the effects of childcare on other household members and the family as a whole (Evans et al., 2021). We provide evidence from a low-income country, and analyze the impact of subsidized childcare on the mother's labor supply, the broader household economy, and child development. Another important strength of our analysis is the inclusion of cash transfers as a separate treatment arm, at a cost equivalent to the childcare subsidy. This allows us to assess the cost-effectiveness of subsidizing childcare, evidence absent from the existing literature.

Our factorial design also allows us to speak to the literature on the effectiveness of interventions to promote small and medium enterprises. Previous work has shown that male-owned enterprises benefit more from financial support and training programs than female-owned enterprises (Berge et al., 2015; Bernhardt et al., 2019; de Mel et al., 2008; Delecourt and Fitzpatrick, 2021; Fafchamps et al., 2014; Fiala, 2018). One potential explanation is that women face more severe time-constraints, arising from domestic work and care obligations. Our design allows us to test separately for the importance of *time* and *credit* constraints in explaining the development of women led businesses. Our evidence points to time constraints being particularly important for subgroups such as single mothers and women who already have a business at baseline (which is the sample studied by most of the papers on small-scale business development, e.g. Berge et al. (2015); Bernhardt

<sup>&</sup>lt;sup>3</sup>We are aware of only one working paper from a low-income country (Martinez et al., 2017). For evidence from high- and middle-income countries, see Baker et al. (2008); Bauernschuster et al. (2016); Berger and Black (1992); Berlinski and Galiani (2007); Berlinski et al. (2009); Bick (2016); Clark et al. (2019); Gelbach (2002); Hojman and López Bóo (2019); Jain (2016); Martínez A. and Perticará (2017); Paes de Barros et al. (2011); Rosero and Oosterbeek (2011).

et al. (2019); de Mel et al. (2009); Fafchamps et al. (2014)).

Finally, the paper complements the growing evidence on the role of childcare services in promoting child development. Most of this evidence is from high-income countries, and in general shows that the impact is particularly strong for children in low socio-economic status families (Baker et al., 2008; Cascio, 2009; Felfe and Lalive, 2018; Havnes and Mogstad, 2015; van Huizen and Plantenga, 2018). The more limited evidence in low- and middle-income countries shows that effects are not always positive and highlights the quality of childcare and the recipient's economic status as important mediators (Andrew et al., 2019; Behrman et al., 2004; Berlinski et al., 2009; Bernal and Fernández, 2013; Bietenbeck et al., 2017; Bouguen et al., 2018; Dean and Jayachandran, 2020; Dowd et al., 2016; Engle et al., 2011; Mwaura et al., 2008). Given the existing evidence, it is not trivial that access to childcare will benefit children. Furthermore, given the cost of childcare, it is plausible that a better outcome could be achieved through simple cash transfers. We contribute to this literature in two ways: by providing experimental evidence on the effects of receiving full-time childcare on child development in Uganda, and by comparing the effect of childcare with that of an equivalent cash grant.

The remainder of the paper is organized as follows. Section 2 describes the experimental design, baseline characteristics, estimation strategy and take-up of the treatment. Section 3 presents treatment effects at the household level, and for the mother and father separately. It also discusses the underlying mechanisms. Section 4 summarizes treatments effects on child development and family well-being. Finally, Section 5 concludes.

# 2 Empirical Design and Data

We start by describing our experimental design, and then move on to a description of the sample and close by specifying our estimation strategy.

## 2.1 Experimental design

Our experiment is designed to understand the effects of childcare and cash transfers on business development. Capital and labor are two key inputs of production in any business. Nonetheless, entrepreneurs may be unable to invest in capital due to credit constraints, while their labor supply may be constrained by domestic duties, such as childcare. Delecourt and Fitzpatrick (2021) show that in Uganda, it is common for female business owners to take their children to work and that this is associated with lower profitability than other female-owned businesses where a child is not present. They show that the presence of a child may limit female entrepreneurs' ability to carry out certain tasks, such as travelling to purchase supplies. Hence, the labor supply constraint may have both a quantity dimension (affecting the number of hours at work) and a quality dimension (affecting productivity at work). Moreover, there may be important complementarities between capital and labor. For instance, a lack of access to capital may severely limit the returns to childcare, as the marginal product of labor can be very low. Similarly, the returns to an increase in capital may be contingent on the entrepreneur having access to childcare, allowing her to work more hours, and more productive hours, in the business.

To shed light on these mechanisms, we designed and implemented a randomized controlled trial with four treatment arms: a childcare treatment that primarily targets the time constraint; a cash treatment that primarily targets the capital constraint; and a combined treatment, offering both childcare and cash, which explores any potential complementarity between the treatments:

- T1 One year of free, full-time childcare.
- T2 Cash grant that equals the average cost of childcare.
- T3 The childcare and cash grants combined.
- C Control group (no intervention).

The childcare intervention offered free, full-day childcare for a year. While private childcare services exist in urban and peri-urban regions of Uganda, these are typically not accessible to the poor, or are limited to a program that runs only in the morning. The childcare treatment offered to enroll one child aged 3–5 years of age in a nearby childcare center of choice and covered the costs (tuition for full-day attendance, breakfast and lunch). The total cost was on average UGX 411,752 (equivalent to USD 111.2) per year. We assisted with the enrollment of children and paid the centers directly at the start of each trimester (in line with their requirements).

The cash grant was delivered in the form of mobile money and was equal to the average cost of childcare within the district. This was labeled as a business grant and was transferred at the same time as the childcare fees were paid to the childcare centers (three installments, one each trimester). The transfers were made directly to the mothers. The total cost of the cash transfer was on average UGX 424,322 (USD 114.6) per year.

While our primary focus is on women's business development, our study also allows us to address the important question of how childcare and cash grants affect the cognitive and non-cognitive development of children. Moreover, our study recognizes that women do not live in isolation and we also document the treatment effects on other household members, their partners in particular.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup>In a recent paper, Evans et al. (2021) review the literature on the impact of early childhood interventions. They show that while the potential effects of such interventions on other household members are generally acknowledged, few studies quantify the effects on mothers' outcomes and almost none consider the impacts on other household members. Evans et al. (2021) highlight that this lack of evidence may lead policymakers to over or underestimate the benefits relative to the costs of early childhood interventions.

The sample for the study was selected from three districts in Western Uganda (Kasese, Kyenjojo and Kabarole), three districts in central Uganda (Mukono, Masaka and Mityana) and three districts in Eastern Uganda (Mbale, Iganga and Jinja). In these districts, we identified 454 communities containing at least one childcare center. To identify eligible households, we conducted a census of each of these communities. Households had to satisfy three criteria to be part of the study: (i) the female caregiver should be present within the household (mother or grandmother), (ii) the household should have one (and only one) child in the age range 3–5 years (we refer to this child as the "target child") and (iii) the target child should not already be attending full-time childcare (but we allowed for children attending part-time childcare). We also wanted to have a sufficiently large group of households without a younger child (and one household that does not satisfy the additional criteria of not having a younger child (and one household that does not satisfy this). From the list of eligible communities and households, we randomly selected 1,496 households across 400 communities to participate in the baseline survey.

We conducted the baseline surveys in November and December 2018. We then randomized the sample into the four treatment arms. Randomization was conducted at the individual level and blocked by (i) district, (ii) whether the target child had younger siblings or not, (iii) whether the target child attended any (part-time) childcare or not, (iv) the female caregiver's main occupation (self-employed, wage-employed or unemployed), and (v) whether the female caregiver was the child's mother (versus grandmother).<sup>5</sup> The interventions covered the 2019 school year, which began in February and ended in late November. A short-term follow-up survey was conducted in July–August 2019, and a long-term follow-up survey in November–December 2019 for children and in February 2020 for households. Figure 1 summarizes the timeline of the project.

#### FIGURE 1: PROJECT TIMELINE



*Notes: Figure 1 shows the timeline of the surveys (three household surveys: Baseline, Short-Term and Long-Term, as well as two child development surveys: Child), and the timing of the cash transfers (\$). The numbers below the tick marks indicate the month of the year.* 

#### The household surveys were answered by the primary female caregiver of the target child.

<sup>&</sup>lt;sup>5</sup>Of the 1496 households that took part in the baseline survey, 363 were randomly allocated to T1, 364 to T2, 357 to T3 and 412 to C. These are not symmetric groupings because the number of observations differed across strata and it was not always divisible by four.

At baseline and at the long-term follow-up, the household surveys collected information on the labor supply and business activities of the respondent and other household members, the demographic and socio-economic characteristics of all the household members, and on the respondent's well-being. During the short-term follow-up, we collected information on only a subset of indicators in order to track some potential short-run changes.

The child survey was based on the International Development and Early Learning Assessment (IDELA), as developed by Save the Children. The tool consists of a set of questions and tests aimed at measuring the level of competency that children possess across four domains: motor skills, early literacy, early numeracy and socio-emotional skills. We chose IDELA because that tool is tailored to the age of the children targeted by our study, covers the most important domains of child development and has been tested in and translated for use in Uganda (Halpin et al., 2019; Pisani et al., 2018).

### 2.2 Baseline characteristics

Table A.1 in Appendix A presents key background characteristics of the participants from the baseline survey. We observe that in 87 percent of households, the primary caregiver is the target child's mother (as opposed to the grandmother). For brevity, we will refer to the female respondent as the "mother" in the remainder of the paper. The average mother was 35 years old and lived in a household with five members. Her partner (i.e. the father or stepfather of the target child) was listed as being part of the household for 68 percent of the families. As for the "mother", we will refer to the partner of the mother as the "father" in what follows. In 49 percent of the households, there is another potential caregiver, i.e. another person besides the mother or the father who is older than 12 years of age. In terms of religion, about a third of the women are Muslim and the remainder Christian. The average child was 3.6 years old at baseline and almost half of them are boys. For about three quarters of the households, the target child was the youngest child in the household, and the average target child had two elder siblings: one male and one female. The enrollment rate of the target children in half-day childcare was 38 percent, none attended full-day childcare.

The average household generated UGX 109 thousand in monthly income, with both wage earnings and profits from self-employment contributing substantially.<sup>6</sup> The pattern differs when we turn our attention to the individuals within the household. Indeed, Table A.2 shows that self-employment constitutes the larger share of the mother's labor hours and earnings than wage-employment, whereas the opposite holds for fathers.<sup>7</sup> This high-lights the gender-segmented nature of the labor market in Uganda where women are more

<sup>&</sup>lt;sup>6</sup>Unless otherwise stated, the monetary values are expressed in 1,000 Ugandan shillings (UGX) and are winsorized at the  $99^{th}$  percentile. In 2019, UGX 1299.5 = USD 1 PPP.

<sup>&</sup>lt;sup>7</sup>The father's labor market outcomes are coded as zero if the respondent does not have a partner.

involved in self-employment, and men in wage-employment.<sup>8</sup>

Tables A.1 and A.2 provide balance tests, comparing the sample of non-attritors (i.e. households still in the sample at the time of the follow-up survey) by treatment status. Of particular interest, columns 2–4 present the standard difference between the control and the three treatment arms, while columns 5–7 report the normalized differences (Imbens and Wooldridge, 2009). Fewer than 5 percent of the pairwise mean comparisons are statistically significantly different, which could have occurred through random chance. Moreover, all the normalized differences are smaller than one fourth of the combined sample variation. Hence, we conclude that the randomization was successful in achieving baseline balancing in key observable characteristics and that the control group therefore constitutes a valid counterfactual for the treatment groups.

#### 2.3 Estimation strategy

We estimate the treatment effects using the following model:

$$y_{it} = \alpha + \sum_{k=1}^{3} \beta^k T_i^k + \lambda y_{i0} + \Gamma_{i0} + \varepsilon_{it}$$
(1)

where  $y_{it}$  is the outcome of interest for respondent *i* at follow-up (*t*=1),  $y_{i0}$  is the baseline level of the outcome,<sup>9</sup>  $T_i^k = 1$  if the respondent is in the following treatment group: (i) childcare only (k=1), (ii) cash only (k=2), (iii) childcare & cash (k=3);  $\Gamma_{i0}$  are indicators for randomization strata which were determined at baseline. In this specification, the  $\beta^k$ correspond to intention to treat (ITT) estimates. Under the assumption that the control observations constitute a valid counterfactual for each treatment group,  $\beta^k$  identifies the causal effect of the offer of childcare ( $\beta^1$ ), cash ( $\beta^2$ ), or both ( $\beta^3$ ). Throughout the paper, monetary values are expressed in 1,000 UGX and are winsorized at the 99<sup>th</sup> percentile.

The treatments are randomized at the individual level. Hence, we do not cluster the standard errors but they are robust to heteroscedasticity. We group outcomes that test the same hypothesis in families and correct the *p*-values to account for multiple hypotheses testing using the procedure proposed by Benjamini and Hochberg (1995). This allows us to control the *false discovery rate* within families of outcome variables. We correct the *p*-values by treatment arm and group the outcomes into families as specified in each table's notes.

We test for differential attrition in Table A.3. For the household survey, the attrition rate

<sup>&</sup>lt;sup>8</sup>We see a similar pattern in other datasets from Uganda, such as the 2018/19 wave of the World Bank's Living Standards Measurement Study (LSMS). For households living in our study districts, 12 percent of women (of the same age range as the participants in our sample) were in wage-employment and 21 percent were self-employed. For males, the corresponding rates were 32 percent for wage labor and 25 percent for self-employment.

<sup>&</sup>lt;sup>9</sup>If information on the baseline level of the outcome is missing (due to non-response for a specific question during the baseline survey), we impute the missing value at baseline with the sample mean and we control for this using an indicator variable equal to one if the observation has been imputed.

was eight percent among the control group and 4-5 percent among the three treatment arms. The difference in attrition between the childcare and the childcare & cash arms relative to the control group is statistically significant, but not for the cash only versus control arm. There is no differential attrition across the three treatment arms, as can be seen from the *p*-values in the bottom panel of the table. For the child survey, the attrition rate was ten percent among the control group and this was lower by 4 ppt for the childcare arm and by 3 ppt for the cash and combined arms. Due to the differential attrition rate in the control group relative to the treatment groups, we assess the sensitivity of our findings with respect to attrition throughout the analysis. To do so, as pre-specified in our pre-analysis plan, we follow Kling et al. (2007) and Fairlie et al. (2015) and calculate the lower and upper bound estimates that adjust for differential non-response rates in the treatment groups relative to the control. We calculate the upper bounds by imputing the mean among the treated plus 0.05 (or 0.1 or 0.2) standard deviations (SD) to the non-responders in the treatment group. For the control group, we impute using the mean among the control minus 0.05 (or 0.1 or 0.2) SD. To calculate the lower bounds, we follow the opposite procedure. For the treatment group, we take the mean minus 0.05 (or 0.1 or 0.2) SD and for the control we take the mean plus 0.05 (or 0.1 or 0.2) SD. We then re-estimate the treatment effects. We report the results in Appendix B. Overall, the attrition bounds show that our main findings are unlikely to be driven by differential attrition.

### 2.4 Take-up

Before presenting the treatment impacts of our interventions, we confirm that the childcare treatment actually led to an increase in the enrollment of the target child in childcare. Table 1, column 1 indicates a 15 (14) ppt increase in the likelihood that the target child is enrolled in any childcare among the childcare (childcare & cash) treatment groups. This corresponds to an increase of around 18 percent relative to the control group where 82 percent of the children are enrolled.<sup>10</sup> The cash transfer also increases enrollment in any childcare by 7 ppt — this effect is significantly smaller than the effects in the treatment arms that include childcare (*p*-value < .01). Column 2 shows the treatment effects on enrollment in full-day childcare. In the control group, only 34 percent of the children are enrolled in full-day. This proportion is approximately 50 ppt larger in the childcare treatments. This corresponds to a nearly 150 percent increase relative to the control. In contrast, the cash treatment leads to only a 7 ppt (21 percent) increase and this is significantly smaller than the effects of the childcare treatments (*p*-value < .01). Column 3 shows that the mothers re-

<sup>&</sup>lt;sup>10</sup>We see similar enrollment rates among children of this age range in other data from this region. For example, in Figure A.1 we compare the school enrollment rates of the children in our control group with children residing in the same districts using the 2018/19 wave of the Uganda LSMS. Among our control group, enrollment rates in any type of school are 79 percent and 83 percent among children aged 3 or 4 at baseline, while in the LSMS sample the corresponding rates are 69 percent and 82 percent respectively. Among the children aged 5 years at baseline, enrollment rates are above 90 percent in both samples.

port fewer days of missed childcare in all the treatment groups during the third trimester: Compared to 21 days on average in the control group, the childcare arms miss 15 fewer days and the cash only transfer arm 9 fewer days. The treatment effects in the childcare treatments are significantly higher than in the cash treatment (p-value < .01).

	Enr	ollment	Attendance
	Any childcare (1)	Full-day childcare (2)	Days missed (3)
Childcare	.15***	$.48^{***}_{\star\star\star}$	-15.21***
	(.02)	(.03)	(1.9)
Cash	.07***	.07**	-8.58***
	(.02)	(.03)	(2.23)
Childcare & cash	$.14^{***}_{\star\star\star}$	.5***	-14.53***
	(.02)	(.03)	(1.96)
p-value (equal treatment effects):			
Childcare = cash	0.000	0.000	0.000
Childcare = childcare & cash	0.463	0.571	0.597
Cash = childcare & cash	0.001	0.000	0.001
Childcare & cash = childcare + cash	0.003	0.254	0.000
Mean Control	.82	.34	20.71
Obs.	1428	1428	1414

TABLE 1: EFFECTS ON CHILDCARE ENROLLMENT AND ATTENDANCE

**Notes:** In columns (1) and (2) the dependent variables are dummies indicating the child is enrolled in any childcare, or in full-day childcare respectively; and in column (3) it measures the number of childcare days missed during the last trimester. All regressions control for the baseline level of the outcome variable and the randomization strata: district indicators, an indicator for whether the target child has younger siblings, whether the target child was already attending childcare at baseline, an indicator for whether the respondent was self-employed at baseline and the corresponding indicator for being wage-employed, and whether the respondent was the birth mother of the target child. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \* \*\* p < 0.01 for *p*-values that are adjusted for multiple hypotheses testing. When correcting the *p*-values, we group all three outcomes as one family.

Overall, the findings in Table 1 demonstrate that all treatments increase enrollment and attendance rates in childcare among the targeted children, but the increase is significantly greater in the groups assigned to the childcare subsidy in comparison to those assigned to the cash transfer.<sup>11</sup> One important finding from the research on childcare intervention

<sup>&</sup>lt;sup>11</sup>We assess the robustness of these findings with respect to differential attrition in Table B.1 and Table B.2. Overall, the magnitudes of the lower and upper bounds are similar to those reported in Table 1 and this holds for all the alternative assumptions about the attriters. As such, we conclude that the effects on childcare enrollment are unlikely to be caused by differential attrition.

is that full-time programs generally have stronger effects than part-time programs (van Huizen and Plantenga, 2018) and it is therefore important to note the very strong effects on full-day enrollment. Nevertheless, we observe that the recipients of cash grants increase their child's enrollment in childcare to some extent, primarily in half-day programs. This is also confirmed by additional evidence from the long-term survey. When we presented an open question "What did you use the cash transfer for?", 65 percent of the respondents in the cash group said they used it at least partly to cover childcare expenditures. This could reflect a latent demand for childcare that may be subject to liquidity constraints. It could also be that the cash grant increases the opportunity cost of time, by increasing labor productivity, and thereby the attractiveness of childcare services.

We also estimate the treatment effects on older siblings' school enrollment and attendance (children aged 7–18 years). As we show in Appendix Table A.4, there are no significant effects on enrollment rates, but there are significant effects on attendance. In particular, the childcare & cash treatment decreases the number of days missed by older siblings during the last school term by 4 days, corresponding to a 38 percent decrease relative to the control mean of 10 days. The effect is driven by both sisters (3 days) and brothers (2 days). The other two treatments, childcare alone and cash alone, do not significantly impact the school attendance of older siblings compared to the control group. We conclude that the increased enrollment and attendance by the target children caused by the childcare treatment(s) did not come at the expense of the enrollment and attendance of their siblings. This reinforces our confidence that these treatments freed up the parents' time.

## 3 Effects on Income, Labor Supply and Investments

Our key research question is whether subsidizing childcare increases labor supply and business development. The hypothesis is that childcare can increase business revenues by alleviating a time constraint: on the quantitative dimension, by freeing up time to work more hours, and on the qualitative dimension, by reducing multi-tasking and thereby increasing productivity.

We first present the treatment effects on income, labor supply and investments at the household level, and then discuss the results for mothers and fathers. Our discussion does not only focus on self-employment, but also on wage labor. This allows us to provide a more complete picture of income for the household.

## 3.1 Households

Table 2 provides the treatment effects on the income generation of the household. We first discuss the impact on income, and then the drivers of income changes, namely labor supply, investments in business assets, and employment. In each case, we begin by analyzing the effect of childcare and then move to cash and its comparison with childcare only, and

finally the potential complementarities between the two treatments. We highlight our key findings in the form of two *results*, one on income and the other on the drivers of income. The results are based on the long-term survey which was conducted approximately one year after the interventions started.

We measure household income from self-employment as revenues and profits over the past month (columns 1–2) from all businesses owned by household members, and wages equal to the total wages received by household members over the same time period.<sup>12</sup> Total household income is measured in two ways, by summing wages and revenues from self-employment (column 1), and by summing wages and profits from self-employment (column 2).<sup>13</sup>

The households assigned to childcare see a large increase in revenues from self-employment, amounting to an increase of UGX 70 thousand compared to a control group average of UGX 158 thousand, corresponding to a 44 percent increase. The effects on profits from self-employment are also large but somewhat smaller in magnitude (a 30 percent increase). The estimated coefficient on wage income is also positive but not statistically significant. In sum, we see that total revenues increase by UGX 86 thousand, and total profits by UGX 31 thousand compared to the control group averages of UGX 250 thousand and UGX 137 thousand respectively.

Turning to the cash treatment, we observe a large increase in revenues from self-employment, which is similar in size to that of childcare. The impact on profits is smaller and not statistically significant. We note that the estimated coefficient on wage income is negative, and in fact, there is a significant difference between the childcare and cash treatment on this dimension (p=0.049). In sum, while the impact is economically important, the cash arm effects on total revenues are not significant once we correct for multiple hypothesis testing, and the effects on profits are small and insignificant.

The households assigned to the combined treatment of childcare & cash obtain an increase in revenues (profits) of UGX 116 thousand (UGX 25 thousand). As in the case of cash, the estimated coefficient on wage income is negative, suggesting that the expansion of income in self-employment is partly crowded out by a reduction in wage income. Once again, there is a significant difference between childcare and the combined treatment on

<sup>&</sup>lt;sup>12</sup>We focus on income from self-employment and wage labor, as they are the most important in household income generation. Table A.5 shows that few households in our sample have income from farming (18% in the control group) or from livestock rearing (16% in the control group). The treatments have no effect on farm income, while the combined treatment has a small positive effect on livestock income. Accounting for these effects does not change our findings on total household income (column 5 in Table A.5).

<sup>&</sup>lt;sup>13</sup>In case the respondent was unsure about the level of revenues or profits of any household business, we asked them to estimate these using intervals. In particular, they were asked if the revenues/profits were higher than X where X = median level of revenues/profits at baseline; if they said "Yes" ("No") they were then asked if the level was higher than X where  $X = 75^{th}$  ( $25^{th}$ ) percentile of revenues/profits at baseline; followed by the 62.5<sup>th</sup> or 12.5<sup>th</sup> percentiles from the baseline. We impute missing values using the mid-point of the relevant interval in which they finished.

this dimension (p = 0.009). Total revenues increase by UGX 107 thousand, while the impact on profits is positive but not statistically significant. Throughout the paper, to test for any complementarities between the childcare and the cash transfer treatments, we test if the treatment effect of the childcare & cash arm is equal to the sum of the treatment effects of the single-arm treatments. For household income, we fail to reject the null hypothesis (p = 0.496 for revenues and p = 0.159 for profits). In other words, we do not find evidence of a complementarity between the childcare and cash treatments.

**Result 1.** Access to childcare leads to a significant increase in household income, driven by an increase in self-employment, which is at least as large as that of cash. We do not find any evidence of complementarity between cash and childcare.

The next two parts of Table 2 allow us to shed light on what drives the changes in business income that we just documented. Namely, do these arise from the treatment effects on the household labor supply, or can they be explained by the investments in business assets and/or the number of employees? We measure labor supply at the extensive margin (any labour supply in the past 30 days) and the intensive margin (hours worked in the past 30 days). Again, we undertake separate measurements for self-employment and wage employment and then sum these to obtain the overall labor supply.

Interestingly, we find no significant effect of childcare on labor supply at the household level. In particular, there is no apparent impact on the labor supply for self-employment, where the estimated coefficients are actually negative, although statistically insignificant. Thus, the households assigned to the childcare treatment generate more business income without spending more time in their business. In contrast, the point estimates on labor supply into wage employment are positive, although not significant. We return to these patterns of labor supply later when we discuss the results for mothers and fathers separately. We now turn to the other business inputs. We measure business assets on the extensive margin, as the purchase of any business asset during the 12 months prior to the interview, and the intensive margin, as the reported current value of those assets.<sup>14</sup> Regarding employees, we focus on whether the business has any worker (including members of the household other than the business owners as well as any external workers), and the total number of workers. Again, we observe that the childcare treatment has no significant effect on the purchase of business assets or the number of employees. Therefore, we can rule out the possibility that the childcare subsidy frees up resources that are invested in the household businesses.

The cash grant leads to an increase in household labor supply, particularly in self-employment. At the extensive margin, households receiving cash are 16 ppt more likely to be engaged in

<sup>&</sup>lt;sup>14</sup>We asked respondents for the value of each new business asset as if sold on the day of the interview.

self-employment, which is a 36 percent increase relative to the control mean of 45 percent. At the intensive margin, cash grant recipients increase their labor supply by 40 hours per month on average. Consistent with the impact on wage income, the signs of the estimated coefficients differ for the childcare and the cash treatment (the difference being significant at the intensive margin, p = 0.06). In line with the framing of the cash grant to support business development, we observe that this treatment leads to a larger increase in business assets. Households receiving a cash grant are 6 ppt more likely to purchase business assets, an increase of around 55 percent over the control group. At the intensive margin, the value of new business assets is UGX 10 thousand higher than the control group mean of UGX 7 thousand. Moreover, the point estimates on employees also point to the cash being spent on expanding employment as, but they are not statistically significant.

The impact of the combined treatment on labor supply is very similar to that of cash alone. Households receiving both treatments are 15 ppt more likely to engage in self-employment and, at the intensive margin, increase their labor supply by 46 hours per month. In this case, however, the increase in total labor supply is not statistically significant, given the somewhat larger contraction of time spent in wage employment (a decrease of 22 hours compared to a control group mean of 129 hours). The impact of the combined treatment on new business assets and employees is also similar to the one observed for the cash grant only: recipients are 8 ppt more likely to purchase new business assets. At the intensive margin, the value of those assets is UGX 10 thousand higher. The effect on business employees is now significant at the extensive margin: compared to the control group, house-holds receiving both childcare and cash are 7 ppt more likely to have an employee. At the intensive margin, the effect is positive but not significant.<sup>15</sup>

**Result 2.** Assignment to childcare does not have significant effects on household labor supply, business assets or number of employees. Cash transfers lead to a significant increase in labor supply, particularly for self-employment, which comes partly at the expense of wage employment. The cash treatment also leads to an increase in business assets and some expansion in the number of employees. The combined treatment leads to a similar effect as the cash only treatment, with a larger contraction in wage employment. We do not find any complementarity between the treatment arms on these dimensions.

In the next two sections, we estimate the treatment effects separately for mothers and for fathers. This is important in both its own right and helps us better understand the effects observed at the aggregate household level.

<sup>&</sup>lt;sup>15</sup>Tables B.3 and B.4 provide the lower and upper attrition bounds for the findings in Table 2. The results show that the treatment effects are unlikely to be driven by differential attrition.

	Income						Labor supply						Assets & employees			
	Self-e	emp.	ip. Wage		al	Self	f-emp.	И	lage	Т	otal	A	Assets	Empl	loyees	
	Revenues (1)	Profits (2)	(3)	Revenues (4)	Profits (5)	>0 (6)	Hrs. (7)	>0 (8)	Hrs. (9)	>0 (10)	Hrs. (11)	>0 (12)	Ush 1000 (13)	>0 (14)	Nb. (15)	
Childcare	69.99**	13.54*	13.13	85.73**	31.03**	02	-1.99	.05	13.67	.01	12.53	.01	3.69	.01	0	
	(32.14)	(7.58)	(10.7)	(33.85)	(13.29)	(.04)	(13.72)	(.03)	(12.56)	(.03)	(17.43)	(.02)	(3.32)	(.03)	(.11)	
Cash	56.48 <sup>**</sup>	8.64	-8.34	56.2*	5.76	.16***	40.42***	0	-10.45	.06**	33.25**	.06**	9.78**	.05*	.12	
	(28.65)	(6.99)	(10.36)	(30.66)	(12.68)	(.04)	(14.15)	(.04)	(12.15)	(.03)	(16.73)	(.03)	(3.91)	(.03)	(.11)	
Childcare & cash	116.17***	24.66***	-15.62	107.05***	9.12	.15***	45.85***	03	-22.12*	.02	24.59	.08***	9.66***	.07**	.14	
	(31.62)	(7.51)	(10.39)	(34.32)	(12.95)	(.04)	(14.07)	(.04)	(11.75)	(.03)	(16.71)	(.03)	(3.68)	(.03)	(.12)	
p-value (equal treatment effects):																
Childcare = cash Childcare = childcare & cash	0.706 0.230	0.558 0.215	0.049 0.009	0.437 0.605	0.083 0.141	$0.000 \\ 0.000$	0.005 0.001	0.125 0.019	$0.060 \\ 0.004$	0.048 0.694	0.255 0.509	0.099 0.023	$0.181 \\ 0.162$	0.148 0.053	0.182 0.156	
Cash = childcare & cash	0.091	0.056	0.493	0.184	0.816	0.869	0.723	0.452	$0.334 \\ 0.146$	0.114	0.623	0.516	0.980	0.647	0.838	
Childcare & cash = childcare + cash	0.830	0.828	0.176	0.496	0.159	0.847	0.719	0.117		0.177	0.394	0.890	0.509	0.916	0.869	
Mean Control	157.96	44.83	92.23	250.51	137.15	.45	132.68	.49	129.42	.79	261.42	.11	6.92	.18	.39	
Obs.	1414	1414	1410	1410	1410	1414	1413	1414	1410	1414	1409	1414	1414	1413	1413	

#### TABLE 2: EFFECTS ON HOUSEHOLDS

**Notes:** The dependent variables measure total revenues (1) and profits (2) earned through self-employment; income earned through wage labor (3) and the sum of wages and revenues (4) or wages and profits (5); labor supply in wage labor, and in self-employment, and in total at the extensive (columns 6, 8 and 10) and at the intensive margins (7, 9 and 11); whether the household purchased any business asset during the last 12 months (12) and the value of these assets (13); whether it has any employee in its businesses (14) and the number of employees (15). All monetary values are in thousands of UGX and are winsorized at the top 99<sup>th</sup> percentile. We include the same control variables as in Table 1. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for *p*-values that are adjusted for multiple hypotheses testing. When correcting the *p*-values for multiple hypothesis testing, we group the outcomes in eight families: (1) and (2), (3), (4) and (5), (6) and (7), (8) and (9), (10) and (11), (12) and (13), (14) and (15).

### 3.2 Mothers

In Table 3, we present the impact of the treatments on the mother's income, labor supply, investment in business assets and labor demand. We observe that childcare leads to a significant increase in the mother's revenues from self-employment (UGX 42 thousand compared to a control group mean of UGX 90 thousand). The point estimate on her business profits is also positive (UGX 7 thousand compared to a control group mean of UGX 24 thousand).

The cash transfer has a similar effect as the childcare treatment on the mother's revenues from self-employment. The effect is very robust and carries through to total revenues, which are UGX 43 thousand higher than in the control group. The total effect is driven by an increase in income from self-employment (UGX 49 thousand), but partly crowded out by a reduction in income from wages (UGX 7 thousand).

A very similar pattern as that for the cash transfer arm emerges from the combined treatment. The mother's revenues (profits) from self-employment increase by UGX 63 (16) thousand. Again, these results also hold for total revenues. Despite the slightly higher increase in income compared to the cash and daycare only treatments, we find no evidence of any complementaries.<sup>16</sup>

**Result 3.** We find that all three treatments lead to a large and significant increase in mothers' revenues from self-employment, and a smaller reduction in their income from wage employment.

Remarkably, the increase in the mother's business revenues from childcare comes without any increase in labor supply in that the effects are positive but close to zero at both the intensive and extensive margin. We shortly return to an analysis of why this may be the case. In contrast, mothers receiving cash are 13 ppt more likely to be employed (compared to a control group average of 47 percent) and work 31 hours longer per month (compared to 112 hours in the control group). Mothers who receive cash are also 7 ppt more likely to buy business assets, and the value of these assets is about UGX five thousand higher, amounting to more than a doubling compared to the control group mean. There are no differences regarding employment. For the combined treatment, the increase in time spent in the business was accompanied by a significant reduction in the time spent on wage work. In total, mothers are nine ppt more likely to have employment (19 percent relative to the control), driven by a 16 ppt increase in self-employment (52 percent relative to the control) and a five ppt reduction in wage employment (29 percent relative to the control). On the

<sup>&</sup>lt;sup>16</sup>Our finding that cash grants have positive impact on mothers' business revenues is in line with Blattman et al. (2014), who study a government program in Uganda that invited youth to form groups and submit grant proposals for business start-ups. Although the grants were labeled as being for business, they were not supervised. As such, they were similar to the cash grants we study which were labeled as being for business development. Blattman et al. (2014) find that four years after baseline, the treated groups had more business assets, longer work hours and higher earnings. These effects did not differ by gender.

intensive margin, mothers increase their monthly labor supply by 20 hours in total which is due to a 36 hours increase in self-employment and a 16 hours decrease in wage labor. We observe an increase of 8 ppt in the likelihood of owning newly purchased business assets and of UGX 7 thousand in the value of these assets. Mothers are 7 ppt more likely to employ at least one worker, which is a robust 10 percent increase compared to the control group. Again, we do not find any complementarities between the treatments.<sup>17</sup>

**Result 4.** We do not find any average effect of childcare on the mother's labor supply, investments in business assets or the number of employees. In contrast, both the cash and the combined treatment lead to an increase in labor supply, driven by a large increase in self-employment and a smaller reduction in wage-employment. The cash and the combined treatments lead to similar increases in business assets and employment.

The finding that childcare leads to an increase in the mother's business revenues without being accompanied by an increase in labor supply evokes two questions: First, why did childcare not increase her labor supply? Second, how did the business revenues increase?

Part of the answer to the first question can be found by contrasting the impact of childcare with that of cash. In contrast to the childcare treatment, providing cash significantly increases the mother's labor supply. This suggests lack of capital may be an important constraint for the mother's labor supply.

On the second question, we find providing childcare does not increase investment in business assets or employment (Table 3), or the creation of new or the closure of old businesses (Table A.6). This suggests mothers stayed in the same occupations. Consistent with this, we do not find effects on the operating time of the business nor on the travel time to the business (Table A.7). Our finding is, however, consistent with childcare increasing the mother's *efficiency* at work. Combining childcare with work is common in Uganda, and it has been shown this is costly in terms of foregone profits (Delecourt and Fitzpatrick, 2021). This is plausible in that childcare has allowed the mother to focus her attention on the business, leading to a substantial gain in revenues. We substantiate this claim in Section 3.4 where we discuss heterogeneous effects of childcare.

<sup>&</sup>lt;sup>17</sup>Tables B.5 and B.6 provide the lower and upper attrition bounds for the findings in Table 3 and these suggest that the treatment effects are unlikely to be driven by differential attrition.

		Income					Labor supply						Assets & employees			
	Self-e	emp.	p. Wage		al	Self	f-emp.	I	Vage	Т	otal	Ā	Assets	Empl	oyees	
	Revenues (1)	Profits (2)	(3)	Revenues (4)	Profits (5)	>0 (6)	Hrs. (7)	>0 (8)	Hrs. (9)	>0 (10)	Hrs. (11)	>0 (12)	Ush 1000 (13)	>0 (14)	Nb. (15)	
Childcare	41.51 **	6.65	-3.83	37.72*	3.37	.02	2.61	02	-6.83	.01	-4.24	.03	1.71	.01	06	
	(21.04)	(4.74)	(3.41)	(21.13)	(6.04)	(.03)	(10.31)	(.03)	(5.58)	(.04)	(10.93)	(.02)	(2.22)	(.02)	(.09)	
Cash	$49.47^{**}_{\star\star}$	9**	-7.26**	43.34 **	2.51	.19***	39.73***	04	-10.51*	.13***	31.31***	.07***	$4.79^{*}_{\star}$	.06**	.05	
	(19.68)	(4.56)	(3.3)	(19.72)	(5.86)	(.03)	(10.98)	(.03)	(5.54)	(.04)	(11.44)	(.02)	(2.5)	(.03)	(.1)	
Childcare & cash	63.17***	16.06***	-9.67***	55.43***	7.65	.16***	36.1***	05**	-16.28***	.09***	20.39*	.08***	7.41 <sup>***</sup>	.07***	.02	
	(20.56)	(4.91)	(3.11)	(20.78)	(6.15)	(.03)	(11.03)	(.02)	(5.08)	(.04)	(11.42)	(.02)	(2.78)	(.02)	(.09)	
p-value (equal treatment effects): Childcare = cash Childcare = childcare & cash Cash = childcare & cash Childcare & cash = childcare + cash	0.741 0.380 0.559 0.376	0.640 0.083 0.176 0.954	0.311 0.071 0.433 0.757	0.816 0.476 0.608 0.417	0.891 0.520 0.421 0.842	0.000 0.000 0.389 0.253	0.001 0.003 0.762 0.693	0.540 0.219 0.546 0.797	0.503 0.059 0.245 0.888	0.001 0.017 0.370 0.424	0.003 0.036 0.373 0.684	0.078 0.032 0.690 0.632	0.288 0.066 0.433 0.819	0.065 0.028 0.759 0.926	0.056 0.100 0.641 0.757	
Mean Control	89.92	24.27	19.34	110.35	45.1	.31	81.76	.17	30.58	.47	112.34	.07	4.25	.1	.25	
Obs.	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414	

TABLE 3: EFFECTS ON MOTHERS

**Notes:** The dependent variables measure total revenues (1) and profits (2) earned through self-employment; income earned through wage labor (3) and the sum of wages and revenues (4) or wages and profits (5); labor supply in wage labor, and in self-employment, and in total at the extensive (columns 6, 8 and 10) and at the intensive margins (7, 9 and 11); whether the household purchase any business asset during the last 12 months (12) and the value of these assets (13); whether it has any employee in its businesses (14) and the number of employees (15). All monetary values are in thousands of UGX and are winsorized at the top 99<sup>th</sup> percentile. We include the same control variables as in Table 1. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for *p*-values that are adjusted for multiple hypotheses testing. When correcting the *p*-values for multiple hypothesis testing, we group the outcomes in eight families: (1) and (2), (3), (4) and (5), (6) and (7), (8) and (9), (10) and (11), (12) and (13), (14) and (15).

### 3.3 Fathers

We now present the treatment effects for fathers, following the same structure as for the households and mothers. Table 4 shows that childcare leads to a significant and robust increase in the father's total income by UGX 38 thousand, a 36 percent increase relative to the control group mean of UGX 107 thousand. While the coefficients on income from self-employment and wage labor are both positive, only the latter is statistically significant. Fathers in the daycare treatment receive a UGX 18 thousand higher wage than those in the control group, an increase of approximately one third.

The cash grant does not affect the father's income. The coefficients are small and insignificant for both self-employment and wage labor.

The combined treatment is associated with a positive increase in total revenues, which is not statistically different from that observed for the childcare treatment. The effect is mainly driven by an increase in revenues from self-employment. In contrast to the cashonly arm, the impact on wage labor is now close to zero.

**Result 5.** Childcare leads to an increase in the father's income from wage labor, while the combined treatment has some impact on business revenues. There is no effect on the father's income from the provision of cash only.

The increased income from wage employment is mirrored by a significant increase in the father's labor supply in the childcare only arm. At the extensive margin, the father's likelihood to be in wage employment increases by 9 ppt (from a mean of 27 percent in the control group) and at the intensive margin by 21 hours (compared to 70 hours in the control group). The effect on total labor supply is attenuated by a slight decrease in labor supply for self-employment, but it is still clearly positive.

In contrast, the cash treatment does not have any effect on the father's labor supply. For the combined treatment, the impact on the total number of hours worked is similar in size to that of childcare only, but less precisely estimated. The additional hours are not only allocated to wage labor, but are more equally divided between self-employment and wage labor. This suggests that the lack of a significant increase in fathers' wage employment in the combined treatment is likely because his additional hours are now allocated to both wage labor and self-employment.<sup>18</sup>

None of the treatments affects the father's business assets or employees hired for his businesses (note, however, that only 15 percent of the fathers owned a business at baseline). This result is consistent with the increase in the father's income and labor supply being

<sup>&</sup>lt;sup>18</sup>This is consistent with the increase in employees observed in women's businesses in Table 3, column 14.

driven by changes in wage employment.<sup>19</sup>

**Result 6.** *Childcare increases the father's labor supply in wage employment. The other treatments do not have a robust effect on the father's labor supply, and none of the treatments impacts the father's business assets or employees.* 

The increase in fathers' wage employment caused by the childcare subsidy could be driven by two potential mechanisms. Childcare may free up some of the father's time, either directly, by relieving time he would otherwise have spent with the child, or indirectly, by the mother taking over some of his domestic work. Alternatively, 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.<sup>20</sup>

We start by exploring the time channel. A recent national time-use survey shows that Ugandan men indeed spend about five hours per day doing unpaid care work (Uganda Bureau of Statistics, 2019b). This is less than the seven hours women spend on such tasks, but it is still substantial. The childcare treatment relieves the household from part of the domestic work required, resulting in the 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 importance of the gender gap in the labor market in Uganda,<sup>21</sup> the most lucrative option from the household's point of view is to increase the father's wage labor, with the mother potentially taking over some of his domestic chores. In addition, the division of labor may also be guided by the tradition that women have the major responsibility for household chores (Uganda Bureau of Statistics, 2019b).

<sup>&</sup>lt;sup>19</sup>Tables B.7 and B.8 provide the lower and upper attrition bounds for the findings in Table 4. The results show that the treatment effects are unlikely to be driven by differential attrition.

<sup>&</sup>lt;sup>20</sup>Abebe et al. (2020) show that providing a transport subsidy to job seekers in Ethiopia can lead to large positive effects on the likelihood of finding a job.

<sup>&</sup>lt;sup>21</sup>During the study period, the median monthly earnings in wage labor were UGX 240,000 for men and 150,000 for women (Uganda Bureau of Statistics, 2019a).

	Income						Labor supply						Assets & employees			
	Self-er	Self-emp.		Tota	al	Self-	emp.	Wa	age	Т	otal	1	Assets	Empl	loyees	
	Revenues (1)	Profits (2)	(3)	Revenues (4)	Profits (5)	>0 (6)	Hrs. (7)	>0 (8)	Hrs. (9)	>0 (10)	Hrs. (11)	>0 (12)	Ush 1000 (13)	>0 (14)	Nr. (15)	
Childcare	14.37 (14.96)	2.61 (4.03)	18.1** (9.12)	38.12 <sup>**</sup> (17.46)	24.56** (10.16)	02 (.03)	-3.38 (8.21)	.09*** (.03)	20.5 <sup>**</sup> (9.55)	.07** (.04)	18.29 (11.68)	0 (.01)	.98 (1.13)	0 (.01)	.03 (.05)	
Cash	-7.2 (13.01)	-5.49 (3.56)	8.02 (8.97)	6.02 (15.62)	5.08 (9.88)	01 (.03)	4 (8.54)	.05 (.03)	8.06 (9.09)	.02 (.04)	8.41 (11.68)	0 (.01)	1.97 (1.31)	0 (.01)	.03 (.04)	
Childcare & cash	30.77* (15.81)	1.87 (3.84)	.92 (8.82)	40.65 ** (18.35)	5.04 (9.94)	.03 (.03)	10.43 (8.76)	.03 (.03)	7.56 (9.33)	.04 (.04)	16.27 (11.79)	0 (.01)	.47 (1.02)	.01 (.02)	.06 (.07)	
p-value (equal treatment effects): Childcare = cash Childcare = childcare & cash	0.154 0.358	0.042 0.863	0.290 0.069	0.073 0.901	0.069 0.070	0.767 0.121	0.737 0.129	0.187 0.065	0.198 0.191	0.123 0.280	0.419 0.870	0.914 0.705	0.522 0.698	0.974 0.513	0.997 0.618	
Cash = childcare & cash Childcare & cash = childcare + cash	0.019 0.288	0.054 0.397	0.441 0.053	0.066 0.892	0.997 0.095	0.212 0.171	0.248 0.255	0.633 0.016	0.958 0.119	0.644 0.258	0.524 0.540	0.785 0.735	0.306 0.178	0.527 0.641	0.608 0.912	
Mean Control Obs.	52.39 1414	17.09 1414	54.11 1412	106.9 1412	71.99 1412	.15 1414	40.64 1413	.27 1414	70.34 1411	.4 1414	110.14 1410	.03 1414	1.53 1414	.04 1413	.09 1413	

TABLE 4: EFFECTS ON FATHERS

**Notes:** The dependent variables measure total revenues (1) and profits (2) earned through self-employment; income earned through wage labor (3) and the sum of wages and revenues (4) or wages and profits (5); labor supply in wage labor, and in self-employment, and in total at the extensive (columns 6, 8 and 10) and at the intensive margins (7, 9 and 11); whether the household purchased any business asset during the last 12 months (12) and the value of these assets (13); whether it has any employee in its businesses (14) and the number of employees (15). All monetary values are in thousands of UGX and are winsorized at the top 99<sup>th</sup> percentile. We include the same control variables as in Table 1. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \* \*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \* \*\* p < 0.01 for p-values that are adjusted for multiple hypotheses testing. When correcting the *p*-values for multiple hypothesis testing, we group the outcomes in eight families: (1) and (2), (3), (4) and (5), (6) and (7), (8) and (9), (10) and (11), (12) and (13), (14) and (15).

Next, we explore the resource channel. First, unlike the childcare treatment, the cash transfer does not have a significant effect on fathers' labor supply. This implies that the resource channel is unlikely to be driving the result. To better understand which households are more likely to have paid for childcare even without the subsidy, we assess the correlates of full-day childcare enrollment in the control group using baseline covariates. Appendix Table A.8 shows that the mother's occupation (wage-employment) and education level, as well as the target child's age and gender are among the significant correlates of childcare enrollment among the control group. Using these covariates, we then predict the target child's likelihood to be in full-day childcare. We use this predicted likelihood to split the sample into households where it is highly likely that the target child will attend childcare or not. Table A.9 shows the heterogeneity of the father's labor supply and income with respect to this dimension. Overall, we do not find evidence that the effects are driven by households that are more likely to send the target child to childcare. This suggests that the effect of the childcare subsidy on the father's labor supply is unlikely to be driven by an income effect among the "always takers" of childcare.

### 3.4 Heterogenous effects of childcare

Our findings above imply that on average, the childcare treatment increases the mother's income without affecting her labor supply significantly. However, the effects are likely to be heterogenous. We pre-specified several baseline measures that we consider important in determining the efficiency of the childcare treatment. In particular, the presence of children younger than the target child, and the presence of another caregiver.<sup>22</sup> If lack of time is a binding constraint for the mother's labor supply, we expect a stronger effect of childcare for those who do not have younger children to care for. Single mothers are also expected to react differently to the childcare subsidy than mothers living with a partner. In the absence of a partner, the only viable option for the mother may be to spend the extra time in her business, whereas it may be more profitable for a couple to allocate the freed-up time to the partner.

Figure 2 depicts the heterogeneous effect estimates for the childcare treatment. We focus on two outcome variables: the mother's self-employment (extensive margin) and her business income (revenues from self-employment). The complete set of estimates, for all treatments and outcome variables, is reported in Tables A.10 and A.11.

The left-hand side panel shows that the effect on the mother's labor supply does not depend on the presence of younger children in the household. Mothers do not work additional hours, even when there are no younger children to be cared for. The interactions between the childcare treatment and the presence of younger children are very small and not statistically significant (see also Table A.10). The childcare effect on the mother's busi-

<sup>&</sup>lt;sup>22</sup>We consider the father as the main other caregiver, as a father is present in 68 percent of the households.

FIGURE 2: HETEROGENEOUS CHILDCARE EFFECTS ON THE PROPORTION OF SELF-EMPLOYED MOTHERS AND ON THEIR INCOME.



ness income, however, varies with the presence of younger children. Providing childcare to the mother's 3–5 year old does not significantly impact her business income if she has younger children. If the target child is the youngest, however, the mother's business income increases by an average UGX 70 thousand per month (compared to a control group average of UGX 90 thousand).

These findings support the mechanisms we discussed earlier. First, lack of time does not seem to be a binding constraint for the mother's labor supply: If it were, mothers without a younger child would have expanded their labor supply more than mothers with a younger child. Second, the finding that the positive impact on the mother's business revenues is driven by mothers without a younger child is consistent with the hypothesis that taking care of young children can limit the quality of the mother's time spent in her business. When her youngest child is placed in childcare, the mother can work more effectively in her business.

**Result 7.** Childcare leads to significantly higher business revenues for mothers without younger children than for mothers with younger children (who do not benefit from childcare). There is no heterogeneity in terms of the mother's labor supply based on the presence of a younger child.

The right-hand side panel presents the results by presence of the target child's father in the

household (he is present in 68 percent of the households). The interaction effects between the childcare treatment and the presence of the father are large and significant for both the mother's labor supply and her business revenues (see also Table A.11). There is no impact of childcare on the mother's labor supply or business income when the father is present, while for single mothers the proportion of self-employed increases by 13 ppt (from 30 to 43 percent) and business revenues by UGX 157 thousand per month (compared to a control mean of UGX 88 thousand).

This evidence is consistent with the interpretations made so far. When a father is present, the household can use the freed-up time to increase the father's labor and income from wage work. When the father is not around, the mother uses the extra time in her own business.<sup>23</sup>

**Result 8.** Childcare does not affect the labor supply for and revenues from self-employment for mothers with a partner, but it does lead to significantly higher labor supply for and revenues from self-employment for single mothers.

Finally, we explore the heterogeneity of treatment effects on mothers' outcomes with respect to baseline business ownership.<sup>24</sup> Previous work has found that male but not femaleowned businesses benefit (in terms of profits) from cash grants.<sup>25</sup> Our findings are consistent with this body of work. Appendix Table A.12 shows that, among the subsample of mothers who already had a business at baseline, cash grants do not have significant effects on business profits or revenues. On the other hand, when cash grants are complemented with access to free childcare, business profits and revenues are significantly higher than those in the control group. This implies that one reason female-owned enterprises may not be able to generate significant returns from cash transfers is the lack of childcare services.

<sup>&</sup>lt;sup>23</sup>The evidence is also consistent with a scenario in which single mothers are less credit constrained than mothers living with a partner. Our data does not support this scenario. We asked all mothers at baseline if they would be able to borrow UGX 300 thousand for the next six months: 65% of single mothers said no, while only 57% of mothers who live with their partner said no. The difference is statistically significant (p = 0.004).

<sup>&</sup>lt;sup>24</sup>This analysis was not pre-specified.

<sup>&</sup>lt;sup>25</sup>Bernhardt et al. (2019) list seven studies from five countries that establish this finding. They also summarize the existing explanations: (i) expropriation of women's working capital and/or profits, (ii) women being more impatient or less committed to growing their business, and (iii) women sorting into less profitable sectors. They propose, test and confirm a fourth explanation, namely that the cash grant is invested in the household's business with the highest return, which is more likely to be owned by men.

# 4 Effects on Child Development and Well-being

We now turn to the impact on a broader range of outcomes related to family welfare. We first discuss the child's development, followed by the mother's psychological well-being, consumption and food security at the household level, and domestic violence targeting the mother or child.

## 4.1 Child development

Table 5 presents the treatment effects on the target child's development, as measured by the IDELA instrument. The tool, as previously mentioned, was developed by Save the Children and has been extensively used to evaluate children's cognitive and non-cognitive skills across the world (Halpin et al., 2019). Column 1 presents the impact on the standardized aggregate IDELA score, while columns 2–5 show the effects on each of its four dimensions: emergent literacy, emergent numeracy, socio-emotional skills and motor development.

We find that childcare —alone or when combined with cash— has positive and significant effects of about 0.15 SD on the aggregate score, driven by significant improvements in emergent literacy and motor development. The effects on emergent numeracy and socio-emotional skills are also positive (0.1 SD and 0.04 SD, respectively), but not statistically significant.

Turning to the cash treatment, the impact on the aggregate score and on its components are positive, but not statistically significant.<sup>26</sup>

**Result 9.** Access to childcare leads to a substantial improvement in child development, while the cash transfer has no significant effect.

<sup>&</sup>lt;sup>26</sup>The Tables B.9 and B.10 provide the lower and upper attrition bounds for the findings in Table 5. The results show that the treatment effects are unlikely to be driven by differential attrition.

		Breakdown into components								
	IDELA	Emergent	Emergent	Socio-	Motor					
	score	literacy	numeracy	emotional	development					
	(1)	(2)	(3)	(4)	(5)					
Childcare	.16***	.12**	.11*	.04	.23***					
	(.06)	(.06)	(.06)	(.07)	(.06)					
Cash	.09	.06	.08	.01	.11*					
	(.06)	(.06)	(.06)	(.07)	(.06)					
Childcare & cash	.15***	.16***	.1	.04	.19***					
	(.06)	(.06)	(.06)	(.07)	(.06)					
p-value (equal treatment effects):										
Childcare = cash	0.234	0.334	0.674	0.562	0.056					
Childcare = childcare & cash	0.956	0.491	0.969	0.950	0.523					
Cash = childcare & cash	0.268	0.100	0.706	0.613	0.207					
Childcare & cash = childcare + cash	0.258	0.786	0.379	0.921	0.080					
Mean Control	0	0	0	0	0					
Obs.	1366	1366	1366	1366	1366					

#### TABLE 5: EFFECTS ON CHILD DEVELOPMENT

**Notes:** In column 1, the dependent variable is the standardized aggregate IDELA score, and in the columns 2-5 the standardized components of the score: emergent literacy, emergent numeracy, socio-emotional skills and motor development. We include the same control variables as in Table 1. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for multiple hypotheses testing. When correcting the *p*-values, we group the outcomes together in two families: the overall score (1) and the components of the score (2, 3, 4 and 5).

### 4.2 Well-being

#### 4.2.1 Mother's psychological well-being

We now analyze the treatment effects on the mother's subjective well-being. Table 6 shows the treatment effects on the mother's self-reported happiness, life satisfaction and stress. For happiness, we rely on the question "How happy are you with your life?", and for life satisfaction on the response to "In your opinion, where are you on the ladder of life at the moment?". Both are measured on a scale from zero to ten. The stress level is captured by the perceived stress scale (Cohen et al., 1983).

Relative to the control group, providing childcare increases happiness by 10% and life satisfaction by 8%. It also reduces stress by an insignificant 2.4%. Cash has a significant impact on all three outcome variables: Compared to the control, happiness and life satisfaction increase with 20% and 16% respectively, and the level of stress reduces by 5%. The effects on happiness and life satisfaction are significantly higher than in the childcare only arm. For the combined arm, happiness with life and life satisfaction increase by 16% and

#### 11% respectively, and stress reduces by 3%.<sup>27</sup>

	Happiness with life (0 to 10)	Life satisfaction (0 to 10)	Perceived stress scale (0-40)
	(1)	(2)	(3)
Childcare	$.4^{***}_{\star\star}$	.31 <sup>***</sup>	58
	(.15)	(.11)	(.38)
Cash	.81***	.65***	-1.15***
	(.16)	(.12)	(.37)
Childcare & cash	.62***	.42***	78**
	(.16)	(.11)	(.39)
p-value (equal treatment effects):			
Childcare = cash	0.010	0.003	0.136
Childcare = childcare & cash	0.151	0.325	0.605
Cash = childcare & cash	0.256	0.063	0.348
Childcare & cash = childcare + cash	0.009	0.001	0.083
Mean Control	4	4	24
Obs.	1414	1414	1414

**Notes:** In the columns (1) and (2), the dependent variables are the mother's happiness with life and position on the ladder of life, measured on a scale from 0 to 10; and in column (3) it is the mother's stress level, captured by Cohen's perceived stress scale. We include the same control variables as in Table 1. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \* \* \* p < 0.01 for unadjusted p-values and by \* p < 0.1, \*\* p < 0.05, \* \* \* p < 0.01 for p-values that are adjusted for multiple hypotheses testing. When correcting the p-values, we group the outcomes together in one family.

#### 4.2.2 Consumption and food security

We proxy well-being at the household level with total consumption and food security.<sup>28</sup> For infrequent purchases, we asked about the expenditures over the past month. For drinks, food and tobacco, we requested the *value of consumption* over the past week. The measure, therefore, does not only include expenditures, but also the consumption of goods produced by the household (from farming and livestock) and received from others. Food security measures the experienced food insecurity during the past 7 days.<sup>29</sup>

<sup>&</sup>lt;sup>27</sup>Tables B.11 and B.12 provide the attrition lower and upper bounds and suggest that our findings on mothers' well-being are not driven by differential attrition.

<sup>&</sup>lt;sup>28</sup>Food insecurity is common in the region we study. In the control group, 87% of the households reduced the variety of products consumed due to a lack of money, and 60% reported they had to skip at least one meal.

<sup>&</sup>lt;sup>29</sup>Food insecurity is measured by taking the principal component of four questions: (1) Was there a time when you ate only a few kinds of foods because of a lack of money or other resources?, (2) Was there a time when you had to skip a meal because there was not enough money or other resources to get food?, (3) Was

Table 7 reports the impact of our treatments on the average consumption *per day* and on food insecurity.

		Consumption per day								
	Total	Food	Non-food	Temptation	insecurity					
	(1)	(2)	(3)	(4)	(5)					
Childcare	.93*	.09	.85**	03	<b>-</b> .11					
	(.52)	(.27)	(.36)	(.05)	(.1)					
Cash	1.29**	.33	.97***	06	<b>-</b> .19 <sup>*</sup>					
	(.53)	(.27)	(.36)	(.05)	(.1)					
Childcare & cash	1.63***	.22	1.39***	04	<b>23</b> **					
	(.57)	(.28)	(.39)	(.05)	(.1)					
p-value (equal treatment effects):										
Childcare = cash	0.524	0.353	0.771	0.430	0.424					
Childcare = childcare & cash	0.234	0.612	0.200	0.771	0.252					
Cash = childcare & cash	0.563	0.711	0.322	0.608	0.718					
Childcare & cash = childcare + cash	0.454	0.624	0.442	0.480	0.625					
Mean Control	11.44	5.9	5.33	.18	.39					
Obs.	1393	1413	1400	1403	1414					

#### TABLE 7: EFFECTS ON HOUSEHOLD CONSUMPTION AND FOOD SECURITY

**Notes:** In column (1), the dependent variables measures total household expenditures per day, comprising expenditures on food in column (2), non-food in column (3) and temptation goods in column (4). The final column is a measure of food insecurity, which is the first principal component of the four questions on experiencing food insecurity in the past 7 days. We include the same control variables as in Table 1. All monetary values are in thousands of UGX and are winsorized at the top 90<sup>th</sup> percentile. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \* \* \* p < 0.01 for multiple hypotheses testing. When correcting the *p*-values, we group the outcomes together in one family.

All treatments increase total household consumption. This effect is mainly driven by an increase in non-food consumption by 16% (childcare only), 18% (cash only) and 26% (childcare and cash). Despite the higher increase in the combined treatment arm, there are no significant complementarities between childcare and cash. The coefficients on food consumption are positive for all treatment arms, yet insignificant. The effect on the consumption of temptation goods is negative and close to zero in all cases. In addition, the cash transfers lead to a significant decline in the index of food insecurity (column 5).<sup>30</sup>

there a time when your household ran out of food because of a lack of money or other resources? (4) Was there a time when you were hungry but did not eat because there was not enough money or other resources for food?

<sup>&</sup>lt;sup>30</sup>Tables B.13 and B.14 provide the lower and upper attrition bounds for the findings in Table 7. The results show that the treatment effects are unlikely to be driven by differential attrition.

#### 4.2.3 Domestic violence

In Table 8, we investigate potential treatment effects on violence against mothers, against children by members of the household, and against children by outsiders. For each block, we look separately at psychological violence, physical violence, and the combination of both.

We first discuss the treatment effects on violence against mothers. This is particularly relevant in our context, given the recurrent finding that cash transfers may increase intimate partner violence (IPV) (Hidrobo and Fernald, 2013). Mothers who have a partner were asked in private about the occurrence of psychological and physical violence over the past month. We report the extensive margin of domestic violence.<sup>31</sup> The effects are not significant once we correct for multiple hypothesis testing. Nevertheless, the large point estimates imply that we cannot exclude that the cash transfers increased physical IPV. For the childcare only treatment, on the other hand, there is no impact on iIPV as the coefficients are small and insignificant.

Columns (4) to (6) provide details on violence against children by household members, which is also a prevalent social problem in Uganda (Ministry of Gender and Development, 2015). We asked the mother whether she, or any other adult household member, committed violent acts against the target child in the past month and report the extensive margin results.<sup>32</sup> Notice that children are often subject to violence. Indeed, in the control group, 78% report at least one episode of psychological violence and 75% report at least one episode of psychological violence and 75% report at least one episode of physical violence. The treatment effects are mostly positive, but small and statistically insignificant.

Finally, columns (7) to (9) discuss violence against children by others. We deemed this is important, as there is substantial use of violence in the education sector in Uganda (Devries et al., 2015). In this case, we asked mothers if they were aware of any other adult having performed the same acts as violence against children by household members. We do not find any evidence of increased violence against children outside the household.<sup>33</sup>

<sup>&</sup>lt;sup>31</sup>For violence against mothers, psychological violence includes three acts: (i) saying or doing something to humiliate the mother in front of others; (ii) threatening to hurt or harm the mother or someone she cares about; (iii) insulting the mother or make her feel bad about herself. Physical violence asks about seven acts: (i) push you, shake you, or throw something at you; (ii) slap you; (iii) twist your arm or pull your hair; (iv) punch you with his fist or with something that could hurt you; (v) kick you, drag you, or beat you up; (vi) try to choke you or burn you on purpose; (vii) threaten or attack you with a knife, gun or other weapon.

<sup>&</sup>lt;sup>32</sup>For violence against children, psychological violence includes three acts: (i) shouting, yelling or screaming at the child; (ii) calling the child dumb, lazy etc.; (iii) taking away privileges. Physical violence includes six acts: (i) shaking the child; (ii) spanking, hitting or slapping the child on the bottom with bare hand; (iii) hitting the child on the bottom or elsewhere on the body with something like a belt, hairbrush, stick or other hard object; (iv) hitting or slapping the child on the face, head or ears; (v) hitting or slapping the child on the hand, arm, or leg; (vi) beating the child up, that is hit him/her over and over as hard as one could.

<sup>&</sup>lt;sup>33</sup>The lower and upper attrition bounds provided in Tables B.15 and B.16 suggest that the effects are unlikely to be driven by differential attrition.

	Agai	nst par	tner	Agains	t child (	(in hh)	Agains	t child (	out hh)
	Psych.	Phy.	Any	Psych.	Phy.	Any	Psych.	Phy.	Any
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Childcare	.01	.01	.01	.05*	03	.03	.03	.04	.04
	(.03)	(.02)	(.03)	(.03)	(.03)	(.02)	(.04)	(.03)	(.04)
Cash	.04 (.03)	.06** (.03)	.06* (.03)	.04 (.03)	0 (.03)	.03 (.02)	02 (.04)	01 (.03)	02 (.04)
Childcare & cash	.02	.05*	.04	.05	01	.02	.03	.02	.03
	(.03)	(.03)	(.03)	(.03)	(.03)	(.02)	(.04)	(.03)	(.04)
p-value (equal treatment effects): Childcare = cash Childcare = childcare & cash Cash = childcare & cash Childcare & cash = childcare + cash	0.410 0.638 0.724 0.668	0.049 0.134 0.644 0.605	0.145 0.362 0.589 0.535	0.687 0.930 0.756 0.317	0.499 0.568 0.923 0.610	0.874 0.666 0.554 0.217	0.111 0.993 0.117 0.643	0.170 0.644 0.351 0.851	0.098 0.920 0.127 0.704
Mean Control	.23	.1	.24	.78	.75	.88	.47	.23	.51
Obs.	1287	1287	1282	1388	1388	1388	1388	1388	1388

 TABLE 8: DOMESTIC VIOLENCE

**Notes:** The dependent variables measure the extensive margin of psychological, physical or any violence against women (column 1 to 3), against children by members of the household (column 4 to 6) and against children by others (column 7 to 9). We include the same control variables as in Table 1. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for *p*-values that are adjusted for multiple hypotheses testing. When correcting the *p*-values for multiple hypothesis testing, we group the outcomes in three families: (1) to (3), (4) to (6) and (7) to (9).

Overall, the findings on well-being lead to the following result:

**Result 10.** All three types of treatments lead to improvements in the mother's reported happiness, life satisfaction and perceived stress. However, it cannot be entirely excluded that the cash treatments increase domestic violence. The treatments did not significantly affect violence against children.

## 5 Conclusion

We reported findings from a randomized control trial that offered women who have a child aged 3–5 access to (i) free childcare, (ii) a cash grant, or (iii) both a cash grant and free childcare. A fourth group of women remained as the control group. We find that access to free childcare improves the household's income and child development. The increases in income stem from the mothers' more productive working time and from their partners taking on new wage jobs. The cash grant of similar value and timing triggers an occupational shift from wage labor to self-employment, and increases business profits and total income. In terms of other outcomes, we find that childcare has large and positive effects on child development and does not cause any increase in violence against the child or the mother. Moreover, it increases the mother's happiness and satisfaction with life and leads to positive effects on household consumption. The evidence from the cash transfer, however, is more mixed. The mothers report increased happiness, satisfaction with life and reduction in stress, and the impact on consumption is positive. However, it does not have any significant effect on child development, and we cannot exclude an increase in domestic violence against the mother. We do not find important complementarities between the treatments on these broader welfare measures.

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. Most importantly, our results imply that evaluating the returns to childcare by studying its impact on child development and maternal labor outcomes is likely to underestimate the returns given the large effects on household income.

Our findings also help understand why families do not use childcare services more despite the large returns. Indeed, the immediate returns in income are lower than the cost of formal childcare and the substantial effects on child development can only bring longterm benefits. Credit constrained households may therefore not have the possibility to use childcare services as much as they would like. The fact that 65 percent of the households receiving the cash transfers used it partly to pay for childcare is consistent with the hypothesis of binding liquidity constraints. However, the enrollment rates in full-day childcare among the cash transfer recipients still fall short of the levels obtained through the subsidy. This may be driven by the labelling of cash grants for business activities, by households who underestimate the potential impact of childcare on household income and child development, or simply by their preference for less uncertain and immediate income gains over long-term investments in children. All of these potential explanations are worthy of further research.

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#### ONLINE APPENDIX: MATERIAL NOT INTENDED FOR PUBLICATION

### **A** Appendix Figures and Tables



FIGURE A.1: ENROLLMENT RATE AMONG CHILDREN, BY AGE AT BASELINE

*Notes:* The figure shows the enrollment rates in any type of school (half-day or full-day) among the target children in our control group and children of a similar age, who reside in the same districts, in the LSMS data. The age on the X-axis refers to the age of the target child at baseline (the actual age of the child is +1 year older at the follow-up survey and in the LSMS).

	Control	Ва	sic Differe	nce	Norr	nalized Dif	ference
	Mean (SD)	T1 v.s. C	T2 v.s. C	T3 v.s. C	T1 v.s. C	T2 v.s. C	T3 v.s. C
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
			A:	Descriptiv	es		
Respondent is target child's mother	0.873	0.030	0.025	0.034	0.066	0.056	0.076
	(0.333)	(0.023)	(0.024)	(0.023)			
Mother's age	34.540	-0.253	-0.415	-0.875	-0.017	-0.029	-0.061
	(10.381)	(0.781)	(0.755)	(0.754)			
Mother's education (years)	8.190	-0.532	-0.065	-0.211	-0.098	-0.012	-0.038
	(3.946)	(0.285)*	(0.297)	(0.293)			
Household size	5.362	-0.079	-0.069	-0.036	-0.027	-0.023	-0.012
<b>F</b> A · · A 1 - 1 11	(2.172)	(0.154)	(0.155)	(0.159)	0.007	0.000	0.010
Father is in the household	0.677	0.062	-0.014	-0.013	0.097	-0.022	-0.019
	(0.468)	(0.034)*	(0.035)	(0.035)	0.022	0.010	0.01/
Other caregiver, besides mother or father	0.487	-0.023	0.007	-0.012	-0.032	0.010	-0.016
Target shild has your considing	(0.500) 0.286	(0.037) -0.014	(0.037) -0.018	(0.037) -0.012	-0.021	0.020	0.019
Target child has younger sibling					-0.021	-0.029	-0.018
Nb of elder male siblings	(0.452) 0.952	(0.033) -0.076	(0.033) -0.025	(0.034) -0.092	-0.051	-0.017	-0.064
no or elder male sionings	(1.072)	(0.078)	(0.077)	(0.076)	-0.031	-0.017	-0.004
Nb of elder female siblings	0.889	0.097	0.006	0.038	0.062	0.004	0.026
no of elder female siblings	(1.050)	(0.083)	(0.078)	(0.078)	0.002	0.004	0.020
Mother's religion is Islam	0.270	0.017	0.009	-0.031	0.026	0.015	-0.050
would stellgion is island	(0.444)	(0.033)	(0.033)	(0.032)	0.020	0.015	0.050
Household owns any land	0.367	-0.062	0.018	0.023	-0.093	0.026	0.033
riouschold owns any land	(0.483)	(0.036)*	(0.038)	(0.038)	0.095	0.020	0.000
Target child is a boy	0.503	0.011	-0.033	0.029	0.015	-0.047	0.041
Target cline is a boy	(0.501)	(0.038)	(0.038)	(0.038)	0.015	0.047	0.041
Target child's age in years	3.612	-0.055	-0.012	-0.066	-0.055	-0.012	-0.066
ranget etina o age in yearo	(0.710)	(0.053)	(0.052)	(0.054)	01000	01012	01000
Target child attends childcare	0.384	-0.034	-0.035	-0.026	-0.050	-0.051	-0.037
lager child attends childcare	(0.487)	(0.036)	(0.036)	(0.036)	01000	01001	01007
Child development (IDELA) score	0.005	-0.137	-0.117	-0.105	-0.101	-0.085	-0.079
	(0.993)	(0.076)*	(0.076)	(0.074)			
	. ,	. ,		hold-level o	outcomes		
Household labor income (profits)	109.160	-20.770	1.581	17.996	-0.067	0.024	0.045
<b>*</b> ·	(216.897)	(16.760)	(18.720)	(28.005)			
Household labor income (revenues)	243.153	-5.431	-18.795	12.148	-0.001	-0.013	0.019
	(748.054)	(61.951)	(54.157)	(60.640)			
Household income from wage-employment	55.713	-5.907	12.164	23.148	-0.028	0.060	0.060
	(125.870)	(10.100)	(12.109)	(21.394)			
Household profits from self-employment	44.378	-14.884	-8.868	-9.733	-0.074	-0.040	-0.033
	(172.349)	(10.802)	(11.240)	(11.987)			
Household revenues from self-employment	169.764	3.086	-26.206	-15.703	0.009	-0.027	-0.007
	(701.666)	(55.324)	(47.311)	(51.722)			
Any household member employed	0.730	-0.039	-0.028	-0.021	-0.049	-0.037	-0.020
	(0.444)	(0.032)	(0.032)	(0.032)			
Hours spent by hh members in employmen	t 211.824	-6.927	5.213	-6.532	-0.006	0.025	-0.007
	(202.603)	(14.510)	(14.800)	(14.668)			
Any household member wage-employed	0.397	-0.025	-0.023	-0.041	-0.040	-0.032	-0.069
	(0.490)	(0.035)	(0.035)	(0.035)			
Hours spent by hh members in wage-emp.	84.378	4.508	9.953	1.617	0.020	0.049	0.001
	(141.154)	(10.688)	(10.713)	(10.980)			
Any household member self-employed	0.442	-0.007	-0.009	0.013	0.003	-0.008	0.039
	(0.497)	(0.033)	(0.033)	(0.033)			
Hours spent by hh members in self-emp.	127.689	-12.547	-5.187	-8.999	-0.030	-0.011	-0.012
	(179.377)	(11.807)	(12.118)	(11.945)			

TABLE A.1: BASELINE DESCRIPTIVES AND BALANCE
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Notes: Column (1) gives the mean and the standard deviation of observations in the control group; columns (2), (3) and (4) report the differences in means between the control group and the childcare only, cash only, and combined arms respectively (\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01). Columns (5), (6) and (7) report the normalized difference between the control and the three different treatments, computed as the difference in means in the relevant treatment and control observations divided by the square root of the sum of the variances. All monetary values are in thousands of UGX and are winsorized at the top  $99^{th}$  percentile.

	Control	Ba	sic Differe	nce	Nor	malized Dif	fference
	Mean (SD)	T1 v.s. C	T2 v.s. C	T3 v.s. C	T1 v.s. C	T2 v.s. C	T3 v.s. 0
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
		A: Moth	ers' labor 1	narket outo	comes and	well-being	
Mother's labor income (profits)	39.706	-6.116	3.598	-4.221	-0.053	0.023	-0.035
	(90.737)	(6.273)	(8.712)	(6.562)			
Mother's labor income (revenues)	102.325	-5.460	4.241	7.184	-0.015	0.010	0.015
	(293.533)	(20.102)	(23.182)	(26.529)			
Mother's income from wage-employment	12.003	0.448	4.432	0.371	0.006	0.059	0.006
	(49.585)	(3.733)	(3.980)	(3.477)			
Mother's profits from self-employment	26.957	-6.816	0.190	-4.491	-0.072	0.001	-0.043
	(78.883)	(5.134)	(7.947)	(5.722)			
Mother's revenues from self-employment	89.729	-5.857	0.881	6.959	-0.016	0.002	0.014
	(292.319)	(19.971)	(23.068)	(26.491)			
Mother is employed	0.429	-0.010	0.022	-0.009	-0.015	0.031	-0.012
	(0.496)	(0.037)	(0.037)	(0.037)			
Mother's hours in employment	91.175	-4.338	9.721	1.222	-0.023	0.049	0.006
	(136.693)	(9.985)	(10.504)	(10.442)			
Mother is wage-employed	0.116	0.010	0.035	0.012	0.021	0.072	0.026
	(0.321)	(0.024)	(0.025)	(0.024)			
Mother's hours in wage-employment	17.542	-0.262	11.167	2.781	-0.003	0.108	0.030
	(61.120)	(4.348)	(5.501)**	(4.854)			
Mother is self-employed	0.325	-0.025	-0.009	-0.019	-0.037	-0.013	-0.029
	(0.469)	(0.034)	(0.035)	(0.035)			
Mother's hours in self-employment	73.743	-4.238	-1.121	-1.408	-0.023	-0.006	-0.008
	(128.325)	(9.540)	(9.559)	(9.620)			
Happiness (0-10)	4.979	0.196	-0.081	0.199	0.057	-0.024	0.057
	(2.454)	(0.182)	(0.179)	(0.185)			
Life satisfaction (0-10)	4.156	-0.001	-0.284	0.001	-0.000	-0.099	0.000
	(2.093)	(0.153)	(0.151)*	(0.158)			
Stress (Cohen scale)	21.249	0.107	0.519	-0.144	0.013	0.063	-0.018
	(5.889)	(0.431)	(0.431)	(0.426)			
			B: Fathers'	labor mar	ket outcom		
Father's labor income (profits)	57.404	-9.426	12.940	29.892	-0.045	0.051	0.071
	(164.201)	(11.968)	(14.645)	(24.981)			
Father's labor income (revenues)	122.220	3.450	-3.904	9.475	0.004	-0.005	0.011
	(625.610)	(51.520)	(43.368)	(47.577)			
Father's income from wage-employment	35.576	-1.763	14.744	28.128	-0.012	0.075	0.075
	(101.181)	(7.955)	(10.940)	(20.549)			
Father's profits from self-employment	16.628	-7.870	-3.485	-3.843	-0.057	-0.024	-0.027
	(123.223)	(7.602)	(7.818)	(7.892)			
Father's revenues from self-employment	75.831	4.883	-18.485	-20.117	0.006	-0.026	-0.029
	(589.986)	(46.684)	(38.285)	(38.635)			
Father is employed	0.407	-0.006	-0.021	-0.034	-0.009	-0.030	-0.050
	(0.492)	(0.036)	(0.036)	(0.036)			
Father's hours in employment	106.205	-2.089	4.177	-3.880	-0.010	0.019	-0.018
	(153.988)	(11.382)	(11.770)	(11.492)			
Father is wage-employed	0.262	-0.010	-0.026	-0.061	-0.016	-0.043	-0.102
	(0.440)	(0.032)	(0.032)	(0.031)*			
Father's hours in wage-employment	58.817	0.566	0.719	-5.777	0.003	0.004	-0.034
	(118.585)	(8.823)	(9.097)	(8.996)			
Father is self-employed	0.159	0.002	0.004	0.013	0.003	0.008	0.025
	(0.366)	(0.027)	(0.027)	(0.028)			
Father's hours in self-employment	47.766	-3.461	2.932	1.363	-0.021	0.017	0.008
	(119.649)	(8.751)	(9.133)	(8.858)			

### TABLE A.2: BASELINE DESCRIPTIVES AND BALANCE (CONTINUED)

Notes: See Table A.1.

	Household survey (1)	Child survey (2)
Childcare	-0.04***	-0.04*
	(0.02)	(0.02)
Cash	-0.03	-0.03*
	(0.02)	(0.02)
Childcare & cash	-0.04***	-0.03*
	(0.02)	(0.02)
Observations	1496	1496
Mean in control	0.08	0.10
Daycare = Cash	0.274	0.917
Daycare = Daycare and cash	0.941	0.941
Cash = Daycare and cash	0.310	0.976

TABLE A.3: ATTRITION

**Notes:** The dependent variable is an indicator that takes value one if the respondent (column 1) or the target child (column 2) could not be surveyed in the follow-up survey. All regressions control for the randomization strata: district indicators, an indicator for whether the target child has younger siblings, whether the target child was already attending (half-day) childcare at baseline, an indicator for whether the respondent was self-employed at baseline and the corresponding indicator for being wage-employed, and whether the respondent was the birth mother of the target child. Robust standard errors are reported in parenthesis (\* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01).

	_	Enrollmen	ıt	D	ays missec	1
	All	Females	Males	All	Females	Males
	(1)	(2)	(3)	(4)	(5)	(6)
Childcare	02	02	01	32	.73	-1.38
	(.02)	(.03)	(.03)	(1.74)	(1.63)	(1.43)
Cash	01	0	0	-1.71	-1.7	-1.1
	(.02)	(.03)	(.03)	(1.47)	(1.33)	(1.36)
Childcare & cash	.01	.02	.01	-3.76 <sup>***</sup>	-2.92 <sup>***</sup>	-2.34*
	(.02)	(.03)	(.03)	(1.31)	(1.12)	(1.27)
p-value (equal treatment effects):						
Childcare = cash	0.684	0.546	0.871	0.389	0.118	0.836
Childcare = childcare & cash	0.170	0.208	0.512	0.022	0.010	0.421
Cash = childcare & cash	0.350	0.522	0.620	0.072	0.202	0.268
Childcare & cash = childcare + cash	0.200	0.363	0.612	0.408	0.308	0.939
Mean Control	.85	.85	.85	9.8	6.39	6.87
Obs.	1150	872	848	1150	872	848

TABLE A.4: EFFECTS ON ELDER SIBLINGS' ENROLLMENT AND ATTENDANCE

**Notes:** In columns (1) until (3) the dependent variables measure the share of the target child's elder siblings, sisters and brothers who are enrolled in school; and in columns (4) until (6) the average number of days of school they missed in the last trimester. The sample is restricted to households where the target child has any elder sibling (columns 1 and 4), an elder sister (columns 2 and 5), or an elder brother (columns 3 and 6). All regressions control for the baseline level of the outcome variable and the randomization strata listed in Table A.3. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted p-values and by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted p-values that are adjusted for multiple hypotheses testing. When correcting the p-values, we group all the outcomes together in one family.

	Farm r	evenues	Livesto	ck revenues	Total revenues
	>0	UGX	>0	UGX	UGX
	(1)	(2)	(3)	(4)	(5)
Childcare	01	69	.01	48	83.12 <sup>**</sup>
	(.03)	(.92)	(.03)	(.81)	(34.2)
Cash	.03	.71	.04	1.28	56.86*
	(.03)	(1.01)	(.03)	(1)	(30.97)
Childcare & cash	04	22	.06**	1.65*	107.5***
	(.03)	(.99)	(.03)	(.93)	(34.82)
p-value (equal treatment effects):					
Childcare = cash	0.132	0.147	0.326	0.066	0.490
Childcare = childcare & cash	0.348	0.624	0.098	0.018	0.555
Cash = childcare & cash	0.016	0.362	0.495	0.734	0.188
Childcare & cash = childcare + cash	0.143	0.858	0.876	0.533	0.529
Mean Control	.18	4.05	.16	3.16	262.84
Obs.	1414	1409	1414	1410	1401

TABLE A.5: EFFECTS ON HOUSEHOLD INCOME FROM FARMING OR LIVESTOCK

**Notes:** The dependent variables measure total household revenues (column 5), which now also include income from farming (column 2) and from livestock (column 4). In the columns (1) and (3) the dependent variables are dummies indicating the household has any income from farming or livestock. All regressions control for the baseline level of the outcome variable and the randomization strata listed in Table A.3. All monetary values are in thousands of UGX and are winsorized at the top 99<sup>th</sup> percentile. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \* \*\* p < 0.01 for *p*-values that are adjusted for multiple hypotheses testing. When correcting the *p*-values, we group all the outcomes together in one family.

	Household	Mot	hers
	New business	New business	Closed business
	(1)	(2)	(3)
Childcare	0	.02	.01
	(.03)	(.03)	(.03)
Cash	.19***	.17***	.03
	(.03)	(.03)	(.03)
Childcare & cash	.15***	.15***	.03
	(.03)	(.03)	(.03)
p-value (equal treatment effects):			
Childcare = cash	0.000	0.000	0.375
Childcare = childcare & cash	0.000	0.000	0.477
Cash = childcare & cash	0.362	0.605	0.859
Childcare & cash = childcare + cash	0.496	0.390	0.754
Mean Control	.24	.15	.17
Obs.	1414	1414	1414

TABLE A.6: BUSINESS CREATION AND SURVIVAL

**Notes:** The dependent variables measure whether a new business was created at the household level (column 1) or by the mother (column 2). Column (3) measures whether at least one of the mother's baseline businesses closed down. All regressions control for the randomization strata listed in Table A.3. Statistical significance is indicated by p < 0.1, p < 0.05, p < 0.05, p < 0.01 for unadjusted *p*-values and by p < 0.1, p < 0.05, p < 0.01 for *p*-values that are adjusted for multiple hypotheses testing. When correcting the *p*-values, we group all the outcomes together in one family.

		Travel time	9	Ope	rating time	(total)
	Any	New	Old	Any	New	Old
	business	business	business	business	business	business
	(1)	(2)	(3)	(4)	(5)	(6)
Childcare	.99	.36	.63	8.44	3.9	4.9
	(.73)	(.53)	(.49)	(9.04)	(7.49)	(6.1)
Cash	2.35***	1.89***	.46	45.68***	36.57***	9.2
	(.75)	(.63)	(.41)	(10.28)	(8.44)	(6.45)
Childcare & cash	$1.65^{**}_{\star\star}$	$1.21^{**}_{\star}$	.45	42.73***	36.73***	6.33
	(.72)	(.59)	(.42)	(10.09)	(8.7)	(5.97)
p-value (equal treatment effects):						
Childcare = cash	0.114	0.022	0.751	0.001	0.000	0.505
Childcare = childcare & cash	0.428	0.181	0.744	0.001	0.000	0.813
Cash = childcare & cash	0.407	0.336	0.982	0.801	0.987	0.651
Childcare & cash = childcare + cash	0.130	0.239	0.351	0.442	0.765	0.379
Mean Control	2.33	1.35	.99	78.43	32.52	45.91
Obs.	1414	1414	1414	1414	1414	1414

#### TABLE A.7: TRAVEL TIME TO THE BUSINESS AND OPERATING HOURS (MOTHER)

**Notes:** The dependent variables are the operating time (total hours per month over all businesses) and the time needed to travel to a business (minutes per day, over all businesses). This is provided for any business (columns 1 and 4), newly created businesses (columns 2 and 5) and businesses that were in existence at the time of the baseline (columns 3 and 6). In columns 4 to 6, we control for the baseline level of the outcome variable and the randomization strata listed in Table A.3. In columns 1-3, we do not have a baseline value for the outcome variable. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for *p*-values that are adjusted for multiple hypotheses testing. When correcting the *p*-values, we group all the outcomes together in one family.

	Full-day childcare
	(1)
Mother self-employed	0.06
	(0.05)
Mother wage-employed	0.13*
	(0.07)
Child's age : 4	0.01
	(0.05)
Child's age : 5	0.26***
	(0.09)
Child's gender: boy	0.09*
	(0.05)
Mother of the child is the respondent	0.08
	(0.11)
Child in half-day childcare (at baseline)	0.06
	(0.06)
Mother's age	0.00
	(0.00)
Mother's education (years)	0.02***
	(0.01)
Household size	-0.00
	(0.02)
Father is in the household	0.00
	(0.06)
Other caregiver, besides mother or father	-0.01
	(0.07)
Nb of elder male siblings	-0.01
	(0.03)
Nb of elder female siblings	0.01
	(0.03)
Mother's religion is Islam	0.03
	(0.06)
Household owns any land	-0.05
	(0.06)
Household income	0.01
	(0.01)
Observations	383
R-squared	0.14
Mean of outcome	0.33

#### TABLE A.8: CORRELATES OF FULL-DAY CHILDCARE ENROLLMENT IN CONTROL GROUP

**Notes:** The sample includes the control group. The dependent variable is a dummy taking value one if the child is enrolled in full-day childcare at the long-term follow-up survey. All the right-hand side variables are defined at baseline. In addition, we also control for district fixed effects and a dummy taking value one if the household's income was missing and therefore imputed to the sample mean. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

			Income					Labo	r supply			Assets & employees			
	Self-er	mp.	Wage	Tota	al	Self	-emp.	W	lage	Т	otal		Assets	Empl	loyees
	Revenues (1)	Profits (2)	(3)	Revenues (4)	Profits (5)	>0 (6)	Hrs. (7)	>0 (8)	Hrs. (9)	>0 (10)	Hrs. (11)	>0 (12)	Ush 1000 (13)	>0 (14)	Nr. (15)
Childcare	37.8 (24.51)	7.42 (6.5)	17.93 (13.37)	57.41** (27.29)	31.86** (15.17)	.01 (.04)	3.9 (12.66)	.1** (.05)	18.35 (14.04)	.12** (.05)	24.16 (17.04)	0 (.02)	85 (1.44)	.03 (.02)	.07 (.08)
Cash	-8.83 (18.2)	-7.14 (5.01)	4.81 (12)	97 (20.78)	.02 (12.97)	02 (.04)	-9.73 (11.14)	.07 (.04)	15.5 (13.81)	.04 (.05)	8.93 (16.4)	0 (.02)	.82 (1.81)	.02 (.02)	0 (.05)
Childcare & cash	48.64 <sup>**</sup> (23.6)	4.68 (5.8)	5.5 (13.02)	66.22** (27.52)	12.64 (14.51)	.06 (.04)	15.3 (12.44)	.05 (.04)	10.3 (13.76)	.08* (.05)	26.25 (16.87)	.01 (.02)	55 (1.38)	.03 (.02)	.16 (.13)
Childcare $\times$ t. c. likely to be in school	-51.71* (29.59)	-10.4 (8.05)	45 (18.28)	-45.62 (34.56)	-18.26 (20.22)	06 (.05)	-14.42 (16.7)	01 (.06)	6.16 (19.22)	08 (.07)	-10.36 (23.48)	0 (.03)	3.56 (2.33)	06* (.03)	09 (.1)
Cash $\times$ t. c. likely to be in school	3.09 (25.59)	1.82 (6.97)	7.12 (17.93)	14.04 (31.1)	9.21 (19.72)	.01 (.05)	16.38 (17.01)	05 (.06)	-14.39 (18.35)	05 (.07)	-1.76 (23.41)	0 (.02)	1.63 (2.44)	03 (.03)	.06 (.09)
Childcare & cash $\times$ t. c. likely to be in school	-32.9 (32.55)	-4.46 (7.87)	-7.67 (17.78)	-47.26 (37.23)	-13.04 (20.25)	06 (.06)	-8.89 (17.94)	02 (.06)	-3.65 (18.63)	09 (.07)	-17.11 (23.84)	02 (.03)	2.17 (2.15)	03 (.03)	19 (.13)
Impact when target child likely in school															
Childcare	-13.91 (16.74)	-2.98 (4.79)	17.47 (12.46)	11.79 (21.33)	13.59 (13.33)	05 (.03)	-10.52 (10.87)	.09** (.04)	24.51* (13.05)	.03 (.05)	13.8 (16.17)	0 (.02)	2.71 (1.78)	03 (.02)	01 (.06)
Cash	-5.74 (18.4)	-5.31 (4.85)	11.94 (13.44)	13.07 (23.34)	9.23 (14.91)	01 (.04)	6.65 (12.88)	.02 (.04)	1.11 (12.06)	01 (.05)	7.17 (16.75)	0 (.02)	2.45 (1.73)	01 (.02)	.06 (.08)
Childcare & cash	15.74 (21.95)	.22 (5.19)	-2.17 (12.1)	18.96 (24.87)	4 (13.98)	0 (.04)	6.41 (12.75)	.03 (.04)	6.64 (12.6)	0 (.05)	9.15 (16.78)	01 (.02)	1.62 (1.62)	0 (.02)	03 (.04)
p-value (equal treatment effects)	(50)	. ,	. ,		. ,		. ,		. ,	. ,	. ,	. ,			. ,
Childcare = cash Childcare = childcare & cash	.653 .167	.626 .538	.693 .12	.957 .776	.775 .324	.245 .21	.176 .173	.111 .142	.084 .203	.441 .469	.709 .793	.706 .468	.915 .629	.527 .223	.385 .676
Cash = childcare & cash Childcare & cash = childcare + cash	.343 .205	.276 .225	.301 .087	.827 .862	.545 .261	.899 .299	.987 .565	.883 .163	.674 .305	.972 .669	.914 .627	.716 .67	.71 .207	.595 .187	.191 .378
Mean Control Obs.	58 1402	18 1402	49 1400	108 1400	69 1400	.15 1402	41 1401	.26 1402	66 1399	.4 1402	107 1398	.04 1402	1 1402	.05 1401	.1 1401

TABLE A.9: EFFECTS ON FATHERS BY TARGET CHILD'S LIKELIHOOD TO BE IN CHILDCARE

**Notes:** The dependent variables measure total revenues (1) and profits (2) earned through self-employment; income earned through wage labor (3) and the sum of wages and revenues (4) or wages and profits (5); labor supply in wage labor, and in self-employment, and in total at the extensive margins (columns 6, 8 and 10) and at the intensive margins (7, 9 and 11); whether the household purchased any business asset during the last 12 months (12) and the value of these assets (13); whether it has any employee in its businesses (14) and the number of employees (15). All monetary values are in thousands of UGX and are winsorized at the top 99<sup>th</sup> percentile. The interaction term is a dummy indicating it is likely that the target child would have attended full day childcare in absence of our subsidies. All regressions control for the baseline level of the outcome variable and the randomization strata listed in Table A.3. Robust standard errors are reported in parenthesis and statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

			Income					Labo	or supply		Assets & employees				
	Self-e	mp.	Wage	Tota	ıl	Self	-emp.	V	Vage	1	Total	Ā	Assets	Empl	loyees
	Revenues (1)	Profits (2)	(3)	Revenues (4)	Profits (5)	>0 (6)	Hrs. (7)	>0 (8)	Hrs. (9)	>0 (10)	Hrs. (11)	>0 (12)	Ush 1000 (13)	>0 (14)	Nr. (15)
Childcare	69.57**	10.58*	-2.46	66.58**	8.25	.04	7.22	04	-11.78*	.01	-4.23	.03	3.64	.04	04
Cash	(27.19) 55.95**	(5.94) 7.89	(4.03) -7.21*	(27.26) 49.77**	(7.38) 1.69	(.04) .2***	(12.45) 49.7***	(.03) 06*	(6.77) -12.52*	(.04) .13***	(13.16) 39.53***	(.03) .07***	(2.35) 8.79***	(.03) .07**	(.13) .03
Childcare & cash	(23.27) 69.38*** (23.9)	(5.31) 19.49*** (6.12)	(3.81) -9.42*** (3.62)	(23.35) 61.89** (24.18)	(6.89) 11.39 (7.57)	(.04) .15*** (.04)	(13.17) 38.2*** (13.13)	(.03) 07** (.03)	(7.03) -21.4*** (6.28)	(.04) .07* (.04)	(13.81) 18.06 (13.6)	(.03) .04 (.03)	(3.09) 4.75** (2.39)	(.03) .07** (.03)	(.13) 02 (.12)
Younger children	(25.9) 18.9 (25.83)	.79 (6.2)	69 (5.54)	(24.10) 14.44 (25.98)	(7.57) -1.13 (8.62)	(.04) 0 (.05)	(15.13) 8.09 (15.38)	(.03) 04 (.04)	-15.21** (7.62)	(.04) 03 (.05)	-7.13 (16.04)	01 (.03)	(2.37) 5.97 (3.93)	.03 (.03)	(.12) 08 (.14)
Childcare $\times$ younger children	-101.3*** (37.88)	-14.23 (9.25)	-4.94 (7.44)	-104.21*** (38.41)	-17.63 (12.46)	06 (.07)	-16.16 (21.74)	.05 (.06)	17.73 (11.82)	0 (.08)	.29 (23.35)	02 (.04)	-6.89 (5.61)	09** (.05)	08 (.14)
$Cash\timesyounger\:children$	-21.82 (43.84)	4.52 (10.42)	12 (7.42)	-21.59 (43.93)	3.49 (13.14)	02 (.08)	-36.33 (23.47)	.06 (.06)	6.77 (10.72)	0 (.08)	-30.38 (24.24)	01 (.05)	-14.77*** (4.91)	03 (.06)	.08 (.17)
Childcare & cash $\times$ younger children	-21.12 (46.24)	-12.24 (9.88)	86 (7.04)	-21.95 (46.67)	-13.31 (12.64)	.05 (.08)	-7.02 (24.12)	.04 (.06)	18.28* (10.4)	.07 (.08)	8.81 (25.01)	.15*** (.06)	9.87 (8.15)	0 (.06)	.14 (.16)
Impact with younger children at baseline															
Childcare	-31.73 (26.33)	-3.65 (7.12)	-7.4 (6.3)	-37.63 (26.93)	-9.38 (10.08)	02 (.06)	-8.94 (17.91)	.01 (.05)	5.94 (9.69)	0 (.07)	-3.94 (19.36)	.01 (.04)	-3.26 (5.09)	06 (.04)	12** (.06)
Cash	34.13 (37.05)	12.41 (8.95)	-7.33 (6.42)	28.17 (37.08)	5.18 (11.19)	.18*** (.07)	13.37 (19.48)	0 (.05)	-5.75 (8.06)	.13* (.07)	9.15 (19.97)	.06 (.04)	-5.98 (3.8)	.04 (.05)	.11 (.1)
Childcare & cash	48.27 (39.75)	7.24 (7.76)	-10.27* (6.06)	39.94 (40.1)	-1.92 (10.12)	.2*** (.07)	31.18 (20.27)	02 (.05)	-3.13 (8.29)	.15** (.07)	26.87 (21)	.19 (.05)	14.62 (7.79)	.07 (.05)	.13 (.09)
p-value (equal treatment effects) Childcare = cash	.048	.073	.989	.052	.192	.004	.246	.829	.22	.076	.524	.259	.435	.027	.016
Childcare = childcare & cash Cash = childcare & cash	.03 .752	.164 .584	.597 .592	.039	.461 .525	.001 .766	.046 .407	.482 .617	.349 .75	.045 .83	.153 .423	.001 .017	.019	.006 .546	.004 .918
Childcare & cash = childcare + cash	.38	.898	.596	.349	.88	.668	.339	.603	.793	.906	.425	.071	.005	.18	.332
Mean Control Obs.	89 1414	21 1414	19 1414	108 1414	40 1414	.31 1414	84 1414	.15 1414	20 1414	.44 1414	103 1414	.06 1414	8 1414	.11 1414	.18 1414

TABLE A.10: EFFECTS ON MOTHERS BY PRESENCE OF YOUNGER CHILDREN AT BASELINE

**Notes:** The dependent variables measure total revenues (1) and profits (2) earned through self-employment; income earned through wage labor (3) and the sum of wages and revenues (4) or wages and profits (5); labor supply in wage labor, and in self-employment, and in total at the extensive margins (columns 6, 8 and 10) and at the intensive margins (7, 9 and 11); whether the household purchased any business asset during the last 12 months (12) and the value of these assets (13); whether it has any employee in its businesses (14) and the number of employees (15). All monetary values are in thousands of UGX and are winsorized at the top 99<sup>th</sup> percentile. The interaction term is a dummy indicating the target child has a younger sibling at baseline. All regressions control for the baseline level of the outcome variable and the randomization strata listed in Table A.3. Robust standard errors are reported in parenthesis and statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\* \* p < 0.01.

			Income					Labo	r supply		Assets & employees				
	Self-e	mp.	Wage	Tota	al	Self	f-emp.	I	Nage	Т	otal		Assets	Empl	oyees
	Revenues	Profits		Revenues	Profits	>0	Hrs.	>0	Hrs.	>0	Hrs.	>0	Ush 1000	>0	Nr.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Childcare	156.6***	23.08**	83	153.64***	21.67*	.13**	35.68*	01	-17.08	.14**	19.24	.04	1.83	.06	.17*
	(53.06)	(10.18)	(6.07)	(52.56)	(12.13)	(.06)	(20.38)	(.05)	(11.93)	(.06)	(21.36)	(.04)	(4.21)	(.04)	(.09)
Cash	22.35	5.1	-7.1	11.06	-3.84	.2***	52.9***	04	-23.58*	.14**	34.97*	.03	1.73	.12***	.29***
	(23.16)	(6.81)	(6.81)	(23.36)	(9.71)	(.06)	(18.67)	(.05)	(12.17)	(.06)	(19.95)	(.04)	(3.67)	(.04)	(.1)
Childcare & cash	63.91**	19.83**	-12.2**	49.37	6.81	.12**	28.72	04	-30.06***	.06	.78	.04	4.39	.06	.1
	(31.81)	(9.04)	(5.5)	(31.88)	(11.14)	(.06)	(19.11)	(.05)	(11.1)	(.06)	(20.39)	(.04)	(4.36)	(.04)	(.06)
Father in hh	29.72	6.24	-1.85	25.11	1.36	.03	14.93	06	-23.48**	03	-10.79	02	-1.22	.07**	.29*
	(24.96)	(6.44)	(5.42)	(25.25)	(8.93)	(.05)	(15.23)	(.04)	(10.21)	(.05)	(16.63)	(.03)	(2.7)	(.03)	(.15)
Childcare $\times$ father in hh	-158.17***	-22.74**	-3.89	-158.88***	-24.84*	15**	-45.93*	01	15.8	17**	-30.84	02	06	07	34**
	(57.05)	(11.55)	(7.27)	(56.7)	(13.99)	(.07)	(23.68)	(.06)	(13.2)	(.08)	(24.84)	(.05)	(5.03)	(.05)	(.17)
$Cash \times father in hh$	41.7	6.03	28	49.38	9.62	01	-19.49	0	19.3	02	-5.75	.05	4.58	08	35**
	(35.77)	(9.1)	(7.67)	(35.86)	(12.3)	(.07)	(23.17)	(.06)	(13.36)	(.08)	(24.38)	(.05)	(4.96)	(.05)	(.16)
Childcare & cash $\times$ father in hh	4	-5.55	3.77	9.76	1.27	.06	11.46	02	20.23*	.05	29.25	.06	4.54	.02	1
	(40.31)	(10.73)	(6.68)	(40.62)	(13.34)	(.07)	(23.47)	(.06)	(12.22)	(.08)	(24.68)	(.05)	(5.62)	(.05)	(.15)
Impact with father at baseline															
Childcare	-1.57	.34	-4.73	-5.24	-3.17	02	-10.25	02	-1.28	04	-11.6	.02	1.78	01	17
	(21.1)	(5.35)	(4.05)	(21.37)	(6.9)	(.04)	(11.99)	(.03)	(5.86)	(.04)	(12.66)	(.02)	(2.66)	(.03)	(.13)
Cash	64.04**	11.14*	-7.38**	60.44**	5.78	.19***	33.4**	04	-4.28	.12***	29.22**	.09	6.31	.03	06
	(27.19)	(5.97)	(3.57)	(27.19)	(7.42)	(.04)	(13.63)	(.03)	(5.64)	(.04)	(14.01)	(.03)	(3.3)	(.03)	(.13)
Childcare & cash	63.51**	14.28**	-8.43**	59.13**	8.08	.18***	40.19***	06**	-9.83*	.11**	30.03**	.1	8.92	.07**	01
	(25.93)	(5.82)	(3.79)	(26.32)	(7.38)	(.04)	(13.54)	(.03)	(5.22)	(.04)	(13.84)	(.03)	(3.55)	(.03)	(.13)
p-value (equal treatment effects)	, , , , , , , , , , , , , , , , , , ,	. ,	. ,	. ,	. ,	. ,	. ,	. ,		. ,	,		. ,		
Childcare = cash	.022	.079	.482	.022	.249	0	.001	.494	.629	0	.004	.027	.215	.173	.109
Childcare = childcare & cash	.018	.022	.354	.021	.152	0	0	.138	.141	.001	.003	.011	.063	.008	.012
Cash = childcare & cash	.987	.635	.769	.968	.781	.869	.649	.421	.323	.883	.958	.71	.549	.231	.495
Childcare & cash = childcare + cash	.979	.744	.498	.92	.615	.892	.372	.976	.598	.64	.53	.781	.869	.248	.136
Mean Control	91	25	18	109	43	.32	85	.15	22	.46	107	.06	3	.12	.33
Obs.	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414

TABLE A.11: EFFECTS ON MOTHERS BY PRESENCE OF THE FATHER AT BASELINE

**Notes:** The dependent variables measure total revenues (1) and profits (2) earned through self-employment; income earned through wage labor (3) and the sum of wages and revenues (4) or wages and profits (5); labor supply in wage labor, and in self-employment, and in total at the extensive margins (columns 6, 8 and 10) and at the intensive margins (7, 9 and 11); whether the household purchased any business asset during the last 12 months (12) and the value of these assets (13); whether it has any employee in its businesses (14) and the number of employees (15). All monetary values are in thousands of UGX and are winsorized at the top 99<sup>th</sup> percentile. The interaction term is a dummy indicating that a father (or step-father) resides in the household at baseline. All regressions control for the baseline level of the outcome variable and the randomization strata listed in Table A.3. Robust standard errors are reported in parenthesis and statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

			Income					Labo	r supply			A	Assets & em	ployees	;
	Self-e	emp.	Wage	Tota	al	Self	f-emp.	V	Vage	Т	otal	A	Assets	Emple	oyees
	Revenues (1)	Profits (2)	(3)	Revenues (4)	Profits (5)	>0 (6)	Hrs. (7)	>0 (8)	Hrs. (9)	>0 (10)	Hrs. (11)	>0 (12)	Ush 1000 (13)	>0 (14)	Nr. (15)
Childcare	24.3	5.46	-5.28	19.11	.8	.02	-10.65	04	-8.52	01	-19.1*	0	1.1	0	11
	(18.95)	(3.92)	(4.53)	(19.35)	(6.6)	(.03)	(8.59)	(.03)	(7.27)	(.04)	(10.53)	(.02)	(2.18)	(.02)	(.12)
Cash	68.01***	14.61***	-9.64**	58.52***	5.03	.24***	41.55***	05	-12.97*	.15***	31.19**	.05**	3.23	.09***	.05
	(20.66)	(4.04)	(4.38)	(20.89)	(6.28)	(.04)	(10.76)	(.03)	(7.17)	(.04)	(12.13)	(.02)	(2.41)	(.03)	(.13)
Childcare & cash	45.45**	11.35***	-12.46***	36.01*	35	.18***	30.5***	08**	-18.02***	.09**	12.8	.08***	7.34**	.06**	02
	(17.87)	(4.01)	(4.17)	(18.61)	(6.37)	(.04)	(10.46)	(.03)	(6.67)	(.04)	(11.78)	(.03)	(2.89)	(.02)	(.12)
Childcare $\times$ business owner	62.07 (56.93)	7.44 (12.95)	4.09 (6.38)	66.27 (56.83)	10.87 (14.48)	.06 (.07)	56.35** (25.65)	.03 (.05)	4.1 (10.76)	.1 (.07)	60.01** (26.01)	.09 (.05)	2.41 (5.9)	.03 (.06)	.12 (.19)
$Cash \times business owner$	-56.37 (48.92)	-16.44 (11.84)	7.31 (6.18)	-45.67 (48.73)	-6.95 (13.98)	15** (.07)	-2.04 (26.13)	.04 (.05)	7.41 (10.97)	07 (.07)	3.59 (26.36)	.06 (.06)	5.03 (6.66)	09 (.06)	0 (.19)
Childcare & cash $\times$ business owner	62.81	16.28	8.5	67.73	26.66*	03	29.68	.07	4.38	.06	34.72	.02	.62	.02	.12
	(55.17)	(13.21)	(5.81)	(55.17)	(15.26)	(.07)	(25.94)	(.05)	(9.55)	(.07)	(26.24)	(.06)	(6.93)	(.06)	(.19)
Impact on baseline business-owners															
Childcare	86.37	12.9	-1.19	85.38	11.67	.08	45.71*	01	-4.42	.09	40.91*	.09	3.51	.03	.02
	(53.39)	(12.31)	(4.47)	(53.12)	(12.82)	(.06)	(24.17)	(.03)	(7.91)	(.06)	(23.76)	(.05)	(5.4)	(.06)	(.14)
Cash	11.64	-1.83	-2.33	12.85	-1.92	.1	39.51*	01	-5.57	.08	34.77	.11	8.26	0	.05
	(43.8)	(11.09)	(4.38)	(43.5)	(12.47)	(.06)	(23.76)	(.04)	(8.28)	(.06)	(23.34)	(.05)	(6.1)	(.05)	(.14)
Childcare & cash	108.26**	27.63**	-3.96	103.75**	26.31*	.15***	60.19**	01	-13.64**	.14***	47.52**	.09	7.95	.08	.1
	(52.08)	(12.54)	(4.01)	(51.82)	(13.76)	(.06)	(23.76)	(.04)	(6.84)	(.06)	(23.46)	(.05)	(6.27)	(.06)	(.13)
p-value (equal treatment effects) Childcare = cash	.183	.234	.777	.194	.31	.813	.81	.892	.87	.92	.807	.74	.49	.593	.812
Childcare = childcare & cash	.728	.284	.448	.769	.315	.219	.574	.941	.078	.324	.793	.959	.528	.39	.525
Cash = childcare & cash	.076	.019	.649	.093	.045	.319	.413	.953	.17	.272	.606	.778	.968	.159	.714
Childcare & cash = childcare + cash	.893	.347	.94	.942	.383	.787	.474	.86	.71	.696	.412	.162	.68	.532	.858
Mean Control	206	58	8	214	67	.64	171	.08	17	.71	188	.13	9	.21	.37
Obs.	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414	1414

TABLE A.12: EFFECTS ON MOTHERS BY BASELINE BUSINESS OWNERSHIP

**Notes:** The dependent variables measure total revenues (1) and profits (2) earned through self-employment; income earned through wage labor (3) and the sum of wages and revenues (4) or wages and profits (5); labor supply in wage labor, and in self-employment, and in total at the extensive margins (columns 6, 8 and 10) and at the intensive margins (7, 9 and 11); whether the household purchased any business asset during the last 12 months (12) and the value of these assets (13); whether it has any employee in its businesses (14) and the number of employees (15). All monetary values are in thousands of UGX and are winsorized at the top 99<sup>th</sup> percentile. The interaction term is a dummy indicating the mother owned a business at baseline. All regressions control for the baseline level of the outcome variable and the randomization strata listed in Table A.3. Robust standard errors are reported in parenthesis and statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.

## **B** Attrition Bounds

Given the differential attrition rate in the control relative to the treatment groups, we assess the sensitivity of our main findings with respect to attrition. As pre-specified, we follow Kling et al. (2007) and Fairlie et al. (2015) and calculate lower and upper bound estimates that adjust for differential non-response rates in the treatment groups relative to the control. We calculate the upper bounds by imputing the mean among the treated plus 0.1 (or 0.2) standard deviations (SD) to the non-responders in the treatment group. For the control group, we impute using the mean among the control minus 0.05 (or 0.1 or 0.2) SD. To calculate lower bounds, we follow the opposite procedure: For the treatment group, we take the mean minus 0.05 (or 0.1 or 0.2) SD and for the control we take the mean plus 0.05 (or 0.1 or 0.2) SD. We then re-estimate the treatment effects. We report the results in the following tables.

	Enr	ollment	Attendance
	Any childcare	Full-day childcare	Days missed
	(1)	(2)	(3)
		anel A: Lower bound	
Childcare	$.14^{***}_{\star\star\star}$	.48***	-15.81***
	(.02)	(.03)	(1.77)
Cash	.07***	.06*	-9.1***
	(.02)	(.03)	(2.07)
Childcare & cash	.13***	.49***	-15.02***
	(.02)	(.03)	(1.82)
p-value (equal treatment effects):			
Childcare = cash	0.000	0.000	0.000
Childcare = childcare & cash	0.386	0.625	0.524
Cash = childcare & cash	0.001	0.000	0.000
Childcare & cash = childcare + cash	0.003	0.282	0.000
Mean Control	.83	.34	21
Obs.	1496	1496	1496
		anel B: Upper bound	
Childcare	.15***	.49***	-15.12***
	(.02)	(.03)	(1.77)
Cash	.08***	.07**	<b>-8.23</b> ***
	(.02)	(.03)	(2.07)
Childcare & cash	$.14^{***}_{\star\star\star}$	.5***	-14.32***
	(.02)	(.03)	(1.82)
p-value (equal treatment effects):			
Childcare = cash	0.000	0.000	0.000
Childcare = childcare & cash	0.402	0.619	0.515
Cash = childcare & cash	0.001	0.000	0.000
Childcare & cash = childcare + cash	0.001	0.198	0.000
Mean Control	.82	.33	20.43
Obs.	1496	1496	1496

TABLE B.1: EFFECTS ON CHILDCARE ENROLLMENT AND ATTENDANCE – ATTRITION: 10%IMPUTATION

**Notes:** See Table 1 for a description of the dependent and control variables. "Imputation x%" provides estimates where we impute to the **lower** bound the mean **minus** x% of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean **plus** the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for multiple hypotheses testing. When correcting the *p*-values, we group all three outcomes together in one family.

	Enr	ollment	Attendance
	Any childcare	Full-day childcare	Days missed
	(1)	(2)	(3)
		anel A: Lower bound	
Childcare	$.14^{***}_{\star\star\star}$	.47***	-16.15***
	(.02)	(.03)	(1.77)
Cash	.07***	$.06^*_{\star}$	-9.53***
	(.02)	(.03)	(2.08)
Childcare & cash	.13***	.49***	-15.37***
	(.02)	(.03)	(1.82)
p-value (equal treatment effects):			
Childcare = cash	0.000	0.000	0.000
Childcare = childcare & cash	0.379	0.627	0.529
Cash = childcare & cash	0.001	0.000	0.000
Childcare & cash = childcare + cash	0.004	0.333	0.000
Mean Control	.83	.34	21.28
Obs.	1496	1496	1496
		anel B: Upper bound	
Childcare	.15***	.49***	-14.78***
	(.02)	(.03)	(1.77)
Cash	.08***	.07**	<b>-7.8</b> ***
	(.02)	(.03)	(2.07)
Childcare & cash	$.14^{***}_{\star\star\star}$	.51***	-13.97***
	(.02)	(.03)	(1.82)
p-value (equal treatment effects):			
Childcare = cash	0.000	0.000	0.000
Childcare = childcare & cash	0.410	0.617	0.510
Cash = childcare & cash	0.001	0.000	0.000
Childcare & cash = childcare + cash	0.001	0.164	0.000
Mean Control	.82	.33	20.15
Obs.	1496	1496	1496

TABLE B.2: EFFECTS ON CHILDCARE ENROLLMENT AND ATTENDANCE – ATTRITION: 20%IMPUTATION

**Notes:** See Table 1 for a description of the dependent and control variables. "Imputation x%" provides estimates where we impute to the **lower** bound the mean **minus** x% of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean **plus** the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for multiple hypotheses testing. When correcting the *p*-values, we group all three outcomes together in one family.

			Income					Labor	supply			1	Assets & en	nployee	s
	Self-e	mp.	Wage	Tot	al	Self	f-emp.	W	lage	Te	otal	A	ssets	Empl	oyees
	Revenues (1)	Profits (2)	(3)	Revenues (4)	Profits (5)	>0 (6)	Hrs. (7)	>0 (8)	Hrs. (9)	>0 (10)	Hrs. (11)	>0 (12)	Ush 1000 (13)	>0 (14)	Nr. (15)
						Pa	nel A: Lo	wer bou	Ind						
Childcare	72.4** (31.17)	16.43** (7.56)	14.97 (10.17)	92.22*** (32.53)	35.91*** (12.72)	02 (.03)	-1.93 (12.98)	.05 (.03)	14.01 (11.82)	.01 (.03)	13.46 (16.38)	.01 (.02)	3.88 (3.17)	0 (.03)	0 (.11)
Cash	56.04** (27.02)	8.54 (6.69)	-7.19 (9.77)	59.85** (28.86)	8.26 (12.1)	.16*** (.03)	39.88*** (13.24)	01 (.03)	-11.35 (11.33)	.06** (.03)	33.28** (15.6)	.05** (.02)	9.52** (3.7)	.05* (.03)	.12 (.11)
Childcare & cash	117.89*** (30.98)	25.78*** (7.44)	-15.31 (9.9)	108.23*** (32.72)	12.33 (12.42)	.15*** (.03)	46.31*** (13.33)	04 (.03)	-22.68** (11.06)	.02 (.03)	25.93 (15.8)	.07*** (.03)	9.63*** (3.53)	.07 * (.03)	.14 (.12)
p-value (equal treatment effects):															
Childcare = cash	0.637	0.340	0.034	0.374	0.048	0.000	0.004	0.077	0.038	0.043	0.253	0.100	0.192	0.131	0.182
Childcare = childcare & cash	0.231	0.297	0.004	0.687	0.100	0.000	0.001	0.010	0.002	0.700	0.477	0.020	0.162	0.034	0.156
Cash = childcare & cash	0.074	0.035	0.426	0.188	0.768	0.912	0.661	0.445	0.325	0.101	0.662	0.463	0.982	0.553	0.838
Childcare & cash = childcare + cash	0.821	0.943	0.109	0.374	0.091	0.742	0.670	0.103	0.124	0.166	0.376	0.826	0.493	0.724	0.869
Mean Control	160.88	45.57	93.49	253.67	138.54	.45	134.2	.5	130.9	.8	263.37	.12	7.21	.18	.39
Obs.	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1413
						Pa	inel B: Up	per bou	nd						
Childcare	77.05** (31.09)	17.57** (7.52)	17.91* (10.18)	94.9*** (32.43)	37.65 <sup>***</sup> (12.65)	01 (.03)	2.83 (12.99)	.06* (.03)	18.6 (11.84)	.02 (.03)	19.84 (16.41)	.02	4.87 (3.18)	.01 (.03)	0 (.11)
Cash	63.03** (27.06)	9.83 (6.62)	-3.78 (9.79)	65.36** (28.85)	10.54 (12.01)	.17*** (.03)	45.27*** (13.25)	0 (.03)	-6.45 (11.34)	.07*** (.03)	39.95** (15.62)	.06*** (.02)	10.85 <sup>***</sup> (3.7)	.06** (.03)	.12 (.11)
Childcare & cash	$\begin{array}{c} (1.00) \\ 123.42^{***} \\ (31.07) \end{array}$	27.09*** (7.43)	-12.54 (9.91)	$(12.27^{***}_{***})$ (32.86)	13.34 (12.36)	.16*** (.03)	(13.35)	02 (.03)	-18.45* (11.07)	.03 (.03)	(10.02) 31.76 <sup>**</sup> (15.82)	.08*** (.03)	$10.69^{***}_{***}$ (3.53)	.08 <sup>***</sup> (.03)	.14 (.12)
p-value (equal treatment effects):															
Childcare = cash	0.685	0.347	0.038	0.416	0.052	0.000	0.003	0.086	0.040	0.039	0.246	0.088	0.167	0.118	0.182
Childcare = childcare & cash	0.220	0.287	0.004	0.662	0.090	0.000	0.001	0.010	0.002	0.701	0.497	0.019	0.157	0.034	0.156
Cash = childcare & cash	0.080	0.035	0.389	0.201	0.839	0.875	0.695	0.416	0.296	0.095	0.626	0.488	0.973	0.582	0.838
Childcare & cash = childcare + cash	0.720	0.977	0.064	0.328	0.063	0.966	0.882	0.055	0.063	0.095	0.233	0.973	0.362	0.933	0.869
Mean Control	155.04	44.09	90.97	247.35	135.77	.44	131.16	.49	127.95	.79	259.47	.11	6.62	.17	.39
Obs.	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1413

TABLE B.3: EFFECTS ON HOUSEHOLDS – ATTRITION: 10 % IMPUTATION

**Notes:** See Table 2 for a description of the dependent and control variables. "Imputation x%" provides estimates where we impute to the **lower** bound the mean **minus** x% of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean **plus** the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\* \* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \*\* \* p < 0.01 for unadjusted for multiple hypotheses testing. When correcting the *p*-values, we group the outcomes in eight families: (1) and (2), (3), (4) and (5), (6) and (7), (8) and (9), (10) and (11), (12) and (13), (14) and (15).

			Income					Labor	supply			1	Assets & en	nployee	s
	Self-e	mp.	Wage	Tot	al	Sel	f-emp.	W	lage	Т	otal	A	ssets	Empl	oyees
	Revenues (1)	Profits (2)	(3)	Revenues (4)	Profits (5)	>0 (6)	Hrs. (7)	>0 (8)	Hrs. (9)	>0 (10)	Hrs. (11)	>0 (12)	Ush 1000 (13)	>0 (14)	Nr. (15)
						Pa	nel A: Lov	ver bou	ınd						
Childcare	69.8 <sup>**</sup> (31.25)	15.77** (7.58)	13.49 (10.18)	90.52*** (32.66)	34.96*** (12.8)	03 (.03)	-4.32 (12.99)	.05 (.03)	11.71 (11.82)	0 (.03)	10.27 (16.39)	.01 (.02)	3.38 (3.18)	0 (.03)	0 (.11)
Cash	52.3* (27.05)	7.82 (6.73)	-8.89 (9.78)	56.78* (28.95)	7.06 (12.19)	.15*** (.03)	37.18*** (13.25)	02 (.03)	-13.8 (11.34)	.06** (.03)	29.95* (15.61)	.05** (.02)	8.86** (3.7)	.04 (.03)	.12 (.11)
Childcare & cash	114.88*** (30.97)	25.05*** (7.45)	-16.69* (9.91)	105.89*** (32.7)	11.75 (12.5)	.15*** (.03)	43.96*** (13.34)	04 (.03)	-24.8 <sup>**</sup> (11.07)	.02 (.03)	23.01 (15.8)	.07 <sup>***</sup> (.03)	9.09** (3.54)	.06** (.03)	.14 (.12)
p-value (equal treatment effects):															
Childcare = cash	0.615	0.337	0.033	0.355	0.046	0.000	0.004	0.073	0.037	0.044	0.257	0.107	0.205	0.138	0.182
Childcare = childcare & cash	0.236	0.302	0.004	0.700	0.106	0.000	0.001	0.010	0.002	0.700	0.468	0.020	0.165	0.035	0.156
Cash = childcare & cash Childcare & cash = childcare + cash	0.071 0.877	0.036 0.897	$0.445 \\ 0.140$	0.182 0.403	0.734 0.109	0.931 0.636	0.644 0.572	$0.460 \\ 0.138$	$0.340 \\ 0.169$	0.105 0.214	$0.681 \\ 0.465$	0.451 0.729	0.960 0.568	0.539 0.625	0.838 0.869
Mean Control	163.8	46.31	94.74	256.83	139.93	.46	135.72	.5	132.38	.8	265.32	.12	7.51	.18	.39
Obs.	1496	1496	1496	1496	1496	.40 1496	1496	.9 1496	132.50	.0 1496	1496	.12 1496	1496	.10 1496	1413
						Pa	nel B: Up	per bou	nd						
Childcare	79.15**	18.06**	19.39*	95.99***	38.47***	0	5.22	.07**	20.89*	.02	23.03	.02	5.37*	.02	0
	(31.09)	(7.51)	(10.19)	(32.47)	(12.66)	(.03)	(13.01)	(.03)	(11.87)	(.03)	(16.43)	(.02)	(3.18)	(.03)	(.11)
Cash	66.33**	10.4	-2.07	67.89**	11.66	.18***	47.97***	.01	-3.99	.08***	43.28***	.07***	11.51***	.06**	.12
	(27.13)	(6.61)	(9.81)	(28.93)	(12.03)	(.03)	(13.27)	(.03)	(11.36)	(.03)	(15.65)	(.02)	(3.7)	(.03)	(.11)
Childcare & cash	125.98*** (31.14)	27.67*** (7.43)	-11.15 (9.93)	114.07*** (32.99)	13.83 (12.41)	.17*** (.03)	53.37*** (13.37)	02 (.03)	-16.34 (11.08)	.03 (.03)	34.67 ** (15.85)	.09*** (.03)	11.23*** (3.54)	.08 <sup>***</sup> (.03)	.14 (.12)
p-value (equal treatment effects):															
Childcare = cash	0.710	0.352	0.040	0.439	0.055	0.000	0.003	0.091	0.042	0.038	0.243	0.082	0.155	0.112	0.182
Childcare = childcare & cash	0.215	0.281	0.004	0.648	0.085	0.000	0.001	0.010	0.002	0.701	0.507	0.018	0.154	0.033	0.156
Cash = childcare & cash	0.084	0.034	0.372	0.208	0.875	0.857	0.713	0.403	0.283	0.092	0.609	0.501	0.950	0.597	0.838
Childcare & cash = childcare + cash	0.675	0.943	0.048	0.309	0.053	0.919	0.993	0.039	0.044	0.071	0.179	0.872	0.306	0.959	0.869
Mean Control	152.13	43.35	89.72	244.18	134.38	.44	129.64	.48	126.47	.79	257.52	.11	6.33	.17	.39
Obs.	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1413

TABLE B.4: EFFECTS ON HOUSEHOLDS – ATTRITION: 20% IMPUTATION

**Notes:** See Table 2 for a description of the dependent and control variables. "Imputation x%" provides estimates where we impute to the **lower** bound the mean **minus** x% of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean **plus** the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\* \* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \*\* \* p < 0.01 for unadjusted for multiple hypotheses testing. When correcting the *p*-values, we group the outcomes in eight families: (1) and (2), (3), (4) and (5), (6) and (7), (8) and (9), (10) and (11), (12) and (13), (14) and (15).

Self-e							Labo	r supply			-	Assets & en	- <b>P</b> -0,00	3
	mp.	Wage	Tota	al	Self	-emp.	V	Vage	Т	otal	A	Assets	Empl	oyees
Revenues (1)	Profits (2)	(3)	Revenues (4)	Profits (5)	>0 (6)	Hrs. (7)	>0 (8)	Hrs. (9)	>0 (10)	Hrs. (11)	>0 (12)	Ush 1000 (13)	>0 (14)	Nr. (15)
					Pa	anel A: Lo	wer bo	und						
39.24* (20.05)	6.74 (4.5)	-3.86 (3.23)	36.41* (20.09)	3.87 (5.71)	.02 (.03)	2.1 (9.73)	02 (.02)	-6.62 (5.26)	0 (.03)	-3.71 (10.32)	.03 (.02)	1.84 (2.12)	.01 (.02)	06 (.09)
$49.04^{***}_{\star\star}$ (18.68)	8.65** (4.34)	(3.08)	43.71** (18.69)	2.7 (5.52)	.19*** (.03)	38.68*** (10.28)	04* (.02)	-10.46 <sup>**</sup> (5.19)	.12*** (.03)	31.09*** (10.71)	.07*** (.02)	4.63* (2.37)	.06** (.02)	.05 (.1)
61.1*** (19.68)	15.03*** (4.72)	-10.11*** (2.95)	53.34*** (19.87)	6.67 (5.86)	.16*** (.03)	35.75*** (10.46)	06** (.02)	-16.76*** (4.77)	.09*** (.03)	20.5* (10.82)	.08*** (.02)	7.37*** (2.68)	.07*** (.02)	.02 (.09)
0.670	0.694	0.287	0.751	0.846	0.000	0.001	0.478	0.464	0.001	0.002	0.078	0.313	0.050	0.056
0.361	0.114	0.045	0.482	0.661	0.000	0.002	0.166	0.036	0.014	0.033	0.027	0.064	0.019	0.100
0.592 0.368	0.205 0.957	0.340 0.807	0.671 0.378	0.520 0.991	0.400 0.299	0.798 0.737	0.503 0.797	0.185 0.964	$0.345 \\ 0.440$	0.366 0.659	0.637 0.677	0.391 0.813	0.717 0.938	0.641 0.757
91.95	24.78	19.8	112.38	45.79	.32	82.95	.18	31.28	.48	113.6	.08	4.46	.11	.25
1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1414
					Р	anel B: Up	per bou	und						
45.05** (20.01)	8.16 <sup>*</sup> (4.5)	-2.57 (3.24)	42.15 <sup>**</sup> (20.06)	5.59 (5.71)	.03 (.03)	5.68 (9.74)	02 (.02)	-4.62 (5.27)	.02 (.03)	.06 (10.33)	.03 (.02)	2.52 (2.12)	.01 (.02)	06 (.09)
55.39*** (18.69)	10.15** (4.33)	-5.87* (3.09)	$49.99^{***}_{\star\star}$ (18.71)	4.56 (5.52)	.2*** (.03)	42.9*** (10.29)	03 (.02)	-8.23 (5.2)	.14*** (.03)	35.51 <sup>***</sup> (10.72)	.07*** (.02)	5.5** (2.37)	.06*** (.02)	.05 (.1)
66.56*** (19.66)	16.51*** (4.72)	-8.9*** (2.95)	58.79*** (19.85)	8.49 (5.87)	.17*** (.03)	39.47*** (10.47)	05** (.02)	-14.89*** (4.77)	.1*** (.03)	24.38** (10.83)	.08*** (.02)	8.15*** (2.68)	.07*** (.02)	.02 (.09)
0.653	0.680	0.308	0.733	0.863	0.000	0.001	0.508	0.493	0.001	0.002	0.067	0.280	0.043	0.056
														$0.100 \\ 0.641$
0.819	0.203	0.303	0.897	0.322	0.374	0.764 0.543	0.467	0.181	0.323	0.342	0.667	0.407	0.750	0.641 0.757
87.9 1496	23.76	18.88	108.31	44.4	.31	80.56	.17	29.88	.47	111.07	.07	4.05	.1	.25 1414
	$\begin{array}{c} 39.24*\\ (20.05)\\ 49.04^{***}\\ (18.68)\\ 61.1^{****}\\ (19.68)\\ \end{array}\\ \begin{array}{c} 0.670\\ 0.361\\ 0.592\\ 0.368\\ \end{array}\\ \begin{array}{c} 91.95\\ 1496\\ \end{array}\\ \begin{array}{c} 45.05^{**}\\ (20.01)\\ 55.39^{***}\\ (18.69)\\ 66.56^{***}\\ (19.66)\\ \end{array}\\ \begin{array}{c} 0.653\\ 0.368\\ 0.619\\ 0.262\\ \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Participant         Participant $39.24*$ $6.74$ $-3.86$ $36.41*$ $3.87$ $.02$ $(20.05)$ $(4.5)$ $(3.23)$ $(20.09)$ $(5.71)$ $(.03)$ $49.04^{***}$ $8.65^{***}$ $-7.31^{***}$ $43.71^{***}$ $2.7$ $19^{****}$ $(18.68)$ $(4.34)$ $(3.08)$ $(18.69)$ $(5.52)$ $(.03)$ $61.1^{****}$ $15.03^{****}$ $-10.11^{****}$ $53.34^{***}$ $6.67$ $16^{****}$ $(19.68)$ $(4.72)$ $(2.95)$ $(19.87)$ $(5.86)$ $(.03)$ $0.670$ $0.694$ $0.287$ $0.751$ $0.846$ $0.000$ $0.361$ $0.114$ $0.045$ $0.482$ $0.661$ $0.000$ $0.368$ $0.957$ $0.807$ $0.378$ $0.991$ $0.299$ $91.95$ $24.78$ $19.8$ $112.38$ $45.79$ $.32$ $1496$ $1496$ $1496$ $1496$ $1496$ $1496$ $52.39^{***}$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

TABLE B.5: EFFECTS ON MOTHERS – ATTRITION: 10 % IMPUTATION

**Notes:** See Table 3 for a description of the dependent and control variables. "Imputation x%" provides estimates where we impute to the **lower** bound the mean **minus** x% of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean **plus** the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \* \* p < 0.05, \* \* \* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \* \* p < 0.05, \* \* \* p < 0.01 for p-values that are adjusted for multiple hypotheses testing. When correcting the *p*-values, we group the outcomes in eight families: (1) and (2), (3), (4) and (5), (6) and (7), (8) and (9), (10) and (11), (12) and (13), (14) and (15).

			Income					Labo	r supply			1	Assets & en	nployee	s
	Self-e	mp.	Wage	Tota	al	Self	f-emp.	V	Vage	Т	<sup>°</sup> otal	Ā	Assets	Empl	oyees
	Revenues (1)	Profits (2)	(3)	Revenues (4)	Profits (5)	>0 (6)	Hrs. (7)	>0 (8)	Hrs. (9)	>0 (10)	Hrs. (11)	>0 (12)	Ush 1000 (13)	>0 (14)	Nr. (15)
						F	anel A: Lo	wer bou	ınd						
Childcare	36.33*	6.03	-4.51	33.53*	3	.01	.3	03	-7.61	0	-5.59	.02	1.51	0	06
	(20.08)	(4.51)	(3.23)	(20.13)	(5.71)	(.03)	(9.74)	(.02)	(5.26)	(.03)	(10.32)	(.02)	(2.12)	(.02)	(.09)
Cash	45.86**	$7.89^{*}_{\star}$	-8.02***	$40.56^{**}_{\star}$	1.77	.18***	36.57***	05**	-11.58**	.12***	28.88***	.06***	4.19*	.05**	.05
	(18.7)	(4.35)	(3.08)	(18.71)	(5.53)	(.03)	(10.29)	(.02)	(5.19)	(.03)	(10.72)	(.02)	(2.37)	(.02)	(.1)
Childcare & cash	58.36***	14.28***	-10.71***	50.6**	5.75	.15***	33.89***	06***	-17.69***	.08**	$18.56^{*}_{\star}$	.07***	6.98 <sup>***</sup>	.06***	.02
	(19.71)	(4.72)	(2.96)	(19.89)	(5.87)	(.03)	(10.46)	(.02)	(4.77)	(.03)	(10.82)	(.02)	(2.68)	(.02)	(.09)
p-value (equal treatment effects):															
Childcare = cash	0.679	0.701	0.277	0.760	0.838	0.000	0.001	0.464	0.451	0.001	0.002	0.084	0.330	0.055	0.056
Childcare = childcare & cash	0.358	0.116	0.046	0.479	0.667	0.000	0.002	0.168	0.037	0.014	0.033	0.028	0.067	0.019	0.100
Cash = childcare & cash	0.579	0.205	0.360	0.658	0.519	0.413	0.815	0.522	0.199	0.357	0.379	0.622	0.384	0.701	0.641
Childcare & cash = childcare + cash	0.431	0.958	0.676	0.440	0.907	0.369	0.843	0.681	0.833	0.529	0.762	0.768	0.736	0.837	0.757
Mean Control	93.97	25.29	20.26	114.41	46.49	.32	84.15	.18	31.97	.48	114.87	.08	4.66	.11	.25
Obs.	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1414
						F	anel B: Uj	pper bou	ınd						
Childcare	47.94**	8.87**	-1.93	45.02**	6.45	.04	7.47	01	-3.63	.02	1.94	.04*	2.86	.02	06
	(20.01)	(4.51)	(3.25)	(20.06)	(5.71)	(.03)	(9.75)	(.02)	(5.28)	(.03)	(10.35)	(.02)	(2.12)	(.02)	(.09)
Cash	58.55***	$10.9^{**}_{\star\star}$	-5.16*	53.13***	5.48	.21***	45.01***	03	-7.12	.14***	37.71***	.08***	5.94**	.07***	.05
	(18.72)	(4.33)	(3.09)	(18.75)	(5.52)	(.03)	(10.3)	(.02)	(5.21)	(.03)	(10.74)	(.02)	(2.37)	(.02)	(.1)
Childcare & cash	69.29 <sup>***</sup>	17.26***	-8.29***	61.52***	9.4	.17***	41.32***	04*	-13.96***	.11***	26.32**	.09***	8.54***	.08***	.02
	(19.67)	(4.73)	(2.96)	(19.86)	(5.88)	(.03)	(10.48)	(.02)	(4.78)	(.03)	(10.85)	(.02)	(2.68)	(.02)	(.09)
p-value (equal treatment effects):															
Childcare = cash	0.644	0.674	0.320	0.724	0.872	0.000	0.001	0.523	0.508	0.000	0.002	0.062	0.264	0.040	0.056
Childcare = childcare & cash	0.372	0.109	0.041	0.493	0.644	0.000	0.002	0.163	0.033	0.014	0.032	0.025	0.057	0.017	0.100
Cash = childcare & cash	0.633	0.206	0.285	0.711	0.524	0.362	0.747	0.450	0.150	0.313	0.331	0.683	0.415	0.766	0.641
Childcare & cash = childcare + cash	0.218	0.711	0.782	0.228	0.764	0.146	0.457	0.838	0.651	0.231	0.393	0.435	0.947	0.762	0.757
Mean Control	85.87	23.25	18.42	106.28	43.71	.31	79.36	.17	29.18	.47	109.8	.07	3.84	.1	.25
Obs.	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1414

TABLE B.6: EFFECTS ON MOTHERS – ATTRITION: 20 % IMPUTATION

**Notes:** See Table 3 for a description of the dependent and control variables. "Imputation x%" provides estimates where we impute to the **lower** bound the mean **minus** x% of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean **plus** the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \* \* p < 0.05, \* \* \* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \* \* p < 0.05, \* \* \* p < 0.01 for *p*-values that are adjusted for multiple hypotheses testing. When correcting the *p*-values, we group the outcomes in eight families: (1) and (2), (3), (4) and (5), (6) and (7), (8) and (9), (10) and (11), (12) and (13).

			Income	2				Labo	or supply			1	Assets & en	nployee	s
	Self-er	np.	Wage	Tot	al	Self-	emp.	V	Vage	Т	otal	A	Assets	Empl	oyees
	Revenues (1)	Profits (2)	(3)	Revenues (4)	Profits (5)	>0 (6)	Hrs. (7)	>0 (8)	Hrs. (9)	>0 (10)	Hrs. (11)	>0 (12)	Ush 1000 (13)	>0 (14)	Nr. (15)
						Par	nel A: Lo	ower bo	ound						
Childcare	18.36	4.57	19.24**	42.74**	28.47***	02	-3.76	.09***	21.83**	.07**	$18.07^{*}_{\star}$	0	.96	0	.03
	(15.07)	(4.2)	(8.68)	(16.95)	(9.77)	(.02)	(7.74)	(.03)	(8.98)	(.03)	(10.95)	(.01)	(1.09)	(.01)	(.05)
Cash	-4.86	-4.94	8.44	8.54	7.1	01	96	.04	7.31	.02	7.68	0	1.85	0	.03
	(12.51)	(3.51)	(8.54)	(14.94)	(9.5)	(.02)	(7.96)	(.03)	(8.53)	(.03)	(10.87)	(.01)	(1.23)	(.01)	(.04)
Childcare & cash	36.81 <sup>**</sup>	4.3	23	$40.64^{**}_{\star}$	7.72	.02	10.11	.03	7.66	.03	16.11	0	.42	.01	.06
	(16.67)	(4.07)	(8.52)	(18.16)	(9.66)	(.03)	(8.26)	(.03)	(8.84)	(.03)	(11.1)	(.01)	(.98)	(.01)	(.07)
p-value (equal treatment effects):															
Childcare = cash	0.127	0.020	0.239	0.050	0.040	0.779	0.740	0.110	0.116	0.094	0.371	0.865	0.552	1.000	0.997
Childcare = childcare & cash	0.326	0.954	0.033	0.918	0.050	0.106	0.112	0.029	0.136	0.256	0.869	0.680	0.667	0.453	0.618
Cash = childcare & cash	0.014	0.021	0.336	0.088	0.953	0.179	0.215	0.581	0.969	0.595	0.474	0.805	0.307	0.440	0.608
Childcare & cash = childcare + cash	0.304	0.424	0.026	0.675	0.051	0.130	0.209	0.008	0.093	0.255	0.549	0.776	0.174	0.492	0.912
Mean Control	53.95	17.56	55.15	108.74	73.12	.15	41.53	.27	71.43	.41	111.43	.03	1.62	.05	.09
Obs.	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1413
						Par	nel B: U	pper bo	ound						
Childcare	21.29	5.58	21.81**	44.88***	30.66***	01	-1.02	.1***	25.27***	.09**	22.25**	.01	1.29	0	.03
	(14.98)	(4.19)	(8.69)	(16.82)	(9.75)	(.02)	(7.74)	(.03)	(9.01)	(.03)	(10.96)	(.01)	(1.09)	(.01)	(.05)
Cash	-1.1	-4.07	11.47	11.97	9.54	0	2.16	.06**	11.04	.03	12.2	0	2.27*	0	.03
	(12.5)	(3.49)	(8.55)	(14.87)	(9.48)	(.02)	(7.96)	(.03)	(8.54)	(.03)	(10.88)	(.01)	(1.23)	(.01)	(.04)
Childcare & cash	40.45**	5.23	2.16	43.3**	8.99	.03	12.89	.04	10.95	.05	20.04*	) 0	.73	.01	.06
	(16.64)	(4.07)	(8.52)	(18.13)	(9.66)	(.03)	(8.27)	(.03)	(8.85)	(.03)	(11.11)	(.01)	(.98)	(.01)	(.07)
p-value (equal treatment effects):															
Childcare = cash	0.139	0.018	0.259	0.058	0.042	0.741	0.706	0.121	0.124	0.104	0.387	0.899	0.506	0.961	0.997
Childcare = childcare & cash	0.306	0.940	0.031	0.938	0.040	0.103	0.111	0.028	0.132	0.256	0.852	0.675	0.658	0.448	0.618
Cash = childcare & cash	0.014	0.019	0.300	0.094	0.957	0.190	0.230	0.542	0.993	0.627	0.505	0.765	0.269	0.464	0.608
Childcare & cash = childcare + cash	0.370	0.521	0.013	0.590	0.028	0.211	0.320	0.003	0.047	0.155	0.370	0.575	0.107	0.680	0.912
Mean Control	50.83	16.62	53.06	105.06	70.86	.14	39.74	.27	69.25	.4	108.84	.03	1.44	.04	.09
Obs.	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1413

TABLE B.7: EFFECTS ON FATHERS – ATTRITION: 10 % IMPUTATION

**Notes:** See Table 4 for a description of the dependent and control variables. "Imputation x%" provides estimates where we impute to the **lower** bound the mean **minus** x% of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean **plus** the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \* \* \* p < 0.01 for *p*-values that are adjusted for multiple hypotheses testing. When correcting the *p*-values, we group the outcomes in eight families: (1) and (2), (3), (4) and (5), (6) and (7), (8) and (9), (10) and (11), (12) and (13), (14) and (15).

			Income	2				Labo	or supply			1	Assets & en	nployee	:S
	Self-er	np.	Wage	Tot	al	Self	emp.	V	Vage	Т	otal		Assets	Empl	loyees
	Revenues (1)	Profits (2)	(3)	Revenues (4)	Profits (5)	>0 (6)	Hrs. (7)	>0 (8)	Hrs. (9)	>0 (10)	Hrs. (11)	>0 (12)	Ush 1000 (13)	>0 (14)	Nr. (15)
						Pa	nel A: L	ower bo	ound						
Childcare	16.78	4.04	17.96**	41.46**	27.31***	02	-5.14	.09***	20.11**	.07**	15.97	0	.8	0	.03
Cash	(15.11) -6.84	(4.2) -5.4	(8.69) 6.93	(17.03) 6.65	(9.8) 5.84	(.02) 02	(7.74) -2.53	(.03) .04	(8.98) 5.45	(.03) .01	(10.95) 5.43	(.01) 0	(1.09) 1.63	(.01) 01	(.05) .03
Childcare & cash	(12.54) $34.88^{**}_{\star}$ (16.69)	(3.53) 3.82 (4.08)	(8.55) -1.41 (8.52)	(15) 39.13** (18.2)	(9.54) 7.02 (9.69)	(.02) .02 (.03)	(7.97) 8.72 (8.27)	(.03) .02 (.03)	(8.54) 6.02 (8.84)	(.03) .03 (.03)	(10.88) 14.15 (11.11)	(.01) 01 (.01)	(1.23) .27 (.98)	(.01) .01 (.01)	(.04) .06 (.07)
p-value (equal treatment effects):	(10.09)	(4.00)	(0.32)	(10.2)	(9.09)	(.03)	(0.27)	(.03)	(0.04)	(.03)	(11.11)	(.01)	(.98)	(.01)	(.07)
Childcare = cash Childcare = childcare & cash	0.122 0.337	0.021 0.961	0.229 0.034	0.047 0.909	0.039 0.056	0.799 0.108	0.757 0.113	0.105 0.029	0.113 0.138	0.089 0.255	0.364 0.878	0.849 0.682	0.575 0.671	0.980 0.456	0.997 0.618
Cash = childcare & cash	0.014	0.022	0.355	0.085	0.909	0.175	0.208	0.601	0.950	0.579	0.459	0.825	0.328	0.429	0.608
Childcare & cash = childcare + cash	0.273	0.378	0.036	0.724	0.069	0.100	0.166	0.012	0.126	0.319	0.652	0.884	0.217	0.410	0.912
Mean Control Obs.	55.51 1496	18.03 1496	56.2 1496	110.59 1496	74.24 1496	.15 1496	42.42 1496	.28 1496	72.52 1496	.41 1496	112.73 1496	.03 1496	1.71 1496	.05 1496	.09 1413
	1470	1470	1470	1470	1470		nel B: U			1470	1170	1470	1170	1470	
Childcare	22.66	6.07	23.1***	45.79***	31.71***	01	.35	.11***	26.99***	.09***	24.35**	.01	1.45	.01	.03
	(14.95)	(4.19)	(8.71)	(16.78)	(9.75)	(.02)	(7.75)	(.03)	(9.03)	(.03)	(10.98)	(.01)	(1.09)	(.01)	(.05)
Cash	.7 (12.51)	-3.65 (3.48)	12.98 (8.57)	13.55 (14.88)	10.72 (9.5)	0 (.02)	3.73 (7.97)	.06** (.03)	12.9 (8.55)	.04 (.03)	14.45 (10.9)	.01 (.01)	2.48 <sup>**</sup> (1.23)	.01 (.01)	.03 (.04)
Childcare & cash	$42.17^{**}_{\star\star}$ (16.63)	5.68 (4.07)	3.36 (8.54)	$44.48^{**}_{\star\star}$ (18.14)	9.58 (9.69)	.04 (.03)	14.28* (8.28)	.04 (.03)	12.6 (8.86)	.05 (.03)	22.01** (11.13)	0 (.01)	.88 (.98)	.02 (.01)	.06 (.07)
p-value (equal treatment effects):															
Childcare = cash Childcare = childcare & cash	0.146 0.296	0.017 0.933	0.270 0.031	$0.063 \\ 0.948$	0.043 0.036	0.722 0.101	0.689 0.111	0.128 0.028	0.128 0.131	0.109 0.257	0.395 0.843	0.916 0.673	$0.485 \\ 0.654$	$0.941 \\ 0.445$	0.997 0.618
Cash = childcare & cash Childcare & cash = childcare + cash	0.290 0.014 0.404	0.019 0.572	0.031 0.284 0.009	0.097 0.555	0.912 0.021	0.101 0.196 0.263	0.238 0.389	0.524 0.002	0.974 0.033	0.237 0.644 0.119	0.521 0.297	0.746 0.485	0.252 0.083	0.445 0.476 0.784	0.608 0.912
Mean Control	49.27	16.16	52.02	103.22	69.73	.14	38.85	.26	68.16	.39	107.55	.03	1.35	.04	.09
Obs.	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496	1413

#### TABLE B.8: EFFECTS ON FATHERS – ATTRITION: 20 % IMPUTATION

**Notes:** See Table 4 for a description of the dependent and control variables. "Imputation x%" provides estimates where we impute to the **lower** bound the mean **minus** x% of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean **plus** the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for *p*-values that are adjusted for multiple hypotheses testing. When correcting the *p*-values, we group the outcomes in eight families: (1) and (2), (3), (4) and (5), (6) and (7), (8) and (9), (10) and (11), (12) and (13), (14) and (15).

			Breakdown i	into compon	ents
	IDELA	Emergent	Emergent	Socio-	Motor
	score	literacy	numeracy	emotional	development
	(1)	(2)	(3)	(4)	(5)
		Pa	anel A: Lowe	er bound	
Childcare	.15***	.1*	.09	.04	.21***
	(.05)	(.05)	(.06)	(.06)	(.06)
Cash	$.09^{*}_{\star}$	.06	.08	0	.11*
	(.05)	(.05)	(.06)	(.06)	(.06)
Childcare & cash	.15***	.16***	$.11^{*}_{\star}$	.02	.19***
	(.05)	(.05)	(.06)	(.06)	(.06)
p-value (equal treatment effects):					
Childcare = cash	0.281	0.390	0.781	0.544	0.062
Childcare = childcare & cash	0.893	0.297	0.828	0.807	0.630
Cash = childcare & cash	0.232	0.058	0.626	0.723	0.166
Childcare & cash = childcare + cash	0.290	0.995	0.464	0.857	0.093
Mean Control	.01	.01	.01	.01	.01
Obs.	1496	1496	1496	1496	1496
		Pa	anel B: Uppe	er bound	
Childcare	.16***	.12**	$.11^{*}_{\star}$	.06	.23***
	(.05)	(.05)	(.06)	(.06)	(.05)
Cash	.11**	.08	.1*	.03	.13 *
	(.05)	(.05)	(.06)	(.06)	(.06)
Childcare & cash	.17***	.18***	.12**	.05	.21***
	(.05)	(.05)	(.06)	(.06)	(.06)
p-value (equal treatment effects):					
Childcare = cash	0.322	0.419	0.832	0.562	0.074
Childcare = childcare & cash	0.867	0.289	0.810	0.818	0.644
Cash = childcare & cash	0.254	0.062	0.656	0.732	0.186
Childcare & cash = childcare + cash	0.195	0.807	0.329	0.631	0.048
Mean Control	01	01	01	01	01
Obs.	1496	1496	1496	1496	1496

#### TABLE B.9: EFFECTS ON CHILD DEVELOPMENT – ATTRITION: 10% IMPUTATION

**Notes:** See Table 5 for a description of the dependent and control variables. "Imputation x%" provides estimates where we impute to the **lower** bound the mean **minus** x% of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean **plus** the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \* \*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \* \*\* p < 0.01 for *p*-values that are adjusted for multiple hypotheses testing. When correcting the *p*-values, we group the outcomes in two families: (1) and (2, 3, 4 and 5).

			Breakdown	into compon	ents
	IDELA score (1)	Emergent literacy (2)	Emergent numeracy (3)	Socio- emotional (4)	Motor development (5)
	(1)		anel A: Low		(5)
Childcare	.14***	.09*	.08	.03	.2***
	(.05)	(.05)	(.06)	(.06)	(.06)
Cash	.08	.05	.06	01	.1
	(.05)	(.05)	(.06)	(.06)	(.06)
Childcare & cash	$.14^{***}_{\star\star\star}$	.15***	.1	.01	$.18^{***}_{\star\star\star}$
	(.05)	(.06)	(.06)	(.06)	(.06)
p-value (equal treatment effects):					
Childcare = cash	0.262	0.378	0.756	0.536	0.057
Childcare = childcare & cash	0.906	0.302	0.837	0.802	0.624
Cash = childcare & cash	0.223	0.056	0.611	0.720	0.157
Childcare & cash = childcare + cash	0.350	0.895	0.544	0.975	0.128
Mean Control	.02	.02	.02	.02	.02
Obs.	1496	1496	1496	1496	1496
		Pa	anel B: Uppe	er bound	
Childcare	.17***	.13**	.12**	.08	.25***
	(.05)	(.05)	(.06)	(.06)	(.05)
Cash	.12**	.09	.11*	.04	.15**
	(.05)	(.05)	(.06)	(.06)	(.06)
Childcare & cash	.18***	.19***	.13**	.06	.22***
	(.05)	(.05)	(.06)	(.06)	(.06)
p-value (equal treatment effects):					
Childcare = cash	0.345	0.434	0.858	0.571	0.080
Childcare = childcare & cash	0.855	0.286	0.801	0.823	0.652
Cash = childcare & cash	0.267	0.065	0.671	0.737	0.197
Childcare & cash = childcare + cash	0.158	0.712	0.273	0.530	0.034
Mean Control	02	02	02	02	02
Obs.	1496	1496	1496	1496	1496

TABLE B.10: EFFECTS ON CHILD DEVELOPMENT – ATTRITION: 20% IMPUTATION

**Notes:** See Table 5 for a description of the dependent and control variables. "Imputation x%" provides estimates where we impute to the **lower** bound the mean **minus** x% of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean **plus** the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \* \*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \* \*\* p < 0.01 for *p*-values that are adjusted for multiple hypotheses testing. When correcting the *p*-values, we group the outcomes in two families: (1) and (2, 3, 4 and 5).

	Happiness	Position on	Perceived
	with life	ladder of life	stress
	(0 to 10)	(0 to 10)	scale (0-40)
	(0 (0 10)	(0 (0 10))	(3)
	. ,	el A: Lower bo	
Childcare	.38***	.29***	64**
	(.14)	(.1)	(.36)
Cash	.79***	.63***	-1.18***
	(.15)	(.11)	(.35)
Childcare & cash	.61***	.4***	82**
	(.15)	(.11)	(.36)
p-value (equal treatment effects):			
Childcare = cash	0.007	0.002	0.139
Childcare = childcare & cash	0.130	0.322	0.630
Cash = childcare & cash	0.242	0.052	0.336
Childcare & cash = childcare + cash	0.009	0.001	0.054
Mean Control	4.21	3.56	23.67
Obs.	1496	1496	1496
	Par	el B: Upper bo	und
Childcare	.43***	.33***	5
	(.14)	(.1)	(.36)
Cash	.85***	.67***	-1.03***
	(.15)	(.11)	(.35)
Childcare & cash	.66***	$.44^{***}_{\star\star\star}$	69**
	(.15)	(.11)	(.36)
p-value (equal treatment effects):			
Childcare = cash	0.006	0.002	0.150
Childcare = childcare & cash	0.127	0.316	0.632
Cash = childcare & cash	0.224	0.046	0.354
Childcare & cash = childcare + cash	0.004	0.000	0.102
Mean Control	4.18	3.53	23.58
Obs.	1496	1496	1496

TABLE B.11: EFFECTS ON MOTHERS' SUBJECTIVE WELL-BEING – ATTRITION: 10% IMPU-<br/>TATION

**Notes:** See Table 6 for a description of the dependent and control variables. "Imputation x%" provides estimates where we impute to the **lower** bound the mean **minus** x% of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean **plus** the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \* \*\* p < 0.01 for multiple hypotheses testing. When correcting the *p*-values, we group the outcomes together in one family.

	Happiness	Position on	Perceived				
	with life	ladder of life	stress				
	(0 to 10)	(0 to 10)	scale (0-40)				
	(1)	(2)	(3)				
		el A: Lower bo	. ,				
Childcare	.35**	.27***	<b></b> 71*				
	(.14)	(.1)	(.36)				
Cash	.76***	.61***	-1.25***				
	(.15)	(.11)	(.35)				
Childcare & cash	.58***	.38***	<b>-</b> .89**				
	(.15)	(.11)	(.36)				
p-value (equal treatment effects):							
Childcare = cash	0.007	0.003	0.135				
Childcare = childcare & cash	0.131	0.326	0.630				
Cash = childcare & cash	0.252	0.055	0.327				
Childcare & cash = childcare + cash	0.013	0.001	0.039				
Mean Control	4.23	3.57	23.72				
Obs.	1496	1496	1496				
	Panel B: Upper bound						
Childcare	.46***	.35***	43				
	(.14)	(.1)	(.36)				
Cash	.88***	.69***	95***				
	(.15)	(.11)	(.35)				
Childcare & cash	.69***	.46***	62**				
	(.15)	(.11)	(.36)				
p-value (equal treatment effects):							
Childcare = cash	0.005	0.002	0.155				
Childcare = childcare & cash	0.126	0.314	0.633				
Cash = childcare & cash	0.215	0.044	0.364				
Childcare & cash = childcare + cash	0.002	0.000	0.136				
Mean Control	4.16	3.52	23.54				
Obs.	1496	1496	1496				

TABLE B.12: EFFECTS ON MOTHERS' SUBJECTIVE WELL-BEING – ATTRITION: 20% IMPU-<br/>TATION

**Notes:** See Table 6 for a description of the dependent and control variables. "Imputation x%" provides estimates where we impute to the **lower** bound the mean **minus** x% of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean **plus** the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \* \* \* p < 0.01 for multiple hypotheses testing. When correcting the *p*-values, we group the outcomes together in one family.

		Food						
	Total	Food	Non-food	on-food Temptation				
	(1)	(2)	(3)	(4)	(5)			
	Panel A: Lower bound							
Childcare	.96**	.96** .04 .89 <sup>***</sup> 04		14				
	(.48)	(.25)	(.33)	(.05)	(.1)			
Cash	$1.27^{***}_{\star\star}$	.29	.95***	07*	21 <sup>**</sup>			
	(.49)	(.25)	(.34)	(.04)	(.09)			
Childcare & cash	1.62***	.18	$1.41^{***}_{\star\star\star}$	05	25***			
	(.52)	(.26)	(.37)	(.05)	(.1)			
p-value (equal treatment effects):								
Childcare = cash	0.560	0.312	0.863	0.417	0.478			
Childcare = childcare & cash	0.236	0.592	0.198	0.756	0.273			
Cash = childcare & cash	0.525	0.678	0.263	0.607	0.681			
Childcare & cash = childcare + cash	0.415	0.674	0.407	0.330	0.471			
Mean Control	11.51	5.94	5.38	.19	.41			
Obs.	1496	1496	1496	1496	1496			
	Panel B: Upper bound							
Childcare	$1.18^{**}_{\star\star}$	.14	1.03***	02	1			
	(.49)	(.25)	(.34)	(.05)	(.1)			
Cash	$1.52^{***}_{\star\star\star}$	.4	$1.12^{***}_{\star\star\star}$	05	17*			
	(.49)	(.25)	(.34)	(.04)	(.09)			
Childcare & cash	1.85***	.28	1.55***	03	22**			
	(.52)	(.26)	(.37)	(.05)	(.1)			
p-value (equal treatment effects):								
Childcare = cash	0.518	0.294	0.826	0.440	0.511			
Childcare = childcare & cash	0.231	0.589	0.202	0.759	0.275			
Cash = childcare & cash	0.556	0.654	0.287	0.633	0.648			
Childcare & cash = childcare + cash	0.253	0.481	0.253	0.518	0.671			
Mean Control	11.37	5.87	5.29	.17	.38			
Obs.	1496	1496	1496	1496	1496			

# TABLE B.13: EFFECTS ON HOUSEHOLD CONSUMPTION AND FOOD SECURITY – ATTRITION:10% IMPUTATION

**Notes:** See Table 7 for a description of the dependent and control variables. "Imputation x%" provides estimates where we impute to the **lower** bound the mean **minus** x% of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean **plus** the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \* \* \* p < 0.01 for p-values that are adjusted for multiple hypotheses testing. When correcting the *p*-values, we group the outcomes together in one family.

		Food						
	Total	Food	Non-food	on-food Temptation				
	(1)	(2)	(3)	(4)	(5)			
	Panel A: Lower bound							
Childcare	.85*	.85* 0 .82 <sup>**</sup> 05		16*				
	(.48)	(.25)	(.33)	(.05)	(.1)			
Cash	$1.14^{**}_{\star\star}$	.24	.87***	09*	23**			
	(.49)	(.25)	(.34)	(.04)	(.09)			
Childcare & cash	$1.51^{***}_{***}$	.14	1.34***	06	27***			
	(.52)	(.26)	(.37)	(.05)	(.1)			
p-value (equal treatment effects):								
Childcare = cash	0.582	0.322	0.882	0.406	0.463			
Childcare = childcare & cash	0.239	0.594	0.196	0.754	0.272			
Cash = childcare & cash	0.510	0.690	0.252	0.595	0.699			
Childcare & cash = childcare + cash	0.515	0.781	0.502	0.256	0.386			
Mean Control	11.59	5.97	5.42	.19	.42			
Obs.	1496	1496	1496	1496	1496			
	Panel B: Upper bound							
Childcare	1.29***	.18	$1.1^{***}_{\star\star\star}$	01	09			
	(.49)	(.25)	(.34)	(.05)	(.1)			
Cash	$1.64^{***}_{\star\star\star}$	.45*	$1.2^{***}_{***}$	04	15			
	(.49)	(.25)	(.34)	(.04)	(.09)			
Childcare & cash	1.96***	.33	1.62***	02	2**			
	(.52)	(.26)	(.37)	(.05)	(.1)			
p-value (equal treatment effects):								
Childcare = cash	0.498	0.285	0.808	0.452	0.529			
Childcare = childcare & cash	0.229	0.588	0.204	0.761	0.276			
Cash = childcare & cash	0.572	0.643	0.300	0.646	0.631			
Childcare & cash = childcare + cash	0.191	0.397	0.194	0.629	0.781			
Mean Control	11.29	5.84	5.24	.17	.37			
Obs.	1496	1496	1496	1496	1496			

# TABLE B.14: EFFECTS ON HOUSEHOLD CONSUMPTION AND FOOD SECURITY – ATTRITION:20% IMPUTATION

**Notes:** See Table 7 for a description of the dependent and control variables. "Imputation x%" provides estimates where we impute to the **lower** bound the mean **minus** x% of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean **plus** the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \* \*\* p < 0.01 for unadjusted p-values and by \* p < 0.1, \*\* p < 0.05, \* \*\* p < 0.01 for p-values that are adjusted for multiple hypotheses testing. When correcting the p-values, we group the outcomes together in one family.

	Against partner		Against child (in hh)			Against child (out hh)				
	Psych.	Phy.	Any	Psych.	Phy.	Any	Psych.	Phy.	Any	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Panel A: Lower bound										
Childcare	0 (.03)	0 (.02)	0 (.03)	.04 (.03)	03 (.03)	.02 (.02)	.02 (.03)	.03 (.03)	.03 (.03)	
Cash	.03	.06**	.06*	.03	01	.02	04	02	04	
	(.03)	(.02)	(.03)	(.03)	(.03)	(.02)	(.03)	(.03)	(.03)	
Childcare & cash	.02	.04*	.03	.04	01	.01	.02	.01	.02	
	(.03)	(.02)	(.03)	(.03)	(.03)	(.02)	(.03)	(.03)	(.03)	
p-value (equal treatment effects):										
Childcare = cash	0.295	0.022	0.074	0.647	$0.470 \\ 0.504$	0.893	0.079	0.129	0.067	
Childcare = childcare & cash	0.558	0.108	0.294	0.955		0.692	0.881	0.522	0.779	
Cash = childcare & cash	0.652	0.507	0.472	0.691	0.964	0.595	0.113	0.373	0.129	
Childcare & cash = childcare + cash	0.743	0.591	0.566	0.404	0.472	0.275	0.515	0.931	0.583	
Mean Control	.23	.11	.25	.78	.75	.89	.48	.23	.52	
Obs.	1496	1496	1496	1496	1496	1496	1496	1496	1496	
	Pa	nel B: L	Jpper b	ound						
Childcare	.03	.02	.03	.06**	02	.03	.04	.04	.04	
	(.03)	(.02)	(.03)	(.03)	(.03)	(.02)	(.03)	(.03)	(.03)	
Cash	.06**	.08***	.08***	.04	0	.03*	02	0	02	
	(.03)	(.02)	(.03)	(.03)	(.03)	(.02)	(.03)	(.03)	(.03)	
Childcare & cash	.04	.06 <sup>***</sup>	.06**	.05**	0	.02	.03	.02	.03	
	(.03)	(.02)	(.03)	(.03)	(.03)	(.02)	(.03)	(.03)	(.03)	
p-value (equal treatment effects):										
Childcare = cash	0.282	0.018	0.068	0.650	0.473	0.897	0.080	0.126	0.068	
Childcare = childcare & cash	0.569	0.099	0.292	0.951	0.509	0.693	0.877	0.515	0.775	
Cash = childcare & cash	0.620	0.492	0.448	0.698	0.961	0.599	$0.114 \\ 0.754$	0.372	0.130	
Childcare & cash = childcare + cash	0.329	0.260	0.221	0.237	0.712	0.152		0.677	0.833	
Mean Control	.22	.1	.24	.77	.75	.88	.47	.22	.51	
Obs.	1496	1496	1496	1496	1496	1496	1496	1496	1496	

TABLE B.15: DOMESTIC VIOLENCE - ATTRITION: 10% IMPUTATION

**Notes:** See Table 8 for a description of the dependent and control variables. "Imputation x%" provides estimates where we impute to the **lower** bound the mean **minus** x% of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean **plus** the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for *p*-values that are adjusted for multiple hypotheses testing. When correcting the *p*-values, we group the outcomes in three families: (1) to (3), (4) to (6) and (7) to (9).

	Against partner		Against child (in hh)			Against child (out hh)				
	Psych. (1)	Phy. (2)	Any (3)	Psych. (4)	Phy. (5)	Any (6)	Psych. (7)	Phy. (8)	Any (9)	
Panel A: Lower bound										
Childcare	01	01	01	.04	04	.02	.02	.02	.02	
	(.03)	(.02)	(.03)	(.03)	(.03)	(.02)	(.03)	(.03)	(.03)	
Cash	.02	.05**	.04	.02	02	.02	04	02	04	
	(.03)	(.02)	(.03)	(.03)	(.03)	(.02)	(.03)	(.03)	(.03)	
Childcare & cash	0	.03	.02	.03	02	.01	.01	0	.01	
	(.03)	(.02)	(.03)	(.03)	(.03)	(.02)	(.03)	(.03)	(.03)	
p-value (equal treatment effects):										
Childcare = cash	0.303	0.024	0.079	0.646	0.470	0.892	0.079	0.131	0.067	
Childcare = childcare & cash	0.553	0.113	0.296	0.958	0.501	0.692	0.883	0.526	0.781	
Cash = childcare & cash	0.669	0.515	0.485	0.688	0.966	0.593	0.113	0.375	0.128	
Childcare & cash = childcare + cash	0.998	0.809	0.805	0.509	0.372	0.358	0.413	0.938	0.472	
Mean Control	.24	.11	.26	.78	.76	.89	.48	.24	.52	
Obs.	1496	1496	1496	1496	1496	1496	1496	1496	1496	
	Pa	nel B: U	pper b	ound						
Childcare	.04	.03	.04	.06**	01	.04*	.05	.05*	.05	
	(.03)	(.02)	(.03)	(.03)	(.03)	(.02)	(.03)	(.03)	(.03)	
Cash	.07**	.09***	.1***	.05*	.01	.04*	01	0	01	
	(.03)	(.02)	(.03)	(.03)	(.03)	(.02)	(.03)	(.03)	(.03)	
Childcare & cash	$.05^{*}_{\star}$	.07***	.07**	.06**	.01	.03	.04	.03	.04	
	(.03)	(.02)	(.03)	(.03)	(.03)	(.02)	(.03)	(.03)	(.03)	
p-value (equal treatment effects):										
Childcare = cash	0.277	0.017	0.065	0.652	0.475	0.899	0.080	0.125	0.068	
Childcare = childcare & cash	0.576	0.095	0.292	0.949	0.512	0.694	0.875	0.513	0.774	
Cash = childcare & cash	0.604	0.485	0.438	0.702	0.959	0.602	0.115	0.372	0.131	
Childcare & cash = childcare + cash	0.195	0.156	0.122	0.175	0.846	0.109	0.885	0.562	0.968	
Mean Control	.21	.09	.23	.77	.74	.88	.46	.22	.5	
Obs.	1496	1496	1496	1496	1496	1496	1496	1496	1496	

#### TABLE B.16: DOMESTIC VIOLENCE - ATTRITION: 20% IMPUTATION

**Notes:** See Table 8 for a description of the dependent and control variables. "Imputation x%" provides estimates where we impute to the **lower** bound the mean **minus** x% of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean **plus** the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. Robust standard errors are reported in parenthesis. Statistical significance is indicated by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values and by \* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01 for unadjusted *p*-values, we group the outcomes in three families: (1) to (3), (4) to (6) and (7) to (9).