Childcare and Cash Grants for Labor Supply and Wellbeing: Experimental Evidence from Uganda*

Kjetil Bjorvatn† Denise Ferris‡ Selim Gulesci § Arne Nasgowitz ¶
Vincent Somville ‖ Lore Vandewalle **

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Abstract

How does access to childcare affect women's and their household's labor supply and income, returns to capital in their businesses, and child development? In order to answer these questions, we implement a field experiment in Uganda where we randomly offer women who have a child aged 3-5 (i) free access to childcare, (ii) a cash grant, or (iii) both a cash grant and free childcare. A fourth group of women remain as the control group. Access to childcare increases household income by 30 percent and improves child development, but does not affect women's labor supply or income on average. Cash grants trigger an occupational shift from wage labor to self-employment and increase women's business profits but not their total income. We observe important heterogeneity in treatment effects. The combination of cash grants and childcare significantly raises the total income of the households who do not have younger children and of women who had a business at baseline. Our findings imply that access to childcare can be a cost-effective way to increase household income, child development and returns to capital in women's businesses.

Keywords: Childcare, female labor supply, Cash transfers, Entrepreneurship, Gender, Child development

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†NHH Norwegian School of Economics. E-mail: Kjetil.Bjorvatn@nhh.no
‡BRAC. E-mail: dnferris@gmail.com
§Trinity College Dublin. E-mail: gulescis@tcd.ie
¶NHH Norwegian School of Economics. E-mail: Arne.Nasgowitz@nhh.no
‖NHH Norwegian School of Economics & Chr. Michelsen Institute. E-mail: Vincent.Somville@nhh.no
**Graduate Institute Geneva. E-mail: lore.vandewalle@graduateinstitute.ch

1 Introduction

Access to childcare services plays a crucial role for women's labor supply in high-income countries (e.g. Gelbach (2002); Baker et al. (2008)). There is, however, little experimental evidence on the matter and hardly any causal evidence from low-income countries. At the same time, domestic obligations are often put forward as one potential explanation for the gender gap in earnings and returns to capital in small enterprises in developing countries (de Mel et al., 2009a; Duflo, 2012; Fafchamps et al., 2014; Berge et al., 2015; Fiala, 2018).

The present paper attempts to fill this gap in the literature by presenting evidence from a large-scale randomized controlled trial on childcare in Uganda. We sampled 1,496 households in 400 communities, and randomly assigned these households to either a control group or one of three treatment arms: (i) free childcare for one year; (ii) a cash grant of equal value (labeled as a business grant and given to the female household head); (iii) both free childcare and the cash grant. The experimental design allows us to identify the causal impact of access to childcare services on labor supply, income and child development; to compare the cost-effectiveness of access to childcare with a cash grant and identify potential complementarities between access to capital and childcare services.

Our paper makes three main contributions to the literature. First, it is one of the few studies to provide experimental evidence on the effects of childcare subsidies, especially in a low-income context. Second, we contrast the childcare intervention with a cash grant of similar value, in order to shed light on the cost-effectiveness of childcare subsidies relative to a commonly used alternative policy, and we investigate potential complementarities between the two types of interventions. Third, we provide evidence on a broad set of outcome variables, including household-level labor supply and earnings, women's psychological well-being, and child development.

We start by examining the treatment effects on labor supply and income at the household level.[1] Three key findings emerge: First, households that received free daycare do not work more hours than the control group, but their business revenues and profits are higher, suggesting that the total factor productivity within household businesses is higher once children are in daycare. Second, households that received cash transfers are more likely to start a business and work more hours in self-employment, compared to both the control and to the daycare only arm. Third, there is a complementarity between childcare and cash grants in terms of business profits: while both the cash arms increase their revenues compared to the control, profits increase only if cash is complemented by daycare.

When we examine effects on individual members of the household, daycare alone does not have a significant effect on women's labor supply or earnings, but it increases the

[1] Bernhardt et al. (2019) highlight the importance of studying effects of business grants at the household as well as the individual level.

fathers' earnings in self-employment and in wage labor. As a result, the father's total income is higher than the income of fathers in the control arm. The observed impact of cash on self-employment at the household level is driven by the child's primary female caregiver's occupational choice. On average, women in the cash arms are more likely to start a business and work more hours than women in the control group and in the daycare only arm. Compared to the control, their revenues and profits are higher, while their income from wage labor is lower. This points in the direction of an occupational change from wage labor to self-employment. Total income is not impacted though and the complementarity between cash and daycare is less pronounced than at the household level.

These average effects mask important heterogeneity along two key dimensions: First, we further investigate the importance of daycare on occupational choice and on efficiency at work by differentiating between women with and without a younger child at baseline. Among women who do not have a younger child, daycare significantly improves business profits. Moreover, there is evidence of an important complementarity between cash grants and access to daycare. We find that the effect of the combined treatment on women's income is significantly higher than cash transfers alone. Second, we revisit the finding that financial returns to capital shocks are lower in female-owned businesses. Since the previous literature has focused on the effects of cash grants on women who already have a business (de Mel et al., 2009a; Fafchamps et al., 2014; Berge et al., 2015; Fiala, 2018), we study the heterogeneity of the treatment effects by baseline business ownership. In line with the literature, we find that the cash transfer alone does not positively impact women's profits. On the other hand, women who received both the cash transfer and the childcare subsidy increase their profits significantly.

Last but not least, we examine the effects on child development and women's subjective wellbeing. We find that the daycare treatments had a modest positive effect of .15 SD on child development. This is driven by improvements in emergent literacy, numeracy and motor development. Moreover, we find that all three types of treatment had positive effects on respondent's self-reported happiness, life satisfaction and stress, with the effect of cash being slightly bigger than daycare.

Our study contributes to three strands of literature. First, we contribute to the literature studying the effect of childcare subsidies on female labor supply. There is an extensive literature on this question in developed countries, and the evidence predominantly points towards a positive effect (Gelbach, 2002; Baker et al., 2008; Bauernschuster et al., 2016). There are fewer studies from middle-income countries, but also there childcare seems to increase maternal labor supply (Berlinski and Galiani, 2007; Berlinski et al., 2009; Jain, 2016). Most of the existing evidence is based on register data, one exception being De-Barros et al. (2011) who conduct a randomized controlled trial exploiting a lottery that

provided free access to public day care in low-income neighbourhoods of Rio de Janeiro. The authors find positive effects on maternal employment on the extensive margin, while no effect on the intensive margin. To the best of our knowledge, the only experimental study on the effect of childcare subsidies in Sub-Saharan Africa is Clark et al. (2019). The study randomizes access to daycare in a neighbourhood of Nairobi and finds significant effects on employment but no effects on hours worked. We contribute to the literature by studying the effects of childcare subsidies and cash grants together and separately. To the best of our knowledge, ours is the first experimental study to do so.

Second, we contribute to a literature studying the effectiveness of financial interventions to stimulate small-scale business development. There is an extensive literature on the effect of microfinance (e.g. Banerjee et al., 2015) and business grants (e.g. de Mel et al., 2008) on business development and household outcomes. A number of studies find a gender gap in the impact of financial interventions with male-owned businesses generating higher returns to capital shocks then female-owned ones (Fiala, 2018; de Mel et al., 2009b; Fafchamps et al., 2014; Berge et al., 2015; Fiala, 2018). There are various explanations for a gender-specific impact of business interventions, ranging from a selection into low-paid occupations (Campos et al., 2015), to social norms (Jayachandran, 2020; Bursztyn et al., 2020) and having little control over own income (Field et al., 2020). Bernhardt et al. (2019) show that low return to capital shocks among female-owned businesses is likely because womenâĂŹs capital is often invested into their husbandâĂŹs business. Another prominent explanation is that women face time-constraints, arising from domestic work and care obligations (Duflo, 2012). Such time constraints can either prevent women from entering the labor market or lead to adjustments on the intensive margin (Nordman and Vaillant, 2014; Delecourt and Fitzpatrick, fort). We contribute to the literature by experimentally introducing childcare subsidies and cash grants, separately and in combination, in order to understand the mechanisms driving women's economic empowerment. We show that returns to capital shocks in female-owned microenterprises can be positive if cash grants are combined with access to free childcare.

Finally, we contribute to the literature on the effect of childcare services on child development. Most of the evidence is again from developed countries, and in general shows that the impact is particularly strong for children from low socio-economic status families (Felfe and Lalive, 2018; Baker et al., 2008; Havnes and Mogstad, 2015; Cascio, 2009). The more limited evidence in low- and middle-income countries also points to positive effects from childcare on child development, but also that the quality of childcare matters (Bernal and Fernández, 2013; Berlinski et al., 2009; Bietenbeck et al., 2017; Dowd et al., 2016; Mwaura et al., 2008). Rosero and Oosterbeek (2011) evaluate the impact of childcare in Ecuador using a regression discontinuity design and find an increase in maternal labor supply but no effects on child development. Hojman and López Bóo (2019) conduct a ran-

domized controlled trial in Nicaragua and find positive effects from childcare provision on both maternal employment and child development. We contribute to this literature by providing experimental evidence from Africa showing that access to daycare improves child development. This is reassuring as Baker et al. (2008) found that subsidized daycare services have negative effects on child development outcomes in Quebec. Our findings imply that the quality of the daycare services is decent, at least in comparison to the counterfactual in the control group.

The remainder of the paper is organized as follows. In section 2 we describe the experimental design and the data and we present descriptive statistics on baseline characteristics, the balance and attrition checks. In section 3 we present our empirical findings and in section 4 we conclude.

2 Experimental Design and Data

In this section, we describe the experimental design of our study, introduce the data, provide baseline characteristics and discuss attrition.

2.1 Experimental Design

Our study aims to answer three key research questions: How do childcare subsidies affect (i) women's and their household's labor supply and income (ii) child development (iii) returns to cash grants in female-owned businesses?

In order to answer these questions, we implemented a randomized control trial in Uganda with two key interventions that ran for one year. The first intervention is offering free daycare. While private daycare services exist in urban and peri-urban regions of Uganda, they are typically not accessible to the poor. The daycare treatment offered to enroll one child aged 3-5 years old for full days in a nearby daycare centre of choice, and covered the costs (tuition, breakfast and lunch). We assisted the enrolment of children and paid the centers directly. The second intervention is a cash grant in the form of mobile money. The cash grant equaled the average cost of daycare within the district, was labeled as a business grant and was transferred at the same time as the daycare payments are due (three installments, at the start of each trimester). As discussed in the introduction, previous studies have found rather modest impacts of providing business grants to women, but our hypothesis is that women may face additional binding constraints due to domestic work and care obligations. One could imagine that daycare frees up a woman's time, while the business grant gives her the capacity to make the best use of this freed-up time to develop the business. To explore whether such complementarities exist, we offered daycare and provided a cash grants to a third treatment arm. Along with the control, this implies our experiment consisted of four different treatment arms:

T1 One year of free, full-time daycare.

T2 Cash grant that equals the average cost of daycare within the district, labeled as a business grant.

T3 The daycare and cash grants combined.

C Control group (no intervention).

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 nursery school. Figure 1 shows the location of these communities within Uganda. To identify eligible households, we conducted a census in September 2018 in each of the 454 communities. In order to be eligible for the study, a household had to satisfy three criteria: (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 (we will refer to this child as the "target child") and (iii) the target child should not already be attending full-time daycare (but we allowed for children attending part-time daycare). We also wanted to have a sufficiently large group of households both with and without younger siblings (below 3 years old). To that end, we restricted the study sample to villages that have at least three households that satisfy the three criteria and do not have younger siblings, and at least one household that satisfies the three criteria and has younger siblings. Finally, from the list of eligible households, we randomly selected 1496 households in 400 communities to participate in the baseline survey.

Following the baseline survey, we randomized households into the four treatment arms. The randomization was conducted at the individual level and was stratified by (i) district, (ii) the target child has younger siblings or not, (iii) the target child attends part-time daycare or not, (iv) the female caregiver's main occupation (self-employed, wage-employed or unemployed), and (v) the female caregiver is the child's mother (versus grandmother). Out 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, because the number of observations differed across strata and it was not always divisible by four. The treatments then started in February 2019.

2.2 Data

We conducted a baseline survey in November and December 2018. It consisted of two parts, a household survey and a child development survey. The respondent for the household survey was the primary female caregiver of the target child. The survey collected information on labor supply and business activities of the respondent and other household members, demographic and socio-economic characteristics of all the household members,

and the respondent's wellbeing. The survey also included a time-use module which collected information on time use during the last working day of the primary female caregiver, the target child's father (if part of the household) and other household members who take care of the target child. The child development survey collected information on the target child using the International Development and Early Learning Assessment (IDELA) instrument developed by Save the Children. The tool consists of a battery of questions and tests that aim to measure the level of competency or mastery that children possess across four domains – motor skills, early literacy, early numeracy and socio-emotional skills.

We conducted a follow-up survey for child development in November and December 2019, and for the household in February 2020. During these surveys, we collected data on the same set of indicators as at baseline.

2.3 Baseline Characteristics, Balance Check and Attrition

Table 1 provides descriptive statistics on key characteristics of the households in our sample. The average target child was 3.6 years old at baseline and almost half of them are boys. For about two thirds of the households in our sample, the target child was the youngest child in the household at baseline. We hypothesise any impact of the daycare subsidy on labor supply to be higher among these households. The enrolment rate of target children in school was 29% at baseline and those enrolled were in half-day pre-school. In 88% of the households, the primary caregiver (and therefore the survey respondent) was the target child's mother. For the rest, it was the grandmother. The average respondent is 34 years old, has completed 11 years of schooling and lives in a household with 5 members. The father of the target child was part of the household for 61% of the families.

The rest of Table 1 provides descriptives on the female respondents' and their households' labor supply and earnings. We express monetary values in 1000 Ugandan shilling (UGX). 32% of the respondents in our sample owned a business at baseline. The average respondent spent 73 hours per month working in their own businesses and they made 26 thousand UGX in profits.[2] On average, 13% of respondents were in wage-employment at baseline and they worked 18 hours per month, making 12 thousand UGX. The total labor income (wages plus business profits) was 39 thousand UGX per month, while their household's total labor income was 134 thousand UGX. For brevity, we report the descriptives on our other outcome variables (the target child's father's labor supply and income, target child's IDELA score and the respondent's subjective wellbeing) in Appendix Table A.1.

At baseline, we also collected information on time use of the target child's primary female caregiver, the father and the third household member who (after the primary caregiver

[2]Hours in and profits from self-employment are coded as 0 if the respondent has no business. To measure enterprise profits, we follow de Mel et al. (2009b) and use a direct question on the level of profits as opposed to subtracting costs from revenues. In 2019, 1299.5 UGX=1 USD PPP.

or the father) takes the most care of the target child. We used a 24-hours recall, i.e. the respondents reported their and the other relevant household members' time use during the most recent working day. Figure 2 presents a visual summary of this information. The figure shows that while the respondent, who is the primary female caregiver of the target child, spent the most time (about 8.5 hours) with the target child, the father of the target child also spent about 3 hours and a third household member (who is often a sibling of the target child) spent about 5.5 hours caring for the child. In terms of labor supply, respondents spent about 6 hours at work, while the father of the child spent almost 9 hours. This suggests that the daycare treatment may not only affect the time use and therefore labor supply of the primary female caregiver but also of other household members.

Baseline balance checks: For all of the outcome variables as well as for other key characteristics, Tables 1 and A.1 report balance tests where we compare the sample means by treatment status. In particular, columns 2-4 show the standard difference between the control and the three treatment arms, while columns 5-8 report the normalized differences (Imbens and Wooldridge, 2009). Fewer than 5% of the pairwise mean comparisons are statistically significantly different, which could have occured by random chance. Moreover, all of the normalized differences are smaller than 1/4th of the combined sample variation. Hence, we conclude that the randomization was successful in achieving baseline balancing in key observable characteristics. Hence, we conclude that the randomization was successful and the control group constitutes a valid counterfactual for the treatment groups.

Attrition: In Table 2, we test for differential attrition at the household and child development surveys. For the household survey, the attrition rate was 4% among the control group and there was no significant differential attrition in treatment arms. Thus, it is unlikely that differential attrition drives the treatment effects we find in the empirical analysis for outcomes coming from the household module. For the child development module, we had higher attrition and there was some difference across treatment arms. In particular, among the control group, we were not able to re-survey 10% of the baseline sample of children and this was lower by 4 ppt for the daycare arm and by 3 ppt for the cash and combined arms. Therefore, whenever we analyze outcomes coming from the child development survey, we will assess the sensitivity of our findings with respect to differential attrition. To do so, we – as pre-specified in our pre-analysis plan – follow Kling et al. (2007) and calculate lower and upper bound estimates that adjust for differential non-response rates in the treatment groups relative to the control.

3 Results

We first outline our empirical methodology. Next, we provide the results on daycare enrollment and labor supply and income, before discussing the heterogeneity in our treatment effects. Finally, we detail the impact on child development and the respondents'

well-being.

3.1 Empirical Methodology

In order to estimate the treatment effects, we estimate the following ANCOVA (McKenzie, 2012) model:

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

where y_{it} is the outcome of interest for respondent i at followup (t=1), y_{i0} is the baseline level of the outcome[3], T_i^k = 1 if the respondent is in the following treatment group: (i) daycare only (k=1), (ii) cash only (k=2), (iii) daycare & cash (k=3); Γ_{i0} are the stratification dummies. In this specification, β^k correspond to intention to treat (ITT) estimates. Under the assumption that the control observations constitute a valid counterfactual for each treatment group, β^k identifies the causal effect of the offer of daycare (β^1), or cash (β^2), or both (β^3).

3.2 First Stage: Daycare Enrollment

We first estimate the impact of our treatments on daycare enrollment and, in particular, on whether the target child attends a full-day program. Table 3 shows the results. All the treatments make it more likely the child is enrolled and attends full-time daycare. While the increase in enrollment is similar across treatment arms (9 percentage points), children in the daycare arms are significantly more likely to attend full-time daycare than children in the cash only arm. The latter can be seen from the p-values for tests of equality of treatments impacts, which are provided at the bottom of the table. In particular, we find that the daycare arms increased the target child's enrollment in full-day daycare by 35 percentage points (ppt), corresponding to a 71% increase relative to the control group where 49% of the target children were in full-day daycare. The equivalent cash grant increased daycare enrollment by 9 ppt (18%). The difference between the effects of cash and daycare arms is statistically and economically significant.

3.3 Labor Supply and Income

Table 4 provides the treatment effects on self-employment, wage employment and total labor supply and income for the household (panel A), the female respondent (panel B) and the target child's father (panel C). For self-employment, it focuses on business creation (the extensive margin) and on the hours worked, revenues and the profits earned over the past month. For wage employment and for the sum of wage labor and self-employment (i.e. the total), the outcome variables of interest are the hours worked and the income over

[3] 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 an indicator variable equal to one if the observation has been imputed.

the past month. We systematically express monetary values in UGX 1000 for expositional reasons.

From the household level - which is presented in panel A - we can draw four main conclusions. First, the cash arms are more likely to start a business and work more hours in self-employment, compared to both the control and to the daycare only arm. Second, while both the cash arms increase their revenues compared to the control, profits are significantly larger for the combined arm only: profits increase more if cash is complemented by daycare. This is is even more outspoken when we winsorize the top 1% values of the outcome variables (Table A.2). Third, the daycare only arm is as likely to have a business and works as many hours as the control, but their revenues and profits are higher. This suggest that the total factor productivity is higher once children are taken care off. Finally, families in the daycare only arm work and earn more in wage labor than households in the cash arms.

Within households, we focus on the respondent and on the target child's father. If the father resides with the target child and respondent, we have information about his labor supply and income. If he does not do so, we replace the missing values by zeroes. Table 1 showed that the father was present in about 60% of the households at baseline and this was equally likely across treatments.

The observed impact of cash on self-employment at the household level is driven by the respondents' occupational choice. Panel B of Table 4 shows that women in the cash arms are more likely to start a business and work more hours than women in the control group and in the daycare only arm. Compared to the control, their revenues and profits are higher, while their income from wage labor is lower. This points in the direction of an occupational change from wage labor to self-employment. Total income is not impacted though and the complementarity between cash and daycare is less pronounced than at the household level.[4] These findings may hide important heterogeneities, which we turn to in the next section.

Panel C of Table 4 shows that fathers do not gain much from the cash treatments. If their three to five years old child is given the opportunity to attend full-time daycare though, their productivity increases in both self-employment and in wage labor. As a result, their total income is higher than the income of fathers in the control arm.

3.4 Heterogeneity in Labor Supply and Income

In this section, we focus on two important heterogeneous effects. First, we further investigate the importance of daycare on occupational choice and on efficiency at work by differentiating between respondents with and without a younger child at baseline. This

[4] If we winsorize the top 1% values of the outcome variables, profits increase more if cash is complemented by daycare (Table A.2).

variable - on which we stratified our randomization - is of first-order interest, as the care for younger siblings may (partially) offset the gain from being offered daycare for the three to five year old child.

We test this hypothesis in Table 5, by interacting each of the treatment variables with a dummy that takes value one if there is no younger child. As such, the coefficients of the main variables now present the impact for respondents with a younger child. The sum of these coefficients and those of the interaction terms provide the impact for respondents without a younger child. These are presented in the bottom panel.

The results confirm the hypothesis: the impacts on the respondents' revenues and profits, and the occupational shift are driven by the sample of women who do not have a younger child. For the combined arm, this shift is profitable, as total income is significantly higher than in the control arm. The results also support the existence of an important complementarity between cash grants and reducing women's time constraints due to care obligations. While there is no impact on profits in the cash only arm, the impact is highly significant for the combined arm. This difference in impact is significant at the 5% level. Note that we do not observe these differential patterns for fathers. From Table A.3, we learn there is a similar pattern for fathers. Daycare increases the father's productivity in wage labor (and in total), but only if there is no younger child.

Second, we revisit the finding that financial returns to capital shocks are lower in female-owned businesses (de Mel et al., 2009a; Fafchamps et al., 2014; Berge et al., 2015; Fiala, 2018). To do so, we explore whether the results differ for the group of respondents who had a business at baseline. Table 6 - which has a similar format as Table 5 - provides the regression output and Figure 3 summarizes the main finding, namely that limited access to daycare provides one explanation for the lower returns to capital shocks in female-owned microenterprises. While a capital shock alone does not positively impact profits, the combined arm sees an important increase in profitability after one year of treatment. This is also clear from the graph in panel B of Figure 3, which presents the distribution of profits in the four experimental arms among women who were business owners at baseline. While there does not appear to be much difference between the cash only arm and the control group, the distribution of profits is shifted to the right for the daycare only arm and even more so for the combined treatment arm. These findings imply that having subsidized access to daycare services enable female-owned enterprises to generate positive returns from capital grants.

3.5 Child Development and Wellbeing

Table 7 presents the treatment effects on child development, as measured by the IDELA instrument. Column 1 presents the standardized effect on the aggregate IDELA score, while columns 2-5 show the effects on the four dimensions that comprise together the score:

emergent literacy, emergent numeracy, socio-emotional skills and motor development. In column 1, we find that both the daycare only and combined treatments have positive and significant effects of 0.15-0.16 standard deviations (SD), while the cash treatment has a positive effect of 0.09 SD relative to the control group. While the effect of the cash only treatment is imprecisely estimated, it is not significantly different from the effects of the other two arms. When we examine the effects on the components of the score, we see that the daycare treatments lead to significant improves in terms of literacy, numeracy and motor development. The cash treatment improves the motor development of the target child, but does not affect the other dimensions of child development – although, with the exception of motor development, the treatment effects of daycare are not significantly different from the cash treatment. Overall, the results in Table 7 show that none of the treatments crowded out child development. If anything the daycare treatment(s) had a modest positive effect of .15 SD on child development. This is reassuring especially in light of previous work that has found that subsidized daycare services may improve maternal employment at the expense of child development outcomes (Baker et al., 2008). Moreover, they imply that the quality of the daycare services in the context of our study are quite decent, at least in comparison to the care received by children in the control group.

In order to assess the robustness of these findings with respect to the differential non-response rates that we observed for the child module (see Table 2 discussed above), 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. To do so, we impute to the lower (upper) bound the mean minus (plus) a certain percentage (5, 10 or 20%) of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean plus (minus) the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. We then re-estimate the treatment effects. The results are presented in Table A.4. Overall, the magnitudes of both the lower and upper bounds under alternative assumptions about the attritors are similar to the unadjusted estimates reported in Table 7. As such, we conclude that the effects on child development are not likely to be driven by differential attrition.

Finally, we analyze the effect's on the female respondent's subjective wellbeing. In Table 8, we present the treatment effects on the respondents self-reported happiness, life satisfaction and stress. For happiness, we rely on the responses to the question "How happy are you with your life?". On a scale from 0 to 10, the average respondent in the control group reported her happiness to be 4.2. Column 1 shows that all three treatments have a positive and significant impact on respondents' happiness. The happiness of respondents who received the daycare subsidy increases by 0.4 units (10% relative to the control), while the corresponding effects for those who received cash is 0.8 (19%) and for those who

received both cash and daycare subsidy is 0.6 (15%). While the effect of receiving cash only is significantly higher than daycare only (p-value=0.01), the differences between the other arms are insignificant. Results in column 2 show a similar pattern in terms of the respondent's life satisfaction: When asked "In your opinion, where are you on the ladder of life at the moment?", respondents who got daycare only report feeling to be 9% higher relative to the control group, while those who received cash are 18% and those who got both are 12% higher. In this case, the treatment effect of cash only is higher than the effects of both daycare only and the combined arm (p=values are 0.003 and 0.063 respectively). The last column presents effects on respondents' stress level, as captured by the perceived stress scale (Cohen et al., 1983). We find that respondent's in all arms have lower perceived stress, but the effect of daycare alone is not precisely estimated at conventional levels. On the other hand, cash leads to a 5% and the combined arm leads to a 3% reduction in perceived stress. It is important to note, however, that none of the differences in treatment effects of the different arms on perceived stress are statistically significant. Overall, the results in Table 8 suggest that all three types of treatment had positive effects on respondent's subjective wellbeing, and the effect of cash seems to be somewhat bigger than daycare.

3.6 Mechanisms

The findings above show that business revenues increase in all the treatment arms, but profits increase in the two daycare arms only. One explanation for this pattern could be that the cash only arm increases business investments in capital and labor (i.e. costs) more than the daycare only arm, thus curtailing an effect on profits. In Table 9 we study the treatment effects on investments in business assets (columns 1-3) and the number of workers employed in the business (columns 4-6).[5] We find that the cash arms have positive and significant effects on investments in assets and workers. Households who received a cash transfer only invested 32 thousand UGX more in business assets, which is around a 4-fold increase relative to the control group. They also had 33% more workers employed in the business. These findings suggest that increased costs can be one reason why we do not see a positive effect of the cash only grant on profits. Perhaps in the longer term these investments will lead to higher profits. The daycare only arm does not have any significant effect on investments in assets or workers (and the difference with the cash arms is statistically significant). This implies that the positive effect on business profits cannot be driven by an increased investment and suggests that an increase in labor productivity is the likely mechanism. The combined arm reflects a combination of both mechanisms: households increase their investments in capital and labor, but also gain from an increased

[5]Number of workers includes anyone other than the owner of the business who worked in a business owned by the relevant household member(s) [either all members, the respondent, or the father of the target child] on a typical working day over the past 30 days. This includes any family workers as well.

labor productivity.[6]

4 Conclusion

We report from a randomized control trial that offered women who have a child aged 3-5 access to (i) free childcare (ii) a cash grant (iii) both a cash grant and free childcare. A fourth group of women remain as the control group.

We find that free access to daycare improves child development and makes labor in self-employment more productive. Household profits increase and so do profits in women's businesses as long as there is no younger child at baseline.

A cash grant of a similar value and timing triggers an occupational shift from wage labor to self-employment, and increases business profits, but not total income. There is a significant increase in total income if the cash grant is complemented by daycare and there is no younger child, or the women has a business at baseline.

In conclusion, our findings imply that access to childcare can be a cost-effective way to increase household income, child development and returns to cash grants in female-owned businesses in Africa.

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[6] In Appendix Table A.5, we test the heterogeneity of the effects on investments and workers with respect to the presence of a younger child at baseline. Similar to the average effects, we do not find a significant effect of the daycare only treatment on investments or number of workers in households with no younger child – although the point estimates are positive, they are imprecisely estimated.

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5 Tables and Figures

FIGURE 1: LOCATION OF THE STUDY

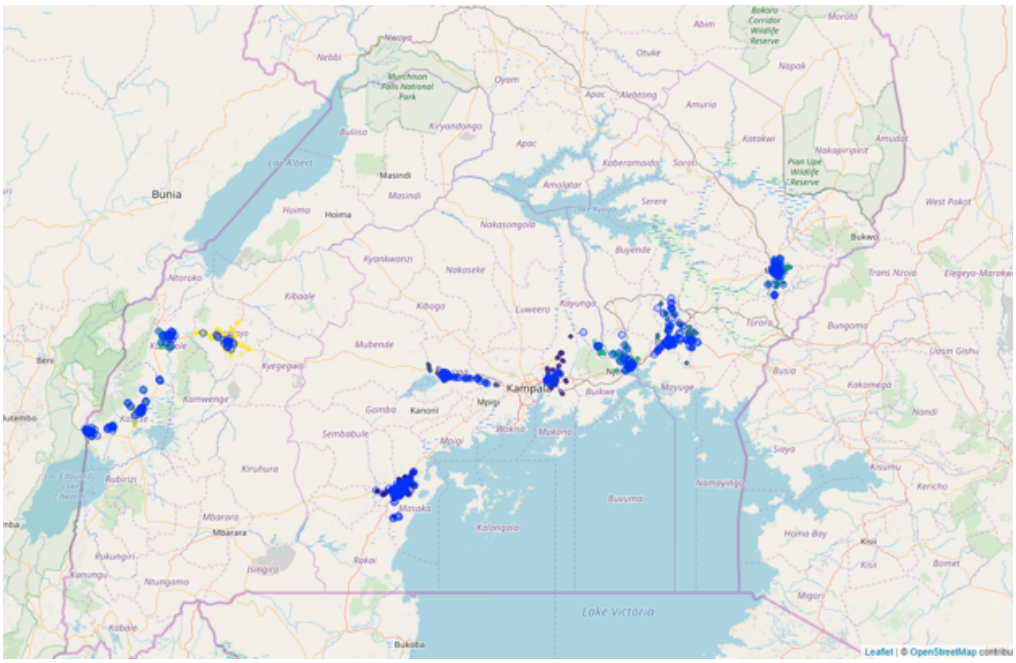


FIGURE 2: TIME USE AT BASELINE – DAILY

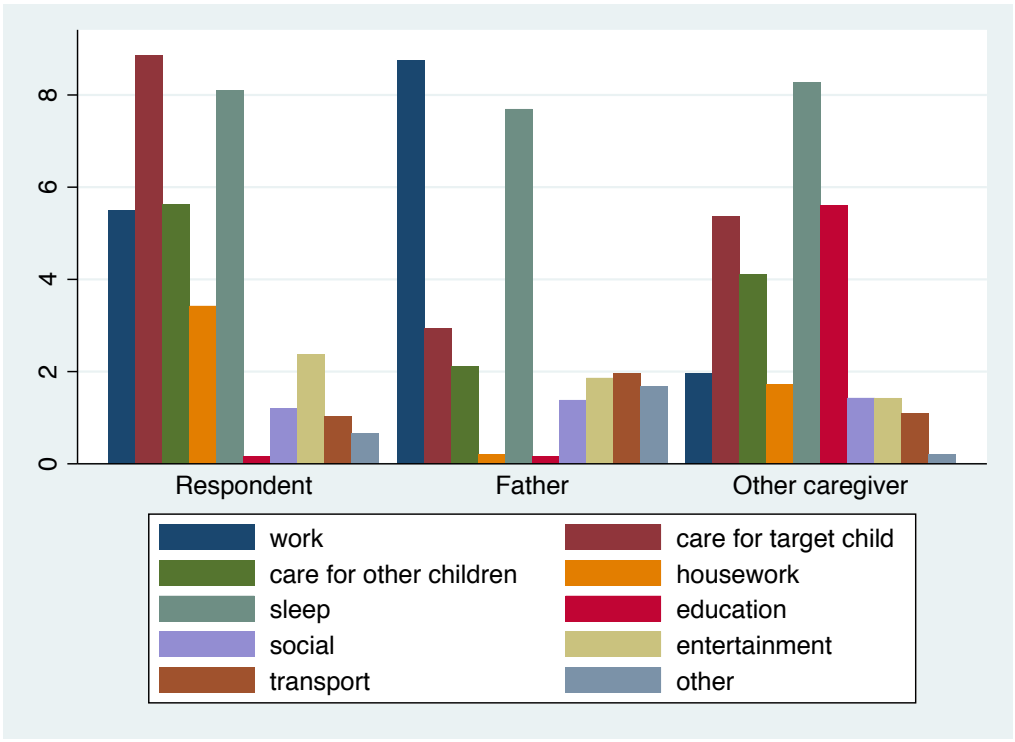
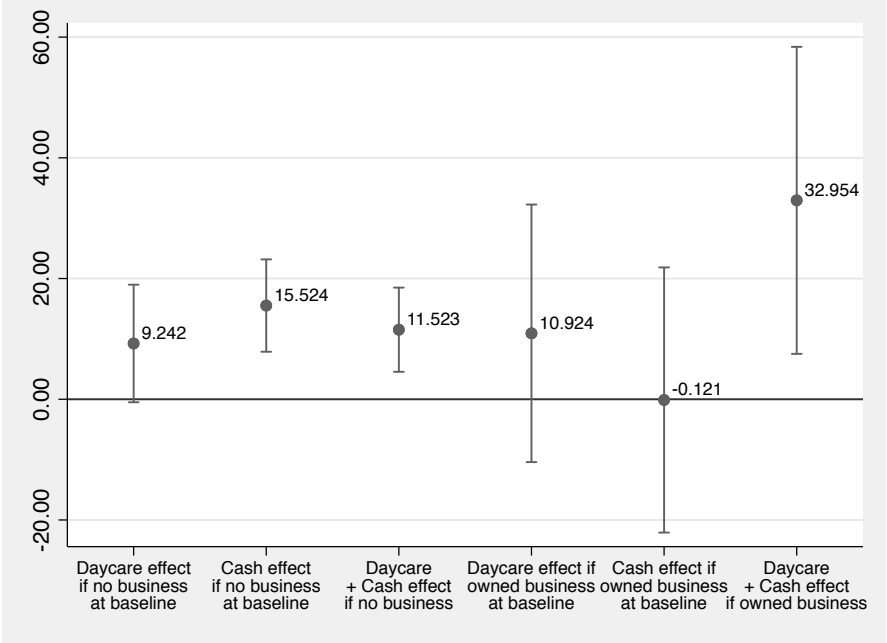
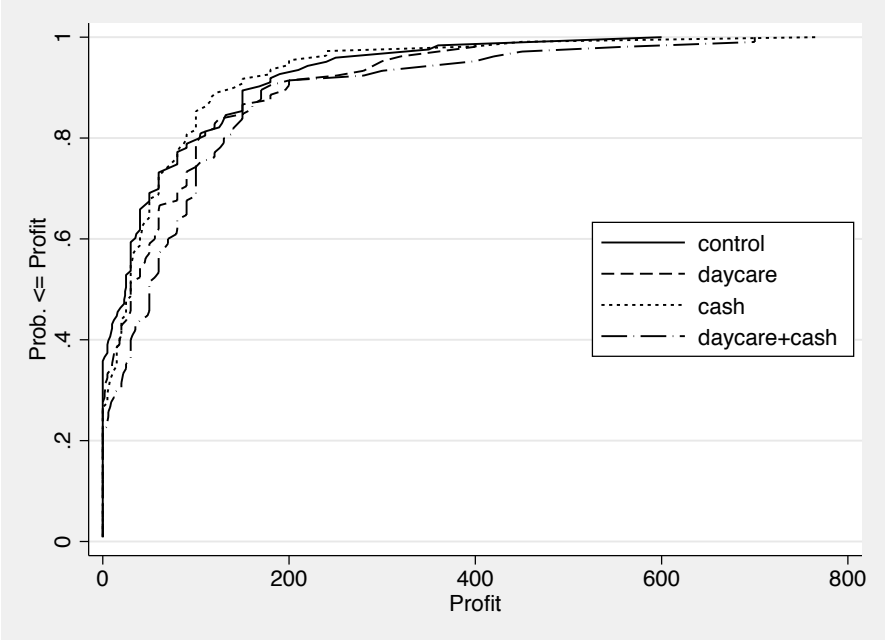


FIGURE 3: HETEROGENEITY OF TREATMENT EFFECTS ON FEMALE RESPONDENTS' PROFITS

(A) TREATMENT EFFECTS BY BASELINE BUSINESS OWNERSHIP



(B) DISTRIBUTION OF PROFITS AMONG BUSINESS OWNERS



Notes: The figure shows ....

TABLE 1: BASELINE DESCRIPTIVES AND BALANCE

	Control	Basic Difference			Normalized Difference			Sample
	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	size
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age of the target child	3.610	-0.046	-0.012	-0.064	-0.047	-0.012	-0.063	1,484
	(0.706)	(0.050)	(0.050)	(0.052)				
Gender of target child: male	0.493	0.028	-0.023	0.039	0.039	-0.032	0.056	1,496
	(0.501)	(0.036)	(0.036)	(0.036)				
Target child has a younger sibling	0.286	-0.019	-0.017	-0.015	-0.030	-0.027	-0.023	1,496
	(0.453)	(0.032)	(0.032)	(0.032)				
Target child enrolled in school	0.289	0.000	0.008	0.011	0.001	0.012	0.017	1,496
	(0.454)	(0.033)	(0.033)	(0.033)				
Respondent is mother of the target child	0.881	0.017	0.015	0.024	0.038	0.033	0.054	1,496
	(0.324)	(0.023)	(0.023)	(0.022)				
Age of the respondent	34.070	0.257	-0.098	-0.521	0.017	-0.007	-0.036	1,496
	(10.507)	(0.769)	(0.735)	(0.733)				
Schooling (in years) of the respondent	11.109	4.759	-0.137	5.297	0.046	-0.022	0.051	1,496
	(4.466)	(5.376)	(0.319)	(5.530)				
Household size	5.291	-0.043	-0.019	0.006	-0.015	-0.007	0.002	1,496
	(2.178)	(0.150)	(0.148)	(0.153)				
Target child's father in household	0.607	0.043	-0.019	0.018	0.063	-0.027	0.026	1,496
	(0.489)	(0.035)	(0.035)	(0.035)				
Respondent's labor supply and income:								
Respondent has any business	0.320	-0.015	-0.013	-0.021	-0.022	-0.019	-0.032	1,496
	(0.467)	(0.033)	(0.033)	(0.033)				
Respondent hours in self-emp.	73.376	-3.111	-2.915	-3.463	-0.017	-0.016	-0.019	1,495
	(127.844)	(9.218)	(9.157)	(9.242)				
Respondent's business profits (UGX 1000)	25.699	-3.684	0.900	-4.114	-0.038	0.006	-0.040	1,393
	(76.459)	(5.030)	(7.519)	(5.400)				
Respondent hours in wage-emp.	17.687	-1.073	9.871	3.520	-0.013	0.096	0.038	1,496
	(61.984)	(4.206)	(5.259)*	(4.819)				
Respondent's income from wage-emp. (UGX 1000)	12.436	-0.400	3.689	0.541	-0.006	0.049	0.008	1,482
	(50.007)	(3.615)	(3.829)	(3.435)				
Respondent's total labor hours	90.961	-4.036	6.646	-0.093	-0.021	0.034	-0.000	1,495
	(136.276)	(9.640)	(10.062)	(10.075)				
Respondent's total labor income (UGX 1000)	39.087	-3.975	3.635	-3.767	-0.034	0.023	-0.032	1,379
	(89.143)	(6.139)	(8.325)	(6.305)				
Household-level labor supply and income:								
Household has any business	0.432	0.020	0.002	0.027	0.028	0.003	0.039	1,496
	(0.496)	(0.036)	(0.036)	(0.036)				
Total hh hours in self-emp.	125.446	-3.269	-1.499	-3.204	-0.013	-0.006	-0.013	1,490
	(177.994)	(12.640)	(12.965)	(12.633)				
Total hh business profits (UGX 1000)	45.700	-7.724	3.287	-6.389	-0.038	0.014	-0.032	1,269
	(168.220)	(11.066)	(13.058)	(10.680)				
Total hh hours in wage-emp.	88.658	-0.506	6.717	-1.235	-0.002	0.031	-0.006	1,494
	(142.951)	(10.828)	(10.954)	(10.873)				
Total hh income from wage-emp. (UGX 1000)	77.019	-25.087	-5.801	5.017	-0.086	-0.018	0.011	1,341
	(259.272)	(15.532)	(16.821)	(24.283)				
Total hh labor hours	213.902	-2.744	5.299	-3.745	-0.009	0.018	-0.013	1,488
	(200.535)	(15.082)	(15.444)	(14.960)				
Total hh labor income (UGX 1000)	133.700	-35.795	-5.593	-1.514	-0.097	-0.014	-0.003	1,134
	(319.112)	(21.230)*	(23.607)	(30.062)				

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 T1, T2 and T3 respectively (* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$). Columns 5, 6 and 7 reports the normalized difference between the group and T1, T2, and T3 respectively, 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 1000s of Ugandan Shillings. In 2019, 1299.5 UGX=1 USD PPP. For detailed variable descriptions see in Appendix B

TABLE 2: ATTRITION

	Household module (1)	Child development module (2)
Daycare	-0.02	-0.04*
	(0.01)	(0.02)
Cash	-0.02	-0.03*
	(0.01)	(0.02)
Cash and daycare	-0.02	-0.03*
	(0.01)	(0.02)
Observations	1496	1496
Mean in control	0.04	0.10
Daycare = Cash	0.949	0.917
Daycare = Daycare and cash	0.771	0.941
Cash = Daycare and cash	0.818	0.976

Notes: The dependent variable is an indicator =1 if the respondent (column 1) or the target child (column 2) could not be surveyed in at follow-up survey. All regressions control for baseline level of the outcome and the randomization strata: district indicators, an indicator for whether the target child has younger siblings, whether the target child was already attending daycare 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 (* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$). For detailed variable descriptions see in Appendix B

TABLE 3: EFFECTS ON DAYCARE ENROLMENT

	Target child is enrolled in daycare (1)	Target child attends full-day daycare (2)
Daycare	0.09***	0.35***
	(0.02)	(0.03)
Cash	0.09***	0.09**
	(0.02)	(0.04)
Cash and daycare	0.09***	0.37***
	(0.02)	(0.03)
Observations	1373	1372
Mean in control	0.85	0.49
Daycare = Cash	0.773	0.000
Daycare = Daycare and cash	0.963	0.412
Cash = Daycare and cash	0.742	0.000

Notes: All regressions control for baseline level of the outcome and the randomization strata: district indicators, an indicator for whether the target child has younger siblings, whether the target child was already attending daycare 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 (* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$). For detailed variable descriptions see in Appendix B

TABLE 4: EFFECTS ON LABOR SUPPLY AND INCOME

	Self-employment				Wage labor		Total	
	Any business	Hours worked	Revenues (UGX 1000)	Profits (UGX 1000)	Hours worked	Income (UGX 1000)	Hours worked	Income (UGX 1000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Household								
Daycare	-0.02	3.33	101.14**	19.90**	13.10	20.45	13.81	42.58**
	(0.03)	(11.68)	(45.17)	(9.71)	(12.53)	(14.20)	(15.91)	(17.72)
Cash	0.16***	43.57***	117.36**	9.63	-10.46	-3.81	32.19**	7.16
	(0.03)	(12.55)	(58.66)	(8.08)	(12.15)	(11.71)	(15.58)	(13.88)
Cash and daycare	0.14***	52.79***	131.47***	51.92**	-22.13*	-13.26	29.90*	40.97
	(0.03)	(12.49)	(44.05)	(25.66)	(11.75)	(12.28)	(15.65)	(30.00)
Observations	1414	1413	1414	1414	1411	1372	1410	1372
Mean in control	0.46	128.05	159.55	44.83	129.42	96.10	256.77	141.22
Daycare = Cash	0.000	0.002	0.817	0.338	0.066	0.109	0.273	0.064
Daycare = Daycare and cash	0.000	0.000	0.606	0.233	0.004	0.034	0.340	0.961
Cash = Daycare and cash	0.629	0.511	0.838	0.104	0.334	0.486	0.890	0.274
Panel B: Female Respondent								
Daycare	0.04	8.30	66.84**	8.70	-6.83	-4.00	0.93	5.29
	(0.03)	(9.04)	(32.74)	(5.85)	(5.58)	(3.93)	(9.84)	(6.87)
Cash	0.20***	44.01***	75.79**	10.15*	-10.51*	-7.06*	30.67***	4.37
	(0.03)	(10.17)	(37.85)	(5.39)	(5.54)	(3.85)	(10.74)	(6.60)
Cash and daycare	0.18***	41.18***	64.94***	17.79***	-16.28***	-7.45*	23.45**	10.82
	(0.03)	(10.02)	(23.94)	(5.74)	(5.08)	(4.40)	(10.50)	(7.05)
Observations	1414	1414	1414	1414	1414	1397	1414	1397
Mean in control	0.31	78.00	92.78	25.01	30.58	20.70	108.58	45.97
Daycare = Cash	0.000	0.001	0.849	0.824	0.503	0.462	0.007	0.903
Daycare = Daycare and cash	0.000	0.001	0.960	0.190	0.059	0.470	0.037	0.497
Cash = Daycare and cash	0.513	0.802	0.792	0.229	0.245	0.933	0.536	0.404
Panel C: Father								
Daycare	-0.01	-3.48	26.46	9.41*	10.67	22.15*	7.90	30.28**
	(0.02)	(7.00)	(25.25)	(5.62)	(9.23)	(13.21)	(10.11)	(13.96)
Cash	-0.02	-3.06	48.47	2.41	3.96	10.86	1.53	13.21
	(0.02)	(7.41)	(47.10)	(6.19)	(8.99)	(10.47)	(10.04)	(11.88)
Cash and daycare	0.02	11.46	69.62*	38.69	3.24	-2.51	15.22	36.78
	(0.02)	(7.46)	(36.84)	(25.25)	(9.39)	(11.07)	(10.53)	(28.82)
Observations	1246	1325	1326	1326	1323	1298	1322	1298
Mean in control	0.15	39.58	58.15	16.39	71.11	56.63	109.78	73.07
Daycare = Cash	0.755	0.956	0.654	0.275	0.472	0.428	0.536	0.260
Daycare = Daycare and cash	0.174	0.052	0.281	0.256	0.444	0.102	0.498	0.831
Cash = Daycare and cash	0.112	0.071	0.705	0.148	0.939	0.281	0.200	0.412

Notes: All regressions control for baseline level of the outcome and the randomization strata: district indicators, an indicator for whether the target child has younger siblings, whether the target child was already attending daycare 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 (* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$). All monetary values are in 1000s of Ugandan Shillings. In 2019, 1299.5 UGX=1 USD PPP. For detailed variable descriptions see in Appendix B

TABLE 5: EFFECTS ON RESPONDENT'S LABOR SUPPLY AND INCOME – HETEROGENEITY BY HAVING A YOUNGER CHILD

	Self-employment				Wage labor		Total	
	Any business	Hours worked	Revenues (UGX 1000)	Profits (UGX 1000)	Hours worked	Income (UGX 1000)	Hours worked	Income (UGX 1000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Daycare	-0.04	-18.34	-30.62	-4.07	5.94	-6.97	-9.81	-9.28
	(0.05)	(16.51)	(26.72)	(7.52)	(9.69)	(6.78)	(17.83)	(10.24)
Cash	0.21***	25.73	129.75	14.92	-5.75	-7.22	16.48	7.26
	(0.06)	(18.55)	(119.74)	(11.01)	(8.06)	(6.16)	(18.40)	(12.51)
Cash and daycare	0.23***	44.67**	46.27	9.53	-3.13	-9.69	40.31**	0.48
	(0.06)	(19.11)	(41.50)	(9.86)	(8.29)	(6.21)	(19.55)	(11.42)
No younger child	-0.02	-13.07	-16.04	-1.02	15.21**	2.30	2.96	1.54
	(0.04)	(13.91)	(27.13)	(6.85)	(7.62)	(5.67)	(14.44)	(8.84)
Daycare × No younger child	0.11*	36.85*	134.29**	17.63*	-17.73	4.11	14.82	20.13
	(0.06)	(19.61)	(52.81)	(10.68)	(11.82)	(8.22)	(21.31)	(13.40)
Cash × No younger child	-0.01	25.32	-73.11	-6.38	-6.77	0.27	19.44	-3.72
	(0.08)	(22.16)	(122.71)	(12.65)	(10.72)	(7.67)	(22.56)	(14.83)
Cash and Daycare × No younger child	-0.08	-4.54	26.08	11.47	-18.28*	3.12	-23.14	14.41
	(0.07)	(22.44)	(50.60)	(12.06)	(10.40)	(8.36)	(23.14)	(14.36)
Observations	1414	1414	1414	1414	1414	1397	1414	1397
Control mean if younger child	0.31	80.20	89.49	21.27	19.64	18.79	99.84	39.97
Control mean if no younger child	0.31	77.12	94.10	26.51	34.96	21.47	112.07	48.38
If there is no younger child at baseline:								
Daycare effect	0.07*	18.50*	103.67**	13.57*	-11.78*	-2.87	5.01	10.85
	(0.04)	(10.70)	(44.38)	(7.57)	(6.77)	(4.75)	(11.75)	(8.65)
Cash effect	0.20***	51.04***	56.64**	8.54	-12.52	-6.95	35.92***	3.54
	(0.04)	(12.13)	(26.54)	(6.18)	(7.03)	(4.71)	(13.06)	(7.83)
Daycare and cash effect	0.15***	40.13***	72.35***	21.00***	-21.40***	-6.57	17.16	14.89*
	(0.04)	(11.76)	(29.03)	(6.98)	(6.28)	(5.60)	(12.42)	(8.72)
Daycare=Cash	0.00	0.01	0.32	0.53	0.91	0.41	0.02	0.43
Daycare = Daycare and cash	0.02	0.07	0.52	0.39	0.10	0.54	0.34	0.69
Cash = Daycare and cash	0.31	0.42	0.64	0.09	0.14	0.95	0.18	0.23

Notes: All regressions control for baseline level of the outcome and the randomization strata: district indicators, an indicator for whether the target child has younger siblings, whether the target child was already attending daycare 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 (* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$). All monetary values are in 1000s of Ugandan Shillings. In 2019, 1299.5 UGX=1 USD PPP. For detailed variable descriptions see in Appendix B

TABLE 6: EFFECTS ON RESPONDENT'S LABOR SUPPLY AND INCOME – HETEROGENEITY BY BUSINESS OWNERSHIP

	Self-employment				Wage labor		Total	
	Any business	Hours worked	Revenues (UGX 1000)	Profits (UGX 1000)	Hours worked	Income (UGX 1000)	Hours worked	Income (UGX 1000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Daycare	0.03	-5.27	51.84	9.24	-8.52	-5.41	-13.99	3.72
	(0.03)	(8.18)	(37.03)	(5.92)	(7.27)	(5.37)	(10.09)	(7.90)
Cash	0.26***	47.37***	71.53***	15.52***	-12.97*	-9.98*	31.80***	6.80
	(0.04)	(10.50)	(23.65)	(4.65)	(7.17)	(5.14)	(11.80)	(6.96)
Cash and daycare	0.20***	36.33***	40.04**	11.52***	-18.02***	-8.83	17.41	2.57
	(0.04)	(10.15)	(18.64)	(4.24)	(6.67)	(6.17)	(11.41)	(7.39)
Business owner	0.46***	22.69	30.58	37.80***	-14.78*	-6.64	23.26	19.68
	(0.05)	(20.96)	(50.04)	(11.34)	(8.14)	(5.20)	(19.60)	(12.72)
Daycare × Business owner	0.04	45.95*	52.23	1.68	4.10	3.99	50.88**	7.46
	(0.07)	(24.06)	(74.00)	(14.27)	(10.76)	(7.05)	(24.44)	(15.42)
Cash × Business owner	-0.18**	-10.57	14.99	-15.64	7.41	8.98	-0.69	-6.42
	(0.07)	(25.05)	(111.01)	(14.15)	(10.97)	(7.53)	(25.33)	(15.89)
Cash and Daycare × Business owner	-0.07	16.96	84.67	21.43	4.38	3.97	22.21	27.39
	(0.07)	(24.95)	(68.66)	(16.12)	(9.55)	(7.54)	(24.91)	(17.50)
Observations	1414	1414	1414	1414	1414	1397	1414	1397
Control mean if no business	0.14	33.12	34.11	8.08	37.37	26.72	70.49	34.93
Control mean if business owner	0.66	171.05	214.41	60.12	16.50	8.30	187.55	68.67
If respondent owns a business at baseline:								
Daycare effect	0.07	40.68	104.08	10.92	-4.42	-1.42	36.89*	11.18
	(0.06)	(22.64)	(63.90)	(12.97)	(7.91)	(4.51)	(22.24)	(13.19)
Cash effect	0.08	36.80	86.53	-0.12	-5.57	-1.00	31.11	0.38
	(0.06)	(22.68)	(108.40)	(13.35)	(8.28)	(5.38)	(22.33)	(14.27)
Daycare and cash effect	0.13**	53.29**	124.70*	32.95**	-13.64**	-4.86	39.61*	29.96*
	(0.06)	(22.81)	(65.66)	(15.46)	(6.84)	(4.14)	(22.12)	(15.69)
Daycare=Cash	0.83	0.87	0.88	0.42	0.87	0.93	0.81	0.47
Daycare = Daycare and cash	0.30	0.61	0.80	0.16	0.08	0.36	0.91	0.24
Cash = Daycare and cash	0.40	0.51	0.74	0.04	0.17	0.43	0.72	0.08

Notes: All regressions control for baseline level of the outcome and the randomization strata: district indicators, an indicator for whether the target child has younger siblings, whether the target child was already attending daycare 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 (* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$). All monetary values are in 1000s of Ugandan Shillings. In 2019, 1299.5 UGX=1 USD PPP. For detailed variable descriptions see in Appendix B

TABLE 7: EFFECTS ON CHILD DEVELOPMENT

		Breakdown into components			
	IDELA score	Emergent literacy	Emergent numeracy	Socio-emotional	Motor development
	(1)	(2)	(3)	(4)	(5)
Daycare	0.16***	0.03**	0.02*	0.01	0.05***
	(0.06)	(0.01)	(0.01)	(0.01)	(0.01)
Cash	0.09	0.01	0.02	0.00	0.03*
	(0.06)	(0.01)	(0.01)	(0.01)	(0.01)
Cash and daycare	0.15***	0.04***	0.02	0.01	0.04***
	(0.06)	(0.01)	(0.01)	(0.01)	(0.01)
Observations	1366	1366	1366	1366	1366
Mean in control	-0.00	0.46	0.46	0.44	0.70
Daycare = Cash	0.234	0.334	0.674	0.562	0.056
Daycare = Daycare and cash	0.956	0.491	0.969	0.950	0.523
Cash = Daycare and cash	0.268	0.100	0.706	0.613	0.207

Notes: All regressions control for baseline level of the outcome and the randomization strata: district indicators, an indicator for whether the target child has younger siblings, whether the target child was already attending daycare 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 (* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$). All monetary values are in 1000s of Ugandan Shillings. In 2019, 1299.5 UGX=1 USD PPP. For detailed variable descriptions see in Appendix B

TABLE 8: RESPONDENT'S SUBJECTIVE WELLBEING

	Happiness with life (0 to 10) (1)	Position on ladder of life (0 to 10) (2)	Perceived stress scale (0-40) (3)
Daycare	0.40***	0.31***	-0.58
	(0.15)	(0.11)	(0.38)
Cash	0.81***	0.65***	-1.15***
	(0.16)	(0.12)	(0.37)
Cash and daycare	0.62***	0.42***	-0.78**
	(0.16)	(0.11)	(0.39)
Observations	1414	1414	1414
Mean in control	4.20	3.54	23.63
Daycare = Cash	0.010	0.003	0.136
Daycare = Daycare and cash	0.151	0.325	0.605
Cash = Daycare and cash	0.256	0.063	0.348

Notes: All regressions control for baseline level of the outcome and the randomization strata: district indicators, an indicator for whether the target child has younger siblings, whether the target child was already attending daycare 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 (* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$). All monetary values are in 1000s of Ugandan Shillings. In 2019, 1299.5 UGX=1 USD PPP. For detailed variable descriptions see in Appendix B

TABLE 9: EFFECTS ON BUSINESS ASSETS AND WORKERS

	Investments in business assets (UGX 1000)			Number of workers		
	Household	Respondent	Father	Household	Respondent	Father
	(1)	(2)	(3)	(4)	(5)	(6)
Daycare	16.32	1.13	15.11	-0.00	-0.01	0.01
	(12.79)	(2.76)	(12.66)	(0.12)	(0.10)	(0.06)
Cash	32.34**	15.90*	16.79	0.28**	0.25**	0.00
	(15.10)	(8.48)	(13.62)	(0.13)	(0.11)	(0.06)
Cash and daycare	11.78**	8.47**	1.71	0.29**	0.20*	0.07
	(4.59)	(3.83)	(2.63)	(0.13)	(0.11)	(0.08)
Observations	1413	1411	1322	1413	1414	1325
Mean in control	7.24	4.78	2.36	0.85	0.56	0.24
Daycare = Cash	0.420	0.099	0.930	0.010	0.001	0.837
Daycare = Daycare and cash	0.728	0.076	0.296	0.012	0.002	0.475
Cash = Daycare and cash	0.187	0.428	0.261	0.916	0.575	0.384

Notes: All regressions control for baseline level of the outcome and the randomization strata: district indicators, an indicator for whether the target child has younger siblings, whether the target child was already attending daycare 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 (* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$). All monetary values are in 1000s of Ugandan Shillings. In 2019, 1299.5 UGX=1 USD PPP. For detailed variable descriptions see in Appendix B

ONLINE APPENDIX: MATERIAL NOT INTENDED FOR PUBLICATION

A Appendix Tables

TABLE A.1: BASELINE DESCRIPTIVES AND BALANCE (CONTINUED)

	Control	Basic Difference			Normalized Difference			Sample
	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	size
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Child's father's labor supply and income:								
Child's father has any business	0.140	-0.002	0.013	0.030	-0.003	0.025	0.059	1,359
	(0.348)	(0.026)	(0.027)	(0.028)				
Father's hours in self-emp.	42.718	-2.084	5.773	5.440	-0.013	0.034	0.033	1,355
	(115.020)	(8.677)	(8.993)	(8.825)				
Father's business profits (UGX 1000)	15.708	-10.893	1.642	-5.009	-0.084	0.009	-0.036	1,215
	(125.034)	(7.165)	(9.753)	(7.716)				
Father's hours in wage-emp.	50.865	2.259	-4.973	-3.282	0.014	-0.031	-0.020	1,356
	(113.374)	(8.686)	(8.515)	(8.755)				
Father's income from wage-emp. (UGX 1000)	48.746	-19.274	-9.443	13.649	-0.072	-0.032	0.031	1,262
	(250.747)	(14.671)	(16.173)	(24.895)				
Father's total labor hours	93.146	1.021	1.382	2.741	0.005	0.007	0.013	1,352
	(149.016)	(11.398)	(11.415)	(11.410)				
Father's total labor income (UGX 1000)	70.508	-32.212	-8.476	13.316	-0.105	-0.024	0.027	1,122
	(290.840)	(17.762)*	(20.475)	(29.406)				
Other outcomes:								
IDELA score	0.000	-0.130	-0.115	-0.114	-0.096	-0.084	-0.087	1,324
	(1.000)	(0.074)*	(0.073)	(0.072)				
Happiness (0-10)	5.015	0.151	-0.111	0.123	0.044	-0.033	0.035	1,496
	(2.468)	(0.176)	(0.173)	(0.181)				
Life satisfaction (0-10)	4.119	0.024	-0.229	0.024	0.008	-0.080	0.008	1,496
	(2.079)	(0.148)	(0.146)	(0.153)				
Stress (Cohen's scale)	21.391	0.022	0.433	-0.349	0.003	0.053	-0.043	1,496
	(5.932)	(0.418)	(0.415)	(0.414)				

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 T1, T2 and T3 respectively (* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$). Columns 5, 6 and 7 reports the normalized difference between the group and T1, T2, and T3 respectively, 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 1000s of Ugandan Shillings. In 2019, 1299.5 UGX=1 USD PPP. For detailed variable descriptions see in Appendix B

TABLE A.2: EFFECTS ON LABOR SUPPLY AND INCOME, WINSORIZED

	Self-employment				Wage labor		Total	
	Any business	Hours worked	Revenues (UGX 1000)	Profits (UGX 1000)	Hours worked	Income (UGX 1000)	Hours worked	Income (UGX 1000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Respondent								
Daycare	0.04	8.30	42.06**	6.74	-6.83	-4.10	0.93	3.27
	(0.03)	(9.04)	(21.08)	(4.74)	(5.58)	(3.44)	(9.84)	(6.11)
Cash	0.20***	44.01***	49.49**	9.03**	-10.51*	-7.37**	30.67***	2.50
	(0.03)	(10.17)	(19.68)	(4.56)	(5.54)	(3.32)	(10.74)	(5.97)
Cash and daycare	0.18***	41.18***	63.15***	16.05***	-16.28***	-9.12***	23.45**	8.25
	(0.03)	(10.02)	(20.56)	(4.91)	(5.08)	(3.12)	(10.50)	(6.25)
Observations	1414	1414	1414	1414	1414	1397	1414	1397
Mean in control	0.31	78.00	89.92	24.27	30.58	19.60	108.58	45.67
Daycare = Cash	0.000	0.001	0.758	0.648	0.503	0.335	0.007	0.903
Daycare = Daycare and cash	0.000	0.001	0.393	0.087	0.059	0.120	0.037	0.460
Cash = Daycare and cash	0.513	0.802	0.560	0.178	0.245	0.570	0.536	0.377
Panel B: Father								
Daycare	-0.01	-3.48	18.41	6.23	10.67	13.31	7.90	21.60**
	(0.02)	(7.00)	(15.28)	(4.17)	(9.23)	(9.51)	(10.11)	(10.42)
Cash	-0.02	-3.06	-0.59	-1.96	3.96	7.28	1.53	7.72
	(0.02)	(7.41)	(14.25)	(3.80)	(8.99)	(9.69)	(10.04)	(10.62)
Cash and daycare	0.02	11.46	39.81**	6.49	3.24	-5.50	15.22	2.90
	(0.02)	(7.46)	(17.25)	(4.12)	(9.39)	(9.17)	(10.53)	(10.33)
Observations	1246	1325	1326	1326	1323	1298	1322	1298
Mean in control	0.15	39.58	51.96	15.88	71.11	56.34	109.78	73.07
Daycare = Cash	0.755	0.956	0.227	0.050	0.472	0.552	0.536	0.217
Daycare = Daycare and cash	0.174	0.052	0.252	0.956	0.444	0.052	0.498	0.090
Cash = Daycare and cash	0.112	0.071	0.022	0.041	0.939	0.191	0.200	0.669
Panel C: Household								
Daycare	-0.02	3.33	65.05**	13.47*	13.10	11.41	13.81	28.77**
	(0.03)	(11.68)	(32.04)	(7.62)	(12.53)	(11.02)	(15.91)	(13.51)
Cash	0.16***	43.57***	50.78*	7.39	-10.46	-8.27	32.19**	4.38
	(0.03)	(12.55)	(28.80)	(7.03)	(12.15)	(10.69)	(15.58)	(13.03)
Cash and daycare	0.14***	52.79***	109.94***	23.73***	-22.13*	-16.36	29.90*	7.56
	(0.03)	(12.49)	(31.68)	(7.61)	(11.75)	(10.76)	(15.65)	(13.28)
Observations	1414	1413	1414	1414	1411	1372	1410	1372
Mean in control	0.46	128.05	157.96	44.83	129.42	95.80	256.77	141.22
Daycare = Cash	0.000	0.002	0.690	0.469	0.066	0.081	0.273	0.101
Daycare = Daycare and cash	0.000	0.000	0.245	0.257	0.004	0.014	0.340	0.161
Cash = Daycare and cash	0.629	0.511	0.096	0.053	0.334	0.465	0.890	0.830

Notes: All regressions control for baseline level of the outcome and the randomization strata: district indicators, an indicator for whether the target child has younger siblings, whether the target child was already attending daycare 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 (* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$). All monetary values are in 1000s of Ugandan Shillings. In 2019, 1299.5 UGX=1 USD PPP. For detailed variable descriptions see in Appendix B

TABLE A.3: EFFECTS ON THE TARGET CHILD'S FATHER'S LABOR SUPPLY AND INCOME – HETEROGENEITY

	Self-employment				Wage labor		Total	
	Any business	Hours worked	Revenues (UGX 1000)	Profits (UGX 1000)	Hours worked	Income (UGX 1000)	Hours worked	Income (UGX 1000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Daycare	-0.06	-15.38	20.73	6.99	12.13	-7.01	-0.71	-3.17
	(0.05)	(12.94)	(27.30)	(10.09)	(20.32)	(19.63)	(20.89)	(21.43)
Cash	-0.00	8.30	42.90	9.56	-47.75***	-44.17**	-35.42	-29.93
	(0.05)	(16.16)	(28.61)	(11.97)	(18.17)	(19.55)	(21.85)	(23.00)
Cash and daycare	-0.00	5.69	62.80*	13.96	-3.81	-27.91	4.98	-14.29
	(0.05)	(14.43)	(36.71)	(10.76)	(21.84)	(20.42)	(23.33)	(22.93)
No younger child	0.00	6.18	52.16*	8.91	-41.28**	-38.34**	-30.76*	-28.63
	(0.04)	(10.76)	(27.04)	(9.37)	(16.51)	(17.24)	(17.60)	(19.83)
Daycare × No younger child	0.07	16.36	8.04	3.51	-1.42	40.29	12.37	46.23*
	(0.05)	(15.32)	(43.71)	(12.15)	(22.70)	(25.64)	(23.82)	(27.32)
Cash × No younger child	-0.02	-15.51	7.81	-9.60	71.44***	75.65***	51.23**	59.46**
	(0.05)	(18.14)	(67.35)	(14.19)	(20.83)	(23.02)	(24.48)	(26.78)
Cash and Daycare × No younger child	0.03	7.95	9.54	34.11	10.26	35.08	14.62	70.32*
	(0.05)	(16.89)	(56.08)	(31.31)	(23.91)	(24.31)	(25.96)	(39.68)
Observations	1246	1325	1326	1326	1323	1298	1322	1298
Control mean if younger child	0.19	47.14	51.59	17.78	107.53	92.15	151.58	109.84
Control mean if no younger child	0.13	36.46	60.86	15.82	56.04	42.98	92.49	58.93
If there is no younger child at baseline:								
Daycare effect	0.01	0.98	28.77	10.50	10.72	33.28**	11.66	43.06**
	(0.02)	(8.27)	(33.61)	(6.73)	(10.06)	(16.52)	(11.42)	(17.24)
Cash effect	-0.02	-7.20	50.71	-0.04	23.69**	31.49***	15.81	29.53**
	(0.03)	(8.18)	(63.27)	(7.31)	(10.10)	(12.22)	(10.98)	(13.76)
Daycare and cash effect	0.03	13.64	72.34	48.07	6.45	7.16	19.59*	56.03
	(0.03)	(8.73)	(47.26)	(33.28)	(9.84)	(13.11)	(11.44)	(37.00)
Daycare=Cash	0.23	0.33	0.74	0.19	0.24	0.92	0.73	0.49
Daycare = Daycare and cash	0.42	0.16	0.41	0.27	0.70	0.18	0.52	0.75
Cash = Daycare and cash	0.06	0.02	0.77	0.15	0.11	0.12	0.75	0.49

Notes: All regressions control for baseline level of the outcome and the randomization strata: district indicators, an indicator for whether the target child has younger siblings, whether the target child was already attending daycare 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 (* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$). All monetary values are in 1000s of Ugandan Shillings. In 2019, 1299.5 UGX=1 USD PPP. For detailed variable descriptions see in Appendix B

TABLE A.4: EFFECTS ON CHILD DEVELOPMENT - ATTRITION BOUNDS

			Breakdown into components							
	IDELA score		Emergent literacy		Emergent numeracy		Socio-emotional		Motor development	
	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Panel A: Imputation 5%										
Daycare	0.15***	0.16***	0.02**	0.03**	0.02*	0.02*	0.01	0.01	0.05***	0.05***
	(0.05)	(0.05)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Cash	0.09*	0.10*	0.01	0.02	0.02	0.02	0.00	0.00	0.03**	0.03**
	(0.05)	(0.05)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Cash and daycare	0.16***	0.17***	0.04***	0.04***	0.02*	0.02**	0.01	0.01	0.05***	0.05***
	(0.05)	(0.05)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Observations	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496
Mean in control	0.01	-0.01	0.46	0.46	0.46	0.46	0.44	0.43	0.71	0.70
Daycare = Cash	0.291	0.311	0.397	0.411	0.793	0.819	0.548	0.557	0.064	0.070
Daycare = Daycare and cash	0.887	0.874	0.295	0.291	0.824	0.815	0.810	0.815	0.634	0.641
Cash = Daycare and cash	0.238	0.249	0.058	0.060	0.633	0.648	0.725	0.730	0.171	0.181
Panel B: Imputation 10%										
Daycare	0.15***	0.16***	0.02*	0.03**	0.02	0.02*	0.01	0.01	0.05***	0.05***
	(0.05)	(0.05)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Cash	0.09*	0.11**	0.01	0.02	0.01	0.02*	0.00	0.01	0.03*	0.03**
	(0.05)	(0.05)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Cash and daycare	0.15***	0.17***	0.04***	0.04***	0.02*	0.02**	0.00	0.01	0.04***	0.05***
	(0.05)	(0.05)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Observations	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496
Mean in control	0.01	-0.01	0.47	0.46	0.46	0.46	0.44	0.43	0.71	0.70
Daycare = Cash	0.281	0.322	0.390	0.419	0.781	0.832	0.544	0.562	0.062	0.074
Daycare = Daycare and cash	0.893	0.867	0.297	0.289	0.828	0.810	0.807	0.818	0.630	0.644
Cash = Daycare and cash	0.232	0.254	0.058	0.062	0.626	0.656	0.723	0.732	0.166	0.186
Panel C: Imputation 20%										
Daycare	0.14***	0.17***	0.02*	0.03**	0.02	0.02**	0.01	0.02	0.05***	0.06***
	(0.05)	(0.05)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Cash	0.08	0.12**	0.01	0.02	0.01	0.02*	-0.00	0.01	0.02	0.03**
	(0.05)	(0.05)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Cash and daycare	0.14***	0.18***	0.03***	0.04***	0.02	0.03**	0.00	0.01	0.04***	0.05***
	(0.05)	(0.05)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Observations	1496	1496	1496	1496	1496	1496	1496	1496	1496	1496
Mean in control	0.02	-0.02	0.47	0.46	0.46	0.46	0.44	0.43	0.71	0.70
Daycare = Cash	0.262	0.345	0.378	0.434	0.756	0.858	0.536	0.571	0.057	0.080
Daycare = Daycare and cash	0.906	0.855	0.302	0.286	0.837	0.801	0.802	0.823	0.624	0.652
Cash = Daycare and cash	0.223	0.267	0.056	0.065	0.611	0.671	0.720	0.737	0.157	0.197

Notes: All regressions control for baseline level of the outcome and the randomization strata: district indicators, an indicator for whether the target child has younger siblings, whether the target child was already attending daycare 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 (* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$). ?Imputation x%" provides estimates where we impute to the lower (upper) bound the mean minus (plus) x% of the standard deviation of the observed treatment group distribution to the non-responders in the treatment group, and the mean plus (minus) the same standard deviation multiple of the observed control group distribution to the non-responders in the control group. For detailed variable descriptions see in Appendix B

TABLE A.5: EFFECTS ON BUSINESS ASSETS AND WORKERS, HETEROGENEITY BY HAVING A YOUNGER CHILD

	Investments in business assets (UGX 1000)			Number of workers		
	Household	Respondent	Father	Household	Respondent	Father
	(1)	(2)	(3)	(4)	(5)	(6)
Daycare	-5.08	-5.35	1.42	-0.38***	-0.16*	-0.20*
	(6.74)	(6.60)	(2.76)	(0.14)	(0.09)	(0.12)
Cash	0.32	-8.08	7.13	0.30	0.32**	-0.08
	(7.99)	(5.24)	(6.66)	(0.19)	(0.14)	(0.13)
Cash and daycare	17.65*	12.15	6.81	0.46*	0.36***	0.11
	(10.48)	(8.79)	(6.44)	(0.26)	(0.13)	(0.25)
No younger child	-3.93	-8.37	6.08	-0.02	0.06	-0.10
	(6.17)	(5.44)	(3.78)	(0.18)	(0.15)	(0.11)
Daycare × No younger child	29.68	9.09	18.92	0.52**	0.20	0.29**
	(18.61)	(7.17)	(16.87)	(0.21)	(0.17)	(0.13)
Cash × No younger child	44.10**	32.81**	13.38	-0.02	-0.10	0.11
	(21.71)	(12.85)	(18.64)	(0.24)	(0.20)	(0.14)
Cash and Daycare × No younger child	-7.79	-4.91	-6.81	-0.23	-0.22	-0.04
	(11.51)	(9.69)	(6.96)	(0.30)	(0.19)	(0.26)
Observations	1413	1411	1322	1413	1414	1325
Control mean if younger child	11.47	9.86	0.91	0.84	0.48	0.35
Control mean if no younger child	5.55	2.75	2.95	0.86	0.60	0.20
If there is no younger child at baseline:						
Daycare effect	24.61	3.74	20.34	0.14	0.04	0.10
	(17.40)	(2.81)	(17.21)	(0.16)	(0.14)	(0.07)
Cash effect	44.42**	24.73**	20.51	0.27	0.22	0.03
	(20.42)	(11.50)	(18.23)	(0.16)	(0.15)	(0.06)
Daycare and cash effect	9.85**	7.24*	0.00	0.23	0.14	0.07
	(4.81)	(4.05)	(2.66)	(0.15)	(0.14)	(0.05)
Daycare=Cash	0.46	0.08	0.99	0.33	0.06	0.44
Daycare = Daycare and cash	0.40	0.46	0.24	0.50	0.24	0.69
Cash = Daycare and cash	0.10	0.15	0.26	0.72	0.41	0.64

Notes: All regressions control for baseline level of the outcome and the randomization strata: district indicators, an indicator for whether the target child has younger siblings, whether the target child was already attending daycare 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 (* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$). All monetary values are in 1000s of Ugandan Shillings. In 2019, 1299.5 UGX=1 USD PPP. For detailed variable descriptions see in Appendix B

B List of variables

- *Age of the respondent (target child)* – A continuous variable corresponding to the respondent's (target child's) age in years.
- *Child's father has any business* – A dummy variable equal to one if the target child's father owns any business. If the target child's father is not a member of the household, the variable is set to missing.
- *Father's business profits* – The monetary value (in 1000 UGX) of profit(s) of any business(es) owned by the target child's father (as reported by the female respondent) over the last 30 days. If the target child's father does not own a business, the variable is set equal to zero. If the target child's father is not a household member, the variable is set to missing.
- *Father's hours in self-emp.* – hours spent by the target child's father (as reported by the female respondent) during the past 30 days working in any business he owned. For every business owned by any the target child's father, respondents were asked to report how many days he worked for that business during the past 30 days and in a typical day, for how many hours he worked for the business. The variable combines these two pieces of information for all the businesses owned by the target child's father. If the target child's father does not own a business, the variable is set equal to zero. If the target child's father is not a household member, the variable is set to missing.
- *Father's hours in wage-emp.* – hours spent by the target child's father (as reported by the female respondent) during the past 30 days working for an employer outside the household. For any wage-employment activity the target child's father was engaged in during the past 30 days, respondents were asked to report how many days he worked for that employer during the past 30 days and in a typical day, for how many hours he worked for. The variable combines these two pieces of information for all the wage-employment activities the target child's father were engaged in. If the target child's father did not work for an employer outside the household, the variable is set equal to zero. If the target child's father is not a household member, the variable is set to missing.
- *Father's income from wage-emp.* – The monetary value (in 1000 UGX) of any salary earned by the target child's father (as reported by the female respondent) from working for an employer outside the household during the past 30 days. If the target child's father did not earn any salary working for an employer outside the household during the past 30 days, the variable is set equal to zero. If the target child's

father is not a household member, the variable is set to missing.

- *Father's labor hours* – The sum of the variables *Father's hours in self-emp.* and *Father's hours in wage-emp.*. If the target child's father is not a household member, the variable is set to missing.
- *Father's labor income* – Sum of the variables Father's business profits and Father's income from wage-emp.
- *Gender of target child: male* – A dummy variable equal to one if the gender of the target child is male.
- *Happiness* – The response to the question "How happy are you with your life?", on a scale from 0 to 10.
- *Household Size* – Number of members of the respondent's household.
- *Household has any business* – A dummy variable equal to one if any of the respondent's household's members own any business.
- *IDELA score* – To measure child development, we use the International Development and Early Learning Assessment (IDELA) tool developed by Save the Children (https://idela-network.org/). IDELA measures development across four domains: textitmotor skills, early literacy, early numeracy and socio-emotional skills. For each of the four domains of the IDELA tool, we subtract the control group mean and divide by the control group standard deviation. We then take the unweighted average of all the z-scores, and again standardize to the control group to obtain the IDELA score.
- *Investments in business assets* – Value of assets acquired (bought, received as gift or constructed) for any businesses owned by the relevant household member(s) [either all members, the respondent, or the father of the target child] since 1 January 2019.
- *Life satisfaction* – The response to the question "In your opinion, where are you on the ladder of life at the moment?", answered on a scale from 1 to 10.
- *Number of workers* – Total number of workers (including any household members) who worked in a business owned by the relevant household member(s) [either all members, the respondent, or the father of the target child] on a typical working day over the past 30 days.
- *Perceived stress scale* – We use the perceived stress scale developed by Cohen et al. (1983).

- *Respondent's business profits* – The monetary value (in 1000 UGX) of profit(s) of any business(es) the respondent owns over the last 30 days. If the respondent owns no business, the variable is set equal to zero.

- *Respondent has any business* – A dummy variable equal to one if the respondent owns any business.

- *Respondent hours in self-employment* – hours spent by the respondent during the past 30 days working in any business she owned. For every business they own, respondents were asked to report how many days they worked for that business during the past 30 days and in a typical day, for how many hours they worked for the business. The variable combines these two pieces of information for all the businesses the respondent owned. If the respondent owns no business, the variable is set equal to zero.

- *Respondent hours in wage-employment* – hours spent by the respondent during the past 30 days working for an employer outside the household. For any wage-employment activity they were engaged in during the past 30 days, respondents were asked to report how many days they worked for that employer during the past 30 days and in a typical day, for how many hours they worked for. The variable combines these two pieces of information for all the wage-employment activities the respondent was engaged in. If the respondent did not for any employer outside the household during the past 30 days, the variable is set equal to zero.

- *Respondent's income from wage-employment* – the monetary value (in 1000 UGX) of any salary earned by the respondent from working for an employer outside the household during the past 30 days. If the respondent did not earn any salary working for an employer outside the household during the past 30 days, the variable is set equal to zero.

- *Respondent is mother of the target child* – A dummy variable equal to one if the female respondent is the birth mother of the target child.

- *Respondent total labor hours* – The sum of the variables *Respondent hours in self-employment* and *Respondent hours in wage-employment* variables.

- *Respondent total labor income* – The sum of the variables *Respondent's business profits* and *Respondent's income from wage-employment* variables.

- *Revenues* – The monetary value (in 1000 UGX) of total sales of the all the household businesses owned by the respondent during the past 30 days. If the respondent owns no business, the variable is set equal to zero.

- *Schooling of the respondent* – Number of years of schooling completed by the female respondent.
- *Target child has a younger sibling* – A dummy variable equal to one if the female respondent has at least another child younger than the target child.
- *Target child is enrolled in school/daycare* – A dummy variable equal to one if the target child is enrolled in either half-day or full-day school/daycare.
- *Target child attends full-day daycare* – A dummy variable equal to one if the target child is enrolled in full-day school/daycare.
- *Target child's father in household* – A dummy variable equal to one if the target child's father is a household member.
- *Total hh business profits* – The monetary value (in 1000 UGX) of profit(s) of any business(es) owned by any member of the respondent's household (including the respondent herself) over the last 30 days. If no household member owns a business, the variable is set equal to zero.
- *Total hh hours in self-emp.* – hours spent by any member of the respondent's household (including the respondent herself) during the past 30 days working in any business they owned. For every business owned by any household member, respondents were asked to report how many days the owner worked for that business during the past 30 days and in a typical day, for how many hours they worked for the business. The variable combines these two pieces of information for all the businesses owned by any household member. If no member of the respondent's household owns any business, the variable is set equal to zero.
- *Total hh hours in wage-emp.* – hours spent by any member of the respondent's household (including the respondent herself) during the past 30 days working for an employer outside the household. For any wage-employment activity any member of the respondent's household was engaged in during the past 30 days, respondents were asked to report how many days they worked for that employer during the past 30 days and in a typical day, for how many hours they worked for. The variable combines these two pieces of information for all the wage-employment activities household members were engaged in. If no member of the respondent's household worked for an employer outside the household, the variable is set equal to zero.
- *Total hh income from wage-emp.* – The monetary value (in 1000 UGX) of any salary earned by any member of the respondent's household (including the respondent herself) from working for an employer outside the household during the past 30 days.

If no member of the respondent's household earned any salary working for an employer outside the household during the past 30 days, the variable is set equal to zero.

- *Total hh labor hours* – The sum of the variables *Total hh hours in self-emp.* and *Total hh income from wage-emp.*
- *Total hh labor income* – The sum of the variables Total hh business profits and Total hh income from wage-emp.