

Persistent yet Ameliorable Shocks to Female Entrepreneurship: Experimental Evidence from Kenya

*Francisco Campos, Maria Hernandez-de-Benito, Julian Jamison, Abba Safir, Bilal Zia**

May 2025

While female entrepreneurs face multiple obstacles, it is unclear whether gender gaps worsen during economic crises: women, in particular married women, may be more impacted than men due to these obstacles and social norms, but they may also be less exposed due to their specialized sectors of operation, or if a crisis flattens everyone together. Using a uniquely suited timing with baseline data collected on Kenyan youth just before COVID-19, we examine the impact of randomized grants and business training on the business outcomes of partnered women and men microentrepreneurs two years after the crisis. We find that women were affected by COVID-19 more severely than men, and that the grants significantly mitigate the crisis impacts on business outcomes—business ownership, sales, profits—as well as impact income and well-being. In terms of channels of impact, the grants increase women's labor supply, at the expense of domestic work, leisure time, and childcare hours, while, for men, time is reallocated from wage employment to their business.

*Campos and Safir are from the World Bank (fcampos@worldbank.org and asafir@worldbank.org, respectively); Hernandez-de-Benito is from CUNEF Universidad (m.hernandezdebenito@cunef.edu); Jamison is from the University of Exeter (j.jamison@exeter.ac.uk); and Zia is from Duolingo (formerly from the World Bank) (bilal@duolingo.com). We are deeply grateful to our counterparts in the Government of Kenya, in the Micro and Small Enterprises Authority (MSEA) and in the State Department for Youth (SDY), in particular Olivia Ouko, Augustine Mayabi, Christine Wanjira, Nobby Macharia, Samuel Matonda, Caroline Kioko, Carol Kungu, Lydia Musimi, Christine Wairimu, Magdalene Mbiti, Raphael Koome, and Arnold Ouma. We thank different colleagues who have worked on the design or implementation of the interventions as well as to advance KYEOP in general, in particular Yanina Domenella, Cecilia Paradi-Guilford, Cornelia Tesliuc, Michael Munavu, Indhira Santos, and Kevin Heraniah. We also thank Kie Riedel for outstanding field coordination as well as Naomi Kimani, Georges Poquillon, Aspasea McKenna, and Moulik Shrivastava for field support as well as Innovations for Poverty Action (IPA) for data collection. Funding from the World Bank Group's Umbrella Facility for Gender Equality (UFGE), the Competitiveness Policy Evaluation Lab (ComPEL), the Africa Gender Innovation Lab (GIL), the Africa Social Protection and Jobs Global Practice (SPJ), the Africa Finance, Competitiveness and Innovation Global Practice (FCI), the Research Support Budget (RSB), IPA, and IPA's Women's Work, Entrepreneurship, and Skilling Initiative funded through the Bill and Melinda Gates Foundation are gratefully acknowledged. Maria Hernandez-de-Benito acknowledges financial support from the Spanish Ministry of Science and Innovation Grant PID2021-124237NB-I00. Thi RCT was registered as AEARCTR-0006099. We also thank the Editor in Chief of the Journal of Development Economics, Andrew Foster, and three anonymous referees who significantly contributed to improving the article.

1. Introduction

We study the gendered impacts of government-sponsored business grants and entrepreneurship training during times of economic crisis. Our data cover the COVID-19 crisis period among Kenyan youth, and we evaluate the effects of a randomized youth entrepreneurship program implemented at large scale by the Government of Kenya, targeted at existing entrepreneurs who wanted to expand their businesses and youth who aspired to start one. We document impacts on business, economic, time use, intra-household, and well-being outcomes over the course of approximately two years from the inception of the pandemic, and identify impacts and pathways to recovery for male and female entrepreneurs. We draw on a timely data collection just before the pandemic outbreak, and on two follow-up surveys conducted in the fall of 2020 and of 2021.

Our research addresses an important question on overcoming large economic shocks, especially by women. A growing literature in development economics shows that exposure to economic shocks, such as the one triggered by COVID-19, disrupts labor markets and small businesses in low- and middle-income countries (Loayza et al. 2007; Miguel and Mobarak, 2022). This labor market volatility exacerbates the increasing employment challenge facing working-age youth, especially in sub-Saharan Africa (Brooks et al. 2014, Fox et al. 2016).

These constraints are particularly relevant for women, who face additional barriers from social norms around employment and family responsibilities (Buvinic et al. 2016; Hardy and Kagy 2018; Jayachandran 2021). Previous studies have shown that the pandemic exacerbated pre-existing challenges for young workers, disproportionately affecting women by increasing family care needs and domestic burdens, which further limited their labor supply and income generation (Andrew et al. 2020; Domenella et al. 2021; Egger et al. 2021; Kugler et al. 2023; Alfonsi, Namubiru, and Spaziani 2023). Women also tended to own less profitable businesses, reducing their resilience to economic shocks (Hardy and Kagy 2020; Torres et al. 2023).

However, in places where women-owned businesses were less dependent on the overall economy and more concentrated on basic needs occupations and home-based activities, the pandemic-induced economic shock may have been less harmful (Afridi, Dhillon, and Sanchari 2023). This trade-off may be particularly salient for married individuals—given likely higher childcare responsibilities—or households with multiple incomes depending on intra-household income allocation (Bernhardt et al. 2019; Delecourt et al. 2022).

To shed light on these questions, we focus this paper’s analysis on youth living with a domestic partner (hereafter referred to as “married youth/women/men”). We find that the COVID-19 crisis negatively impacted married women’s business outcomes more than men’s in terms of business ownership, as well as sales and profits. New businesses opened by women during the pandemic also performed worse than those opened by men. Female

entrepreneurs were less likely to adapt their businesses through online sales, remote work, or by accessing government support or loans. Beyond entrepreneurship, the pandemic also widened gender disparities in earnings. Time-use data suggest that the burden of increased domestic work, particularly childcare following school closures, fell disproportionately on women, with the gender gap in childcare hours rising by 30%. This additional domestic burden appears to have contributed to women's reduced working hours and helps explain the widening gender gaps in business outcomes.

Using randomized vignettes assessing perceived changes in household dynamics, we also find that women were significantly more likely than men to identify with scenarios indicating a deterioration in their bargaining position, even nearly two years after the pandemic began. These results align with broader evidence showing the pandemic's negative impact on women's decision-making power and increased risk of intimate partner violence (Leslie and Wilson 2020; Aguero 2021; Mahmud and Riley 2021; Bhalotra et al. 2024).

Having found such economically significant gender differences in business and household outcomes, we assess whether randomized US\$ 360 business grants and a training program helped protect women's businesses differently from men's during the COVID-19 pandemic. The programs evaluated were implemented by the Government of Kenya, with financial support from the World Bank, under the Kenya Youth Employment and Opportunities Project (KYEOP).

The grants were impactful in boosting business performance among women as much as among men, with effects relative to the control group between 25% and 45% for men and women-owned businesses. While various programs have found impacts for male-owned but not female-owned businesses of small cash grants (Fafchamps et al. 2014), and for businesses owned by husbands of female recipients of such grants (Bernhardt et al. 2019), we find that married women benefitted from the business grants in the context of the pandemic, including among women whose spouses were also entrepreneurs.

Beyond business outcomes, the grants had significant impacts on other aspects of women's economic behavior and well-being. Examining possible channels of impact, we observe that the grants increased both men's and women's likelihood of being self-employed. For women, the grants—particularly when combined with business training—led to a transition into the labor force altogether, at the expense of household duties and leisure time. For men, in contrast, it led to a transition from wage employment to self-employment, with no change in overall working hours. In theory, this could have ambiguous welfare effects for women, but in practice the grants had strong positive impacts on survey-based subjective well-being outcomes.

Our results contribute to several strands of the literature. They contribute to the mixed evidence (so far) regarding the pandemic crisis's impact on gender gaps in developing

economies. We find, contrary to Alon et al. (2022) and Contreras-Gonzalez et al. (2022) persistent gender gaps even two years after the pandemic, more in line with findings from Alfonsi, Namubiru, and Spaziani (2023). Our study assesses in detail the intra-household income gaps, showing sustained relative declines for women vs men (relative to their spouses). We also contribute directly to the literature documenting the heterogenous impact of the pandemic on women’s versus men’s businesses (Torres et al. 2023).

Second, we provide evidence on the role of grant interventions in mitigating crises, in limiting the widening of income and employment gender gaps, and in buffering negative shocks to married women’s intra-household positions.¹ In this regard, the two most related papers are Brooks et al. (2022) and Domenella et al. (2021). The former evaluates the impact of delivering a one-time unconditional cash transfer in May 2020 to a randomly selected group of female microenterprises in an informal setting in Nairobi County, with endline data collected in August 2020. Their study only focuses on female entrepreneurs, while we also collect data from men. Our sample also covers 15 different counties in the country. Additionally, we evaluate longer-run effects two years after the pandemic onset. Domenella et al. (2021) builds on the same underlying KYEOP project sample, but it is focused on the short-run dynamics of the crisis for all youth entrepreneurs. In contrast, our paper focuses on the gender-differentiated consequences of the COVID-19 shock, as well as by measuring a considerably wider set of individual and intra-household outcomes. In particular, the data on time-use and the vignettes allow us to directly analyze key gender-specific potential mechanisms and pathways. Furthermore, this paper focuses on a longer-run evaluation (approximately two years as opposed to several months), allowing us to understand whether the interventions’ impacts are sustained.

Finally, by examining channels of impact of both the economic shock and business support to mitigate its impact, we contribute to the broader literature on performance gaps between male and female businesses (Nix, Gamberoni, and Heath 2016; Jayachandran 2021), notably regarding self-control issues (Fafchamps et al. 2014), expropriation issues (Fiala 2017; Gazeaud et al. 2023; Riley 2024), interactions between cash and training (de Mel, McKenzie, and Woodruff 2014), and response to shocks and differential adaptation from mitigating circumstances. In our paper, we make some of these channels more precise via the vignette questions and the time-use surveys.

The next section describes the background of the paper. Section 3 details the setting and data. Section 4 outlines the empirical strategy and the effect of the crisis on gender gaps. In section 5, we present the evidence on the impacts of the interventions on youth outcomes, and section 6 presents a discussion of the results and concludes.

¹ Bharadwaj and Vogl 2016; Bottan et al. 2021; Gulesci, Puente-Beccar, and Ubfal 2021; Decker et al. 2022; Alfonsi, Namubiru, and Spaziani 2023; Londoño-Vélez and Querubin 2022.

2. Background

In recent years, policy makers have aimed to reduce African youth unemployment and underemployment by supporting ambitious training and employment programs (Mckenzie and Woodruff 2014; Bardasi et al. 2021; McIntosh and Zeitlin 2022).

The KYEOP is a large youth employment project implemented by the Government of Kenya, financed by the World Bank, with calls for applicants every six months from 2018 to 2023. The project's objectives were to increase employment and earning opportunities among vulnerable youth by providing skills training, entrepreneurship support, and access to relevant job market information. In each call, the Kenyan Government launches a wide-spread campaign including broadcast and social media and the appointment of youth officers at the county level aimed to support mobilization of participants reaching to local stakeholders, print and social media channels, distribute copies of application materials, and host informational events.

This paper focuses on one of the interventions of KYEOP, the self-employment component which provides selected youth with the following forms of support to help them start or grow their business: (a) business grants of Ksh. 40,000 (equivalent to about US\$ 360); (b) business development services (BDS) in the form of classroom training, one-on-one counseling visits, and an SMS-based digital self-paced course; or (c) grants and BDS. The eligible population are youth aged 18-29 years with no more than secondary education and who are unemployed or working in vulnerable jobs. Table C1 compares key characteristics of the youth recruited in our study with those of a representative sample of married youth aged 18-29, living in the same fifteen counties, obtained from the Kenya Continuous Household Survey.² As expected, given the voluntary recruitment and interest in boosting entrepreneurship, KYEOP participants are, on average, more likely to be working on their own business and women in the program are also more likely to be engaged in any economic activity.

The business grants of Ksh. 40,000 are quite substantial for the local context, equivalent to approximately seven times the monthly average income earned from primary activity at baseline for women in our sample, and four times for men.³ The grant is equivalent to approximately two months of baseline average sales, and six and eight months of average profits for male and female entrepreneurs, respectively. The grants were distributed as digital payment through bank accounts in two tranches. To receive the grant, participants had to attend a brief orientation session where they were given details about the program's

² The Kenya Continuous Household Survey (KCHS) is representative of each county annually, and nationally representative for each quarter. In Table C1, we compare the sample of this paper at baseline (January-February 2020) with the KCHS of 2019 and the first quarter of the KCHS of 2020.

³ A possible concern is that sizeable grants like these could cause negative externalities for competitors, especially during a crisis. Although we are not able to directly test this, McKenzie and Puerto (2021) find minimal spillovers of an impactful training program in a very similar sample in Kenya. In addition, the grants are implemented throughout the country, with no particularly concentrated targeting on a specific county, and therefore with limited risks of spillovers.

objectives and requirements. In our sample, given the COVID-19 restrictions, monitoring was mainly conducted via telephone.

The BDS program takes a multi-pronged approach to improving youth's business management practices. It consists of a four-day classroom training, four months of access to a digital BDS repository, and seven personalized sessions with a business counselor. The curriculum covers a range of topics, including business idea formation, business models, funding sources, legal registration, marketing, pricing, and record-keeping.

3. Methodology and Sample Characteristics

3.1 Experimental Setting and Data

The call for youth to apply to the fourth round of the KYEOP took place in June-August 2019. Out of the over 36,000 eligible participants to the self-employment component, 9,380 individuals were randomly selected to complete an in-person baseline survey in January and February 2020. Immediately after, the 9,380 youth applicants were randomly allocated into treatment groups. Randomization was stratified by gender, county, and whether youth were transitioning from a prior KYEOP component (11% of the sample). Youth could not request a change in their treatment status. Fifty-seven percent of the sample was assigned to receive a business grant (35% of the sample in combination with BDS), 35% was assigned to the BDS treatment without the grant, and 8% was assigned to neither the grant nor BDS. The intervention rollout was organized around three clusters, each consisting of five counties. The three clusters received the interventions at different times, but all interventions were implemented by December 2021 (Figure 1, see further details in Tables A1 and A2).

With the goal of studying the gendered impacts of the pandemic and the potential mitigating effects of the KYEOP program, we secured funding to conduct follow-up phone surveys approximately one and two years after the crisis started with a focus of targeting those living with a domestic partner (our broad definition of “being married”), which represented 34% of the baseline sample. We focused on married women given the high risks of household expropriation identified in the literature, and the importance of understanding how intra-household dynamics were impacted by the crisis.⁴

This paper uses data from three sources: (i) in-person baseline survey collected in January and February 2020, prior to any COVID-19 related restrictions were adopted; (ii) a follow-up phone survey conducted between October and December 2020⁵ to collect data on the gendered impacts of the crisis on individuals' business, economic, and time-use outcomes; and (iii) a second follow-up phone survey conducted between October and

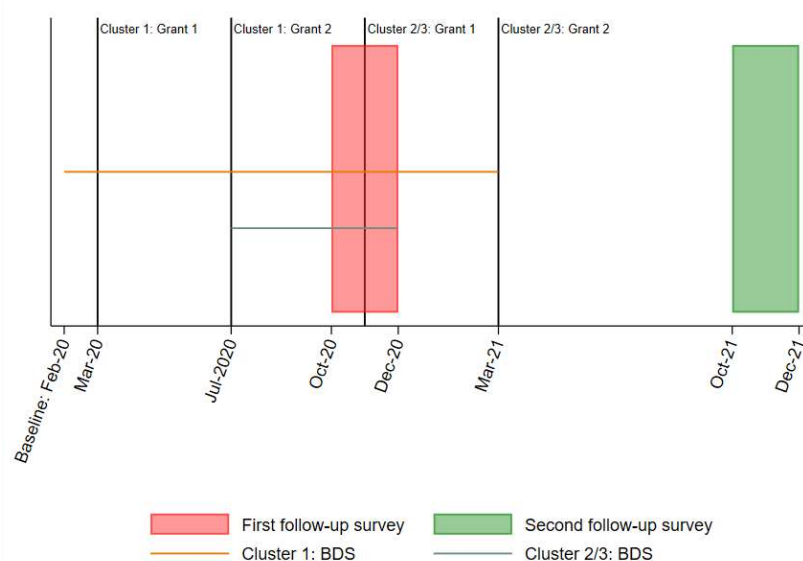
⁴ The married sample is, on average, about two years older and less educated, and exhibits higher economic participation than those that are not married. However, business performance is very similar across both groups (Table C2).

⁵ This survey included questions about respondents' time-use and their spouses' income as of February 2020.

December 2021.

Figure 1 shows the timing of the interventions in relation to the timing of the two follow-up surveys. At the time of the first follow-up survey, only the first cluster had received the entirety of the grant, and BDS interventions were ongoing. At the time of the second follow-up survey, both grant and BDS interventions had been fully implemented with high take-up rates of 89% for grants and 82% for BDS.⁶

Figure 1: Timeline of interventions and follow-up surveys



Among those interviewed at baseline, we randomly sampled 2,000 individuals out of the 2,696 applicants that complied with the following criteria: (i) be married or living together at baseline (34% of sample); and (ii) was not a randomly selected respondent of the other post-COVID surveys (15% of the partnered sample) (Domenella et al. 2021). The random sampling was stratified by county, gender, and treatment status with respect to business grants and BDS. The geographic counties were divided in three clusters. The sampling strategy consisted of selecting 85% of the available “pure controls” in each of the clusters. The rest of respondents within each cluster were selected as follows: 60% grants recipients, and 40% non-grants recipients. We kept a gender ratio of 55% female, 45% male in each component.

The final sample from the first follow-up survey consists of 1,888 respondents, after accounting for non-response and dropping six individuals who had been incorrectly labelled as married or living together at the time of the baseline survey. The second follow-up survey interviewed 1,856 individuals, of which 1,715 of them had also

⁶ For grants, disbursement of the first tranche was conditional to attending the one-day grant orientation session. For BDS, take-up is calculated here as the percentage, among those assigned to BDS, who attended at least one day of the classroom training. The take-up rates of the respondents included in this paper’s analytical sample are 92.73% for grants and 84% for BDS. The take-up rates are not statistically different by gender.

participated in the first follow-up survey. These 1,715 individuals (55% female) comprise this paper's main analytical panel sample. Response rates were similar across treatment/comparison groups and there is no evidence of differential attrition by treatment status (Table C3).⁷

3.2 Key Data Variables

The baseline survey collected data on individual demographics, labor, income, and business outcomes. To study the economic impacts of the pandemic, and in particular, the mechanisms through which the effects may differ by gender, the follow-up phone surveys included a subset of the economic and business outcomes from the baseline and introduced new modules that focused on pandemic-induced mitigation strategies, time use, intra-household dynamics, and subjective well-being. Appendix B describes the specific variables used in this paper.

In terms of business sales and profits, the follow-up surveys, due to their phone format, only collected these data with respect to the primary business the respondent spent the most hours at the time. Therefore, for comparability reasons, in the main analysis of business outcomes, we restrict the sample to those individuals that reported owning only one or zero businesses at baseline (91% of the sample), although we will also present results pooling all respondents with businesses at endline. In addition, the baseline and 2021 follow-up surveys also gathered comparable data on labor supply and income earned from other activities.⁸ In the follow-up surveys, we also gathered information on the income of the respondent's spouses.

To investigate the impacts of the pandemic on domestic and childcare needs, the follow-up surveys collected data on time use through a 24-hour recall diary. Participants were asked to report the number of hours spent on various activities during a typical working day. In the follow-up survey conducted in 2020, we also inquired about their time use prior to COVID-19, phrasing the question as a typical working day in February 2020. To mitigate survey design biases, we randomized the order in which participants were asked about their time use in February 2020 or at the time of the follow-up survey. In the 2021 follow-up survey, we only asked about their current time use.

⁷ Prior to the first follow-up survey, we randomly selected 2,382 eligible individuals (2,000 target sample + 382 in a replacement list), stratified by county, gender, and treatment status. In Table C3, we include the full set of 2,382 individuals randomly selected for the follow-up surveys and run regressions where the dependent variable equals one if the respondent was not interviewed, separately for each follow-up survey. We show that non-response is not statistically different by treatment status and shows no treatment heterogeneity by gender or other baseline characteristics, including secondary education, entrepreneurship status, and having children under age four.

⁸ In particular, the surveys first asked the respondent whether in the last week they had worked on any of the following activities for at least one hour: employee for compensation, own business, own farm/livestock, helped in a business/enterprise, helped in an agricultural activity/livestock, volunteer, and intern/apprentice. We construct an "income from primary activity" variable with their income earned in the last completed month, replacing it with a zero if the question was not administered because they did not participate in any of the listed activities. We also add the monetary value of any in-kind compensation.

In the follow-up surveys, we also gauged the respondents' perceptions of changes in intra-household dynamics since the pandemic outbreak by presenting them with three vignettes. We randomized the order and language of the vignettes, which either presented scenarios that improved or worsened the respondents' intra-household position. We applied the same conceptual randomization to the three vignettes. The first vignette describes an individual who feels that, since the outbreak of COVID-19, their partner controls more (or less) than before how the household money is spent. The second vignette describes an individual who feels that their voice is heard less (or more) inside the household when it comes to making important decisions than it was six months ago. The third vignette describes an individual who feels that their household's well-being depends more (or less) than before COVID-19 on her partner's income. The hypothetical individuals described in the vignettes had the same gender as the respondents and had common names in the Kenyan context. We then asked the respondent if they were like the person described after each of the three vignettes. If the answer was "yes", we followed up with the question "Are you completely the same or somewhat the same?" If the answer was "no" the follow up question was "Are you completely different or somewhat different?"

Finally, the follow-up surveys included questions about the respondent's subjective well-being. This included perception of current and future life quality, current food security, as well as satisfaction with their current work-life balance.

3.3 Pre-COVID Summary Statistics and Balance

At baseline, before COVID, our sample comprised youth with an average age of 26 years old and around 70% of them had completed secondary education (Table 1). In terms of family structure, female respondents lived in slightly larger households than their male counterparts, and resided with a larger number of children, although men lived with more young children under the age of four, consistent with men in the sample having their first child at an older age than women (24.1 vs 21.6).

In early 2020, women in our study earned a lower income than men and had fewer sources of income. Although 58% of women and 62% of men were already business owners at baseline, there were gender gaps in sales and profits, consistent with the literature in the region of high participation rates and gaps in business performance (World Bank, 2019). Table C4 shows that there were also baseline gender differences in the types of business sectors, with women more likely to own businesses in retail trade as well as in accommodation and food services, while less likely to own businesses in the agricultural, information and communication, manufacturing, and transportation sectors.

Following the randomization design, baseline characteristics of both female and male respondents in the grant vs. non- grant interventions are well balanced (columns (4) to

(11) in Table 1).

4. COVID-19 in Kenya: Increased Gender Gaps Among Youth Entrepreneurs

The COVID-19 crisis disrupted labor markets and business operations in Kenya. The government responded in mid-March 2020 with restaurant and bar closures, bans on gatherings over five people, flight suspensions, a nationwide curfew, and mobility restrictions in some counties. The first infection peak occurred in July–August 2020, followed by waves in October–December 2020 and April–May 2021. Schools closed on March 16, 2020 and fully reopened in January 2021, only to shut down again from March to May 2021 due to renewed restrictions.

Early evidence documented large negative impacts of COVID-19 on economic activity and households' living standards in Kenya (Miguel et al. 2020; Janssens et al. 2021; Miguel and Walker 2021; Heemann, Pape, and Vollmer 2022). The impacts on the Kenyan economy were particularly felt in the tourism and service industries, remittances, and cash and export crops. This led to a sharp increase in the unemployment rate, which more than doubled to 10.4% in the second quarter of 2020 (World Bank, 2020). Average sales and profits among entrepreneurs declined by nearly 40% and 50% respectively during that initial period (World Bank, 2020). The government put in place loan payment deferral programs but only 40% of microentrepreneurs were aware of them, with awareness even lower (10%) for other assistance programs provided by the government and NGOs. Take-up was minimal for all of them (World Bank, 2020). The government also launched a labor-intensive public works program in urban informal settlements in April 2020, which is estimated to have reached about 280,000 youth.⁹

Prior research highlights gender disparities in COVID-19's impact in Kenya. Between February and June 2020, wage workers' hours dropped by 23% on average, but women experienced a steeper 30% decline, leading to greater earnings losses (World Bank, 2020). Xu, Delius, and Pape (2022) show that female-headed households, already poorer pre-pandemic, relied more on social networks to cope with shocks. Biscaye, Egger, and Pape (2022) find that the partial school reopening in October 2020 boosted labor supply for both genders, while both men and women increased childcare hours during the pandemic.

To quantify the impacts, we estimate the following model:

$$(1) \quad Y_{it} = \beta_1 Covid\ 2020_t * Female_i + \beta_2 Covid\ 2021_t * Female_i + \mu_i + \theta_t + \gamma Z_{it} + \varepsilon_{it},$$

where Y_{it} is the outcome variable of respondent i and survey round t . $Covid\ 2020_t$ and $Covid\ 2021_t$ are indicator variables equal to one if the observation was collected during

⁹ World Bank. (2020, October 12). *National hygiene program creates jobs for Kenyans in informal settlements*. <https://www.worldbank.org/en/news/feature/2020/10/12/national-hygiene-program-creates-jobs-for-kenyans-in-informal-settlements>

the 2020 and 2021 follow-up surveys, respectively; $Female_i$ is an indicator equal to one for female respondents; μ_i are individual fixed effects that allow controlling for time-invariant individual heterogeneity; θ_t are survey fixed effects; and Z_{it} include survey-county fixed effects, and survey-baseline business sector fixed effects, including not owning a business as a separate category; ε_{it} is the error term clustered at the individual-level. The main coefficients of interest are β_1 and β_2 , which capture the evolution of the gender gap over time. The identification strategy consists of comparing the outcome variables of male and female respondents relative to February 2020, once controlling for time-invariant individual heterogeneity, common shocks across individuals, and differential time trends based on baseline location and business sector characteristics. For a subset of outcome variables, we only have comparable measures in the baseline and the 2021 survey.

The main results are presented in Table 2. Considering that the sample includes beneficiaries of grants which mitigated the impact of the shock (see section 5), we also present, in Appendix Table C5, the results of estimating equation (1) restricting to non-grant recipients. We also present the results without Z_{it} in Tables C8 and C9 (non-grant).

4.1 Women further impacted by the pandemic on business outcomes

Aligned with prior research, the COVID-19 crisis impacted women's business ownership more negatively than men's, with persistent impacts extending close to two years after the pandemic began (Table 2). Controlling for baseline business sector, including not owning a business as a separate category, women are five percentage points less likely than men to own a business in late 2020, with the gap persisting in late 2021, as compared to baseline (column (1)). Gender gaps widened in both business survival and entry (columns (2)-(3)).¹⁰ In 2021, the gender gap in monthly sales and profits increased by approximately Ksh.3,000 and 1,500, respectively, about an 60-80% increase relative to pre-pandemic gender gaps (columns (4)-(5)).¹¹ These results are not driven by differential gender business closure, as they are the same if we restrict the sample to surviving businesses (Table C7). Women also opened businesses with significantly lower sales and profits than men during this time (columns (6) and (7) of Table 2), with wider gender gaps than business owners had back in early 2020 (Table 1). The estimates on gender gaps are similar among non-grant recipients (Table C5).¹²

¹⁰ We find the same patterns in the intensive margin with number of businesses as the outcome variable (Table C6).

¹¹ As explained in section 3, we collected these data both in the baseline and in the 2021 follow-up survey. However, the latter survey only collected profits and sales data on the primary business where the respondent spent the most hours. Therefore, for comparability reasons, columns (4) to (5) in Table 2 restrict the sample to those individuals who reported owning only one business at baseline (869 respondents) and for which sales and profits data was available at baseline (733 respondents, hence 1,466 observations). Both monthly sales and profits, as well as income-based variables (columns (12)-(13)), are winsorized at the 5% level on both tails.

¹² In addition to measurement error, the fluctuations we observe may partly include temporal volatility that could occur regardless of COVID-19 crisis impacts. We do find that the results are robust to controlling for seasonality through month of interview fixed effects (Table C10).

In terms of mechanisms, previous literature (Alfonsi, Namubiru, and Spaziani 2023; Alon, Coskun, et al. 2022, Alon, Doepke, et al. 2022; Torres et al. 2023), indicates that pre-pandemic sector differences increased domestic responsibilities for women, as well as greater challenges adapting business operations to the crisis may explain these results. Our results suggest that sector of operations can only partly explain the changes in gender gaps (Tables C8 and C11).

While both men and women increased time on childcare, women did so more than men with the gender gap on childcare daily hours increasing by 0.27 in 2020 and still 0.22 in 2021 even after schools reopened, respectively a 31% and 26% increase. We find that women reduce their working hours in 2020, with a gender gap of 0.4 hours. After another year, in the fall of 2021, women have somewhat adjusted working hours by reducing domestic work but, worryingly, they have also decreased sleep (Table C12).¹³ We also find suggestive evidence that gender differences in business ownership are, at least partly, due to mothers being more affected by the rise in childcare hours than fathers (see Appendix C2 and Table C14). Women also had a harder time adapting their business to the crisis. Women were less likely than men to start online sales or remote work arrangements, receive government support,¹⁴ and take a loan to sustain business operations in response to COVID-19 (Table C15).¹⁵

4.2 Intra-Household Income Dynamics and Perceived Bargaining Power

Consistent with the impacts on business outcomes, women's income generating capacity was more negatively affected than men's, including when comparing among spouses. The gender gap in income diversification and in earnings from the primary income-generating activity substantially widened, even two years after the pandemic (columns (11) - (12) of Table 2), increasing by 44% and 33% respectively. Column (13) in Table 2 also shows a substantial increase in the reported spousal income gap for female respondents compared to their male counterparts.¹⁶

Previous research has shown how shocks that reduce an individual's relative ability to

¹³ This result of "catch-up" on work hours in 2021 seems to mask important heterogeneity by prior working status. If we restrict the sample to individuals that were working before COVID-19 (Table C13), the increased childcare needs still come at the expense of an increased gap in working hours in 2021, with gender gap in working hours increasing by 0.58 hours per day, a 34% increase relative to pre-COVID. In addition, we do not find that controlling for the randomized order in which the time use module was implemented at the 2020 follow-up survey affects the results.

¹⁴ We do not observe that obtaining the grants affected the probability of obtaining other types of government help.

¹⁵ Heterogeneity analysis suggests that the increased gender gaps in business ownership and performance are concentrated among young entrepreneurs that switched to online sales and/or remote work arrangements, which are presumably the businesses more directly affected by the lockdowns. Additionally, the increased gender gap in business ownership is not present among those that received government support in response to the crisis (Table C16).

¹⁶ We asked the respondent "Approximately, how much income did your spouse/partner earn in total last month?". It is important to note that this coefficient should be interpreted with caution due to potential measurement error of respondents estimating their spouse's income, and the fact that 6% and 16% of respondents at baseline and follow-up, respectively, did not provide an estimate, with women being twice as likely to not report a number. It is also possible that the crisis may have affected the likelihood of spouses to hide income, or the magnitude of income losses, from each other, and this effect may have been different for each gender. Nevertheless, the change in underreporting or overreporting would need to be significant to fully explain the reported increased spousal income gaps.

contribute to the household may negatively affect their intra-household bargaining power and marital outside options (Chiappori and Mazzocco 2017; Baland and Ziparo 2018). Using the responses to the three different randomized vignettes (see section 3 and Appendix B), we find that the increase in gender gaps in income was accompanied by women being more likely than men to identify with situations where their intra-household position has deteriorated across measures, even almost two years after the pandemic started (Table 3).¹⁷ When using self-reported measures, concerns may arise regarding whether they accurately capture the underlying construct of interest and whether responses are affected by social desirability bias—particularly in this case, due to the debate on the disproportionate impact of COVID-19 on women. First, the vignettes perform well in terms of construct validity, as they correlate with standard proxies of intra-household bargaining power, such as spousal gaps in age, education, income, and assets, as well as who is the main income earner in the household (Table C17). Second, we observe that the gender differences in responses to the vignettes are also present among less educated individuals and women living in rural areas, where exposure to media narratives around the pandemic and gender inequality is expected to be significantly more limited (Tables C18, C19). Third, we find that respondents who identify with weaker intra-household positions have a lower probability of being divorced post-COVID (Table C20), as predicted by a collective model of the household without commitment and with prior empirical evidence. This further supports the validity of the vignettes as proxies for changes in intra-household bargaining power during the crisis.¹⁸

5. Experimental Evidence on Gender Impacts of Business Support during Crisis

Section 4 showed that the COVID crisis had negative effects for both female and male entrepreneurs, but consequences were more severe for women across various outcomes. In this section, we study the effectiveness of randomized business grants and business development services in offsetting these crisis impacts.

5.1 Estimation Strategy

To study the gendered effects of the randomized entrepreneurship interventions during the COVID-19 crisis, we estimate regressions pooling data from the baseline survey and

¹⁷ The results are based on estimating equation (1) without baseline data since the vignettes were not collected then. We include the 1,611 respondents for which responses are available for the three vignettes and both follow-up survey rounds. In column (1) of Table 7, the outcome variable is a standardized index based on the average of the three vignettes: Women's index is 0.58 and 0.43 standard deviations higher than men's in the 2020 and 2021 post-covid surveys, respectively. The gender gap persists in time across the three vignettes, (columns (2) to (4)), although it seems to decrease over time (significant difference between 2020 and 2021 for the index and for vignette V1).

¹⁸ At the 2021 follow-up survey, 112 respondents (71 women and 31 men) were divorced or separated. Table C20 shows that if the respondent identifies with a situation where, since the pandemic outbreak, their partner now controls more than before how household money is spent, the probability of divorce in 2021 decreases by 9 percentage points. If the respondent identifies with a situation where, since the pandemic outbreak, their household's well-being depends more on their spouse/partner's income than before COVID-19, the probability of divorce is also 10 percentage points lower. The effect is twice as large for women, although it is also statistically significant for male respondents.

the 2021 follow-up survey, with the following specification:

$$(2) \quad Y_{it} = \pi_1 Covid\ 2021_t * Grant\ only_i + \pi_2 Covid\ 2021_t * Grant\ only_i * Female_i \\ + \pi_3 Covid\ 2021_t * Grant\ and\ BDS_i + \pi_4 Covid\ 2021_t * Grant\ and\ BDS_i * Female_i \\ + \beta Covid\ 2021_t * Female_i + \mu_i + \theta_t + \gamma Z_{it} + \varepsilon_{it},$$

where *Grant only_i* and *Grant and BDS_i* are indicator variables equal to one if the respondent received the “grant only” or the “grant and BDS” treatments, respectively. The rest of the controls mirror equation (1) and standard errors are clustered at the individual level. The coefficients π_1 and π_3 capture the grant and grant and BDS treatment effects for men. The sum of $\pi_1 + \pi_2$ and $\pi_3 + \pi_4$ correspond to the treatment effects on females of receiving grant only and grant and BDS, respectively, with π_2 and π_4 , capturing the differential gendered effect of the grants only and grants and BDS treatments, respectively.

In equation (2), the omitted categories pool together the BDS only treatment group (620 respondents) and the pure control group (128 respondents). We will also estimate an extension of equation (2) that includes *BDS only_i* and *BDS_i * Female_i* separately and where the omitted category will be the pure control group. In most of the outcomes, we will see how the relevant results are driven by the grant intervention, but we will discuss it whenever the “BDS only” treatment also had an impact on the discussed outcome of interest. In Appendix Figure D1, we also plot the raw mean values of the main outcomes of interest over time by treatment status separating the BDS only and the pure control groups showing how they comove together over time.

As shown in Appendix D1, given the randomization, the results are consistent when estimating an ANCOVA specification, and as expected, the ANCOVA yields more precisely estimated coefficients.¹⁹

In the main specification (2), we use only the baseline and the second 2021 follow-up survey, because at the time of the first follow-up survey (Fall 2020), the interventions had not been fully implemented in some geographical locations (see Figure 1 and Table A1). However, for the outcome of business ownership and number of income sources, for which we have comparable data across all three survey rounds, we will show the evolution of treatment effects over time (Table D3).

¹⁹ The ANCOVA specification is as follows: $Y_i = \alpha_1 Grant\ only_i + \alpha_2 Grant\ only_i * Female_i + \beta_1 Grant\ and\ BDS_i + \beta_2 Grant\ and\ BDS_i * Female_i + \Gamma_i + \gamma Y_{i0} + \theta Missing\ baseline_i + \epsilon_i$, where the data comes from the 2021 follow up survey, Γ_i are dummy variables for the randomization stratification variables, and Y_{i0} are the outcome variables measured during the baseline period, whenever available. Y_{i0} values are set to zero when the baseline value is missing and $\theta Missing\ baseline_i$ is an indicator variable equal to one when this is the case. Hence, for outcomes with missing observations at baseline, the ANCOVA specification have more observations than the individual fixed effects regressions.

5.2 Main Results: Causal Evidence of Receiving Business Grants During COVID

5.2.1 Grants Largely Effective for both Female and Male Business Ownership

The grants, with or without the BDS, led to an increase of 19 to 26 percentage points on the likelihood of having a business at the end of 2021 relative to non-grant recipients (Table 4, columns (1)-(3)). There are no differential treatment effects on business ownership by gender. Still, in relative terms to the comparison group, the impacts are larger for women than for men: for grants, the impacts on business ownership are 40-46% for women against the comparison group vs 31-36% for men.

The grants increase the probability of starting a business by 32 percentage points for men and 33 percentage points for women, representing respectively a 74% and 91% increase relative to the comparison group. While the point estimate for Grant and BDS is higher than for Grant Only, the difference is not statistically significant.

The results are identical with the ANCOVA specification (Table D1). The BDS treatment without the grant did not have an impact on the probability of entrepreneurship (Table D2). In Table D3, we also show that the grants were already largely effective in the fall of 2020, with effects being larger in the counties that had already received the full grant.

To investigate heterogeneous treatment effects, given the specific challenges posed by the pandemic, we first estimate each participant's business survival probability by regressing the likelihood of business survival, as in 2021, among non-grant recipients on baseline characteristics using a probit model (Appendix D2). Figure D2 shows that the grants increase the probability of business survival across the board—except for businesses whose estimated survival probability already exceeds 90% (about 5% of the sample), based on their sector and county of operation. When conducting the analysis separately by gender, we find that the grants were effective for women across the entire distribution, whereas for men, they were most effective among those in the bottom 50% of the business survival probability distribution.

The grants were impactful in supporting entrepreneurship for both the least and most pandemic-affected groups — according to government mobility restrictions and COVID-19 Google mobility trends — for both female and male participants (Table D4). We also find that grants were similarly effective in supporting business survival for retail and non-retail businesses (Table D5).

5.2.2 Grants Were Also Effective for Earnings and Wellbeing

The grants were also effective in boosting business performance of male and female-owned businesses (columns (4)-(7) of Table 4). Male businesses that received the grants saw an increase in monthly sales of Ksh. 8,000 and profits by Ksh. 2,600 (a 45% increase relative to the comparison group). Female businesses that received grants had business

sales that were Ksh. 4,700-5,700 higher, representing also more than 40% increase relative to the comparison group. The impacts on profits for female businesses are also positive of about 25% relative to the comparison group mean, but not statistically significant when restricting to those with only one business at baseline. The ANCOVA results (Table D1) also show similar results.

More broadly, the grants had large impacts for women on the likelihood of having any source of income and the overall income from any source from both businesses and other sources (columns (6)-(8) of Table 4). While 99% of the men in the comparison group already had at least one source of income, and therefore, grants did not have a significant effect at this margin, for women, the grants had a large effect on the likelihood of having any source of income (11 pp, 14% increase relative to the comparison group). In terms of income from primary activity, the grant treatment effects were also positive and large for both men and women (see also ANCOVA results in Tables D1).²⁰ The BDS only intervention was also effective for women's earnings (Table D2).

The positive effects on business and income variables suggest that grants were potentially effective also in improving individuals' well-being. Table 5 shows that the grants had strong positive impacts on subjective well-being outcomes, although less so for women than for men. The point estimates on the differential gendered treatment effects are negative and statistically significant, except for food security, but the grants are still quite impactful for women as compared to the female comparison group. The BDS only intervention was also effective for men's life satisfaction and women's food security, but at half the size of the grant effect (Table D6).

5.3 Channels of Impact

KYEOP applicants included both individuals who already owned a business and those looking to start one, having been either unemployed or in low-quality jobs. Thus, although 50% of the women and 47% of men owned a business at baseline, there was substantial gender heterogeneity in livelihood sources at baseline (Table 1). In early 2020, 18% of women reported having no income source, compared to just 4% of men. Wage employment was also more common among men: it was the main source of income for 35% of men versus 13% of women, and 44% had worked in wage employment in the past month, more than double the share of women (21%).

Therefore, although the point estimates of the treatment effect of grants were the same among female and male entrepreneurs, the transition path towards higher rates of entrepreneurship was not. As per Table 6, the grants increased the probability of women working in the month prior to the survey by 9 to 11 percentage points, and the main

²⁰ Note that, by construction, as explained in section 3, this variable was collected for respondents who reported a main income-generating activity other than their own business, or replaced with profits when their business was the main activity, and it should be read in parallel with the business outcomes reported in columns (4) and (5) of Table 4.

activity through which grants increased labor force participation was their own business. In contrast, there was no grant impact on men's work at the extensive margin, but we observe a significant transition from working in wage employment towards working in their own business.

Consistently, when looking at the intensive margin, the grants increased the number of hours that both men and women work at their own business (column (7)), but while for women there is an increase in total number of working hours, we find no effect on men labor supply at the intensive margin (column (8)). The results are consistent for the ANCOVA specification, and BDS alone has no impact on labor supply (Tables D7, D8).

Further, among women, the impact on working hours was much stronger for the half of the sample who did not own a business at baseline (Tables D9 and D10). Among men, the transition from wage employment towards business is much stronger among those without a business at baseline, although there was also a decline in wage employment among baseline entrepreneurs.

Using the time-use diary, we also confirm that the grants, and in particular the combination of the grants and BDS, were effective at increasing women's working hours in a typical day (Table D11). While there were decreases in domestic work, childcare, and leisure activities for women as a result of the grants, these did not occur for men. If anything, the point estimates suggest the opposite pattern emerges: grants reduce the time men spent working, and increase their time spent on leisure and domestic work activities.

We explore other differential channels by gender and do not find evidence of other female/male specific mechanisms. On business operations, the grants did not help to close the gender gap on women's probability of switching to online operations. The grants also increase the probability of changing the location to the business in response to the crisis, but there is no heterogeneity by gender (Table C15). We also do not find relevant grant treatment heterogeneity by baseline variables that display a significant gender gap or which are strong correlates of intra-household bargaining power (Table D12).

6. Discussion and conclusion

The findings from this study demonstrate that married women entering entrepreneurship and operating small-scale businesses in Kenya were significantly impacted from the COVID-19 crisis in their economic and household activities, and more so than married men. With women also less likely to know about and explore opportunities for mitigating these effects through government programs and access to finance, identifying timely crisis-response mechanisms are of paramount importance for policy targeting and effectiveness.

However, the challenge is that the menu of mechanisms to support female

entrepreneurship is limited, and the evidence is especially weak for supporting resilience in time of crises (Bandiera et al. 2019; Cirera et al. 2021). Against that spare backdrop, this study identifies that providing grants can be a very effective mechanism of supporting (married) women entrepreneurs in a time of a crisis.

The effects are also encouraging when considering the mixed results of grants (Fafchamps et al. 2014) and microcredit (Banerjee, Karlan, and Zinman 2015) to existing female-owned businesses. The impacts of programs are heterogeneous, given the diversity of the profiles of business owners. At one extreme, the large-scale grants in the context of business plan competitions achieve strong impacts on both men- and women-led businesses (McKenzie 2017), but these programs require large funding per beneficiary and are designed so that only a small proportion of participants win (typically around 5%). Hence, they are not targeting the same group of entrepreneurs as those studied in this program.²¹ Furthermore, their selection and due diligence process typically results in a significant time between an entrepreneur's initial application period and the disbursement of the funding. At the other extreme, there are grants in cash transfer and economic inclusion programs, typically targeting very poor groups of the population, which lead to economic impacts including through new self-employment opportunities, especially in rural areas, where entrepreneurship is often a hedge against the volatility in income (Banerjee et al. 2015). In between the two groups (vulnerable households and high growth entrepreneurs), the impact of (small) cash grants on the performance of female entrepreneurs operating existing businesses in urban areas is low. This is in contrast with impacts for male-owned businesses (Fafchamps et al. 2014).

The debate on the reasons for the lack of impact of cash grants for existing women entrepreneurs includes, as first area of explanation, the efficiency or not in the allocation of resources in the household (Bernhardt et al. 2019). In our study, we find that the business grants were effective for female entrepreneurs whose spouses were also entrepreneurs (Table D13). This, of course, does not rule out the possibility that these women still faced greater pressure than their male counterparts to share resources with family, especially during a crisis.

A second area of explanation relates to expropriation pressures (Fiala 2017). Riley (2024) shows that providing loans in mobile money leads to higher levels of business capital and profits compared to a control group who received their loan as cash. In our study, the grants were provided in individual bank accounts. There is a growing body of evidence on the importance of bank accounts for shielding income for business investment (World Bank 2019). Table D14 shows that the effects of the grants are similarly impactful, in terms of business entry, for both women with and without personal savings accounts at baseline, suggesting that the most important element of the package is the grant. In addition, women who already had personal savings accounts at baseline enjoyed larger

²¹ KYEOP included a separate business plan competition targeting high-growth entrepreneurs with potential for job creation on a separate set of participants than the ones in this study.

impacts from the grants on business survival and business performance. This finding is indicative that the positive impacts are not driven by the opening of savings accounts.

In conclusion, while the pandemic-induced crisis had persistent and large negative effects on female entrepreneurship performance, the introduction of mid-size grants (equivalent to eight times the average monthly income earned by women) led to significant improvements on business performance and well-being for women. Assuming no other spillover effects and stable profit returns, it would take about 2.4 years for women entrepreneurs to recoup the grant investment.²² The primary mechanism for the change, as evidenced by time use data, appears to be the transitioning into self-employment on the extensive margin and increasing the number of working hours, as opposed to men who transition from wage to self-employment without changing total working hours.

While resources are necessarily limited during a crisis, it is important for policymakers to be aware that there is indeed scope for making a substantial impact in mitigating the economic shocks in this population. Future work could help to target even more finely in terms of recipient characteristics, business sectors, and timing.

References

Acevedo, I., Castellani, F., Lotti, G. and Székely, M., 2025. Labour market gender gaps in the time of COVID-19 in Latin America and the Caribbean. *Applied Economics*, 57(19), pp.2317-2332.

Afridi, F., Dhillon, A. and Roy, S., 2023. The gendered crisis: Livelihoods and well-being in India during COVID-19. *Feminist Economics*, 29(3), pp.40-74.

Agüero, J.M., 2021. COVID-19 and the rise of intimate partner violence. *World development*, 137, p.105217.

Alfonsi, L., Namubiru, M. and Spaziani, S., 2024. Gender gaps: back and here to stay? Evidence from skilled Ugandan workers during COVID-19. *Review of Economics of the Household*, 22(3), pp.999-1046.

Alon, T., Coskun, S., Doepke, M., Koll, D. and Tertilt, M., 2022. From mancession to shecession: Women's employment in regular and pandemic recessions. *NBER Macroeconomics Annual*, 36(1), pp.83-151.

Alon, T., Doepke, M., Manysheva, K. and Tertilt, M., 2022, May. Gendered impacts of COVID-19 in developing countries. In *Aea papers and proceedings* (Vol. 112, pp. 272-276).

²² This calculation is based on our estimate of the grant's impact on monthly profits for women (column (5) of Table 4), which is 1,381.80 Ksh. Given that the grant is worth 40,000 Ksh, we estimate the payback period as $40,000 / 1,381.80 = 28.9$ months, or roughly 2.4 years.

2014 Broadway, Suite 305, Nashville, TN 37203: American Economic Association.

Andrew, A., Cattan, S., Costa Dias, M., Farquharson, C., Kraftman, L., Krutikova, S., Phimister, A. and Sevilla, A., 2022. The gendered division of paid and domestic work under lockdown. *Fiscal Studies*, 43(4), pp.325-340.

Baland, J.M. and Ziparo, R., 2018. Intra-household bargaining in poor countries. *Towards gender equity in development*, 69(1).

Bhalotra, S., Brito, E., Clarke, D., Larroulet, P. and Pino, F., 2024. Dynamic impacts of lockdown on domestic violence: Evidence from multiple policy shifts in Chile. *Review of Economics and Statistics*, pp.1-29.

Biscaye, P.E., Egger, D. and Pape, U.J., 2022. Balancing Work and Childcare. W. paper.

Bandiera, O., Buehren, N., Goldstein, M., Rasul, I. and Smurra, A., 2019. The economic lives of young women in the time of Ebola: lessons from an empowerment program. *World Bank Policy Research Working Paper*, (8760).

Banerjee, A., Karlan, D. and Zinman, J., 2015. Six randomized evaluations of microcredit: Introduction and further steps. *American Economic Journal: Applied Economics*, 7(1)

Banerjee, A., Duflo, E., Goldberg, N., Karlan, D., Osei, R., Parienté, W., Shapiro, J., Thuysbaert, B., Udry, C., 2015. A multifaceted program causes lasting progress for the very poor: Evidence from six countries. *Science*, 348.

Bardasi, E., Gassier, M., Goldstein, M., and Holla, A., 2021. The Profits of Wisdom: The Impact of a Business Support Program in Tanzania. *The World Bank Economic Review*, Volume 35, Issue 2, May, pp. 328-347.

Bernhardt, A., Field, E., Pande, R. and Rigol, N., 2019. Household matters: Revisiting the returns to capital among female microentrepreneurs. *American Economic Review: Insights*, 1(2), pp.141-60.

Bharadwaj, P. and Vogl, T.S., 2016. Crisis and human biology. *The Oxford handbook of economics and human biology*, pp.52-69.

Blattman, C., Fiala, N. and Martinez, S., 2014. Generating Skilled Self-Employment in Developing Countries: Experimental Evidence from Uganda. *The Quarterly Journal of Economics*, Volume 129, Issue 2, May, pp.697-752.

Bottan, N., Hoffmann, B. and Vera-Cossio, D.A., 2021. Stepping up during a crisis: The unintended effects of a noncontributory pension program during the Covid-19 pandemic. *Journal of Development Economics*, 150, p.102635.

Brooks, K.M., Filmer, D.P., Fox, M.L., Goyal, A., Mengistae, T.A., Premand, P., Ringold, D., Sharma, S., and Zorya, S., 2014. Youth employment in Sub-Saharan Africa (Vol. 2): Full report. Africa development forum, World Bank, Washington, D.C.

Brooks, W., Donovan, K. and Johnson, T.R., 2018. Mentors or teachers? Microenterprise training in Kenya. *American Economic Journal: Applied Economics*, 10(4), pp.196-221.

Brooks, W., Donovan, K., Johnson, T.R. and Oluoch-Aridi, J., 2022. Cash transfers as a response to COVID-19: Experimental evidence from Kenya. *Journal of Development Economics*, 158, p.102929.

Bruhn, M., Karlan, D., and Schoar, A., 2010. What Capital Is Missing in Developing Countries? *The American Economic Review*, 100(2), pp.629-33.

Buvinić, M., Furst-Nichols, R., 2016. Promoting Women's Economic Empowerment: What Works? *The World Bank Research Observer*, Volume 31, Issue 1, February, pp.59-101.

Chiappori, P.A. and Mazzocco, M., 2017. Static and intertemporal household decisions. *Journal of Economic Literature*, 55(3), pp.985-1045.

Cirera, X., Cruz, M., Davies, E., Grover, A., Iacovone, L., Cordova, J.E.L., Medvedev, D., Maduko, F.O., Nayyar, G., Reyes Ortega, S. and Torres, J., 2021. Policies to support businesses through the COVID-19 shock: A firm level perspective. *The World Bank Research Observer*, 36(1), pp.41-66.

De Mel, S., McKenzie, D. and Woodruff, C., 2009. Are Women More Credit Constrained? Experimental Evidence on Gender and Microenterprise Returns. *American Economic Journal: Applied Economics*, 1(3), pp.1-32.

De Mel, S., McKenzie, D. and Woodruff, C., 2014. Business training and female enterprise start-up, growth, and dynamics: Experimental evidence from Sri Lanka. *Journal of Development Economics*, 106, pp.199-210.

Decker, M.R., Bevilacqua, K., Wood, S.N., Ngare, G.W., Thiongo, M., Byrne, M.E., Williams, A., Devoto, B., Glass, N., Heise, L. and Gichangi, P., 2022. Gender-based violence during COVID-19 among adolescent girls and young women in Nairobi, Kenya: a mixed-methods prospective study over 18 months. *BMJ global health*, 7(2).

Del Boca, D., Oggero, N., Profeta, P. and Rossi, M., 2020. Women's and men's work, housework and childcare, before and during COVID-19. *Review of Economics of the Household*, 18(4), pp.1001-1017.

Delecourt, S., Marchenko, A., Fitzpatrick, A. and Lowe, L., 2022. Too close to home: Women's business location and the gender profit gap. Working Paper.

Domenella, Yanina et al. 2020. "Boosting Youth Entrepreneurship with Grants, Human Capital Support, and Behavioral Insights: Experimental Evidence from a Country-Wide Program in Kenya." AEA RCT Registry.

Domenella, Y., Jamison, J.C., Safir, A. and Zia, B., 2021. Can Business Grants Mitigate a Crisis? Evidence from Youth Entrepreneurs in Kenya during COVID-19. World Bank Policy Research Working Paper No. 9874.

Dupas, Pascaline, and Jonathan Robinson. "Savings constraints and microenterprise development: Evidence from a field experiment in Kenya." *American Economic Journal: Applied Economics* 5, no. 1 (2013): 163-92.

Egger, D., Miguel, E., Warren, S.S., Shenoy, A., Collins, E., Karlan, D., Parkerson, D., Mobarak, A.M., Fink, G., Udry, C. and Walker, M., 2021. Falling living standards during the COVID-19 crisis: Quantitative evidence from nine developing countries. *Science advances*, 7(6).

Eissler, S., Heckert, J., Myers, E., Seymour, G., Sinharoy, S. and Yount, K.M., 2021. Exploring gendered experiences of time-use agency in Benin, Malawi, and Nigeria as a new concept to measure women's empowerment (Vol. 2003). Intl Food Policy Res Inst.

Fafchamps, M., McKenzie, D., Quinn, S., Woodruff, C., 2014. Microenterprise growth and the flypaper effect: Evidence from a randomized experiment in Ghana. *Journal of Development Economics* 106 (2014) 211–226.

Farré, L., Fawaz, Y., González, L. and Graves, J., 2020. How the COVID-19 lockdown affected gender inequality in paid and unpaid work in Spain (No. 13434). IZA Discussion Papers.

Fiala, N. 2017. Business is tough, but family is worse: Household bargaining and investment in microenterprises in Uganda. Working Paper.

Fox, L. Senbet, L., and Simbanegavi, W. Youth Employment in Sub-Saharan Africa: Challenges, Constraints and Opportunities, *Journal of African Economies*, Volume 25, Issue suppl_1, March 2016, Pages i3–i15

Gazeaud, J., Khan, N., Mvukiyehe, E., and Sterck, O., 2023. With or without him? Experimental evidence on cash grants and gender-sensitive trainings in Tunisia. *Journal of Development Economics*, 165, 103169.

Gulesci, S., Puente–Beccar, M. and Ubfal, D., 2021. Can youth empowerment programs reduce violence against girls during the COVID-19 pandemic?. *Journal of development economics*, 153, p.102716.

Hardy, M. and Kagy, G., 2018, May. Mind the (profit) gap: why are female enterprise owners

earning less than men?. In AEA Papers and Proceedings (Vol. 108, pp. 252-55).

Hardy, M. and Kagy, G., 2020. It's getting crowded in here: experimental evidence of demand constraints in the gender profit gap. *The Economic Journal*, 130(631), pp.2272-2290.

Hardy, M., Litzow, E., McCasland, J. and Kagy, G., 2023. Gender Differences in Informal Labor-Market Resilience. *The World Bank Economic Review*, 37(1), pp.112-126.

Heemann, M., Johann Pape, U. and Vollmer, S., 2022. The Labor Market Implications of Restricted Mobility during the COVID-19 Pandemic in Kenya: Evidence from Nationally Representative Phone Surveys. *The World Bank*.

Janssens, W., Pradhan, M., de Groot, R., Sidze, E., Donfouet, H.P.P. and Abajobir, A., 2021. The short-term economic effects of COVID-19 on low-income households in rural Kenya: An analysis using weekly financial household data. *World Development*, 138, p.105280.

Jayachandran, S., 2021. Social Norms as a Barrier to Women's Employment in Developing Countries. *IMF Economic Review*.

Kugler, M., Viollaz, M., Duque, D., Gaddis, I., Newhouse, D., Palacios-Lopez, A. and Weber, M., 2023. How did the COVID-19 crisis affect different types of workers in the developing world?. *World Development*, 170, p.106331.

Leslie, E., Wilson, R., 2020. Sheltering in place and domestic violence: Evidence from calls for service during COVID-19. *J. Public Econ.* 189, 104241.

Loayza, N.V., Ranciere, R., Servén, L. and Ventura, J., 2007. Macroeconomic volatility and welfare in developing countries: An introduction. *The World Bank Economic Review*, 21(3), pp.343-357.

Londoño-Vélez, J. and Querubin, P., 2022. The impact of emergency cash assistance in a pandemic: experimental evidence from Colombia. *The Review of Economics and Statistics*, 104(1), pp.157-165.

Mahmud, M., and Riley, E., 2021. Household response to an extreme shock: Evidence on the immediate impact of the Covid-19 lockdown on Economic Outcomes and Well-being in Rural Uganda. *World Dev.* 140, 105318.

McIntosh, C. and Zeitlin, A., 2022. Using household grants to benchmark the cost effectiveness of a USAID workforce readiness program. *Journal of Development Economics*, 157, p.102875.

McKenzie, D. and Puerto, S., 2021. Growing markets through business training for female entrepreneurs: A market-level randomized experiment in Kenya. *American Economic Journal: Applied Economics*, 13(2), pp.297-332.

McKenzie, D., and Woodruff, C. What Are We Learning from Business Training and Entrepreneurship Evaluations around the Developing World?, The World Bank Research Observer, Volume 29, Issue 1, February 2014, Pages 48–82,

Miguel, E., Haushofer, J., Walker, M., and Egger, D. 2020. Economic activity and living standards during the COVID-19 pandemic: Evidence from rural Kenya. IGC Policy Brief KEN-20062.

Miguel, E. and Mobarak, A.M., 2022. The economics of the COVID-19 pandemic in poor countries. Annual Review of Economics, 14, pp.253-285.

Miguel, E., and Walker M., 2021. Gender effects of Covid-19: Evidence from the Kenya Life Panel Survey. G2LM|LIC Policy Brief No.36

Nix, E., Gamberoni, E. and Heath, R., 2016. Bridging the gender gap: Identifying what is holding self-employed women back in Ghana, Rwanda, Tanzania, and the Republic of Congo. The World Bank Economic Review, 30(3), pp.501-521.

Riley, Emma. 2024. Resisting Social Pressure in the Household Using Mobile Money: Experimental Evidence on Microenterprise Investment in Uganda. American Economic Review, 114 (5): 1415–47.

Torres, J., Maduko, F., Gaddis, I., Iacovone, L. and Beegle, K., 2023. The impact of the COVID-19 pandemic on women-led businesses. The World Bank Research Observer, 38(1), pp.36-72.

World Bank, 2019. Profiting from Parity: Unlocking the Potential of Women’s Businesses in Africa. World Bank.

World Bank, 2020. Kenya Economic Update, November 2020: Navigating the Pandemic. World Bank.

Table 1: Baseline Descriptive Statistics and Balance

	All			Female				Male			
	(1) Female	(2) Male	(3) Diff.	(4) Grant	(5) Grant+BDS	(6) C/BDS only	(7) T-C/BDS only	(8) Grant	(9) Grant+BDS	(10) C/BDS only	(11) T-C/BDS only
<u>Socio-economic</u>											
Age	25.94 [2.68]	26.62 [2.51]	-0.67*** (0.13)	26.12 [2.60]	26.07 [2.61]	25.75 [2.77]	-0.34* (0.18)	26.56 [2.44]	26.82 [2.61]	26.50 [2.47]	-0.21 (0.18)
Secondary education	0.67 [0.47]	0.72 [0.45]	-0.06** (0.02)	0.64 [0.48]	0.65 [0.48]	0.70 [0.46]	0.05 (0.03)	0.71 [0.45]	0.70 [0.46]	0.75 [0.44]	0.04 (0.03)
Household size	4.27 [1.85]	4.07 [1.95]	0.20** (0.09)	4.31 [1.94]	4.21 [1.70]	4.29 [1.89]	0.04 (0.12)	4.13 [1.96]	4.15 [2.14]	3.96 [1.77]	-0.18 (0.14)
# of hh minors	1.92 [1.41]	1.62 [1.53]	0.30*** (0.07)	1.93 [1.35]	1.90 [1.39]	1.93 [1.47]	0.02 (0.09)	1.75 [1.79]	1.64 [1.57]	1.54 [1.33]	-0.15 (0.11)
# of hh children under 4	0.79 [0.67]	0.88 [0.70]	-0.09*** (0.03)	0.82 [0.76]	0.78 [0.63]	0.78 [0.64]	-0.02 (0.04)	0.95 [0.73]	0.86 [0.71]	0.85 [0.66]	-0.04 (0.05)
Ever parent	0.96 [0.19]	0.92 [0.27]	0.04*** (0.01)	0.95 [0.22]	0.98 [0.15]	0.96 [0.19]	-0.00 (0.01)	0.93 [0.26]	0.90 [0.30]	0.93 [0.25]	0.02 (0.02)
Age at first child	21.60 [2.94]	24.18 [2.81]	-2.59*** (0.14)	21.68 [3.17]	21.62 [3.11]	21.53 [2.67]	-0.12 (0.19)	23.79 [2.91]	24.40 [2.77]	24.25 [2.76]	0.11 (0.21)
Has income source	0.82 [0.38]	0.96 [0.20]	-0.14*** (0.01)	0.85 [0.36]	0.82 [0.39]	0.81 [0.39]	-0.02 (0.03)	0.96 [0.19]	0.95 [0.21]	0.96 [0.19]	0.00 (0.01)
Sources of income	1.00 [0.61]	1.29 [0.60]	-0.30*** (0.03)	1.03 [0.59]	0.98 [0.60]	1.00 [0.63]	-0.00 (0.04)	1.30 [0.62]	1.30 [0.61]	1.29 [0.58]	-0.01 (0.04)
Main income source: farming	0.09 [0.29]	0.12 [0.33]	-0.03** (0.01)	0.08 [0.27]	0.10 [0.30]	0.09 [0.28]	-0.00 (0.02)	0.11 [0.31]	0.11 [0.31]	0.14 [0.34]	0.03 (0.02)
Main income source: business	0.50 [0.50]	0.47 [0.50]	0.03 (0.02)	0.57 [0.50]	0.48 [0.50]	0.48 [0.50]	-0.04 (0.03)	0.51 [0.50]	0.46 [0.50]	0.44 [0.50]	-0.04 (0.04)
Main income source: wage	0.13 [0.33]	0.35 [0.48]	-0.22*** (0.02)	0.10 [0.30]	0.15 [0.36]	0.13 [0.33]	0.00 (0.02)	0.31 [0.46]	0.34 [0.48]	0.37 [0.48]	0.04 (0.03)
Main income source: remittances	0.02 [0.15]	0.00 [0.06]	0.02*** (0.01)	0.02 [0.14]	0.02 [0.14]	0.03 [0.17]	0.01 (0.01)	0.01 [0.10]	0.00 [0.06]	0.00 [0.00]	-0.01* (0.00)
Working	0.83 [0.37]	0.96 [0.19]	-0.13*** (0.01)	0.85 [0.35]	0.83 [0.37]	0.82 [0.39]	-0.02 (0.02)	0.97 [0.16]	0.96 [0.20]	0.96 [0.21]	-0.01 (0.01)
# Working activities	1.38 [1.02]	1.88 [1.14]	-0.49*** (0.05)	1.44 [1.02]	1.37 [0.97]	1.36 [1.05]	-0.04 (0.07)	1.95 [1.16]	1.91 [1.21]	1.81 [1.07]	-0.12 (0.08)
Works as employee	0.21 [0.41]	0.44 [0.50]	-0.23*** (0.02)	0.20 [0.40]	0.19 [0.39]	0.23 [0.42]	0.04 (0.03)	0.44 [0.50]	0.42 [0.50]	0.44 [0.50]	0.01 (0.04)
Worked on own business	0.53 [0.50]	0.53 [0.50]	-0.01 (0.02)	0.59 [0.49]	0.53 [0.50]	0.48 [0.50]	-0.08** (0.03)	0.58 [0.50]	0.54 [0.50]	0.50 [0.50]	-0.06 (0.04)
Income primary activity (W.5%)	4,928.45 [7,061.21]	9,761.78 [8,130.83]	-4,833.33*** (376.60)	4,932.12 [6,677.57]	4,941.82 [7,226.85]	4,917.20 [7,179.58]	-20.17 (476.32)	10,373.90 [8,398.13]	9,308.27 [7,836.03]	9,753.06 [8,194.11]	-15.43 (593.97)
Owens a business	0.58 [0.49]	0.62 [0.49]	-0.04 (0.02)	0.65 [0.48]	0.57 [0.50]	0.55 [0.50]	-0.05 (0.03)	0.63 [0.48]	0.63 [0.48]	0.60 [0.49]	-0.04 (0.04)
<u>Primary Business</u>											
Monthly sales (W.5%)	16,986.71 [19,701.55]	22,103.96 [21,929.38]	-5,117.25*** (1,536.55)	15,824.33 [17,619.87]	17,361.03 [21,204.22]	17,552.75 [20,092.55]	966.59 (2,004.89)	22,872.22 [21,652.88]	20,344.50 [19,701.26]	22,986.19 [23,738.17]	1,509.88 (2,458.79)
Monthly profits (W.5%)	4,814.85 [5,736.11]	6,787.80 [6,498.71]	-1,972.94*** (452.11)	5,125.63 [5,359.13]	5,132.14 [6,510.87]	4,371.11 [5,413.29]	-757.74 (570.24)	7,041.26 [5,905.84]	6,929.50 [6,452.03]	6,518.28 [6,912.03]	-461.26 (724.57)
<u>Time Use</u>											
Working hours	7.34 [3.65]	9.79 [2.50]	-2.46*** (0.15)	7.36 [3.47]	7.49 [3.65]	7.22 [3.76]	-0.21 (0.24)	10.12 [2.56]	9.86 [2.49]	9.56 [2.46]	-0.41** (0.18)
Domestic work hours	2.44 [1.42]	1.14 [0.99]	1.29*** (0.06)	2.51 [1.42]	2.38 [1.46]	2.43 [1.40]	-0.01 (0.09)	1.09 [0.95]	1.10 [1.06]	1.20 [0.96]	0.10 (0.07)
Children hours	2.57 [1.83]	1.71 [1.50]	0.86*** (0.08)	2.61 [1.91]	2.57 [1.82]	2.56 [1.80]	-0.03 (0.12)	1.70 [1.42]	1.69 [1.45]	1.73 [1.58]	0.04 (0.11)
Observations	937	778		239	286	412		189	253	336	
Joint equality test (p-value)	0.19										

Notes: Columns (1) and (2) present sample means and standard deviations, in brackets, of the analytical sample for female and male respondents at baseline, respectively. Column (3) reports the OLS coefficient of a regression of the respondent's characteristic on a gender indicator variable, robust standard errors in parentheses. Columns (4) to (6) present sample means and standard deviations, in brackets, of the female respondents in the Grant only, Grant+BDS, and Pure Control/BDS only treatment groups, respectively. Column (7) reports the OLS coefficient of a regression of the female respondent's characteristic on a treatment indicator variable (equal to one if respondent assigned to pure control or BDS only), robust standard errors in parentheses. Columns (8) to (11), are analogous to (4) to (7) for male respondents. Income from primary activity includes estimates from in-kind payment. Primary business outcomes are restricted to those respondents reporting a maximum of one primary business at baseline. To control for joint significance, we run a probit regression of the treatment indicator on the selected variables, and report p-values of an F-test for the joint significance of the coefficients. The number of observations with non-missing information varies per variable. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 2: COVID-19 Impact on Gender Gap in Business Outcomes, Time Use, and Income Variables

	Business Ownership				Business Performance (W 5%)				Time Use				Income (W 5%)	
	All		Survival		Baseline Entrepreneurs		New Business		Work/		# Income		Primary	Spousal Gap
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		
Covid 2020 × Female	-0.05** (0.02)	-0.03 (0.02)	-0.07* (0.04)					0.27*** (0.09)	-0.40** (0.17)	0.11* (0.06)	-0.05 (0.04)			
Covid 2021 × Female	-0.05** (0.02)	-0.05** (0.03)	-0.05 (0.04)	-3,037.61* (1,787.01)	-1,511.06** (680.60)	-6,189.84*** (1,871.91)	-3,290.08*** (806.56)	0.22** (0.11)	0.05 (0.18)	-0.18** (0.08)	-0.13*** (0.04)	-1,576.81*** (507.15)	2,818.49*** (727.45)	
Individual FE	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Observations	5,145	3,075	2,070	1,466	1,466	384	384	5,145	5,145	5,145	5,145	3,304	2,608	
Pre-Covid mean, male	0.62	1.00	0.00	22,087.28	6,766.43	.	.	1.71	9.79	1.14	1.29	9,715.53	-4,661.21	
Covid 2021 mean, male	0.75	0.83	0.61	22,099.10	7,448.21	24,108.86	9,200.05	2.27	9.48	1.29	1.50	13,773.19	-9,671.30	
Pre-Covid mean, female	0.58	1.00	0.00	17,079.99	4,864.84	.	.	2.57	7.34	2.44	1.00	4,956.51	8,256.23	
Covid 2021 mean, female	0.70	0.80	0.56	13,730.90	4,290.57	18,487.84	5,980.67	3.38	7.07	2.39	1.08	7,473.93	5,900.78	

Notes: In columns (1) to (3), the dependent variable is an indicator variable = 1 if the respondent reported owning a business. Column (1) includes the 1,715 respondents in the three survey rounds (5,145 observations), column (2) restricts the sample to the 1,025 respondents that reported owning at least one business in the baseline period, and column (3) restricts the sample to the 690 respondents that reported not owning any business in the baseline period. In columns (4) and (6) the dependent variable are monthly sales and in columns (5) and (7) the dependent variable are monthly profits, both winsorized at the 5% level on both tails reported in Kenyan Shillings. Columns (4) and (5) restrict the sample to the 733 respondents that reported owning one business in the baseline period and had non-missing sales and profits data. Columns (6) and (7) restrict the sample to those 384 respondents that reported not owning any business in the baseline period but opened a business by the time of the 2021 follow-up survey, only using data from this latter survey. In columns (8) to (10), the dependent variables are the number of hours the respondent reports spending on a typical working day in each activity. In column (10), the dependent variable is the number of income sources. In column (12), the dependent variable is the respondent's income earned from their primary activity reported in Kenyan Shillings for the 1,650 respondents with available income information in both survey rounds including the monetary value of any compensation they received in kind, winsorized at the 5% level on both tails. In column (13), the dependent variable is the spousal income gap subtracting from the respondent's estimate of their spouse's monthly income their income for the 1,304 respondents with available self-reported spousal income gap information, also winsorized. All regressions control for individual fixed effects, county-time trends, and pre-Covid business sector-time trends. Pre-Covid mean, Covid 2020 mean, and Covid 2021 mean refer to the mean of males/females at baseline survey, and at the post-Covid follow-up surveys in 2020 and 2021, respectively. Standard errors, clustered at the individual level, in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 3: COVID-19 Impact on Gender Gap in Intra-Household Dynamics

	Vignette Index (1)	V1 Partner Control (2)	V2 Voice Heard (3)	V3 Partner Income (4)
Covid 2020 \times Female	0.58*** (0.05)	0.27*** (0.06)	0.44*** (0.05)	0.52*** (0.05)
Covid 2021 \times Female	0.43*** (0.05)	0.12** (0.06)	0.38*** (0.05)	0.40*** (0.06)
Covid 2021	0.31 (0.26)	0.04 (0.31)	0.50* (0.30)	0.10 (0.30)
Constant	-0.12 (0.11)	2.27*** (0.12)	2.25*** (0.11)	2.23*** (0.12)
County*Survey FE	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓	✓
Vignette framing*Survey FE	✓	✓	✓	✓
Vignette order*Survey FE	✓	✓	✓	✓
Observations	3,222	3,222	3,222	3,222
Covid 2020 mean, male	-0.33	2.24	2.01	2.08
Covid 2021 mean, male	-0.22	2.28	2.05	2.23
Covid 2020 mean, female	0.26	2.50	2.46	2.59
Covid 2021 mean, female	0.22	2.42	2.44	2.61
[Covid 2020 \times female] = [Covid 2021 \times female] (p-value)	0.03	0.06	0.42	0.14

Notes: All the regressions include observations from the two post-Covid follow-up surveys for the 1,611 respondents with non-missing information for all three vignettes in both survey rounds. Column (1) dependent variable is the standardized average of the three vignettes. Columns (2) to (4) present the answers to vignette 1, 2 and 3, respectively. The three vignettes are coded on a scale from one to four, with four indicating the largest decline in intra-household position as described by each vignette. The table reports the coefficient of the interactions between the two post-Covid surveys and female. All regressions control for county- and business sector-time trends. Covid 2020 mean and Covid 2021 mean refer to the mean of males/females at the post-Covid follow-up surveys in 2020 and 2021, respectively. Standard errors, clustered at the individual level, in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 4: Grants and BDS Treatment Effects during COVID: Business Outcomes and Income Variables

	Business Ownership			Business Performance				Income		
				All		Baseline Owners (1 Business)				
	All (1)	Survival (2)	Entry (3)	Sales (W. 5%) (4)	Profits (W. 5%) (5)	Sales (W. 5%) (6)	Profits (W. 5%) (7)	Has source (8)	Number sources (9)	Income Prim. activity (W%5) (10)
Covid 2021 \times Grant	0.19*** (0.04)	0.11*** (0.04)	0.32*** (0.07)	7,671.47*** (2,105.45)	2,378.35*** (761.35)	8,042.80*** (3,092.98)	2,606.59** (1,145.16)	0.01 (0.02)	0.07 (0.07)	1,133.92 (956.12)
Covid 2021 \times Grant \times Female	0.03 (0.05)	0.02 (0.06)	0.02 (0.09)	-2,380.94 (2,571.32)	-996.55 (968.94)	-3,279.52 (3,821.30)	-1,724.87 (1,446.78)	0.11** (0.04)	0.26*** (0.09)	1,053.71 (1,203.89)
Covid 2021 \times Grant and BDS	0.23*** (0.03)	0.15*** (0.04)	0.35*** (0.06)	8,632.49*** (1,833.38)	2,709.63*** (724.72)	8,437.25*** (2,779.56)	2,183.30* (1,118.01)	0.02 (0.02)	0.20*** (0.07)	1,858.45** (871.17)
Covid 2021 \times Grant and BDS \times Female	0.03 (0.05)	-0.00 (0.06)	0.05 (0.08)	-1,827.72 (2,424.77)	-828.68 (925.57)	-2,704.15 (3,832.16)	-1,349.83 (1,467.64)	0.10** (0.04)	0.17* (0.09)	1,105.79 (1,133.97)
Covid 2021 \times Female	-0.06* (0.03)	-0.06 (0.04)	-0.06 (0.06)	-980.71 (1,542.01)	-983.87* (572.85)	-1,271.63 (2,718.99)	-612.83 (1,000.94)	-0.06** (0.03)	-0.24*** (0.05)	-2,163.39*** (750.16)
Individual FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Survey FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Observations	3,430	2,050	1,380	3,100	3,100	1,466	1,466	3,430	3,430	3,304
Grant effect for females	0.22*** (0.03)	0.14*** (0.04)	0.33*** (0.06)	5290.53*** (1508.34)	1381.80** (601.81)	4763.28** (2258.83)	881.72 (883.83)	0.11*** (0.04)	0.33*** (0.06)	2187.63*** (743.59)
Grant and BDS effect for females	0.26*** (0.03)	0.15*** (0.04)	0.40*** (0.05)	6804.77*** (1573.39)	1880.95*** (570.63)	5733.10** (2653.66)	833.46 (954.66)	0.12*** (0.04)	0.36*** (0.06)	2964.24*** (740.83)
Comparison group mean, female	0.55	0.71	0.36	9181.62	2837.34	11561.71	3567.73	0.77	0.90	6100.05
Percent effect (grant only), female	40.06	19.05	91.53	57.62	48.70	41.20	24.71	14.74	36.46	35.86
Percent effect (grant and BDS), female	46.73	20.71	110.10	74.11	66.29	49.59	23.36	15.37	40.51	48.59
Comparison group mean, male	0.62	0.75	0.43	14786.89	5168.54	18114.76	5715.89	0.99	1.42	12979.16
Percent effect (grant only), male	31.28	15.19	73.62	51.88	46.02	44.40	45.60	0.73	4.92	8.74
Percent effect (grant and BDS), male	36.81	19.73	81.59	58.38	52.43	46.58	38.20	2.12	13.89	14.32
[Grant=Grant and BDS] male (p-value)	0.32	0.39	0.61	0.67	0.69	0.90	0.73	0.51	0.11	0.47
[Grant=Grant and BDS] female (p-value)	0.28	0.76	0.29	0.39	0.46	0.71	0.96	0.90	0.59	0.34

Notes: All the regressions include observations from the baseline and the 2021 post-Covid follow-up survey. Columns (1) to (3) present OLS regressions where the dependent variable is an indicator variable = 1 if the respondent reported owning a business for the 1,715 respondents. Column (2) restricts the sample to the 1,025 respondents that reported owning at least one business in the baseline period. Column (3) restricts the sample to the 690 respondents that reported not owning any business in the baseline period. Columns (4) to (7) present OLS regressions where the dependent variable are monthly sales and monthly profits, respectively, winsorized at the 5% level on both tails reported in Kenyan Shillings. Columns (6) and (7) restrict the sample to the 733 respondents that reported owning one business in the baseline period and had non-missing sales and profits data. Columns (8) and (9) dependent variable are an indicator variable equal to one if the respondent reports having any source of income and the number of sources of income, respectively, for the 1,715 respondents Column (10) dependent variable is the respondent's income earned from their primary activity winsorized at the 5% level on both tails, including the monetary value of any compensation they received in kind, reported in Kenyan Shillings for the respondents with available income information in both survey rounds. The table reports the coefficient of the interactions between the post-Covid surveys time dummy and indicators for treatment (Grant only and Grant+BDS), as well as their triple interaction with female. All regressions control for individual fixed effects, county- and business sector-time trends. Control+BDS only mean refers to the mean of males/females of the pure control or BDS only groups at the 2021 follow-up survey. Standard errors, clustered at the individual level, in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 5: Grants and BDS Treatment Effects during COVID: Subjective Wellbeing

	10-step ladder		Food security	Satisfaction work/life	Intra-Household
	Perception (1)	Expectation (2)			Vignette Index (5)
Grant	0.63*** (0.14)	0.38** (0.15)	0.26*** (0.10)	0.30*** (0.10)	-0.18* (0.09)
Grant \times Female	-0.40** (0.18)	-0.03 (0.21)	-0.01 (0.13)	-0.23* (0.13)	0.11 (0.12)
Grant and BDS	0.56*** (0.13)	0.65*** (0.13)	0.33*** (0.09)	0.30*** (0.09)	-0.19** (0.09)
Grant and BDS \times Female	-0.26 (0.18)	-0.51*** (0.19)	-0.14 (0.12)	-0.11 (0.13)	0.12 (0.12)
Female	0.10 (0.11)	0.18 (0.13)	-0.03 (0.08)	0.05 (0.08)	0.38*** (0.08)
County FE	✓	✓	✓	✓	✓
Baseline business sector	✓	✓	✓	✓	✓
Observations	1,715	1,715	1,715	1,715	1,611
Grant effect for females	0.23* (0.12)	0.35** (0.14)	0.25*** (0.08)	0.08 (0.09)	-0.07 (0.08)
Grant and BDS effect for females	0.30** (0.13)	0.14 (0.14)	0.19** (0.08)	0.19** (0.09)	-0.07 (0.08)
Comparison group mean, female	4.17	7.55	-1.32	2.91	0.26
Percent effect (grant only), female	5.47	4.63	-18.66	2.62	-27.52
Percent effect (grant and BDS), female	7.19	1.82	-14.62	6.63	-27.90
Comparison group mean, male	4.06	7.34	-1.30	2.85	-0.14
Percent effect (grant only), male	15.48	5.24	-19.74	10.59	134.29
Percent effect (grant and BDS), male	13.89	8.79	-25.41	10.51	140.17
[Grant=Grant and BDS] male (p-value)	0.67	0.09	0.47	0.98	0.93
[Grant=Grant and BDS] female (p-value)	0.60	0.17	0.55	0.22	0.99

Notes: All the regressions include observations from the 2021 post-Covid follow-up survey for the 1,715 respondents. Columns (1) to (4) are OLS regressions where the dependent variables are the answers to the different measures of individual subjective well-being. Column (5) dependent variable is the standardized average index of the three intra-household vignettes restricting to the 1,611 individuals with non-missing information for the three vignettes. The table reports the coefficient of female and interactions between female and the indicators for treatment (Grant only and Grant+BDS). All regressions control for county and business sector fixed effects. Control+BDS only mean refers to the mean of males/females of the pure control or BDS only groups at the 2021 follow-up survey. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 6: Grants and BDS Treatment Effects during COVID: Labor Supply

	Last month: worked as						Weekly hours (W5%)	
	Any (1)	# (2)	Employee (3)	Business (4)	Farm/Livestock (5)	Help/Volunteer (6)	Business (7)	Total (8)
Covid 2021 \times Grant	-0.00 (0.02)	-0.07 (0.13)	-0.18*** (0.05)	0.16*** (0.04)	0.00 (0.05)	-0.06 (0.10)	13.55*** (2.87)	-0.54 (2.42)
Covid 2021 \times Grant \times Female	0.09** (0.04)	0.45** (0.18)	0.18*** (0.07)	0.00 (0.06)	0.08 (0.06)	0.19 (0.13)	-4.43 (3.64)	8.33** (3.49)
Covid 2021 \times Grant and BDS	0.00 (0.02)	-0.08 (0.13)	-0.10* (0.05)	0.18*** (0.04)	0.02 (0.05)	-0.19* (0.10)	8.64*** (2.65)	1.39 (2.26)
Covid 2021 \times Grant and BDS \times Female	0.11*** (0.04)	0.51*** (0.17)	0.09 (0.07)	0.05 (0.06)	0.02 (0.06)	0.34*** (0.12)	5.91* (3.50)	10.82*** (3.45)
Covid 2021 \times Female	-0.06** (0.03)	-0.32*** (0.11)	-0.06 (0.04)	-0.06 (0.04)	-0.05 (0.04)	-0.15* (0.08)	-4.24* (2.36)	-8.63*** (2.23)
Individual FE	✓	✓	✓	✓	✓	✓	✓	✓
Survey FE	✓	✓	✓	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓
Observations	3,430	3,430	3,430	3,430	3,430	3,430	3,424	3,402
Grant effect for females	0.09** (0.04)	0.38*** (0.12)	0.01 (0.04)	0.16*** (0.04)	0.08* (0.04)	0.13 (0.09)	9.12*** (2.26)	7.79*** (2.51)
Grant and BDS effect for females	0.11*** (0.04)	0.43*** (0.11)	-0.00 (0.04)	0.24*** (0.04)	0.04 (0.04)	0.15* (0.08)	14.55*** (2.28)	12.21*** (2.60)
Comparison group mean, female	0.79	1.69	0.24	0.51	0.37	0.57	22.49	34.13
Percent effect (grant only), female	11.39	22.27	2.38	31.69	21.23	22.77	40.56	22.83
Percent effect (grant and BDS), female	14.03	25.31	-0.21	46.06	10.73	26.75	64.71	35.78
Comparison group mean, male	0.99	2.44	0.54	0.57	0.51	0.81	29.38	55.23
Percent effect (grant only), male	-0.45	-2.97	-32.88	27.94	0.55	-6.99	46.10	-0.97
Percent effect (grant and BDS), male	0.18	-3.33	-17.61	31.85	3.50	-22.87	29.39	2.52
[Grant=Grant and BDS] male (p-value)	0.74	0.95	0.15	0.63	0.78	0.22	0.10	0.46
[Grant=Grant and BDS] female (p-value)	0.57	0.69	0.89	0.07	0.39	0.80	0.03	0.11

Notes: All the regressions include observations from the baseline and the 2021 post-Covid follow-up survey. Column (1) dependent variable is a dummy variable equal to one if the respondent participated in any working activity in the last month while column (2) dependent variable is the number of such activities. Columns (3)-(6) are indicator variables equal to one if the respondent worked as a wage employee, at their own business, at own farm or livestock, and helped in or volunteered at any activity, respectively. In columns (7) and (8) the dependent variable are the number of weekly hours worked, winsorized at 5%, at their own business and in total. The table reports the coefficient of the interactions between the post-Covid surveys time dummy and indicators for treatment (Grant only and Grant+BDS), as well as their triple interaction with female. All regressions control for individual fixed effects, county- and business sector-time trends. Control+BDS only mean refers to the mean of males/females of the pure control or BDS only groups at the 2021 follow-up survey. Standard errors, clustered at the individual level, in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

ONLINE APPENDIX

Appendix A

Table A1. Timeline of Interventions

	Grants' disbursement		BDS	
	Tranche 1	Tranche 2	Start	End
Cluster 1	3/17/2020	6/30/2020	February 2020	March 2021
Cluster 2	10/28/2020	3/4/2021	July 2020	December 2020
Cluster 3	11/17/2020	3/4/2021	July 2020	December 2020

Table A2: List of Counties by Cluster

Cluster 1	Cluster 2	Cluster 3
Mombasa	Kitui	Kilifi
Kwale	Nyandarua	Machakos
Nakuru	Kiambu	Kakamega
Kisumu	Turkana	Bungoma
Nairobi	Migori	Kisii

Appendix B. Survey Variables

Business outcomes

Business ownership, survival and entry are measured with the following question included in each of the survey rounds: “*How many businesses do you own?*”.

Data on business sales was collected in the following way:

1. I am now going to ask you about the sales of your business in a few different ways. Can you tell me the total SALES of your business in THE LAST MONTH from all sources, including manufacturing, trade and services? This is all the money you bring IN to your business BEFORE you pay any bills, expenses, or salaries.
2. Now think of the BEST WEEK in your business last month. This is the week where you sold the most. How much money came into your business that week?

3. Now think of the WORST WEEK in your business last month. This is the week where you sold the least. How much money came into your business that week?
4. Based on what you just told me about the total sales in your Best Week and in your Worst Week, we can estimate your monthly sales to be approximately: [average(BEST WEEK, WORST WEEK) * 4.25] for the LAST MONTH. Your first estimate of monthly sales was: [enter response to first recall of monthly sales]. With these two estimates of monthly sales in front of you, can you confirm your final estimate of sales in your business for the last month?

Data on business profits was collected in the following way:

- Now that we have all the information on your money coming into the business through sales and your expenses, we are going to talk about all the money that is leftover after paying all costs—or your profits. What do you think your PROFIT was for the last month? This is the total amount of money remaining in your business after all of your costs (bills, expenses, salaries) are deducted from your sales.

Business adaptation strategies

“Did this establishment experience any of the following changes in response to the COVID-19 outbreak?”. Response scale: Yes/No. Changes: sell the business or transfer ownership to another person? (If Yes, skip the rest); started online sales or remote work arrangement?; changed or decreased the type of products sold or increased delivery of goods or services?; changed business location?; received any national or local government support in response to the crisis? ; took loan from formal or informal lenders to sustain business operations?

Time use

Now I am going to ask you about the number of hours you spend on a typical working day in different activities. We understand you may be at the same time taking care of children while you perform the following activities. Activities: sleep; work/studying/training (paid and unpaid), including transport/commute to workplace; eating/drinking/wash yourself/get dressed/other personal care; domestic work (e.g. cooking, cleaning, shopping household goods, caring for elderly/ill, etc.); leisure and social activities (e.g. watching tv, listening to radio, reading, meeting friends/family,

going to church, etc.).

- How many hours do you spend now on this activity on a typical working day in your household?
- How many of the [X] hours you spend on [activity] you are also watching over children?

Now, we will ask you about the number of hours you spent with children doing different activities. Please answer about the number of hours you were "just" doing that.

Activities: helping children with school activities; taking care of children (e.g., feeding, washing, dressing, watching over, putting to sleep); playing with children.

[Number of hours across activities must add up to 24]

Intra-household Vignettes

Now I am going to read you some stories about different individuals. This question format is different from the rest so take your time in answering. For each I will then ask you how much you are like or not like each of these people. We would like to know if you are completely different from them, similar to them, or somewhere in between.

There are no right or wrong answers to these questions. [Randomization between "less" or "more" versions. Randomization occurs once and applies to all vignettes] Response code: Yes/No. If yes: Are you completely the same or somewhat the same?. If no: Are you completely different or somewhat different?

V1 Partner control. "[Person's name] feels that, since the outbreak of COVID-19, her/his partner controls [less/more] than before how the household money is spent "

V2 Voice heard. "[Person's name] feels that [her/his] voice is heard [less/more] inside the household when it comes to making important decisions than it was 6 months ago".

V3 Partner income: "[Person's name] feels that [her/his] household's wellbeing depends [less/more] than before COVID-19 on [her/his] spouse/partner income"

Subjective Well-being

Ladder: life perception and expectation. Imagine for a minute that you are living the best life you can possibly imagine. Now imagine that your life is the worst it could possibly be. Imagine a ladder with 10 steps. Suppose we say that the top of the ladder (step 10) represents the best possible life for you and the bottom (step 1) represents the worst possible life for you. Which step on the ladder best represents where you personally stand at the present time? _Think about your life five years from today. Which step best represents where you personally believe you will be on the ladder five years from now? Response scale: 1-10.

Food security. How often did you eat a smaller meal than you felt you needed because there was not enough food in the last month? Response: never; rarely (1-2 days); sometimes (3-10 days); often (+10 days).

Satisfaction with work/life balance. In a scale from 1 to 5, where 5 is very satisfied and 1 is very dissatisfied, how satisfied are you with your current work-life balance? By work-life balance, we mean the time and space you have for other things you care that are not household or business responsibilities

Appendix C

C1 Sample Characteristics and Crisis Impacts

Table C1: Comparison with 2019 and 2020Q1 Representative Married Sample

	Male Sample			Female Sample		
	Household Survey			Household Survey		
	(1)	(2)	(3)	(4)	(5)	(6)
	Baseline	2019	2020Q1	Baseline	2019	2020Q1
Age	26.62	26.43	26.06	25.94	24.86	24.59
Secondary	0.72	0.63	0.58	0.67	0.41	0.41
Working	0.96	0.91	0.93	0.83	0.50	0.57
Works as employee	0.44	0.64	0.57	0.21	0.16	0.14
Works as self-employed	0.53	0.23	0.28	0.53	0.14	0.21
Hours Worked	53.37	50.84	45.46	38.12	21.10	18.52
Observations	778	694	134	937	1,527	302

Notes: The table compares key characteristics of the baseline sample of this paper (column (1) and (3)) with those of a sample of youth aged 18-29, married or living together, living in the same counties as our study participants, which was taken from the 2019 and 2020 (Q1) representative national Kenya Continuous Household Survey. Source: own computations.

Table C2: Baseline Descriptive Statistics: Single vs. Married Sample

	Female Sample			Male Sample		
	(1) Single	(2) Married	(3) Diff.	(4) Single	(5) Married	(6) Diff.
Age	23.88 [2.88]	25.89 [2.71]	2.01*** (0.08)	23.74 [2.59]	26.62 [2.54]	2.88*** (0.08)
Secondary education	0.82 [0.38]	0.68 [0.47]	-0.15*** (0.01)	0.87 [0.34]	0.72 [0.45]	-0.14*** (0.01)
Household size	4.46 [2.52]	4.18 [1.81]	-0.28*** (0.06)	3.72 [2.66]	4.02 [1.97]	0.29*** (0.07)
# of hh children under 4	0.32 [0.55]	0.79 [0.67]	0.47*** (0.02)	0.07 [0.33]	0.82 [0.68]	0.75*** (0.02)
Has income source	0.76 [0.43]	0.81 [0.39]	0.05*** (0.01)	0.86 [0.35]	0.95 [0.21]	0.10*** (0.01)
Sources of income	0.87 [0.58]	0.98 [0.62]	0.12*** (0.02)	1.06 [0.61]	1.27 [0.58]	0.21*** (0.02)
Main income source: farming	0.02 [0.15]	0.08 [0.27]	0.06*** (0.01)	0.07 [0.26]	0.11 [0.32]	0.04*** (0.01)
Main income source: business	0.32 [0.47]	0.47 [0.50]	0.15*** (0.01)	0.32 [0.47]	0.48 [0.50]	0.16*** (0.02)
Main income source: wage	0.29 [0.46]	0.15 [0.36]	-0.14*** (0.01)	0.39 [0.49]	0.34 [0.48]	-0.04*** (0.02)
Main income source: remittances	0.02 [0.15]	0.02 [0.15]	-0.00 (0.00)	0.02 [0.13]	0.00 [0.07]	-0.01*** (0.00)
Working	0.84 [0.37]	0.82 [0.38]	-0.02* (0.01)	0.91 [0.28]	0.96 [0.20]	0.04*** (0.01)
Works as employeee	0.39 [0.49]	0.22 [0.41]	-0.17*** (0.01)	0.50 [0.50]	0.44 [0.50]	-0.06*** (0.02)
Worked on own business	0.34 [0.47]	0.50 [0.50]	0.16*** (0.02)	0.37 [0.48]	0.54 [0.50]	0.18*** (0.02)
Income primary activity	5,007.61 [9,460.69]	5,821.23 [11,912.34]	813.62** (344.73)	7,943.84 [11,799.96]	12,444.88 [27,445.29]	4,501.04*** (759.19)
Owns a business	0.38 [0.49]	0.55 [0.50]	0.17*** (0.02)	0.45 [0.50]	0.61 [0.49]	0.17*** (0.02)
Monthly sales (W.5%)	16,039.16 [17,029.03]	16,674.36 [18,145.06]	635.19 (913.21)	20,790.57 [21,033.86]	23,763.66 [22,010.69]	2,973.10*** (1,065.81)
Monthly profits (W.5%)	5,200.38 [5,977.15]	5,154.38 [6,182.91]	-46.00 (315.46)	7,061.37 [7,638.09]	7,437.20 [7,325.62]	375.83 (366.16)

Notes: Columns (1) and (2) present sample means and standard deviations, in brackets, of single and married female respondents at baseline, respectively. Column (3) reports the OLS coefficient of a regression of the respondent's characteristic on a baseline married indicator variable, robust standard errors in parentheses. Columns (4)-(6) present the analogous statistics for male respondents. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C3: Non-Response

	2020 Follow-up		2021 Follow-up	
	(1)	(2)	(3)	(4)
Grant	-0.02 (0.05)	-0.01 (0.04)	-0.07 (0.05)	-0.01 (0.04)
Grant and BDS	0.04 (0.04)	-0.05 (0.05)	-0.00 (0.04)	-0.05 (0.05)
BDS	0.00 (0.04)	-0.01 (0.01)	-0.02 (0.03)	-0.01 (0.01)
Female		0.06 (0.05)		0.06 (0.05)
Secondary		-0.06 (0.07)		-0.06 (0.07)
Baseline business		-0.06 (0.02)		-0.06 (0.02)
Children under 4		-0.01 (0.04)		-0.01 (0.04)
Grant \times Female		-0.05 (0.06)		-0.05 (0.06)
Grant and BDS \times Female		-0.02 (0.06)		-0.02 (0.06)
BDS \times Female		-0.07 (0.05)		-0.07 (0.05)
Grant \times Secondary		0.01 (0.08)		0.01 (0.08)
Grant and BDS \times Secondary		0.07 (0.07)		0.07 (0.07)
BDS \times Secondary		0.01 (0.06)		0.01 (0.06)
Grant \times Baseline business		0.00 (0.05)		0.00 (0.05)
Grant and BDS \times Baseline business		0.06 (0.03)		0.06 (0.03)
BDS \times Baseline business		0.07 (0.02)		0.07 (0.02)
Grant \times Children under 4		0.00 (0.06)		0.00 (0.06)
Grant and BDS \times Children under 4		0.02 (0.06)		0.02 (0.06)
BDS \times Children under 4		0.00 (0.04)		0.00 (0.04)
Observations	2,382	2,382	2,382	2,382
p-value joint test		0.99		0.99

Notes: The dependent variable is an indicator variable equal to one 1 if the respondent could not be surveyed at the 2020 and 2021 follow-up surveys. The sample is the 2,382 married respondents randomly selected to be surveyed (including the 382 placed in waiting list). The p-value for the joint test corresponds to an F-test for joint significance of the interaction terms. Standard errors, clustered at the county cluster level, in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C4: Pre-COVID Business Sector

	Female		Male		Difference
	(1)	(2)	(3)	(4)	(5)
	Mean and SD	Obs.	Mean and SD	Obs.	[Female - Male]
Accommodation and food service activities	0.06 [0.24]	544	0.03 [0.18]	481	0.03** (0.01)
Administrative and support service activities	0.00 [0.04]	544	0.00 [0.06]	481	-0.00 (0.00)
Agriculture, forestry and fishing	0.09 [0.28]	544	0.15 [0.36]	481	-0.06*** (0.02)
Arts,entertainment and recreation	0.03 [0.16]	544	0.01 [0.12]	481	0.01 (0.01)
Construction	0.00 [0.00]	544	0.01 [0.09]	481	-0.01** (0.00)
Education	0.01 [0.10]	544	0.02 [0.13]	481	-0.01 (0.01)
Electricity,gas,steam, and air conditioning supply	0.00 [0.06]	544	0.00 [0.06]	481	-0.00 (0.00)
Financial and insurance activities	0.02 [0.15]	544	0.01 [0.11]	481	0.01 (0.01)
Human health and social work activities	0.17 [0.38]	544	0.15 [0.36]	481	0.02 (0.02)
Information and communication	0.02 [0.13]	544	0.05 [0.21]	481	-0.03** (0.01)
Manufacturing	0.05 [0.21]	544	0.07 [0.26]	481	-0.02* (0.01)
Mining and quarrying	0.00 [0.04]	544	0.00 [0.05]	481	-0.00 (0.00)
Other service activities	0.00 [0.04]	544	0.00 [0.00]	481	0.00 (0.00)
Professional,scientific and technical activities	0.00 [0.06]	544	0.00 [0.06]	481	-0.00 (0.00)
Real estate activities	0.02 [0.13]	544	0.02 [0.16]	481	-0.01 (0.01)
Transportation and storage	0.00 [0.00]	544	0.12 [0.32]	481	-0.12*** (0.01)
Water supply,sewerage,waste mngt. and remediation act.	0.00 [0.06]	544	0.01 [0.09]	481	-0.00 (0.00)
Wholesale and retail trade,repair of motor vehicles	0.52 [0.50]	544	0.33 [0.47]	481	0.19*** (0.03)

Notes: Columns (1) and (3) present sample means and standard deviations, in brackets, of the analytical sample for 544 female and 481 male respondents, respectively, who reported owning a business at baseline. Columns (2) and (4) present the number of female and male respondents, respectively. Column (5) reports the OLS coefficient of a regression of the the respondent's characteristic on a gender indicator variable, robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C5: Non-Grant Recipients: COVID-19 Impact on Gender Gap in Business Outcomes, Time Use, and Income Variables

	Business Ownership			Business Performance (W 5%)				Time Use			Income (W 5%)		
	All			Baseline Entrepreneurs		New Business		Work/			# Income		Spousal Gap (13)
	(1)	(2)	(3)	Sales (4)	Profits (5)	Sales (6)	Profits (7)	Childcare (8)	Study (9)	Work (10)	Sources (11)	Primary Activity (12)	
Covid 2020 \times Female	-0.07** (0.03)	-0.03 (0.04)	-0.10* (0.05)					0.15 (0.15)	-0.82*** (0.26)	0.16* (0.10)	-0.13** (0.06)		
Covid 2021 \times Female	-0.06* (0.03)	-0.06 (0.04)	-0.06 (0.06)	-1,361.20 (2,944.31)	-548.53 (1,114.81)	-5,349.17* (3,131.80)	-3,639.75** (1,447.42)	0.27 (0.17)	-0.48 (0.30)	0.10 (0.11)	-0.24*** (0.06)	-2,129.21*** (766.72)	3,397.87*** (1,113.88)
Individual FE	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
Observations	2,244	1,284	960	604	604	120	120	2,244	2,244	2,244	2,244	1,450	1,168
Pre-Covid mean, male	0.60	1.00	0.00	22,907.98	6,429.89	.	.	1.73	9.56	1.20	1.29	9,662.93	-4,402.08
Covid 2021 mean, male	0.62	0.75	0.43	18,114.76	5,715.89	22,226.65	9,231.04	2.32	9.39	1.26	1.42	12,979.16	-8,973.33
Pre-Covid mean, female	0.55	1.00	0.00	17,809.38	4,476.25	.	.	2.56	7.22	2.43	1.00	4,938.30	8,618.02
Covid 2021 mean, female	0.55	0.71	0.36	11,561.71	3,567.73	16,480.32	5,370.26	3.49	6.47	2.58	0.90	6,100.05	7,140.41

Notes: This Table presents the same set of results as presented in Table 2 but limiting the sample to non-grant recipients. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C6: COVID-19 Impact on Gender Gap in Business Ownership (Intensive Margin)

	Business Ownership		Business Survival		Business Entry	
	(1)	(2)	(3)	(4)	(5)	(6)
Covid 2020 \times Female	-0.08* (0.04)	-0.11*** (0.04)	-0.07 (0.05)	-0.11** (0.05)	-0.15*** (0.06)	-0.14** (0.06)
Covid 2021 \times Female	-0.10** (0.04)	-0.15*** (0.04)	-0.15*** (0.05)	-0.19*** (0.05)	-0.12** (0.05)	-0.11** (0.05)
Individual FE	✓	✓	✓	✓	✓	✓
County*Survey FE		✓		✓		✓
Baseline business sector*Survey FE		✓		✓		
Observations	5,145	5,145	3,075	3,075	2,070	2,070
Pre-Covid mean, male	0.74	0.74	1.20	1.20	0.00	0.00
Covid 2020 mean, male	1.11	1.11	1.30	1.30	0.79	0.79
Covid 2021 mean, male	1.02	1.02	1.17	1.17	0.76	0.76
Pre-Covid mean, female	0.67	0.67	1.15	1.15	0.00	0.00
Covid 2020 mean, female	0.96	0.96	1.18	1.18	0.64	0.64
Covid 2021 mean, female	0.84	0.84	0.98	0.98	0.65	0.65
[Covid 2020 \times female] = [Covid 2021 \times female] (p-value)	0.47	0.30	0.14	0.10	0.62	0.64

Notes: All the regressions include observations from the baseline and the two post-Covid follow-up surveys. OLS regressions where the dependent variable is a continuous variable with the number of businesses the respondent reports owning. Columns (1) and (2) include the 1,715 respondents in the three survey rounds (5,145 observations). Columns (3) and (4) restrict the sample to the 1,025 respondents that reported owning at least one business in the baseline period. Columns (5) to (6) restrict the sample to the 690 respondents that reported not owning any business in the baseline period. The table reports the coefficient of the interactions between the two post-Covid surveys time dummies and female. All regressions control for individual fixed effects. Columns (2), (4) and (6) also include county-time and pre-Covid business sector-time trends. Pre-Covid mean refers to the mean of males/females at baseline survey. Covid 2020 mean and Covid 2021 mean refer to the mean of males/females at the post-Covid follow-up surveys in 2020 and 2021, respectively. Standard errors, clustered at the individual level, in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C7: COVID-19 Impact on Gender Gap in Monthly Sales and Profits: Surviving Businesses

	Surviving			
	Sales (Wins. 5%)		Profits (Wins. 5%)	
	(1)	(2)	(3)	(4)
Covid 2021 \times Female	-4,000.90** (1,742.58)	-2,945.71 (1,968.77)	-1,611.21** (675.63)	-1,644.78** (768.05)
Individual FE	✓	✓	✓	✓
County*Survey FE		✓		✓
Baseline business sector*Survey FE		✓		✓
Observations	1,174	1,174	1,174	1,174
Pre-Covid mean, male	23,230.17	23,230.17	7,031.22	7,031.22
Covid 2021 mean, male	27,107.17	27,107.17	9,136.12	9,136.12
Pre-Covid mean, female	17,543.03	17,543.03	4,949.37	4,949.37
Covid 2021 mean, female	17,419.13	17,419.13	5,443.05	5,443.05

Notes: All the regressions include observations from the baseline and the 2021 post-Covid follow-up survey. Columns (1) and (2) present OLS regressions where the dependent variable are monthly sales winsorized at the 5% level on both tails, reported in Kenyan Shillings. Columns (3) and (4) present OLS regressions where the dependent variable are monthly profits winsorized at the 5% level on both tails, reported in Kenyan Shillings. All regressions restrict the sample to the 587 respondents that reported owning one business in the baseline period and are still business owners at the time of the 2021 follow-up survey. The table reports the coefficient of the interactions between the 2021 post-Covid survey time dummies and female. All regressions control for individual fixed effects and county-time trends. Columns (2), (4), (6), and (8) also include and pre-Covid business sector-time trends. Pre-Covid mean refers to the mean of males/females at baseline survey. Covid 2021 mean refer to the mean of males/females at the post-Covid 2021 follow-up survey. Standard errors, clustered at the individual level, in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C8: Without County and Business Sector Trends: COVID-19 Impact on Gender Gap in Business Outcomes, Time Use, and Income Variables

	Business Ownership			Business Performance (W 5%)			Time Use			Income (W 5%)		
	All			Baseline Entrepreneurs			Work/			# Income		
	(1)	(2)	(3)	Sales	Profits	Sales	Childcare	Study	Domestic	Sources	Primary Activity	Spousal Gap
	(1)	(2)	(3)	(4)	(5)	(6)	(8)	(9)	(10)	(11)	(12)	(13)
Covid 2020	0.17*** (0.02)	-0.11*** (0.01)	0.62*** (0.03)				0.14** (0.06)	-0.22** (0.09)	-0.00 (0.04)	0.26*** (0.03)		
Covid 2021	0.13*** (0.02)	-0.17*** (0.02)	0.61*** (0.03)	11.82 (1,245.64)	681.78 (480.12)		0.56*** (0.07)	-0.32*** (0.11)	0.14*** (0.05)	0.20*** (0.03)	4,057.65*** (379.62)	-5,010.09*** (470.62)
Covid 2020 × Female	-0.02 (0.03)	-0.01 (0.02)	-0.08** (0.04)				0.30*** (0.09)	-0.42*** (0.16)	0.10 (0.06)	-0.05 (0.04)		
Covid 2021 × Female	-0.01 (0.03)	-0.03 (0.02)	-0.05 (0.04)	-3,360.92** (1,617.33)	-1,256.06** (605.58)	-5,621.01*** (1,875.92)	0.25** (0.10)	0.06 (0.18)	-0.19*** (0.07)	-0.12*** (0.04)	-1,540.23*** (493.43)	2,654.64*** (689.84)
Individual FE	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓
Observations	5,145	3,075	2,070	1,466	1,466	384	5,145	5,145	5,145	5,145	3,304	2,608
Pre-Covid mean, male	0.62	1.00	0.00	22,087.28	6,766.43		1.71	9.79	1.14	1.29	9,715.53	-4,661.21
Covid 2021 mean, male	0.75	0.83	0.61	22,099.10	7,448.21	24,108.86	2.27	9.48	1.29	1.50	13,773.19	-9,671.30
Pre-Covid mean, female	0.58	1.00	0.00	17,079.99	4,864.84		2.57	7.34	2.44	1.00	4,956.51	8,256.23
Covid 2021 mean, female	0.70	0.80	0.56	13,730.90	4,290.57	18,487.84	3.38	7.07	2.39	1.08	7,473.93	5,900.78

Notes: This Table presents the same set of results as presented in Table 2 but without business sector and county trends. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C9: Non-Grant Recipients, Without County and Business Trends: COVID-19 Impact on Gender Gap in Business Outcomes, Time Use, and Income Variables

	Business Ownership				Business Performance (W 5%)				Time Use			Income (W 5%)		
					Baseline Entrepreneurs		New Business		Childcare		Work/ Study	Domestic Work	# Income Sources	Primary Activity
	All (1)	Survival (2)	Entry (3)		Sales (4)	Profits (5)	Sales (6)	Profits (7)	Childcare (8)	Study (9)	Work (10)	Work (10)	(11)	(12)
Covid 2020	0.09*** (0.03)	-0.16*** (0.03)	0.46*** (0.04)						0.29*** (0.10)	-0.20 (0.14)	0.04 (0.06)			
Covid 2021	0.02 (0.03)	-0.25*** (0.03)	0.43*** (0.04)		-4,793.22** (1,999.39)	-714.00 (751.11)			0.59*** (0.11)	-0.17 (0.17)	0.06 (0.07)		0.13*** (0.04)	3,316.22*** (577.00)
Covid 2020 × Female	-0.02 (0.04)	0.00 (0.04)	-0.12** (0.06)						0.20 (0.15)	-0.88*** (0.25)	0.20** (0.09)			
Covid 2021 × Female	-0.02 (0.04)	-0.04 (0.04)	-0.07 (0.06)		-1,454.45 (2,596.86)	-194.52 (962.28)	-5,746.33* (2,977.00)	-3,860.77*** (1,374.01)	0.34** (0.16)	-0.58** (0.28)	0.09 (0.11)		-0.23*** (0.05)	-2,154.47*** (747.24)
Individual FE	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
Observations	2,244	1,284	960		604	604	120	120	2,244	2,244	2,244	2,244	1,496	1,450
Pre-Covid mean, male	0.60	1.00	0.00		22,907.98	6,429.89			1.73	9.56	1.20		1.29	9,662.93
Covid 2021 mean, male	0.62	0.75	0.43		18,114.76	5,715.89	22,226.65	9,231.04	2.32	9.39	1.26		1.42	12,979.16
Pre-Covid mean, female	0.55	1.00	0.00		17,809.38	4,476.25			2.56	7.22	2.43		1.00	4,938.30
Covid 2021 mean, female	0.55	0.71	0.36		11,561.71	3,567.73	16,480.32	5,370.26	3.49	6.47	2.58		0.90	6,100.05

Notes: This Table presents the same set of results as presented in Table 2 but limiting the sample to non-grant recipients and without business sector and county trends. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C10: Month of Interview FE: COVID-19 Impact on Gender Gap in Business Outcomes, Time Use, and Income Variables

	Business Ownership			Business Performance (W 5%)				Time Use			Income (W 5%)		
	All			Baseline Entrepreneurs		New Business		Work/		#	Income		Spousal Gap
	(1)	(2)	(3)	Sales (4)	Profits (5)	Sales (6)	Profits (7)	Childcare (8)	Study (9)	Domestic (10)	Sources (11)	Primary Activity (12)	(13)
Covid 2020 × Female	-0.05** (0.02)	-0.03 (0.02)	-0.06* (0.04)					0.27*** (0.09)	-0.41** (0.17)	0.12* (0.06)	-0.05 (0.04)		
Covid 2021 × Female	-0.05** (0.02)	-0.05** (0.03)	-0.04 (0.04)	-2,983.79* (1,777.26)	-1,479.20** (682.04)	-6,426.22*** (1,898.32)	-3,405.36*** (807.32)	0.21** (0.11)	0.03 (0.18)	-0.17** (0.08)	-0.13*** (0.04)	-1,541.29*** (506.04)	2,823.32*** (726.89)
Individual FE	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
Month of interview FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
Observations	5,145	3,075	2,070	1,466	1,466	384	384	5,145	5,145	5,145	5,145	3,304	2,608
Pre-Covid mean, male	0.62	1.00	0.00	22,087.28	6,766.43	.	.	1.71	9.79	1.14	1.29	9,715.53	-4,661.21
Covid 2021 mean, male	0.75	0.83	0.61	22,099.10	7,448.21	24,108.86	9,200.05	2.27	9.48	1.29	1.50	13,773.19	-9,671.30
Pre-Covid mean, female	0.58	1.00	0.00	17,079.99	4,864.84	.	.	2.57	7.34	2.44	1.00	4,956.51	8,256.23
Covid 2021 mean, female	0.70	0.80	0.56	13,730.90	4,290.57	18,487.84	5,980.67	3.38	7.07	2.39	1.08	7,473.93	5,900.78

Notes: This Table presents the same set of results as presented in Table 2 but including month of interview fixed effects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C11: The Role of Business Sector: COVID-19 Impact on Gender Gap in Business Outcomes

	Business Survival (1)	Sales (Wins. 5%) (2)	Profits (Wins. 5%) (3)
Covid 2020 × Female × Agriculture, forestry and fishing	0.05 (0.06)		
Covid 2020 × Female × Human health and social work activities	-0.08* (0.04)		
Covid 2020 × Female × Wholesale and retail trade	-0.04 (0.03)		
Covid 2020 × Female × Other	-0.00 (0.04)		
Covid 2021 × Female × Agriculture, forestry and fishing	-0.03 (0.08)	6,020.64 (4,052.91)	1,238.60 (1,938.26)
Covid 2021 × Female × Human health and social work activities	-0.09 (0.06)	-2,939.12 (3,849.50)	-2,568.37* (1,338.09)
Covid 2021 × Female × Wholesale and retail trade	-0.08** (0.04)	-5,556.49* (2,885.71)	-2,746.58*** (1,041.80)
Covid 2021 × Female × Other	0.05 (0.04)	-5,335.08* (3,029.94)	-619.45 (1,132.21)
Individual FE	✓	✓	✓
County*Survey FE	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓
Observations	3,075	1,466	1,466
Pre-Covid mean, male	1.00	22,087.28	6,766.43
Covid 2021 mean, male	0.83	22,099.10	7,448.21
Pre-Covid mean, female	1.00	17,079.99	4,864.84
Covid 2021 mean, female	0.80	13,730.90	4,290.57

Notes: All the regressions include observations from the baseline and the 2021 post-Covid follow-up survey. The sample is restricted to the 1,025 respondents that reported owning a business in the baseline period. Column (1) also includes observations from the 2020 post-Covid follow-up survey. Columns (2) and (3) further restrict the sample to the 733 respondents that reported owning one business in the baseline period and had non-missing sales and profits data. Columns (1), (2) and (3) present OLS regressions where the dependent variable are an indicator variable = 1 if the respondent reported owning a business, and monthly sales and profits winsorized at the 5% level on both tails reported in Kenyan Shillings, respectively. The table reports the coefficient of the interactions between the 2021 post-Covid survey time dummies, female, and indicator variables categorizing the business sector they operated in at baseline. All regressions control for individual fixed effects and county-time trends. Pre-Covid mean refers to the mean of males/females at baseline survey. Covid 2021 mean refer to the mean of males/females at the post-Covid 2021 follow-up survey. Standard errors, clustered at the individual level, in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

C2 Time Use, Business Adaptation and Business Outcomes

Table C12: COVID-19 Impact on Gender Gap in Time Use

	(1)	(2)	(3)	(4)	(5)	(6)
	Childcare	Work/study	Domestic work	Leisure	Sleep	Eating/self-care
Covid 2020 \times Female	0.27*** (0.09)	-0.40** (0.17)	0.11* (0.06)	0.01 (0.07)	0.02 (0.08)	0.03 (0.04)
Covid 2021 \times Female	0.22** (0.11)	0.05 (0.18)	-0.18** (0.08)	0.09 (0.08)	-0.19** (0.09)	0.00 (0.05)
Individual FE	✓	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓	✓	✓	✓
Observations	5,145	5,145	5,145	5,145	5,145	5,145
Pre-Covid mean, male	1.71	9.79	1.14	2.05	7.79	1.47
Covid 2020 mean, male	1.85	9.58	1.14	2.06	7.80	1.47
Covid 2021 mean, male	2.27	9.48	1.29	2.00	7.39	1.39
Pre-Covid mean, female	2.57	7.34	2.44	1.76	8.21	1.61
Covid 2020 mean, female	3.01	6.70	2.54	1.78	8.25	1.64
Covid 2021 mean, female	3.38	7.07	2.39	1.81	7.63	1.55
[Covid 2020 \times female] =						
[Covid 2021 \times female] (p-value)	0.61	0.01	0.00	0.29	0.01	0.52

Notes: All the regressions include observations from the two post-Covid follow-up surveys for the 1,715 respondents. OLS regressions where the dependent variables are the number of hours the respondent reports spending on a typical working day in each activity. The baseline values were collected during the 2020 post-Covid follow-up survey retroactively. The table reports the coefficient of the interactions between the two post-Covid surveys time dummies and female. All regressions control for individual fixed effects, survey fixed effects, county-survey fixed effects, and pre-Covid business sector-survey fixed effects. Pre-Covid mean refers to the mean of males/females at baseline survey. Covid 2020 mean and Covid 2021 mean refer to the mean of males/females at the post-Covid follow-up surveys in 2020 and 2021, respectively. Standard errors, clustered at the individual level, in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C13: COVID-19 Impact on Gender Gap in Time Use (If Worked Before)

	(1)	(2)	(3)	(4)	(5)	(6)
	Childcare	Work/study	Domestic work	Leisure	Sleep	Eating/self-care
Covid 2020 \times Female	0.39*** (0.09)	-0.85*** (0.16)	0.20*** (0.06)	0.13** (0.07)	0.09 (0.08)	0.09** (0.04)
Covid 2021 \times Female	0.38*** (0.11)	-0.58*** (0.18)	-0.04 (0.07)	0.23*** (0.08)	-0.12 (0.09)	0.07 (0.05)
Individual FE	✓	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓	✓	✓	✓
Observations	4,851	4,851	4,851	4,851	4,851	4,851
Pre-Covid mean, male	1.71	9.84	1.13	2.04	7.77	1.46
Covid 2020 mean, male	1.85	9.60	1.14	2.05	7.79	1.47
Covid 2021 mean, male	2.26	9.48	1.29	2.00	7.39	1.39
Pre-Covid mean, female	2.36	8.15	2.23	1.59	8.13	1.52
Covid 2020 mean, female	2.90	7.06	2.42	1.73	8.24	1.60
Covid 2021 mean, female	3.32	7.22	2.33	1.79	7.63	1.54
[Covid 2020 \times female] =						
[Covid 2021 \times female] (p-value)	0.91	0.13	0.00	0.23	0.02	0.73

Notes: The sample is restricted to those 1,617 individuals that reported positive working hours on a typical day in February 2020. All the regressions include observations from the two post-Covid follow-up surveys for the 1,617 respondents. OLS regressions where the dependent variables are the number of hours the respondent reports spending on a typical working day in each activity. The baseline values were collected during the 2020 post-Covid follow-up survey retroactively. The table reports the coefficient of the interactions between the two post-Covid surveys time dummies and female. All regressions control for individual fixed effects, survey fixed effects, county-survey fixed effects, and pre-Covid business sector-survey fixed effects. Pre-Covid mean refers to the mean of males/females at baseline survey. Covid 2020 mean and Covid 2021 mean refer to the mean of males/females at the post-Covid follow-up surveys in 2020 and 2021, respectively. Standard errors, clustered at the individual level, in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

To explore the role that increased gaps in childcare hours may play in explaining the business gaps results, we fully interact equation (1) with the number of hours respondents reported spending with children. The results suggest that gender differences in business ownership are, at least partly, due to mothers being more affected

by the rise in childcare hours than fathers (Table C14), with childcare effects being more relevant in the short-term for business entry, but more important for business survival in the medium-term.

Table C14: The Role of Chilcare Needs: COVID-19 Impact on Gender Gap in Business Outcomes

	Business Ownership			Pre-Covid Business Owners		New Business	
	All	Survival	Entry	Sales (Wins. 5%)	Profits (Wins. 5%)	Sales (Wins. 5%)	Profits (Wins. 5%)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Covid 2020 × Female	0.06*	0.03	0.13*				
	(0.04)	(0.04)	(0.07)				
Covid 2020 × Childcare	-0.02	-0.01	-0.04				
	(0.08)	(0.10)	(0.09)				
Covid 2020 × Female × Childcare	-0.04***	-0.02	-0.07***				
	(0.01)	(0.02)	(0.02)				
Covid 2021 × Female	0.08*	0.17***	-0.03	539.05	-614.31	-4,390.52	-4,587.43***
	(0.05)	(0.05)	(0.08)	(3,635.43)	(1,445.28)	(3,701.61)	(1,590.36)
Covid 2021 × Childcare	0.06	0.08	0.00	5,007.48	691.00	1,087.31	-15.69
	(0.05)	(0.05)	(0.08)	(8,086.31)	(2,416.94)	(1,721.57)	(746.78)
Covid 2021 × Female × Childcare	-0.04**	-0.07***	0.00	-995.38	-210.06	175.11	858.50
	(0.02)	(0.02)	(0.03)	(1,329.15)	(560.02)	(1,287.58)	(527.66)
Individual FE	✓	✓	✓	✓	✓		
County*Survey FE	✓	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓		✓	✓		
Observations	5,145	3,075	2,070	1,466	1,466	384	384
Pre-Covid mean, male	0.62	1.00	0.00	22,087.28	6,766.43	.	.
Covid 2020 mean, male	0.79	0.89	0.62	.	.	.	.
Covid 2021 mean, male	0.75	0.83	0.61	22,099.10	7,448.21	24,108.86	9,200.05
Pre-Covid mean, female	0.58	1.00	0.00	17,079.99	4,864.84	.	.
Covid 2020 mean, female	0.73	0.87	0.54	.	.	.	.
Covid 2021 mean, female	0.70	0.80	0.56	13,730.90	4,290.57	18,487.84	5,980.67

Notes: Columns (1) to (3) present OLS regressions including observations from the baseline and the two post-Covid follow-up surveys for the 1,715 respondents, where the dependent variable is an indicator variable = 1 if the respondent reported owning a business. Column (2) restricts the sample to the 1,025 respondents that reported owning at least one business in the baseline period. Column (3) restricts the sample to the 690 respondents that reported not owning any business in the baseline period. Columns (4) and (5) present OLS regressions including observations from the baseline and the 2021 post-Covid follow-up survey, where the dependent variable are monthly sales and monthly profits, respectively, winsorized at the 5% level on both tails reported in Kenyan Shillings for the 733 respondents that reported owning one business in the baseline period. Columns (6) and (7) restrict the sample to the 384 respondents that reported not owning any business in the baseline period but opened a business by the time of the 2021 follow-up survey, only using data from this latter survey. The regression results estimate equation (1) fully interacting with the number of hours respondent report spending in childcare. The table reports the coefficient of the interactions between the post-Covid surveys time dummies and the number of childcare hours, as well as their triple interaction with female. All regressions control for individual fixed effects, county- and business sector-time trends. Pre-Covid mean refers to the mean of males/females at baseline survey. Covid 2020 mean and Covid 2021 mean refer to the mean of males/females at the post-Covid follow-up surveys in 2020 and 2021, respectively. Standard errors, clustered at the individual level, in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Trying to understand how the pandemic could have affected business operations, we asked a series of questions around six possible business changes in the two follow up surveys about the primary business they owned in February 2020. In the first survey, the question was “Did your business experience the following change in response to the COVID-19 outbreak?”, and in the second round in 2021 “Did your business experience the following change since December 2020?”. For each possible business change k , we build an indicator variable BC_i^k equal to 1 if the answer is “Yes” in any of the two follow-up surveys.

Table C15 presents the results of regressions for each of these indicator variables on a female dummy and other individual characteristics (age, education, county, pre-Covid business sector, and KYEOP treatment status).

Heterogeneity analysis suggests that the increased gender gaps in business ownership and performance are concentrated among young entrepreneurs that switched to online sales and/or remote work arrangements, which are presumably the businesses more directly affected by the lockdowns. Additionally, the increased gender gap in business ownership is not present among those that received government support in response to the crisis (Table C16).

Table C15: Gendered Differences in Business Changes in Response to Covid-19

	Sell/transfer		Online/remote		Changed products/services		Changed location		Govt. help		Formal/informal loan	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Female	-0.00 (0.01)	0.00 (0.01)	-0.14*** (0.03)	-0.15*** (0.04)	-0.04 (0.02)	-0.06 (0.04)	0.02 (0.02)	0.01 (0.03)	-0.07** (0.03)	-0.04 (0.04)	-0.08*** (0.02)	-0.13*** (0.04)
Grant \times Female		-0.01 (0.01)		0.02 (0.05)		0.04 (0.05)		0.01 (0.04)		-0.04 (0.05)		0.08* (0.05)
Grant		0.01 (0.01)		-0.02 (0.04)		-0.03 (0.03)		0.10*** (0.03)		0.06 (0.04)		-0.10*** (0.04)
Age	0.00 (0.00)	0.00 (0.00)	-0.01** (0.00)	-0.01** (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.01)	0.00 (0.01)	-0.00 (0.00)	-0.00 (0.00)
Secondary	0.01* (0.00)	0.01* (0.00)	0.04 (0.03)	0.04 (0.03)	0.05* (0.03)	0.05* (0.03)	-0.02 (0.02)	-0.02 (0.02)	0.06** (0.03)	0.06** (0.03)	0.03 (0.03)	0.03 (0.03)
County FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Business sector FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Observations	1,351	1,351	1,348	1,348	1,348	1,348	1,345	1,345	1,348	1,348	1,348	1,348
Outcome mean, male	0.01	0.01	0.42	0.42	0.79	0.79	0.18	0.18	0.37	0.37	0.30	0.30
Outcome mean, female	0.01	0.01	0.30	0.30	0.76	0.76	0.20	0.20	0.30	0.30	0.22	0.22

Notes: OLS regressions where the dependent variable is an indicator variable = 1 if the respondent answered yes to each of the business changes in any of the 2020 or 2021 post-Covid follow-up survey (see appendix for description of each question). In the first survey, the question was *Did your business experience the following change in response to the COVID-19 outbreak*, and in the second round in 2021 *Did your business experience the following change since December 2020?*. For each possible business change k , we build an indicator variable BC_{i^k} equal to 1 if the answer is Yes in any of the two follow-up surveys. The questions were asked in each survey about the primary business to those that reported owning a business each of the follow-up survey rounds. Outcome mean refer to the mean of the males/female dependent variable. Standard errors, clustered at the individual level, in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C16: The Role of Post-Covid Business Changes: COVID-19 Impact on Gender Gap in Business Outcomes

	Business Ownership			Sales (Wins. 5%)			Profits (Wins. 5%)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Covid 2021 × Female	-0.01 (0.02)	-0.04* (0.02)	-0.04** (0.02)	-28.87 (2,326.85)	-3,227.04 (2,592.21)	-2,136.00 (2,240.11)	-546.13 (860.63)	-2,153.61** (961.35)	-1,573.21* (887.95)
Covid 2021 × Female × Online/remote	-0.06* (0.03)			-7,385.46* (3,809.51)			-2,678.97* (1,578.73)		
Covid 2021 × Female × Govt. help		0.05* (0.03)			6.02 (3,859.59)			1,398.17 (1,536.52)	
Covid 2021 × Female × Formal/informal loan			-0.02 (0.04)			-5,551.76 (4,749.49)			-1,284.31 (1,682.28)
Individual FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
Observations	2,696	2,696	2,696	1,318	1,318	1,318	1,318	1,318	1,318
Pre-Covid mean, male	0.68	0.68	0.68	22,992.39	22,992.39	22,992.39	6,891.50	6,891.50	6,891.50
Covid 2021 mean, male	0.92	0.92	0.92	25,203.32	25,203.32	25,203.32	8,494.45	8,494.45	8,494.45
Pre-Covid mean, female	0.67	0.67	0.67	17,524.19	17,524.19	17,524.19	4,983.27	4,983.27	4,983.27
Covid 2021 mean, female	0.89	0.89	0.89	14,951.42	14,951.42	14,951.42	4,671.95	4,671.95	4,671.95

Notes: All the regressions include observations from the baseline and the 2021 post-Covid follow-up survey for the respondents for which the business change variables are available in the follow-up survey. Columns (1) to (3) present OLS regressions where the dependent variable is an indicator variable = 1 if the respondent reported owning a business. Columns (4) to (6) and (6) to (8) present OLS regressions where the dependent variable are monthly sales and monthly profits, respectively, winsorized at the 5% level on both tails reported in Kenyan Shillings among respondents that reported owning one business in the baseline period. The regression results estimate equation (1) fully interacting with indicator variables equal to one if the respondent adopted the business change specified in the variable list by the time of the 2020 or 2021 follow-up surveys. The table reports the coefficient of the interactions between the post-Covid surveys time dummies, the business change, and female. All regressions control for individual fixed effects, county- and business sector-time trends. Pre-Covid mean refers to the mean of males/females at baseline survey. Covid 2021 mean refer to the mean of males/females at the 2021 post-Covid follow-up surveys. Standard errors, clustered at the individual level, in parentheses * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

C3 Vignettes

Table C17: Vignettes: Construct Validity

	2020				2021			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Vignette Index	V1 Partner Control	V2 Voice Heard	V3 Partner Income	Vignette Index	V1 Partner Control	V2 Voice Heard	V3 Partner Income
Age gap	-0.21***	-0.08***	-0.17***	-0.16***	-0.19***	-0.06**	-0.15***	-0.14***
Education gap	-0.08***	-0.03	-0.07***	-0.06**	-0.04*	-0.07***	0.02	-0.04*
Respondent's asset ratio	-0.10***	-0.04*	-0.06**	-0.10***	-0.10***	-0.02	-0.08***	-0.09***
Main household earner	-0.30***	-0.13***	-0.19***	-0.27***	-0.22***	-0.08***	-0.14***	-0.19***
# income sources	-0.11***	-0.02	-0.08***	-0.13***	-0.13***	-0.06**	-0.07***	-0.12***
Income gap (w 5%)	.	.	.	.	-0.20***	-0.07***	-0.12***	-0.18***

Notes: This table presents pairwise correlation coefficients of the vignettes with each of the outcomes listed on the left column. Gaps are defined as the respondent's outcome minus the spousal outcome* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C18: COVID-19 Impact on Gender Gap in Intra-Household Dynamics: Heterogeneity by Type of Location

	Small City/Village				Big City			
	Vignette Index (1)	V1 Partner Control (2)	V2 Voice Heard (3)	V3 Partner Income (4)	Vignette Index (5)	V1 Partner Control (6)	V2 Voice Heard (7)	V3 Partner Income (8)
Covid 2020 \times Female	0.40*** (0.15)	0.12 (0.16)	0.22 (0.16)	0.50*** (0.16)	0.61*** (0.05)	0.29*** (0.06)	0.48*** (0.06)	0.52*** (0.06)
Covid 2021 \times Female	0.47*** (0.15)	0.05 (0.17)	0.40** (0.16)	0.54*** (0.16)	0.41*** (0.05)	0.13** (0.06)	0.38*** (0.06)	0.36*** (0.06)
Covid 2021	-0.03 (0.52)	-0.19 (0.66)	0.73 (0.52)	-0.59 (0.49)	-0.00 (0.26)	-0.02 (0.28)	-0.37 (0.28)	0.39 (0.29)
Constant	0.06 (0.27)	2.42*** (0.32)	2.31*** (0.23)	2.41*** (0.29)	-0.11 (0.11)	2.13*** (0.13)	2.61*** (0.12)	2.05*** (0.12)
County*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓
Observations	452	452	452	452	2,770	2,770	2,770	2,770
Covid 2020 mean, male	-0.18	2.37	2.13	2.12	-0.35	2.22	1.99	2.07
Covid 2021 mean, male	-0.29	2.30	1.96	2.15	-0.21	2.28	2.06	2.24
Covid 2020 mean, female	0.25	2.55	2.35	2.64	0.26	2.50	2.48	2.58
Covid 2021 mean, female	0.24	2.37	2.43	2.73	0.21	2.43	2.44	2.59
[Covid 2020 \times female] =								
[Covid 2021 \times female] (p-value)	0.73	0.78	0.44	0.87	0.01	0.06	0.20	0.06

Notes: All the regressions include observations from the two post-Covid follow-up surveys for the 1,611 respondents with non-missing information for all three vignettes in both survey rounds. Columns (1) to (4) restrict the sample to respondents living outside of counties with big cities. Columns (5) to (8) limit the sample to the counties of Kisumu, Mombasa, and Nairobi. Columns (1) and (5) dependent variable is the standardized average of the three vignettes. Columns (2) to (4) and (6) to (8) present the answers to vignette 1, 2 and 3, respectively. The three vignettes are coded on a scale from one to four, with four indicating the largest decline in intra-household position as described by each vignette. The table reports the coefficient of the interactions between the two post-Covid surveys and female. All regressions control for county- and business sector-time trends. Covid 2020 mean and Covid 2021 mean refer to the mean of males/females at the post-Covid follow-up surveys in 2020 and 2021, respectively. Standard errors, clustered at the individual level, in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table C19: COVID-19 Impact on Gender Gap in Intra-Household Dynamics: Heterogeneity by Education Level

	< Secondary				Secondary			
	Vignette Index (1)	V1 Partner Control (2)	V2 Voice Heard (3)	V3 Partner Income (4)	Vignette Index (5)	V1 Partner Control (6)	V2 Voice Heard (7)	V3 Partner Income (8)
Covid 2020 × Female	0.62*** (0.11)	0.23** (0.11)	0.73*** (0.11)	0.34*** (0.11)	0.59*** (0.06)	0.32*** (0.07)	0.34*** (0.06)	0.58*** (0.07)
Covid 2021 × Female	0.38*** (0.09)	0.15 (0.11)	0.45*** (0.10)	0.20* (0.11)	0.42*** (0.06)	0.09 (0.07)	0.34*** (0.07)	0.46*** (0.07)
Covid 2021	0.68 (0.45)	0.98** (0.39)	0.36 (0.65)	0.08 (0.37)	0.09 (0.30)	-0.17 (0.37)	0.33 (0.33)	0.04 (0.34)
Constant	-0.39 (0.25)	1.86*** (0.27)	2.09*** (0.24)	2.24*** (0.26)	-0.04 (0.12)	2.39*** (0.15)	2.33*** (0.13)	2.22*** (0.13)
County*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓
Observations	980	980	980	980	2,242	2,242	2,242	2,242
Covid 2020 mean, male	-0.40	2.15	1.94	2.09	-0.30	2.27	2.03	2.07
Covid 2021 mean, male	-0.18	2.28	2.06	2.30	-0.24	2.28	2.04	2.20
Covid 2020 mean, female	0.19	2.33	2.65	2.44	0.29	2.59	2.37	2.66
Covid 2021 mean, female	0.24	2.45	2.55	2.53	0.20	2.41	2.38	2.65
[Covid 2020 × female] = [Covid 2021 × female] (p-value)	0.10	0.65	0.06	0.37	0.05	0.02	1.00	0.20

Notes: All the regressions include observations from the two post-Covid follow-up surveys for the 1,611 respondents with non-missing information for all three vignettes in both survey rounds. Columns (1) to (4) restrict the sample to respondents with less than a secondary education. Columns (5) to (8) limit the sample to respondents with secondary education. Columns (1) and (5) dependent variable is the standardized average of the three vignettes. Columns (2) to (4) and (6) to (8) present the answers to vignette 1, 2 and 3, respectively. The three vignettes are coded on a scale from one to four, with four indicating the largest decline in intra-household position as described by each vignette. The table reports the coefficient of the interactions between the two post-Covid surveys and female. All regressions control for county- and business sector-time trends. Covid 2020 mean and Covid 2021 mean refer to the mean of males/females at the post-Covid follow-up surveys in 2020 and 2021, respectively. Standard errors, clustered at the individual level, in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

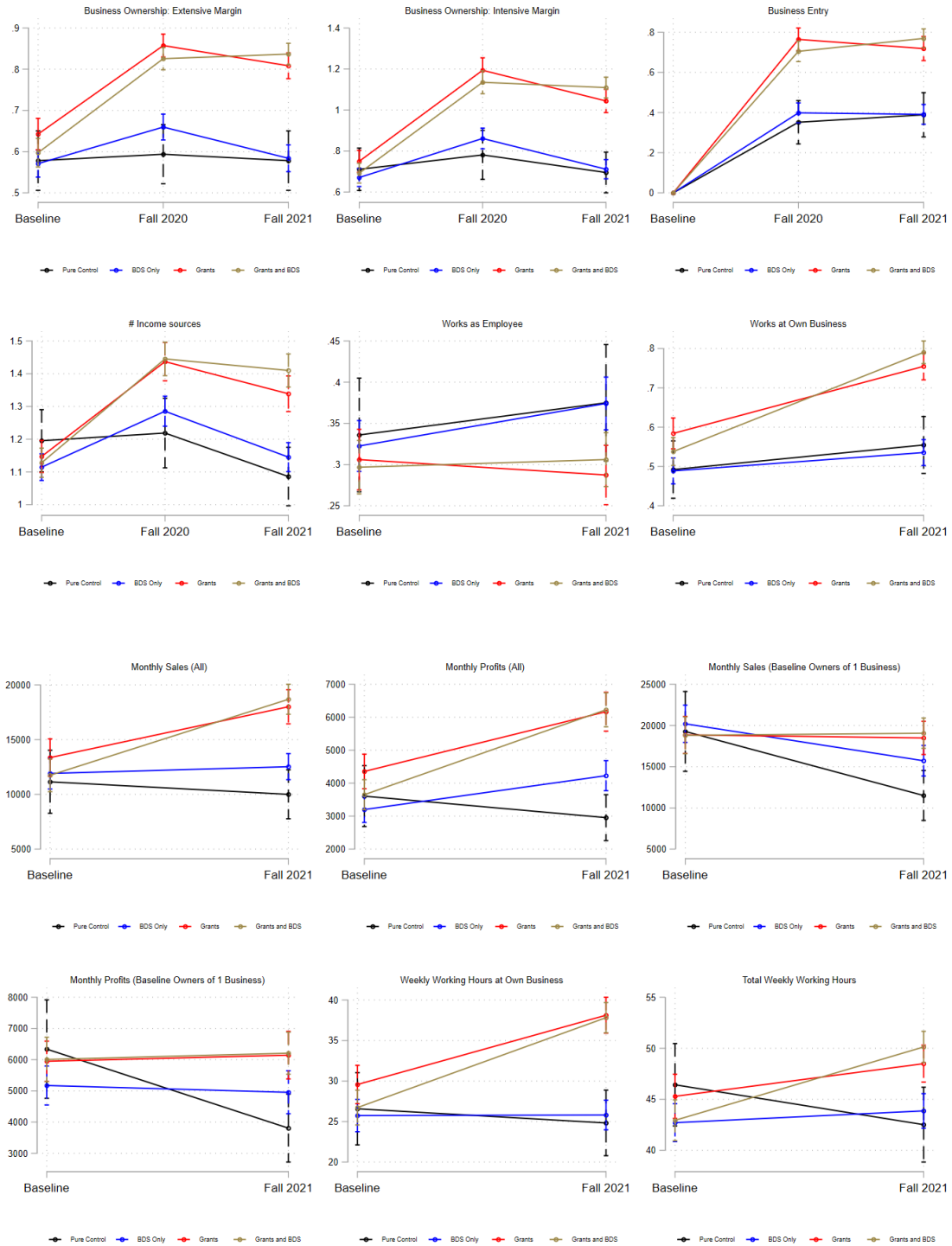
Table C20: Intrahousehold Bargaining Power and Marital Dissolution

	All	Women	Men
	(1)	(2)	(3)
V1 Partner control	-0.09*** (0.01)	-0.11*** (0.01)	-0.06*** (0.01)
V2 Voice heard	-0.00 (0.01)	-0.03* (0.02)	0.03 (0.02)
V3 Partner Income	-0.10*** (0.01)	-0.13*** (0.01)	-0.06*** (0.01)
Female	0.05*** (0.01)		
County FE	✓	✓	✓
Baseline business sector FE	✓	✓	✓
Observations	1715	937	778

Notes: the dependent variable is an indicator variable = 1 if the respondent reported been divorced or separated in the 2021 follow-up survey. Column (1) includes the 1,715 respondents and columns (2) and (3) limit the sample to female and male respondents, respectively. The regressors of interest are dummy variables equal to one if the respondent identified with a worsening in their intra-household position in each of the three different vignettes. Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

D1 Treatment Effects: Additional Analysis

Figure D1: Evolution of Main Outcome Variables Over Time by Treatment Status



Notes: This figure plots the mean and the 90% confidence interval of the mean outcome variable over time by treatment status: pure control, BDS only, grant only, and grant and BDS.

Table D1: ANCOVA Grants and BDS Treatment Effects during COVID: Business Outcomes and Income Variables

	Business Performance									
	Business Ownership			Business Performance				Income		
				All		Baseline Owners (1 Business)				
	All	Survival	Entry	Sales (W. 5%)	Profits (W. 5%)	Sales (W. 5%)	Profits (W. 5%)	Has source	Number sources	Income Prim. activity (W%5)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
Grant	0.19*** (0.04)	0.11*** (0.04)	0.32*** (0.07)	7,713.25*** (1,784.02)	2,624.43*** (699.89)	6,117.27** (2,526.84)	2,349.37** (993.57)	-0.00 (0.01)	0.06 (0.06)	1,527.24* (790.97)
Grant × Female	0.03 (0.05)	0.02 (0.06)	0.02 (0.09)	-4,134.21* (2,143.12)	-1,281.59 (846.22)	-3,581.15 (2,968.21)	-1,618.05 (1,187.69)	0.13*** (0.03)	0.26*** (0.08)	607.79 (998.70)
Grant and BDS	0.23*** (0.03)	0.15*** (0.04)	0.35*** (0.06)	6,626.88*** (1,563.90)	2,330.11*** (636.36)	4,405.96* (2,258.23)	1,652.68* (895.43)	0.01 (0.01)	0.19*** (0.05)	1,322.78* (722.66)
Grant and BDS × Female	0.03 (0.05)	-0.00 (0.06)	0.05 (0.08)	-159.53 (2,005.67)	-401.20 (787.48)	-338.52 (2,875.77)	-803.27 (1,094.78)	0.11*** (0.03)	0.14** (0.07)	1,591.42* (953.63)
Female	-0.06* (0.03)	-0.06 (0.04)	-0.06 (0.06)	-4,988.02*** (1,283.97)	-2,134.60*** (501.26)	-6,936.60*** (2,109.23)	-2,221.74*** (794.76)	-0.20*** (0.02)	-0.49*** (0.04)	-5,857.47*** (628.44)
County	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Baseline business sector	✓	✓		✓	✓	✓	✓	✓	✓	✓
Observations	1,715	1,025	690	1,677	1,677	851	851	1,715	1,715	1,700
Grant effect for females	0.22*** (0.03)	0.14*** (0.04)	0.33*** (0.06)	3579.04*** (1194.88)	1342.83*** (475.94)	2536.12* (1510.93)	731.32 (634.09)	0.13*** (0.03)	0.32*** (0.05)	2135.03*** (614.07)
Grant and BDS effect for females	0.26*** (0.03)	0.15*** (0.04)	0.40*** (0.05)	6467.35*** (1259.68)	1928.92*** (465.01)	4067.45** (1789.17)	849.41 (645.80)	0.12*** (0.03)	0.34*** (0.05)	2914.19*** (630.43)
Control+BDS only mean, male	0.62	0.75	0.43	15355.14	5359.39	18888.05	6043.32	0.99	1.42	12982.35
Control +BDS only mean, female	0.55	0.71	0.36	9449.52	2913.33	11690.11	3662.43	0.77	0.90	6030.12
[Grant=Grant and BDS] male (p-value)	0.33	0.39	0.62	0.57	0.70	0.50	0.49	0.35	0.04	0.81
[Grant=Grant and BDS] female (p-value)	0.28	0.76	0.29	0.04	0.28	0.39	0.86	0.70	0.70	0.28

Notes: This Table presents the same set of results as presented in Table 4 but in an ANCOVA specification. *

$p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D2: Grants and BDS Treatment Effects during COVID: Business Outcomes and Income Variables

	Business Performance									
	Business Ownership			All				Income		
	All (1)	Survival (2)	Entry (3)	Sales (W. 5%) (4)	Profits (W. 5%) (5)	Sales (W. 5%) (6)	Profits (W. 5%) (7)	Has source (8)	Number sources (9)	Income Prim. activity (W%5) (10)
Covid 2021 \times Grant	0.22*** (0.06)	0.13 (0.08)	0.33*** (0.10)	9,767.92*** (2,921.94)	4,493.49*** (1,158.40)	11,391.15** (5,699.71)	6,080.38*** (2,228.27)	0.02 (0.03)	0.17 (0.11)	1,551.16 (1,556.64)
Covid 2021 \times Grant \times Female	-0.02 (0.09)	-0.02 (0.11)	0.01 (0.15)	-3,188.43 (3,872.71)	-2,050.58 (1,428.44)	-4,337.80 (7,101.50)	-4,020.70 (2,621.61)	0.12* (0.07)	0.27* (0.14)	2,869.35 (2,090.35)
Covid 2021 \times Grant and BDS	0.26*** (0.06)	0.17** (0.08)	0.36*** (0.10)	10,725.75*** (2,783.08)	4,821.09*** (1,135.52)	11,785.53** (5,586.19)	5,658.45** (2,207.09)	0.03 (0.03)	0.30*** (0.10)	2,274.98 (1,507.89)
Covid 2021 \times Grant and BDS \times Female	-0.02 (0.09)	-0.04 (0.11)	0.04 (0.15)	-2,624.07 (3,822.72)	-1,871.72 (1,397.96)	-3,752.12 (7,152.04)	-3,641.67 (2,619.36)	0.11 (0.07)	0.18 (0.14)	2,928.43 (2,056.48)
Covid 2021 \times BDS	0.03 (0.07)	0.02 (0.09)	0.02 (0.10)	2,525.58 (2,764.49)	2,547.51** (1,102.03)	3,909.89 (5,694.83)	4,060.81* (2,184.48)	0.02 (0.03)	0.12 (0.10)	510.70 (1,500.70)
Covid 2021 \times BDS \times Female	-0.06 (0.09)	-0.05 (0.11)	-0.01 (0.15)	-974.23 (3,707.28)	-1,268.64 (1,345.99)	-1,134.20 (7,181.62)	-2,636.37 (2,594.11)	0.02 (0.07)	0.02 (0.13)	2,154.29 (2,028.69)
Individual FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Survey FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓		✓	✓	✓	✓	✓	✓	✓
Observations	3,430	2,050	1,380	3,100	3,100	1,466	1,466	3,430	3,430	3,304
Grant effect for females	0.20*** (0.06)	0.11 (0.07)	0.34*** (0.11)	6579.50** (2570.98)	2442.90*** (831.10)	7053.35 (4376.52)	2059.68 (1405.43)	0.14** (0.07)	0.44*** (0.10)	4420.51*** (1403.55)
Grant and BDS effect for females	0.23*** (0.06)	0.12* (0.07)	0.41*** (0.11)	8101.67*** (2629.13)	2949.36*** (820.21)	8033.40* (4617.82)	2016.78 (1463.52)	0.15** (0.07)	0.48*** (0.10)	5203.41*** (1414.48)
BDS only effect for females	-0.03 (0.06)	-0.03 (0.08)	0.01 (0.11)	1551.35 (2493.22)	1278.88* (774.42)	2775.69 (4484.88)	1424.44 (1426.04)	0.03 (0.07)	0.14 (0.09)	2664.99* (1382.38)
Control mean, male	0.57	0.70	0.41	9263.68	3238.68	11175.00	4209.52	0.98	1.38	11256.10
Control mean, female	0.59	0.73	0.37	9647.08	2419.58	9918.75	3061.61	0.75	0.82	5315.08
[Grant=Grant and BDS] male (p-value)	0.33	0.39	0.61	0.67	0.70	0.90	0.73	0.51	0.11	0.47
[Grant=Grant and BDS] female (p-value)	0.28	0.76	0.29	0.39	0.45	0.71	0.96	0.90	0.59	0.34

Notes: This Table presents the same set of results as presented in Table 4 but splitting the comparison group by pure control and BDS only. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D3: Grants and BDS Treatment Effects during COVID: Business Ownership

	All		Survival		Entry	
	All (1)	Cluster 1 (2)	All (3)	Cluster 1 (4)	All (5)	Cluster 1 (6)
Covid 2020 \times Grant	0.17*** (0.03)	0.23*** (0.08)	0.06* (0.04)	0.09 (0.08)	0.34*** (0.06)	0.42*** (0.16)
Covid 2021 \times Grant	0.19*** (0.04)	0.18** (0.08)	0.11*** (0.04)	0.14 (0.09)	0.32*** (0.07)	0.18 (0.18)
Covid 2020 \times Grant \times Female	0.03 (0.05)	0.13 (0.10)	0.00 (0.05)	0.08 (0.12)	0.07 (0.09)	0.19 (0.18)
Covid 2021 \times Grant \times Female	0.03 (0.05)	0.06 (0.11)	0.02 (0.06)	-0.07 (0.14)	0.02 (0.09)	0.29 (0.22)
Covid 2020 \times Grant and BDS	0.15*** (0.03)	0.31*** (0.07)	0.08*** (0.03)	0.12 (0.08)	0.26*** (0.06)	0.54*** (0.12)
Covid 2021 \times Grant and BDS	0.23*** (0.03)	0.18** (0.08)	0.15*** (0.04)	0.07 (0.10)	0.35*** (0.06)	0.30** (0.12)
Covid 2020 \times Grant and BDS \times Female	0.03 (0.04)	0.06 (0.09)	-0.04 (0.05)	0.01 (0.12)	0.08 (0.08)	0.02 (0.15)
Covid 2021 \times Grant and BDS \times Female	0.03 (0.05)	0.17 (0.10)	-0.00 (0.06)	0.08 (0.14)	0.05 (0.08)	0.20 (0.16)
Individual FE	✓	✓	✓	✓	✓	✓
Survey FE	✓	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓	✓		
Observations	5,145	1,242	3,075	705	2,070	537
2020 Grant effect for females	0.20*** (0.03)	0.36*** (0.06)	0.07* (0.04)	0.17** (0.09)	0.41*** (0.06)	0.61*** (0.10)
2020 Grant and BDS effect for females	0.18*** (0.03)	0.37*** (0.07)	0.04 (0.03)	0.13 (0.09)	0.35*** (0.05)	0.56*** (0.09)
2020 Comparison group mean, female	0.62	0.50	0.84	0.77	0.34	0.26
2020 Percent effect (grant only), female	32.86	70.82	7.87	22.39	120.32	230.99
2020 Percent effect (grant and BDS), female	29.87	73.21	5.01	16.39	102.31	213.07
2020 Comparison group mean, male	0.69	0.57	0.84	0.81	0.46	0.26
2020 Percent effect (grant only), male	24.69	40.30	7.56	11.47	74.08	158.49
2020 Percent effect (grant and BDS), male	22.47	54.38	10.05	14.53	57.41	204.59
2021 Grant effect for females	0.22*** (0.03)	0.24*** (0.08)	0.14*** (0.04)	0.07 (0.11)	0.33*** (0.06)	0.47*** (0.12)
2021 Grant and BDS effect for females	0.26*** (0.03)	0.35*** (0.07)	0.15*** (0.04)	0.15 (0.10)	0.40*** (0.05)	0.51*** (0.10)
2021 Comparison group mean, female	0.55	0.45	0.71	0.67	0.36	0.25
2021 Percent effect (grant only), female	40.06	53.42	19.05	9.89	91.53	192.36
2021 Percent effect (grant and BDS), female	46.73	78.32	20.71	22.90	110.10	206.74
2021 Comparison group mean, male	0.62	0.53	0.75	0.70	0.43	0.32
2021 Percent effect (grant only), male	31.28	33.84	15.19	19.82	73.62	56.72
2021 Percent effect (grant and BDS), male	36.81	34.26	19.73	10.56	81.59	94.21

Notes: This Table includes the results of augmenting equation (2) including the 2020 follow-up survey. The columns Cluster 1 limit the sample to counties in the first cluster who received the grants earlier on.

Table D4: Treatment Effects on Business Ownership: Heterogeneity by COVID Severity Shock

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Covid 2021 \times Grant	0.22*** (0.02)	0.25*** (0.03)	0.22*** (0.03)	0.23*** (0.03)	0.21*** (0.03)	0.24*** (0.04)	0.22*** (0.03)	0.24*** (0.03)	0.24*** (0.03)	0.26*** (0.04)
Covid 2021 \times Grant \times Mob. restrictions	0.06 (0.05)	0.01 (0.06)								
Covid 2021 \times Grant \times Mob. affected: retail			0.02 (0.04)	0.03 (0.05)						
Covid 2021 \times Grant \times Mob. affected: work					0.02 (0.04)	0.01 (0.05)				
Covid 2021 \times Grant \times Mob. affected: grocery							0.03 (0.04)	0.01 (0.05)		
Covid 2021 \times Grant \times Mob. affected: transit									-0.02 (0.04)	-0.03 (0.05)
Covid 2021 \times Grant \times Female		-0.05* (0.03)		-0.03 (0.03)		-0.05 (0.04)		-0.05 (0.03)		-0.04 (0.04)
Covid 2021 \times Grant \times Mob. restrictions \times Female		0.09 (0.06)								
Covid 2021 \times Grant \times Mob. affected: retail \times Female				-0.01 (0.05)						
Covid 2021 \times Grant \times Mob. affected: work \times Female						0.02 (0.05)				
Covid 2021 \times Grant \times Mob. affected: grocery \times Female								0.03 (0.05)		
Covid 2021 \times Grant \times Mob. affected: transit \times Female										0.02 (0.05)
Individual FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Survey FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Observations	3,430	3,430	3,430	3,430	3,430	3,430	3,430	3,430	3,430	3,430

Notes: This Table presents results of estimating grant treatment heterogeneity on business ownership by severity of the COVID-19 shock on business ownership. The mobility restriction variable is an indicator variable equal to one for the counties of Nairobi, Mombasa, Kilifi, and Kwale. The mobility affected: retail, work, grocery, and transit variables are indicator variables equal to one if the county is in the top 50th percentile of mobility affectedness according to COVID-19 Google mobility trends. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D5: Treatment Effects on Business Survival: Heterogeneity by Business Sector

	(1)	(2)
Covid 2021 \times Grant \times Agriculture	0.07 (0.08)	0.05 (0.09)
Covid 2021 \times Grant \times Health	0.18*** (0.06)	0.26*** (0.06)
Covid 2021 \times Grant \times Retail	0.15*** (0.04)	0.18*** (0.05)
Covid 2021 \times Grant \times Other	0.11** (0.05)	0.14*** (0.05)
Covid 2021 \times Grant \times Agriculture \times Female		0.05 (0.09)
Covid 2021 \times Grant \times Health \times Female		-0.13** (0.06)
Covid 2021 \times Grant \times Retail \times Female		-0.04 (0.04)
Covid 2021 \times Grant \times Other \times Female		-0.07 (0.05)
Individual FE	✓	✓
Survey FE	✓	✓
County*Survey FE	✓	✓
Baseline business sector*Survey FE	✓	✓
Observations	2,050	2,050

Notes: This Table presents results of estimating grant treatment heterogeneity by baseline business sector. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D6: Grants and BDS Treatment Effects during COVID: Subjective Wellbeing

	10-step ladder		Intra-Household		
	Perception	Expectation	Food security	Satisfaction work/life	Vignette Index
	(1)	(2)	(3)	(4)	(5)
Grant	1.08*** (0.22)	1.00*** (0.26)	0.41** (0.16)	0.32* (0.18)	-0.18 (0.16)
Grant \times Female	-0.97*** (0.29)	-0.53 (0.34)	0.04 (0.21)	-0.31 (0.23)	0.07 (0.21)
Grant and BDS	1.02*** (0.21)	1.26*** (0.25)	0.48*** (0.15)	0.32* (0.17)	-0.19 (0.16)
Grant and BDS \times Female	-0.83*** (0.29)	-1.00*** (0.33)	-0.08 (0.20)	-0.19 (0.23)	0.08 (0.21)
BDS	0.55*** (0.21)	0.75*** (0.25)	0.18 (0.15)	0.02 (0.17)	-0.00 (0.16)
BDS \times Female	-0.68** (0.28)	-0.60* (0.33)	0.06 (0.20)	-0.10 (0.23)	-0.05 (0.20)
Female	0.66*** (0.25)	0.68** (0.30)	-0.09 (0.18)	0.13 (0.21)	0.42** (0.19)
County FE	✓	✓	✓	✓	✓
Baseline business sector	✓	✓	✓	✓	✓
Observations	1,715	1,715	1,715	1,715	1,611
Grant effect for females	0.12 (0.19)	0.47** (0.22)	0.45*** (0.13)	0.01 (0.15)	-0.12 (0.13)
Grant and BDS effect for females	0.19 (0.19)	0.26 (0.21)	0.40*** (0.13)	0.13 (0.15)	-0.12 (0.13)
BDS only effect for females	-0.13 (0.19)	0.14 (0.21)	0.25* (0.13)	-0.07 (0.15)	-0.05 (0.13)
Control mean, male	3.58	6.68	-1.45	2.77	-0.13
Control mean, female	4.25	7.38	-1.53	3.00	0.29
[Grant=Grant and BDS] male (p-value)	0.66	0.09	0.47	0.98	0.93
[Grant=Grant and BDS] female (p-value)	0.59	0.17	0.56	0.22	0.99

Notes: All the regressions include observations from the 2021 post-Covid follow-up survey for the 1,715 respondents. Columns (1) to (4) are OLS regressions where the dependent variables are the answers to the different measures of individual subjective well-being. Column (5) dependent variable is the standardized average index of the three intra-household vignettes restricting to the 1,611 individuals with non-missing information for the three vignettes. The table reports the coefficient of female and interactions between female and the indicators for treatment (Grant only and Grant+BDS). All regressions control for county and business sector fixed effects. Control+BDS only mean refers to the mean of males/females of the pure control or BDS only groups at the 2021 follow-up survey. Standard errors, clustered at the individual level, in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D7: ANCOVA Grants and BDS Treatment Effects during COVID: Labor Supply

	Last month: worked as						Weekly hours (W5%)	
	Any	#	Employee	Business	Farm/Livestock	Help/Volunteer	Business	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Grant	0.00 (0.01)	0.02 (0.11)	-0.17*** (0.04)	0.20*** (0.04)	-0.00 (0.04)	0.01 (0.08)	14.36*** (2.53)	2.55 (1.61)
Grant × Female	0.11*** (0.03)	0.37** (0.15)	0.18*** (0.05)	-0.01 (0.05)	0.10* (0.05)	0.08 (0.11)	-5.61* (3.19)	3.23 (2.51)
Grant and BDS	0.00 (0.01)	0.00 (0.10)	-0.11*** (0.04)	0.20*** (0.04)	0.02 (0.04)	-0.10 (0.07)	9.13*** (2.28)	1.35 (1.51)
Grant and BDS × Female	0.12*** (0.03)	0.42*** (0.14)	0.08 (0.05)	0.06 (0.05)	0.05 (0.05)	0.21** (0.10)	4.50 (2.97)	8.97*** (2.41)
Female	-0.19*** (0.02)	-0.69*** (0.09)	-0.28*** (0.03)	-0.06* (0.03)	-0.12*** (0.03)	-0.25*** (0.07)	-6.01*** (1.97)	-19.71*** (1.67)
County	✓	✓	✓	✓	✓	✓	✓	✓
Baseline business sector	✓	✓	✓	✓	✓	✓	✓	✓
Observations	1,715	1,715	1,715	1,715	1,715	1,715	1,712	1,701
Grant effect for females	0.11*** (0.03)	0.39*** (0.10)	0.01 (0.03)	0.19*** (0.04)	0.10*** (0.04)	0.08 (0.07)	8.75*** (1.96)	5.77*** (1.92)
Grant and BDS effect for females	0.12*** (0.03)	0.42*** (0.10)	-0.03 (0.03)	0.27*** (0.03)	0.07** (0.03)	0.11 (0.07)	13.63*** (1.89)	10.32*** (1.87)
Control+BDS only mean, male	0.99	2.44	0.54	0.57	0.51	0.81	29.38	55.23
Control +BDS only mean, female	0.79	1.69	0.24	0.51	0.37	0.57	22.49	34.13
[Grant=Grant and BDS] male (p-value)	0.87	0.91	0.14	0.83	0.62	0.18	0.05	0.48
[Grant=Grant and BDS] female (p-value)	0.65	0.75	0.31	0.03	0.44	0.78	0.02	0.02

Notes: This Table presents the same set of results as presented in Table 6 but in an ANCOVA specification. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D8: Grants and BDS Treatment Effects during COVID: Labor Supply

	Last month: worked as						Weekly hours (W5%)	
	Any (1)	# (2)	Employee (3)	Business (4)	Farm/Livestock (5)	Help/Volunteer (6)	Business (7)	Total (8)
Covid 2021 \times Grant	-0.01 (0.03)	0.01 (0.23)	-0.20** (0.09)	0.21*** (0.07)	-0.08 (0.07)	0.09 (0.18)	15.65*** (4.46)	3.96 (3.51)
Covid 2021 \times Grant \times Female	0.12* (0.07)	0.57* (0.32)	0.26** (0.12)	-0.12 (0.10)	0.29*** (0.10)	0.15 (0.24)	-6.27 (5.90)	8.25 (5.62)
Covid 2021 \times Grant and BDS	0.00 (0.03)	0.00 (0.23)	-0.12 (0.09)	0.23*** (0.07)	-0.07 (0.07)	-0.04 (0.18)	10.74** (4.35)	5.88* (3.37)
Covid 2021 \times Grant and BDS \times Female	0.14* (0.07)	0.63** (0.32)	0.17 (0.11)	-0.07 (0.10)	0.23** (0.10)	0.30 (0.24)	4.09 (5.83)	10.77* (5.59)
Covid 2021 \times BDS	-0.00 (0.03)	0.10 (0.22)	-0.03 (0.09)	0.06 (0.07)	-0.10 (0.07)	0.18 (0.18)	2.56 (4.32)	5.48 (3.34)
Covid 2021 \times BDS \times Female	0.03 (0.07)	0.15 (0.31)	0.09 (0.11)	-0.15 (0.10)	0.26** (0.10)	-0.05 (0.23)	-2.23 (5.77)	-0.17 (5.49)
Covid 2021 \times Female	-0.08 (0.07)	-0.44 (0.29)	-0.14 (0.10)	0.06 (0.09)	-0.26*** (0.09)	-0.11 (0.22)	-2.39 (5.20)	-8.52* (4.96)
Individual FE	✓	✓	✓	✓	✓	✓	✓	✓
Survey FE	✓	✓	✓	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓
Observations	3,430	3,430	3,430	3,430	3,430	3,430	3,424	3,402
Grant effect for females	0.12* (0.06)	0.58*** (0.22)	0.06 (0.07)	0.08 (0.07)	0.20*** (0.08)	0.24 (0.16)	9.38** (3.90)	12.20*** (4.39)
Grant and BDS effect for females	0.14** (0.06)	0.64*** (0.21)	0.05 (0.07)	0.16** (0.07)	0.17** (0.08)	0.26* (0.15)	14.82*** (3.91)	16.65*** (4.45)
BDS effect for females	0.03 (0.06)	0.25 (0.21)	0.06 (0.07)	-0.09 (0.07)	0.15** (0.08)	0.13 (0.15)	0.33 (3.87)	5.31 (4.37)
Comparison group mean, female	0.79	1.71	0.19	0.59	0.38	0.54	22.78	32.40
Percent effect (grant only), female	14.56	34.25	29.70	14.35	53.57	43.79	41.19	37.67
Percent effect (grant and BDS), female	17.19	37.30	26.50	26.86	43.45	48.06	65.06	51.37
Percent effect (BDS), female	3.86	14.72	32.06	-15.87	39.66	24.17	1.43	16.40
Comparison group mean, male	1.00	2.32	0.58	0.52	0.50	0.72	27.15	53.80
Percent effect (grant only), male	-0.56	0.53	-34.83	39.80	-16.61	12.95	57.66	7.36
Percent effect (grant and BDS), male	0.07	0.14	-20.62	44.06	-13.48	-5.11	39.54	10.92
Percent effect (BDS), male	-0.13	4.46	-5.20	10.75	-20.76	25.37	9.43	10.19
[Grant=Grant and BDS] male (p-value)	0.74	0.95	0.15	0.63	0.77	0.22	0.09	0.46
[Grant=Grant and BDS] female (p-value)	0.56	0.69	0.89	0.07	0.40	0.80	0.03	0.11

Notes: This Table presents the same set of results as presented in Table 6 but splitting the comparison group by pure control and BDS only. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D9: Grants and BDS Treatment Effects during COVID: Labor Supply (Baseline Entrepreneurs)

	Last month: worked as						Weekly hours (W5%)	
	Any (1)	# (2)	Employee (3)	Business (4)	Farm/Livestock (5)	Help/Volunteer (6)	Business (7)	Total (8)
Covid 2021 \times Grant	-0.01 (0.02)	-0.11 (0.16)	-0.13** (0.06)	0.08 (0.05)	-0.03 (0.06)	-0.03 (0.12)	10.61*** (3.89)	0.27 (3.05)
Covid 2021 \times Grant \times Female	0.06 (0.04)	0.32 (0.23)	0.12 (0.08)	0.02 (0.08)	0.11 (0.08)	0.07 (0.17)	-3.29 (5.00)	5.18 (4.36)
Covid 2021 \times Grant and BDS	0.00 (0.01)	0.01 (0.16)	-0.03 (0.06)	0.15*** (0.05)	0.01 (0.06)	-0.13 (0.12)	4.18 (3.65)	-0.31 (2.77)
Covid 2021 \times Grant and BDS \times Female	0.04 (0.04)	0.26 (0.22)	0.06 (0.08)	-0.02 (0.07)	0.03 (0.08)	0.20 (0.16)	7.53 (4.98)	8.95** (4.41)
Covid 2021 \times Female	-0.09*** (0.03)	-0.17 (0.15)	-0.10* (0.05)	-0.04 (0.05)	-0.05 (0.05)	0.02 (0.11)	-4.43 (3.61)	-11.44*** (3.06)
Individual FE	✓	✓	✓	✓	✓	✓	✓	✓
Survey FE	✓	✓	✓	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓
Observations	2,050	2,050	2,050	2,050	2,050	2,050	2,044	2,022
Grant effect for females	0.06 (0.04)	0.21 (0.16)	-0.01 (0.05)	0.10* (0.05)	0.08 (0.06)	0.04 (0.11)	7.32** (3.16)	5.45* (3.13)
Grant and BDS effect for females	0.05 (0.04)	0.27* (0.15)	0.03 (0.05)	0.13*** (0.05)	0.04 (0.06)	0.07 (0.10)	11.71*** (3.42)	8.64** (3.43)
Comparison group mean, female	0.86	1.92	0.18	0.65	0.41	0.68	29.62	39.32
Percent effect (grant only), female	6.57	11.03	-8.01	15.32	20.30	6.38	24.70	13.86
Percent effect (grant and BDS), female	5.42	14.17	16.89	19.93	10.71	10.00	39.53	21.98
Comparison group mean, male	1.00	2.48	0.42	0.69	0.56	0.81	37.33	56.64
Percent effect (grant only), male	-0.75	-4.36	-31.76	12.01	-5.07	-3.71	28.41	0.48
Percent effect (grant and BDS), male	0.23	0.38	-6.92	22.30	2.27	-15.84	11.19	-0.54
[Grant=Grant and BDS] male (p-value)	0.50	0.50	0.13	0.18	0.53	0.45	0.09	0.85
[Grant=Grant and BDS] female (p-value)	0.77	0.72	0.38	0.53	0.52	0.83	0.19	0.34

Notes: This Table presents the same set of results as presented in Table 6 but restricting the sample to respondents who owned a business at baseline. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D10: Grants and BDS Treatment Effects during COVID: Labor Supply (Not Baseline Entrepreneurs)

	Last month: worked as						Weekly hours (W5%)	
	Any (1)	# (2)	Employee (3)	Business (4)	Farm/Livestock (5)	Help/Volunteer (6)	Business (7)	Total (8)
Covid 2021 \times Grant	-0.02 (0.04)	-0.02 (0.22)	-0.26*** (0.09)	0.30*** (0.07)	0.05 (0.08)	-0.11 (0.16)	17.87*** (4.20)	-3.80 (4.04)
Covid 2021 \times Grant \times Female	0.17** (0.08)	0.64** (0.29)	0.34*** (0.12)	-0.06 (0.10)	0.02 (0.10)	0.34 (0.21)	-6.80 (5.33)	16.70*** (5.84)
Covid 2021 \times Grant and BDS	0.00 (0.04)	-0.23 (0.21)	-0.22** (0.09)	0.23*** (0.07)	0.03 (0.07)	-0.27 (0.16)	15.20*** (3.67)	3.30 (3.75)
Covid 2021 \times Grant and BDS \times Female	0.20** (0.08)	0.85*** (0.27)	0.19* (0.11)	0.14 (0.09)	-0.00 (0.09)	0.53*** (0.20)	3.26 (4.63)	14.59*** (5.45)
Covid 2021 \times Female	-0.03 (0.05)	-0.55*** (0.16)	-0.04 (0.07)	-0.08 (0.06)	-0.05 (0.06)	-0.39*** (0.13)	-3.78 (2.79)	-6.25* (3.26)
Individual FE	✓	✓	✓	✓	✓	✓	✓	✓
Survey FE	✓	✓	✓	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓
Observations	1,380	1,380	1,380	1,380	1,380	1,380	1,380	1,380
Grant effect for females	0.16** (0.07)	0.62*** (0.19)	0.08 (0.08)	0.24*** (0.07)	0.07 (0.06)	0.23* (0.14)	11.06*** (3.26)	12.90*** (4.23)
Grant and BDS effect for females	0.20*** (0.07)	0.62*** (0.17)	-0.04 (0.07)	0.37*** (0.06)	0.03 (0.06)	0.26** (0.12)	18.46*** (2.78)	17.89*** (3.88)
Comparison group mean, female	0.70	1.40	0.31	0.34	0.32	0.43	13.73	27.86
Percent effect (grant only), female	22.20	44.12	25.00	70.08	22.52	53.23	80.59	46.30
Percent effect (grant and BDS), female	28.68	44.58	-11.47	108.49	8.77	60.61	134.46	64.20
Comparison group mean, male	0.99	2.38	0.73	0.39	0.44	0.81	17.60	53.17
Percent effect (grant only), male	-1.88	-0.91	-36.09	76.01	11.86	-13.59	101.49	-7.15
Percent effect (grant and BDS), male	0.33	-9.63	-30.40	57.77	6.82	-32.58	86.34	6.20
[Grant=Grant and BDS] male (p-value)	0.62	0.41	0.69	0.40	0.81	0.39	0.56	0.12
[Grant=Grant and BDS] female (p-value)	0.55	0.97	0.17	0.06	0.52	0.82	0.04	0.29

Notes: This Table presents the same set of results as presented in Table 6 but restricting the sample to respondents who did not own a business at baseline. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D11: Grants and BDS Treatment Effects during COVID: Time-Use Diary

	(1) Childcare	(2) Work/study	(3) Domestic work	(4) Leisure	(5) Sleep	(6) Eating/self-care
Covid 2021 \times Grant	-0.05 (0.16)	-0.16 (0.28)	0.04 (0.11)	0.13 (0.14)	0.13 (0.16)	-0.11 (0.09)
Covid 2021 \times Grant \times Female	0.01 (0.26)	0.78* (0.45)	-0.40** (0.18)	-0.17 (0.19)	-0.08 (0.21)	-0.02 (0.13)
Covid 2021 \times Grant and BDS	-0.03 (0.16)	-0.34 (0.26)	0.23** (0.11)	0.07 (0.13)	0.10 (0.14)	-0.04 (0.08)
Covid 2021 \times Grant and BDS \times Female	-0.34 (0.24)	1.45*** (0.43)	-0.58*** (0.18)	-0.33* (0.19)	-0.08 (0.20)	-0.07 (0.12)
Covid 2021 \times Female	0.32* (0.16)	-0.60** (0.29)	0.11 (0.11)	0.24* (0.12)	-0.14 (0.13)	0.03 (0.08)
Individual FE	✓	✓	✓	✓	✓	✓
Survey FE	✓	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓	✓	✓	✓
Observations	3,430	3,430	3,430	3,430	3,430	3,430
Grant effect for females	-0.04 (0.20)	0.62* (0.36)	-0.35** (0.15)	-0.05 (0.13)	0.06 (0.14)	-0.13 (0.10)
Grant and BDS effect for females	-0.37** (0.18)	1.10*** (0.34)	-0.35** (0.14)	-0.26** (0.13)	0.03 (0.15)	-0.11 (0.09)
Comparison group mean, female	3.49	6.47	2.58	1.93	7.70	1.59
Percent effect (grant only), female	-1.12	9.51	-13.75	-2.45	0.74	-8.21
Percent effect (grant and BDS), female	-10.64	17.05	-13.59	-13.70	0.33	-6.79
Comparison group mean, male	2.32	9.39	1.26	2.02	7.37	1.42
Percent effect (grant only), male	-2.19	-1.75	3.44	6.27	1.83	-7.53
Percent effect (grant and BDS), male	-1.45	-3.67	18.13	3.28	1.42	-2.57
[Grant=Grant and BDS] male (p-value)	0.92	0.54	0.13	0.69	0.86	0.46
[Grant=Grant and BDS] female (p-value)	0.11	0.20	0.98	0.12	0.85	0.82

Notes: This Table presents the results of estimating equation (2) on the time use outcome variables. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D12: Grants and BDS Treatment Effects during COVID: Business Ownership (Heterogeneity by Baseline Characteristics)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Grant × Female	0.11** (0.05)	0.06 (0.05)	0.05 (0.05)	0.04 (0.05)	0.05 (0.05)	0.04 (0.05)	-0.02 (0.07)	0.03 (0.12)	-0.00 (0.05)
Grant	0.19*** (0.04)	0.19*** (0.04)	0.20*** (0.04)	0.23*** (0.04)	0.22*** (0.04)	0.19*** (0.04)	0.26*** (0.06)	0.28*** (0.10)	0.21*** (0.04)
Grant × Secondary	0.04 (0.04)								
Grant × Secondary × Female	-0.12** (0.05)								
Grant × Weekly hours (baseline)		0.04 (0.04)							
Grant × Weekly hours (baseline) × Female		-0.07 (0.05)							
Grant × Daily childcare hours (baseline)			0.03 (0.03)						
Grant × Daily childcare hours (baseline) × Female			-0.03 (0.05)						
Grant × Spousal age gap				-0.02 (0.04)					
Grant × Spousal age gap × Female				-0.02 (0.05)					
Grant × Spousal educ gap					-0.00 (0.04)				
Grant × Spousal educ gap × Female					-0.04 (0.05)				
Grant × Spousal asset ratio (baseline)						0.04 (0.04)			
Grant × Spousal asset ratio (baseline) × Female						-0.00 (0.05)			
Grant × Main income earner (baseline)							-0.05 (0.06)		
Grant × Main income earner (baseline) × Female							0.10 (0.07)		
Grant × # income sources (baseline)								-0.07 (0.10)	
Grant × # income sources (baseline) × Female								-0.01 (0.11)	
Grant × Spousal income gap (baseline)									0.01 (0.03)
Grant × Spousal income gap (baseline) × Female									0.06 (0.05)
County	✓	✓	✓	✓	✓	✓	✓	✓	✓
Baseline business sector	✓	✓	✓	✓	✓	✓	✓	✓	✓
Observations	1,715	1,715	1,715	1,715	1,715	1,715	1,715	1,715	1,715
Grant effect for females	0.29*** (0.03)	0.25*** (0.04)	0.24*** (0.03)	0.27*** (0.03)	0.27*** (0.04)	0.23*** (0.03)	0.24*** (0.03)	0.31*** (0.05)	0.20*** (0.04)
Grant effect + Grant*X for females	0.21*** (0.03)	0.23*** (0.03)	0.24*** (0.03)	0.22*** (0.03)	0.23*** (0.03)	0.26*** (0.03)	0.29*** (0.04)	0.23*** (0.03)	0.28*** (0.03)
Grant effect for males	0.19*** (0.04)	0.19*** (0.04)	0.20*** (0.04)	0.23*** (0.04)	0.22*** (0.04)	0.19*** (0.04)	0.26*** (0.06)	0.28*** (0.10)	0.21*** (0.04)
Grant effect + Grant*X for males	0.23*** (0.03)	0.23*** (0.03)	0.23*** (0.03)	0.21*** (0.03)	0.21*** (0.03)	0.22*** (0.03)	0.21*** (0.03)	0.21*** (0.03)	0.22*** (0.03)

Notes: This Table presents results of estimating grant treatment heterogeneity on business ownership by baseline characteristics of the respondent and of the respondent's household. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D13: Grants and BDS Treatment Effects: Business Outcomes. Heterogeneity by Spouse's Business Ownership

	Business Ownership			Business Performance (Wins. 5%)	
	All (1)	Survival (2)	Entry (3)	Sales (4)	Profits (5)
Covid 2021 \times Grant	0.24*** (0.03)	0.14*** (0.04)	0.38*** (0.06)	10,166.99*** (2,807.61)	2,889.68*** (1,061.61)
Covid 2021 \times Grant \times Female	0.00 (0.05)	0.02 (0.06)	-0.05 (0.08)	-4,768.02 (3,779.43)	-2,136.15 (1,424.23)
Covid 2021 \times Grant \times Spouse had business at baseline	-0.11 (0.07)	-0.02 (0.09)	-0.18 (0.14)	-9,059.73 (6,100.62)	-2,422.58 (2,364.76)
Covid 2021 \times Grant \times Spouse had business at baseline \times Female	0.12 (0.10)	-0.04 (0.11)	0.33* (0.17)	8,618.08 (7,475.64)	2,737.70 (2,866.92)
Individual FE	✓	✓	✓	✓	✓
Survey FE	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓		✓	✓
Observations	3,430	2,050	1,380	1,466	1,466
Grant effect for females	0.24*** (0.03)	0.16*** (0.04)	0.33*** (0.06)	5398.97** (2532.72)	753.53 (959.62)
Grant effect for females with entrepreneur spouse	0.25*** (0.05)	0.10* (0.06)	0.47*** (0.08)	4957.31 (3598.15)	1068.65 (1337.82)
Control+BDS only mean, male	0.62	0.75	0.43	18114.76	5715.89
Control+BDS only mean, female	0.55	0.71	0.36	11561.71	3567.73

Notes: This Table presents results of estimating grant treatment heterogeneity on business ownership by whether the respondent's spouse owned a business at baseline. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D14: Grant and BDS Treatment Effects: Business Outcomes. Heterogeneity by Bank Account at Baseline

	Business Ownership			Business Performance	
	All (1)	Survival (2)	Entry (3)	Sales (4)	Profits (5)
Covid 2021 \times Grant	0.26*** (0.05)	0.15*** (0.06)	0.39*** (0.08)	16,142.20*** (4,255.72)	4,699.43*** (1,607.62)
Covid 2021 \times Grant \times Female	-0.05 (0.06)	-0.06 (0.08)	-0.03 (0.10)	-13471.59*** (5,138.16)	-4,379.68** (1,935.04)
Covid 2021 \times Grant \times Bank savings account at baseline	-0.08 (0.06)	-0.03 (0.07)	-0.11 (0.11)	-12411.54** (5,286.68)	-3,801.35* (2,000.80)
Covid 2021 \times Grant \times Bank savings account at baseline \times Female	0.14* (0.08)	0.14 (0.10)	0.14 (0.15)	18,170.39*** (6,685.12)	5,000.61** (2,532.53)
Individual FE	✓	✓	✓	✓	✓
Survey FE	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓		✓	✓
Observations	3,430	2,050	1,380	1,466	1,466
Grant effect for females	0.21*** (0.04)	0.09* (0.05)	0.36*** (0.06)	2670.61 (2855.67)	319.76 (1092.64)
Grant effect for females with bank savings account at baseline	0.27*** (0.04)	0.20*** (0.05)	0.39*** (0.07)	8429.46*** (2953.33)	1519.02 (1083.90)
Control+BDS only mean, male	0.62	0.75	0.43	18114.76	5715.89
Control+BDS only mean, female	0.55	0.71	0.36	11561.71	3567.73

Notes: This Table presents results of estimating grant treatment heterogeneity on business ownership by whether the respondent had a personal savings account at baseline * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table D15: Month of Interview FE: Grants and BDS Treatment Effects during COVID: Business Outcomes and Income Variables

	Business Performance									
	Business Ownership			Business Performance				Income		
	All	Survival	Entry	All	Baseline Owners (1 Business)			Has	Number	Income Prim.
	(1)	(2)	(3)	Sales (W. 5%)	Profits (W. 5%)	Sales (W. 5%)	Profits (W. 5%)	source	sources	activity (W%5)
	(4)	(5)	(6)	(7)	(8)	(9)	(10)			
Covid 2021 × Grant	0.19*** (0.04)	0.11*** (0.04)	0.32*** (0.07)	7,573.20*** (2,101.66)	2,330.66*** (761.72)	7,866.99** (3,092.53)	2,537.30** (1,146.06)	0.01 (0.02)	0.07 (0.07)	1,101.47 (959.75)
Covid 2021 × Grant × Female	0.03 (0.05)	0.02 (0.06)	0.02 (0.09)	-2,193.93 (2,570.23)	-895.41 (968.01)	-3,195.82 (3,823.12)	-1,673.86 (1,450.28)	0.11*** (0.04)	0.26*** (0.09)	1,133.63 (1,206.66)
Covid 2021 × Grant and BDS	0.23*** (0.03)	0.15*** (0.04)	0.35*** (0.06)	8,594.98*** (1,833.43)	2,688.42*** (724.93)	8,592.31*** (2,771.83)	2,207.56** (1,119.01)	0.02 (0.02)	0.20*** (0.07)	1,839.16** (871.17)
Covid 2021 × Grant and BDS × Female	0.03 (0.05)	0.00 (0.06)	0.05 (0.08)	-1,755.57 (2,430.16)	-776.08 (926.19)	-2,583.75 (3,830.10)	-1,313.68 (1,468.92)	0.10** (0.04)	0.17* (0.09)	1,157.58 (1,134.06)
Covid 2021 × Female	-0.06* (0.03)	-0.06 (0.04)	-0.06 (0.06)	-974.13 (1,544.29)	-984.23* (574.56)	-1,251.57 (2,714.81)	-602.68 (1,002.33)	-0.06** (0.03)	-0.24*** (0.05)	-2,162.77*** (750.41)
Individual FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Month of interview FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Survey FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
County*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Baseline business sector*Survey FE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Observations	3,430	2,050	1,380	3,100	3,100	1,466	1,466	3,430	3,430	3,304
Grant effect for females	0.23*** (0.03)	0.14*** (0.04)	0.34*** (0.06)	5379.26*** (1506.60)	1435.25** (597.86)	4671.18** (2272.12)	863.44 (877.32)	0.12*** (0.04)	0.33*** (0.06)	2235.10*** (740.19)
Grant and BDS effect for females	0.26*** (0.03)	0.15*** (0.04)	0.40*** (0.05)	6839.41*** (1578.39)	1912.34*** (569.37)	6008.56** (2656.13)	893.88 (956.53)	0.12*** (0.04)	0.37*** (0.06)	2996.74*** (741.04)
Comparison group mean, female	0.55	0.71	0.36	9181.62	2837.34	11561.71	3567.73	0.77	0.90	6100.05
Percent effect (grant only), female	40.66	19.32	93.43	58.59	50.58	40.40	24.20	14.95	36.72	36.64
Percent effect (grant and BDS), female	47.22	20.93	110.31	74.49	67.40	51.97	25.05	15.50	40.76	49.13
Comparison group mean, male	0.62	0.75	0.43	14786.89	5168.54	18114.76	5715.89	0.99	1.42	12979.16
Percent effect (grant only), male	31.04	15.20	73.74	51.22	45.09	43.43	44.39	0.55	4.62	8.49
Percent effect (grant and BDS), male	36.80	19.65	82.16	58.13	52.02	47.43	38.62	2.06	13.74	14.17
[Grant=Grant and BDS] male (p-value)	0.30	0.39	0.59	0.65	0.67	0.82	0.79	0.47	0.11	0.47
[Grant=Grant and BDS] female (p-value)	0.29	0.77	0.34	0.41	0.48	0.61	0.97	0.91	0.59	0.35

Notes: This Table presents the same set of results as presented in Table 4 but including month of interview fixed effects. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

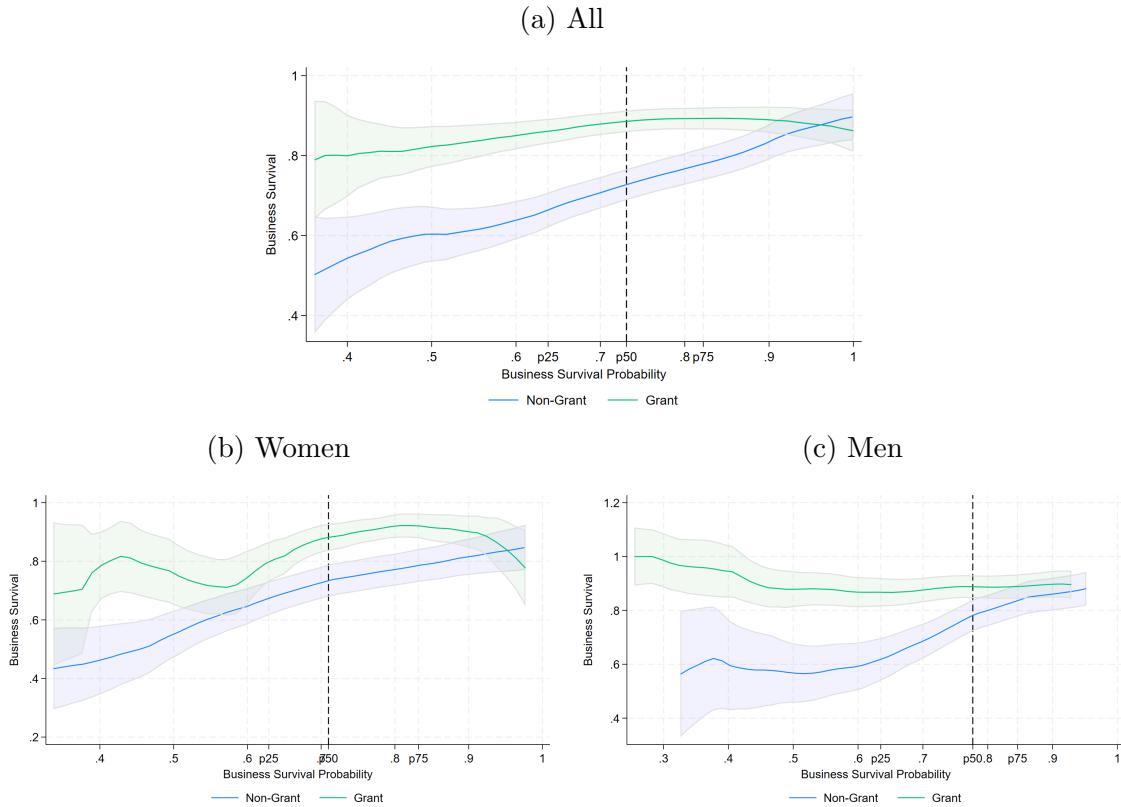
D2 Business Survival Probability

Using the subsample of non-grant recipients who owned a business at baseline, we estimate predicted business survival probability based on the following probit model:

$$Business\ survival_i = \Phi(\alpha + \beta female_i + \delta_s + \delta_s * female_i + \mu_c + \epsilon_i) \quad (D1)$$

where δ_s and μ_c are business sector and county dummies, respectively. $Business\ survival_i$ is a dummy variable equal to one if the respondent is still a business owner after Covid (second follow-up survey). Using equation (D1) we predict business survival probability for both grant- and non-grant baseline entrepreneurs and we plot them non-parametrically in Figure D2.

Figure D2: Business Survival by Grant treatment status and business survival probability



Notes: Predicted business survival probability (horizontal axis) is constructed as described in section D2. 90% confidence intervals.