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Family: Burden or Support to Entrepreneurship in Times of Crisis?

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Abstract

During economic downturns, governments often provide business grants to stimulate entrepreneurship. However, in societies where kinship ties play a significant role, policy design may be suboptimal if spillover effects are not accounted for. This paper examines the role of family ties in shaping entrepreneurship and the effectiveness of business support measures during economic crises. Using a randomized controlled trial in Kenya, I find that entrepreneurs with larger families coped better with the crisis. However, when external funding was available, strong family ties reduced the positive effects on entrepreneurship. The analysis identifies mutual assistance, crowding-out effects, and managerial interference as key mechanisms. These findings highlight the dual role of family networks, acting as both a safety net and a constraint, with implications for the design of business support policies in developing economies.

JEL Codes: L26, O12, O15, Z13, C93.

Keywords: Entrepreneurship, kinship networks, private transfers, social norms, business support, crisis, field experiment, Kenya.

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1 Introduction

Risks and crises are recurrent in developing countries. In the absence of complete financial markets, people rely on informal inter-household arrangements to smooth consumption. However, the benefit of risk pooling is greatest when households are subject to different sources of risk (Fafchamps and Gubert, 2007). What happens in the presence of widespread crisis, when the entire system is under stress? In moments like this, as we have experienced since 2020 with the COVID-19 crisis, governments worldwide try to support businesses and bolster economic recovery. However, when there is lack of separability between the business and the household–particularly when the extended family plays central role, as is the case in many African countries–policy design might not be optimal. A mutual assistance mechanism between entrepreneurs and their families may introduce additional heterogeneity in policy impacts and complicate evaluation due to unmeasured spillovers.

In this paper, I investigate how kinship networks influence entrepreneurship both by shaping the impact of external support measures for self-employment and by either supporting or constraining entrepreneurship in the absence of these measures. Using a rich panel dataset, I explore the mechanisms through which family ties can serve as a source of resilience or a burden on business activities, particularly in times of crisis. This research leverages a randomized control trial (RCT) originally designed to evaluate the Kenyan Youth Employment and Opportunities Project (KYEOP), which provided business grants, business development services, or both to vulnerable young entrepreneurs in Kenya. The coinciding timing of the KYEOP impact evaluation and the onset of the COVID-19 pandemic allows me to assess not only the direct effects of these support measures but also the broader role of extended family ties in shaping business resilience and entrepreneurial outcomes in the face of economic shocks. My results show that entrepreneurs with larger families were more likely to maintain their businesses during the crisis but experienced weaker benefits from external support measures. I find suggestive evidence of mutual assistance and potential crowding-out effects shaping the impact of support measures. Additional mechanisms include managerial interference through family involvement. These findings highlight the dual role of kinship ties, offering both a safety net and a potential

¹A fourth group was randomly assigned to the control condition, receiving no support.

constraint on entrepreneurial success.

My empirical strategy builds on the experimental design of the KYEOP impact evaluation, which provides an external income shock to young entrepreneurs. The panel nature of the dataset together with an ANCOVA specification allows me to compare business outcomes for youth with small or large extended families, both in the absence of support and when receiving external assistance, while controlling for baseline values of key business outcomes and any pre-existing differences across groups before the interventions. This approach enables me to determine whether young entrepreneurs with strong family ties coped better with the crisis than those with weaker kinship networks and whether there is heterogeneity in the impact of support measures by family size.

My results show that entrepreneurs with larger extended families coped better with the crisis. They were 11 percentage points (pp) more likely to keep their business afloat compared to those with small families, and each additional relative was associated with a 0.3 pp increase in business entry. Two years after the pandemic began, youth from large families were 11 pp more likely to own a business and 7 pp more likely to report business as their main source of income than those from smaller families. However, there were no significant differences in business performance by family size.

Crucially, I find that having a large family mitigates the positive impact of business grants on entrepreneurship and business performance. While the grant increased business ownership by 21.2 pp, the effect was reduced by 0.2 pp for each additional family member, resulting in an impact of 20.2 pp for the youth with the median family size of five. The results also suggest that offering BDS alongside business grants had no significant additional effect, as the findings for the grants-only group and the grants-with-BDS group were similar. The effect of family size is also evident in business survival and entry. In the control group, each additional family member is associated with a 0.2 pp higher survival rate and a 0.3 pp higher entry rate, suggesting that youth from larger families were better able to navigate the crisis. While the effect of business grants was larger for business entry than for business survival, the heterogeneity in grant effects by family size was observed only in business survival, not in business entry. Among youth who started a business after the baseline, the grant's impact on profits was 62% lower for those with large families com-

pared to those with small families.² These findings suggest that the extended family plays a dual role, providing essential support during crises but also diluting the effectiveness of external financial assistance.

A key contribution of my paper is the detailed exploration of the mechanisms behind these heterogeneous effects. I leverage not only baseline and midline survey data but also results from a pre-treatment assessment capturing socioemotional, business, and cognitive skills.

First, I provide suggestive evidence of a mutual assistance mechanism and a plausible crowding-out effect from business grants. Entrepreneurs with larger families were more likely to receive financial help from relatives when they lacked external support. However, this dynamic changed when they received grants—family requests for assistance increased, while entrepreneurs became less likely to seek help from their relatives. This suggests that external assistance partially replaces intra-family financial support. A crowding-out effect is also evident in business startup financing: youth who received grants were less likely to use family money to start their business. Among grant recipients, those with larger families were 1.4 pp more likely to use part of the grant for household expenses (compared to 6% of those with small families), which may reduce the intended impact of business support measures.

Second, I find evidence that family networks influence business operations. Entrepreneurs with larger families were more likely to increase employment during the crisis, but the grants generated different cost structures. Youth with small families increased labor costs as a share of total expenses, while those with large families had no significant impact from the supportive measures.

Third, family ties shape business management practices. Entrepreneurs with larger families were more likely to involve relatives in decision-making when they received grants, their profit allocation was also affected by prioritizing covering household expenses instead of saving or investing, and their businesses exhibited less financial separation between personal and business accounts. This may explain why the performance impact of grants is weaker for this group.

²The large family group includes youth with a family size greater than or equal the median of five. The average family size in this group is 24 members, whereas the average for the small family group is one.

Lastly, I find that risk aversion is higher and ambiguity tolerance lower among entrepreneurs with large extended families, which may partly explain the lower returns to business support. However, I find no evidence that effort levels declined among grant recipients with large families—in fact, for those who already owned a business, hours worked increased more in this group.

To address concerns about potential endogeneity in self-reported family size, I introduce an alternative measure of family ties based on the traditional domestic organization of ethnic groups. This provides a more exogenous proxy for kinship networks. My results using this measure align with those based on self-reported family size. Entrepreneurs from ethnic groups with smaller extended family structures were 9 pp less likely to own a business at midline compared to those from nuclear or large extended family backgrounds. However, they benefited more from external financial support. Among these individuals, grants increased business ownership by 22 pp and the likelihood of business being the main income source by 17 pp, compared to smaller but still significant effects of 16 pp and 11 pp, respectively, for those from nuclear or large extended family groups. These findings suggest that weaker kinship obligations in small extended family structures enhance the entrepreneurial impact of business support measures.

This study builds on my previous work on KYEOP in Domenella et al. (2021) and ongoing research (Domenella et al., 2025). The former examines a subsample to assess the short-term impact of business support measures in mitigating the effects of COVID-19 on business and individual outcomes. The latter extends this analysis to the medium and long term, with the full sample and focusing on the differential impacts of alternative formats of business development services and the advantages of complementing grants and business training with behavioral interventions.

My paper also contributes to the literature on the effects of support measures on business outcomes during the COVID-19 crisis (Brooks et al., 2021; Autor et al., 2022a,b) and the broader impact of the pandemic on businesses (Chetty et al., 2020; Guerrero-Amezaga et al., 2022). I extend this body of work by shifting the focus to the role of family networks, investigating whether entrepreneurs with stronger family ties exhibited greater resilience during the crisis. Furthermore, I examine how the existence and strength of

family ties shape the effectiveness of policy interventions. Beyond documenting these heterogeneous effects, I provide a detailed analysis of the underlying mechanisms that influence entrepreneurial resilience.

This study also relates to the broader literature on risk-sharing arrangements and the interplay between family, household, and business. Prior research has highlighted various benefits of family networks, including their role in consumption smoothing (Pollack, VanEpps, and Hayes, 1989), facilitating investments that are too large to be collateralized with tangible assets (Kinnan and Townsend, 2012), and supporting non-collateralizable investments such as education (Angelucci, De Giorgi, and Rasul, 2017). Stronger family ties have also been linked to psychological benefits, such as reduced stress and improved well-being (Alesina and Giuliano, 2013). However, other strands of research emphasize the potential constraints that family impose on entrepreneurship and economic development (Di Porto et al., 2024; Bloom and Van Reenen, 2007; Bloom et al., 2012; Lemos and Scur, 2019; Bandiera et al., 2015). For instance, Bertrand and Schoar (2006) provide cross-sectional evidence linking stronger family ties to worse economic outcomes, a prevalence of smaller firms, and a higher incidence of family control among listed firms. Social obligations to share income within the family may deter profitable investments and constrain entrepreneurship (Jakiela and Ozier, 2012; Squires, 2024), reduce work incentives and labor productivity by diminishing the returns to effort (Carranza et al., 2022), and influence financial decisions in ways that limit business growth to avoid pressures to share (Baland, Guirkinger, and Mali, 2011; Anderson and Baland, 2002).

My main contribution to this literature is quantifying both the positive and negative effects of kinship ties on entrepreneurship and demonstrating that the net impact varies depending on the availability of external funding. To this end, I draw on a real-world experiment in which businesses receive grants. Using a rich dataset that includes business outcomes, performance, management practices, and personal characteristics such as well-being and socioemotional skills, I analyze how family-business interactions evolve in the absence of external support and how they respond to the presence of external funding.

This paper further contributes to the literature on the performance of family versus nonfamily businesses during economic downturns, a field that has predominantly focused on medium and large firms in developed countries, yielding mixed results (Cesaroni, Chamochumbi, and Sentuti, 2017; Allouche et al., 2008; Wu et al., 2012). I extend this research by focusing on small firms in a developing country, where family influence on business decisions is not necessarily tied to formal ownership stakes.

Lastly, this study relates to emerging research on the role of kinship traditions and culture in shaping policy impacts (Ashraf et al., 2020; Moscona and Seck, 2024) and responses to crises (Cao, Xu, and Zhang, 2022). My paper contributes to this nascent literature by leveraging a randomized controlled trial to examine how kinship structures embedded in ethnic groups mediate the effects of business support policies and whether they helped mitigate the adverse consequences of the crisis.

The rest of the paper is organized as follows. Section 2 describes the experiment and timeline of interventions and data collection. Section 3 outlines the study context, while Sections 4 and 5 present the data and empirical strategy, respectively. Section 6 discusses results, robustness checks, and the mechanisms behind these findings. Finally, Section 7 concludes.

2 Study Design

This paper evaluates how family ties affect the impact of supportive interventions on entrepreneurship among vulnerable youth through a large-scale randomized controlled trial (RCT) conducted in Kenya. This section outlines the study's design, detailing the interventions and implementation timeline.

2.1 Experimental Design

This study leverages a large-scale RCT designed to assess a component of the KYEOP—a government initiative funded by the World Bank to enhance employment and incomegenerating opportunities among vulnerable youth. KYEOP provides skills training, entrepreneurship support, and job market information.

The analysis focuses on KYEOP's self-employment support program, which targets unem-

ployed or underemployed youth aged 18–29 years who either own a business and seek to expand it or intend to start one.³ While applications were open nationwide, implementation was restricted to 15 counties, grouped into three clusters: Kisumu, Kwale, Mombasa, Nairobi, Nakuru (cluster 1); Bungoma, Kakamega, Kisii, Migori, Turkana (cluster 2); and Kiambu, Kilifi, Kitui, Machakos, Nyandarua (cluster 3).

The RCT employs a four-arm design, where eligible youth were randomly assigned to one of the following groups: (i) a business grant of Ksh. 40,000 (approximately US\$ 360); (ii) business development services (BDS); (iii) grants and BDS; or (iv) a control group with no intervention. Randomization was conducted at the individual level, stratified by county of implementation, gender, and prior KYEOP exposure, specifically whether youth had participated in an earlier KYEOP training and internship program.⁴

The first intervention, the business grant, was designed to provide capital for starting or expanding a business. The Ksh. 40,000 grant was substantial, exceeding six months' worth of baseline business profits and equivalent to two months of average business sales (see Section 4.1). Recipients were required to attend a short orientation session, after which the funds were disbursed in two installments: the first shortly after orientation and the second three to four months later. Participants were informed that the Government of Kenya would monitor grant usage to ensure it was allocated for business-related purposes. However, due to COVID-19 restrictions, monitoring was primarily conducted remotely via phone.

The second intervention, BDS, aimed to enhance entrepreneurial knowledge and decision-making. For this paper, I define the BDS group as youth assigned to any form of business development support: classroom training, digital training, and counseling visits.⁵ The classroom training component involved a four-day, 28-hour in-person program covering

³Eligibility criteria include being a Kenyan citizen aged 18–29, not currently employed, not enrolled in school or planning to enroll within the next eight months, and having a maximum education level of Form Four. For more details, see KYEOP's official page here.

⁴This program corresponds to another component of KYEOP aiming to improve youth employability through life skills training, core business skills training, and an internship with a formal provider or a master craftsman. More information about this component can be found at this resource.

⁵The full RCT design has 17 treatment arms and has three different possibilities for BDS: (i) receiving full BDS (classroom BDS, counseling visits, and digital BDS); (ii) receiving counseling and digital BDS; and (iii) receiving only digital BDS. This paper consolidates the analysis by treating all youth assigned to BDS as a single group, regardless of whether they received full, partial, or digital-only BDS.

topics such as business idea formation, financial management, legal registration, marketing strategies, and record-keeping (Domenella et al., 2021). Digital BDS consisted of self-paced training with 15 modules covering the same topics as the classroom sessions. The repository was available for four months and participants could obtain a certificate by scoring at least 70% on a final quiz. Finally, counseling consisted of seven individual coaching sessions, each lasting approximately two hours. The sessions took place at the youth's business or home (if they did not have a business yet), and the objective was to cover a pre-specified agenda, with similar topics as those covered in business training, but flexible to provide personalized guidance based on individual needs.

2.2 Timeline

This study spans the period from June 2019 to early August 2022, as shown in Figure 1. Applications for the program were submitted between June and July 2019, after which applicants took an Entrepreneurship Aptitude Test (EAT) between August and November 2019. This test measured socio-emotional, cognitive, and business skills.⁶ The baseline survey was conducted between January and February 2020, with interventions beginning shortly thereafter.

The implementation followed a staggered adoption approach, beginning with Cluster 1. Classroom BDS was launched at the end of February 2020, followed by grant orientation in early March. However, following the first COVID-19 case in Kenya (March 13, 2020) and the immediate containment measures imposed by the government, the program experienced delays. Counseling visits started in June 2020 for Cluster 1, with digital BDS launched in August for all three clusters. Once in-person activities were permitted again, Clusters 2 and 3 followed the same implementation structure as Cluster 1, with classroom BDS, grant orientation, and counseling visits occurring in sequence. By July 2021, all program activities had been completed. The midline survey took place between January and August 2022.

 $^{^6}$ The impact evaluation also assessed the test's potential as a screening tool, so participants were selected from across the entire score distribution.

⁷At each point in time, the sample reached out to be surveyed was balanced in terms of the key variables.

Figure 1: Timeline

	2019					2020												20	22				
	Jun- Aug-		Jan	Jan-Feb Feb		eb I	Mar	Ju	Jun		Aug Sep		èр	Oct	0	ct	0	ct	D	ec	Jan	24-	
	Jul Nov				24-27 3-6		3-6			22-25 6-9		19	-23	3 27-30				Au	g 5				
						_																	
	Int	ake	EAT	Base	eline	Cla	ss.	G	Coun	seling	Digita	I BDS	Cla	iss.	G	Cla	iss.	(ŝ	Coun	seling	Mid	lline
				sur	vey	ВІ	OS		sta	irts	sta	irts	ВІ	D\$		В	DS.			sta	rts	sur	vey
Cluster																							
1		х	X	1	X	X		X	,	X	,	()	x
2		x	X		X						,	•	1	X	X					,	•)	ĸ
3		X	X		X						1	(K)	K)	()	ĸ

Note: G refers to grant orientation, while Class. BDS stands for classroom BDS. Counseling visits were conducted over a total period of seven months, and the digital BDS repository was accesible for four months. All interventions were completed by July 2021.

3 Study Context

The onset of the COVID-19 pandemic coincided with the early stages of this study, significantly altering the economic landscape in Kenya. The Government of Kenya (GoK) responded swiftly to the crisis, implementing strict containment measures, including school closures, travel restrictions, and curfews, beginning in March 2020 (see Appendix Figure A1a). Although restrictions were gradually eased toward the end of 2020, a second lock-down was imposed in early 2021 due to a resurgence in cases. While the GoK introduced economic relief measures such as mobile money fee waivers, tax relief, and sector-specific stimulus packages, the pandemic still led to a contraction of 0.3% in real GDP, pushing an estimated two million Kenyans into poverty (World Bank, 2021). Unemployment spiked to 16% in the third quarter of 2020, and approximately one-third of small businesses shut down between February and June of that year. Within the study sample, business ownership fell from 48% in February 2020 to 30% by June, and it had not fully recovered by October 2020. Sales and profits dropped sharply—by 75% and 78%, respectively—immediately following the crisis, reflecting the severe impact on entrepreneurial activity (Domenella et al., 2021).

The economy rebounded in 2021, with GDP growth reaching 7.5% (Kenya National Bureau of Statistics, 2022) and unemployment declining to 7% by midyear (World Bank, 2021). However, by the time of the midline survey, Kenya was experiencing its fifth wave of

COVID-19 (see Appendix Figure A1b), with cumulative cases exceeding 320,000 and more than 5,500 deaths. The crisis persisted beyond the pandemic, with inflationary pressures intensifying in 2021 due to global supply chain disruptions, higher taxes on essential goods, and currency depreciation. By January 2022, inflation stood at 5.4%, with food inflation reaching 9%. The war in Ukraine further exacerbated price pressures, pushing inflation to 7.1% in May 2022. These compounding crises raise important empirical questions about the role of family networks in buffering economic shocks and the impact of external financial support in such contexts.

4 Data

In this section, I describe the data used for my analysis. The baseline and midline surveys provide rich business information that is complemented by the Entrepreneurship Aptitude Test and Ethnographic Data. This allows me to examine the main business outcomes of ownership, survival, entry, and financial performance while examining the role of family networks in entrepreneurship.

4.1 Main Data

The main data sets used in this paper are the baseline and midline surveys from the KYEOP impact evaluation. The baseline survey, conducted in person between February and January 2020, collected data from 9,380 youth across Kenya, covering demographic details, labor and income information, business characteristics, financial assets, and loans. Of particular interest are detailed measures of business performance, financial management practices, and sources of business startup capital. The midline survey, conducted two years later, was designed to follow up the information included at baseline, also capturing COVID-19's impact on economic activity and well-being, along with additional measures of family networks and financial exchanges between relatives, which were added specifically for the current study. In particular, I obtained information about the number of relatives

⁸See BBC's article from 22 February "Kenyan food prices: Why have they gone up so much?" here.

⁹Annual inflation rate calculated using data from Kenya National Bureau of Statistics.

living in the same subcounty but in a different household. Following Jakiela and Ozier (2012), I defined relatives as parents, grandparents, siblings, grown children, aunts and uncles.¹⁰ Appendix Table A27 details the different questions related to financial exchanges between relatives that are used to analyze the mechanisms behind my results. Finally, those assigned to grants were asked what they use the money for.¹¹

Table 1 provides summary statistics and balance tests. The sample is gender-balanced, with an average respondent age of 24 years. 68% have secondary education, 35% are married, and the average household size is 4 members. In terms of income generation, 40% have wage employment, while 49% own businesses, which are typically small (one additional employee on average). Monthly sales average Ksh. 19,444, and profits average Ksh. 6,330. The most common business sectors are wholesale and retail trade (41%), services (16%), and agriculture (13%) (see Appendix Figure A2).

The p-values of mean equality tests indicate that most baseline characteristics are balanced between treatment and control groups, except for marital status.¹² Therefore, this variable is controlled for in all specifications. Additionally, the empirical strategy controls for baseline values of outcome variables (see Section 5).

4.2 Supplementary Data: Entrepreneurial Aptitude Test and Ethnographic Data

To explore underlying mechanisms, data from the Entrepreneurship Aptitude Test, conducted between August and November 2019, is incorporated. This test measured socioemotional, cognitive, and business skills through a structured questionnaire, including

¹⁰The question asked is "How many relatives live in your same subcounty but do not live with you? That is, consider your extended family living outside your household. Include parents, grandparents, siblings, grown children, aunts and uncles."

¹¹Despite efforts were made to ensure that responses would not have any consequences, there could still be misreporting. However, the possibility of selecting all the answers that apply allows to separate those who select only business-related uses (e.g., business expenses or investment), from those who also selected non-business-related uses (such as household expenses).

¹²Table 1 shows the balance between control and treatment groups, pooling together those who received any of the treatments explained in Section 2.1. Meanwhile, Appendix Table A5 shows the balance between control group and each of the treatment groups separately.

Table 1: Baseline Summary Statistics and Balance Test

Variable	N	(1) Total Mean/(Var)	N	(2) Control Mean/(Var)	Any N	(3) Treatment Mean/(Var)		ise t-test P-value
Female	7648	0.47 (0.25)	650	0.45 (0.25)	6998	0.47 (0.25)	7648	0.25
Age	7648	24.64 (8.76)	650	24.70 (7.59)	6998	24.63 (8.87)	7648	0.56
Married or Living Together	7648	0.34 (0.23)	650	0.31 (0.21)	6998	0.35 (0.23)	7648	0.04**
Household Size	7648	4.10 (5.82)	650	4.15 (5.89)	6998	4.10 (5.81)	7648	0.57
Hast Children Under 4	7648	0.36 (0.23)	650	0.38 (0.24)	6998	0.36 (0.23)	7648	0.29
Born in this village/town/city	7648	$0.50 \\ (0.25)$	650	0.49 (0.25)	6998	$0.50 \\ (0.25)$	7648	0.54
Born in this county (but not here)	7648	0.15 (0.13)	650	0.17 (0.14)	6998	0.15 (0.13)	7648	0.25
Secondary Education	7648	0.69 (0.22)	650	0.71 (0.21)	6998	0.68 (0.22)	7648	0.23
College Education or More	7648	0.12 (0.11)	650	0.12 (0.11)	6998	0.12 (0.11)	7648	0.96
Confidence in Own Ability	7337	0.61 (0.05)	618	0.62 (0.05)	6719	0.61 (0.05)	7337	0.12
Life Satisfaction	7181	0.48 (0.04)	611	0.47 (0.04)	6570	0.48 (0.04)	7181	0.39
Business Training in Last Year	7648	0.22 (0.17)	650	0.25 (0.19)	6998	0.22 (0.17)	7648	0.05*
Has Wage Job	7648	$0.40 \\ (0.24)$	650	0.42 (0.24)	6998	$0.40 \\ (0.24)$	7648	0.49
Has a Business	7648	$0.48 \\ (0.25)$	650	$0.49 \\ (0.25)$	6998	$0.48 \\ (0.25)$	7648	0.49
# of Businesses	3654	1.12 (0.13)	319	1.13 (0.14)	3335	1.12 (0.13)	3654	0.92
Business is Registered	3080	0.33 (0.22)	270	0.36 (0.23)	2810	0.32 (0.22)	3080	0.18
# of Employees	3080	1.09 (4.59)	270	1.26 (7.81)	2810	1.07 (4.28)	3080	0.27
Business Sales (KSh)	3080	$19444.37 \\ (3.85e+08)$	270	19421.30 (3.90e+08)	2810	$19446.59 \\ (3.85e+08)$	3080	0.98
Business Profits (KSh)	3082	6329.88 $(4.64e+07)$	270	$\substack{6133.26 \\ (4.30e+07)}$	2812	$\substack{6348.76 \\ (4.67e+07)}$	3082	0.61

In addition, ethnographic data is used to obtain a more exogenous measure of the strength of family ties and their potential influence on entrepreneurship. This includes ethnic group information derived from language data collected at baseline, supplemented with external sources such as the Demographic and Health Survey (2014), Round 8 of Afrobarometer (2021), and ethnographic datasets (Nunn and Wantchekon, 2011; Moscona, Nunn, and Robinson, 2017). Finally, I use the Ethnographic Atlas obtained from D-Place (Kirby et al., 2016), which contains information on the traditional practices and characteristics of ethnic groups.¹⁴. The process for mapping languages to ethnic groups and traditional practices, as well as the rationale for using this as a measure of family ties is included in Section 4.4.

4.3 Constructing the Measure of Family Size

Family size is measured using midline data on the number of close relatives living in the same subcounty but in separate households. To ensure consistency, enumerators provided a standardized definition of "relatives." The question reads: "How many relatives live in your same subcounty but do not live with you? That is, consider your extended family living outside your household. Include parents, grandparents, siblings, grown children, aunts and uncles."

Although a relationship may exist with relatives living elsewhere, I focus on those living in the same subcounty as the respondent because it is expected that the strength of the mutual assistance mechanism, as well as the strength of emotional and information support is larger the closer the proximity. For example, Fafchamps and Gubert (2007) finds that geographic proximity in the rural Philippines is a strong correlate of risk-sharing networks since it facilitates monitoring and enforcement. In addition to this, only 2.29% of the youth in my sample report remittances (from Kenya or from abroad) as one of their three main sources of income.

¹³The socio-emotional skills included confidence, effort belief, perseverance, time preferences, ambiguity tolerance, openness to experience, flexibility, and executive function. In addition, business knowledge and cognition were measured. Appendix Table A27 details the questions used to measure each of these skills.

¹⁴D-PLACE dataset derived from Murdock et al. (1999).

The primary measure of family size is a continuous count of extended family members, winsorized at the 1% level. Figure 2 shows the distribution of the variable of interest. The average extended family size (family size from now on for short) is 13.2 and the median is 5 (see Appendix Table A8). However, 21.8% of the respondents did not have any extended family living in the same subcounty.

OZ - House of Extended Family Members in the Subcounty

Figure 2: Distribution of the Number of Extended Family

Note: Number of extended family members winsorized at the 1% level.

Alternatively, I consider a binary variable distinguishing large versus small families. This dummy is equal to one if the family size is larger than or equal to the overall median in the sample, and 0 otherwise. Although this measure might be less subject to measurement errors arising from respondents not remembering exactly the number of extended relatives, the continuous measure provides useful information about the actual size.

A possible concern with my measure of family size is that it is measured at midline, almost two years after the start of the intervention, and that it could be related to treatment. The potential endogeneity of this measure is assessed in Section 6.3 and it provides robustness

4.4 Identifying Ethnic Group and Traditional Practices

Ethnic group identification is based on respondents' native language, using a structured mapping approach that integrates multiple data sources. In Kenya, most languages correspond strongly to a single ethnic group, allowing for reliable classification. This method successfully assigns ethnic groups to 94% of the sample, allowing for a robust analysis of cultural influences on family structures and economic behavior. Details of the classification methodology are provided in Appendix A5.

Using these ethnic group classifications, I assign traditional practices based on the Ethnographic Atlas, with a particular focus on predominant forms of domestic and familial organization. Family structures are categorized as nuclear (monogamous or polygynous), small extended, or large extended families. A nuclear family typically consists of a married couple and their children, though additional individuals may sometimes reside within the household (Murdock, 1967). Small extended families include a core household unit along with a limited number of additional kin, while large extended families encompass multiple generations and collateral relatives (e.g., uncles, aunts, and cousins) who live together or nearby

The domestic organization of ethnic groups shapes family ties' strength and size by influencing kinship structures, co-residence patterns, and economic interdependence. Ethnic groups with nuclear family structures, whether monogamous or polygynous, typically emphasize self-sufficiency within smaller household units, which can limit extended family obligations but maintain strong direct ties (Murdock, 1967). In contrast, large extended families, common in many African societies, foster strong kin networks by emphasizing collective economic support, shared responsibilities, and frequent interaction among multiple generations. Small extended families, which lie between these two structures, may experience weaker obligations to distant relatives compared to large extended families but still maintain some interdependence. The extent of financial sharing and mutual assistance also varies. Thus, the domestic organization of ethnic groups affects both the number of close relatives an individual interacts with and the strength of the financial and social ties

among them, which in turn influences economic behaviors such as entrepreneurship and resource-sharing.

5 Empirical Strategy

To estimate the causal effect of business support measures on youth with varying family sizes, I use the following ANCOVA specification:

$$Y_{i,post} = \alpha + \eta Y_{i,baseline} + \gamma_1 Any T_i + \gamma_2 F_i + \gamma_3 (Any T_i \times F_i) + \sum_{m=1}^{M} \beta_m X_m + \varepsilon_i \quad (1)$$

where $Y_{i,post}$ corresponds to the business or individual outcome of interest for individual i, in the post-treatment period (midline survey) and $Y_{i,baseline}$ is the control for the dependent variable value at baseline. $AnyT_i$ is a dummy variable that equals one when the individual i was assigned to receive any of the treatments described in Section 2.1 (i.e., grants, BDS, or grants and BDS). F_i is the measure of family size described in Section 4.3, that can be continuous or a dummy variable, depending on the specification, and $(AnyT_i \times F_i)$ is the interaction between the two preceding variables. X_m are stratification variables (i.e., gender, county, and previous KYEOP exposure), as well as additional controls for the economic sector and marital status at baseline. Finally, ε_i is the error term.

The coefficient γ_2 captures the correlation between family size and the outcome of interest, while γ_1 estimates the causal impact of treatment for those without extended family. The total effect of treatment for individuals with a positive extended family size is given by $\gamma_1 + \gamma_3 F_i$, where statistically significant γ_3 indicates heterogeneous effects by family size.

The main outcomes of interest are business ownership, survival, entry, and financial performance. Whereas business ownership evaluates whether individuals in the full sample have a business, business survival is studied by focusing on the sample of individuals who had a business at baseline, and analyzing whether they have a business at midline. Similarly, for business entry, I focus on those who did not have a business at baseline and I analyze whether they were running a business by midline. Regarding financial performance, I focus on monthly business sales and profits, conducting separate regressions baseline business

owners and new entrepreneurs. Finally, I analyze whether business is the main source of income.

To disentangle the effects of specific support measures, I estimate a disaggregated version of Equation 1:

$$Y_{i,post} = \alpha + \eta Y_{i,baseline} + \gamma_{11}G_i + \gamma_{12}BDS_i + \gamma_{13}G\&BDS_i + \gamma_2F_i + \gamma_{31}(G_i \times F_i) + \gamma_{32}(BDS_i \times F_i) + \gamma_{33}(G\&BDS_i \times F_i) + \sum_{m=1}^{M} \beta_m X_m + \varepsilon_i \quad (2)$$

where G_i , BDS_i , and $G\&BDS_i$ are dummy variables indicating assignment to grants, BDS, or both, respectively. As before, the coefficients of interest are the interactions between the treatment and the measure of family size (i.e., γ_{31} , γ_{32} , and γ_{33}), that capture heterogeneity by family size. The rest of the variables are the same as explained for equation 1.

Based on previous findings in Domenella et al. (2021) for the short run, I expect positive and significant γ_{11} and γ_{13} . The effect of family size on business outcomes could be positive or negative (as explained in Section 1), and I will be capturing the net effect. Therefore, the sign of γ_2 , and the interaction terms remain an empirical question, which I explore further in Section 6.5

6 Results

This section presents the main findings on business outcomes, focusing on extended family size as reported at midline. I also discuss attrition, address potential endogeneity concerns, and test robustness using ethnic-based domestic organizations and alternative sample restrictions. Finally, I conduct a thorough analysis of the potential mechanisms behind my results.

6.1 Attrition

Before presenting my main results, I briefly discuss attrition in this study. Of the 9,380 individuals in the baseline sample, 7,632 were successfully followed at midline, resulting in an overall attrition rate of 19%. Attrition rates varied slightly across treatment groups: participants assigned to BDS-only experienced 5 pp higher attrition than the control group, while those in the grant with BDS group had 3 pp higher attrition. However, there is no statistically significant difference in attrition rates between the control group and those assigned to grants only (see Appendix Table A1). The higher attrition among the BDS-only group may be due to disappointment from attending training without being selected afterwards for the business grant.

Although overall attrition is associated with some observable characteristics, I find no evidence of treatment-induced selective attrition. The individuals followed at midline are less likely to be women and more likely to have been born in the same village, town, or city where they were living at baseline (Appendix Table A3). However, there is no significant difference in attrition by baseline business ownership across treatment groups (Appendix Table A2).

6.2 Main Results

In this section, I present the results on business outcomes using Equations 1 and 2. The tables included in this section use the continuous measure of family size described in 4.3, whereas the results using the dummy measure are included in the Appendix. The first two columns in Table 2 examine business ownership, while the last two analyze whether a business is the main income source.

As can be seen in the table, being assigned to grants or a combination of grants and BDS, significantly increases business ownership and the likelihood of reporting business as the main source of income. However, BDS alone has no significant impact, and providing BDS in addition to grants is not statistically different from offering grants only.

Regarding family size, I find that each additional close relative in the same subcounty

correlates with a 0.3 percentage point (pp) higher probability of business ownership and a 0.2 pp higher probability of business being the main source of income. For reference, 50% of those in the control group with no close relatives own a business at midline, compared to 52% for individuals with a median family size of five and 55% for those in the 75th percentile (15 relatives) (see Figure 3).

The results confirm that there is treatment heterogeneity by family size. The treatment effect on business ownership is 14.5 pp for individuals without extended family, but each additional family member reduces this impact by 0.2 pp (significant at 1%). A similar result is found for business being the main source of income. Columns (2) and (4), show that these results are driven by grants, either alone or in combination with BDS. Figure 3 illustrates how the causal impact of grants declines from 21 pp (no relatives) to 18 pp (15 relatives).

Using the alternative family size measure, results hold: individuals from large families are 11 pp more likely to own a business at midline compared to those from a small family (see Appendix Table A4). Grants (either alone or together with BDS) increase ownership by 22 pp, but this effect is 6 pp lower for large families compared to those with smaller ones, though not statistically significant.

In summary, the results so far show that two years into the crisis, youth with a larger family size are more likely to have a business and to claim that the business is their main source of income, compared to those with smaller families. However, when they receive an external source of funding to help them with their business or business plans, having a larger family mitigates the positive impacts of the grants on entrepreneurship.

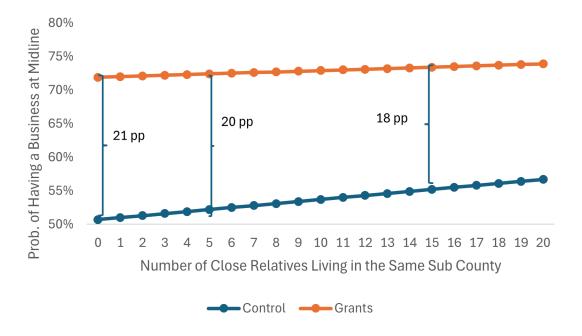
Next, I analyze the causal impacts on business survival and business entry. As explained in Section 5, I run separate regressions for those who had and those who did not have a business at baseline, and analyze what happened to them at midline depending on family size and treatment status. As can be seen in Table 3, those who have more family members seem to have coped better with the crisis: each additional close relative correlates with a 0.2 pp higher survival rate and a 0.3 pp higher entry rate. For instance, 65% of youth with small families retain their business at midline, compared to 76% for those with large families (see Appendix Table A6). The business support measures seem to more than

Table 2: Effects on Income Generation

	(1)	(2)	(3)	(4)
	Has a Business		Business	s is Main
			Source o	f Income
Any Treatment	0.145***		0.089***	
	(0.022)		(0.023)	
# Ext. Family Members	0.003^{***}	0.003***	0.002**	0.002^{**}
	(0.001)	(0.001)	(0.001)	(0.001)
(Any Treatment)×(# Ext. Family Members)	-0.002**		-0.002*	
	(0.001)		(0.001)	
Grants only		0.212***		0.143***
		(0.025)		(0.025)
$(Grants only) \times (\# Ext. Family Members)$		-0.002**		-0.002*
		(0.001)		(0.001)
BDS only		0.028		-0.006
		(0.024)		(0.024)
(BDS only) \times (# Ext. Family Members)		-0.001		-0.001
		(0.001)		(0.001)
G & BDS		0.214***		0.145***
		(0.024)		(0.024)
$(G \& BDS) \times (\# Ext. Family Members)$		-0.002***		-0.002**
		(0.001)		(0.001)
R-squared	0.095	0.125	0.094	0.110
Sample Size	7632	7632	7632	7632
Dep. Vble. Mean	0.507	0.507	0.412	0.412
Dep. Vble. Mean at Baseline	0.459	0.459	0.331	0.331

Notes: This table presents ANCOVA regression analysis for income generation outcomes using equations 1 (in columns 1 and 3) and 2 (in columns 2 and 4). All regressions include controls for the dependent variable values at baseline, stratification variables, business sector, marital status at baseline, and month of interview fixed effects. The number of extended family members is winsorized at the 1 % level. The dependent variable mean in the control group with zero family members is reported at midline and baseline. Robust standard errors in parentheses. * p < 0.1, *** p < 0.05, *** p < 0.01.

Figure 3: Business Ownership at Midline for Different Family Sizes and Treatment Arm



Note: This figure shows the probability of having a business at midline for different family sizes, using the estimated coefficients shown in Table 2.

compensate for this lack of family support. Grant and BDS cause a significant increase in business survival of 14 pp for those with no extended family members (or 16 pp for those with a small family in Appendix Table A6 specification). However, as seen in business ownership, the effect is mitigated by family size (γ_{33} is negative and significant in both specifications).

Regarding business entry, treatment significantly increases it, but effects do not vary significantly by family size. despite the interaction terms are still negative, they are not significant. Youth assigned to grants or grants and BDS are 27–28 pp more likely to start a business, compared to a 39% baseline entry rate in the control group. For those in the control group, each additional family member is correlated with a 0.3 pp higher entry rate. In the alternative specification presented in the Appendix, the correlation between the entry rate and having a larger family size is 10 pp, also significant.

Finally, Table 4 reports the impact on the intensive margin, by analyzing profits and sales for baseline business owners (columns 1-2, 5-6), and new entrepreneurs (columns

Table 3: Effects on Business Survival and Entry

	(1)	(2)	(3)	(4)	
	Business	Survival	Business Entry		
Any Treatment	0.090***		0.189***		
	(0.031)		(0.032)		
# Ext. Family Members	0.002***	0.002***	0.003**	0.003**	
	(0.001)	(0.001)	(0.001)	(0.001)	
(Any Treatment)×(# Ext. Family Members)	-0.002**		-0.001		
	(0.001)		(0.002)		
Grants only		0.143^{***}		0.268^{***}	
		(0.033)		(0.036)	
(Grants only)×(# Ext. Family Members)		-0.002**		-0.001	
		(0.001)		(0.002)	
BDS only		0.003		0.045	
		(0.033)		(0.035)	
(BDS only)×(# Ext. Family Members)		-0.002*		-0.000	
		(0.001)		(0.002)	
G & BDS		0.138***		0.276***	
		(0.032)		(0.034)	
(G & BDS)×(# Ext. Family Members)		-0.002**		-0.002	
		(0.001)		(0.002)	
R-squared	0.064	0.086	0.048	0.088	
Sample Size	3649	3649	3983	3983	
Dep. Vble. Mean	0.647	0.647	0.388	0.388	

Notes: This table presents regression analysis for business survival and entry using equations 1 (in columns 1 and 3) and 2 (in columns 2 and 4). The first 2 columns restrict the sample to youth who had a business at baseline, whereas the last 2 columns restrict the sample to those who did not have a business at baseline. All regressions include controls for stratification variables, business sector, marital status at baseline, and month of interview fixed effects. The number of extended family members is winsorized at the 1 % level. The dependent variable mean in the control group with zero family members is reported at midline. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

3-4, 7-8).¹⁵ Results show that the correlation of family size and sales and profits is not significant in general. Only for those who started a business between baseline and midline, the correlation with monthly profits is positive and significant at the 10% level when using the continuous family size but not the dummy (see Appendix Table A7). That is, in general, those with small families performed as well as those with large families. This may suggest that during times of crisis, the net effect of having a larger family on business performance is neutral. On the one hand, a larger family network might help attract more customers and increase sales through extended social connections. On the other hand, it may reduce the owner's incentives to invest effort in the business, potentially leading to lower sales. In the case of new businesses, it seems that the net effect of family size on profits is positive. I study the different mechanisms driving my results in Section 6.5.

The results show that the support measures increased sales and profits (as we found in the short-term in Domenella et al. (2021)), with a larger impact among those who did not have a business at baseline. For youth without extended family, grants increase sales by 39% and profits by 60% (see Table 4). The effect is similar when comparing small and large families: 43% higher sales and 58% higher profits for grant recipients in small families (see Appendix Table A7). For those who had a business before, sales increased 13%, when assigned to grants compared to the control group, with no significant impact on profits (see Table 4).

In terms of heterogeneity by family size, each additional family member reduces the grant impact on profits by Ksh. 54 for new businesses. At the median family size (five members), the impact is 10% lower than for those with no relatives. Using the alternative measure, grants increase profits 62% more for youth from small families (see Appendix Table A7).

¹⁵Given that there are positive and significant treatment effects on business entry and survival, I analyze the unconditional sales and profits, to avoid the selection bias (since the pool of businesses for whom I observe these outcome variables is affected by treatment). That is, I replace the missing performance values with zeros.

 $^{^{16}}$ Focusing on those who did not have a business at baseline, I compute 8446.94/21570.97 to obtain the impact of 39% on sales, and 2804.77/4636.03 for the impact of 60% on profits.

Table 4: Impact on the Intensive Margin: Sales and Profits

		Mont	hly Sales		Monthly Profits				
	With a busi	ness at baseline	Without a bu	usiness at baseline	With a busi	ness at baseline	Without a bu	isiness at baseline	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Any Treatment	2558.52		5678.40***		367.41		1860.33***		
	(1819.65)		(1227.58)		(664.98)		(372.02)		
# Ext. Family Members	-3.56	-2.33	56.86	56.53	6.70	6.95	33.55*	33.46*	
	(59.78)	(59.67)	(61.13)	(61.30)	(22.88)	(22.85)	(20.25)	(20.27)	
(Any Treatment)×(# Ext. Family Members)	-2.13		-52.31		-11.41		-30.55		
	(62.60)		(63.33)		(23.79)		(21.22)		
Grants only		4742.78**		8446.94***		789.80		2804.77***	
		(2045.73)		(1447.93)		(733.29)		(450.63)	
(Grants only) \times (# Ext. Family Members)		-22.48		-112.81*		-16.85		-53.90**	
		(70.01)		(67.73)		(26.07)		(22.27)	
BDS only		-1314.46		1701.78		-532.66		754.90*	
		(1921.77)		(1318.36)		(706.46)		(408.46)	
(BDS only) \times (# Ext. Family Members)		26.13		-8.72		1.37		-16.77	
		(66.90)		(67.85)		(25.34)		(22.83)	
G & BDS		4800.27**		7808.01***		954.91		2336.11***	
		(1954.87)		(1370.36)		(711.53)		(424.28)	
$(G \& BDS) \times (\# Ext. Family Members)$		-17.74		-60.25		-21.48		-30.68	
		(68.97)		(67.76)		(25.64)		(22.79)	
R-squared	0.16	0.17	0.03	0.04	0.11	0.11	0.03	0.04	
Sample Size	3544	3544	3839	3839	3544	3544	3839	3839	
Dep. Vble. Mean	36989.53	36989.53	21570.97	21570.97	11358.37	11358.37	4636.03	4636.03	

Notes: This table shows ANCOVA regressions for the unconditional sales and profits using equations 1 (in odd columns) and 2 (in even columns). The first two columns and columns 5 and 6 restrict the sample to youth who had a business at baseline, whereas columns 3, 4, 7, and 8, restrict the sample to those who did not have a business at baseline. All regressions include controls for stratification variables, business sector, marital status at baseline, and month of interview fixed effects. I also control for the outcome variable at baseline. In the case of those who did not have a business, sales and profits at baseline are set to zero. The number of extended family members is winsorized at the 1 % level. The dependent variable mean in the control group with zero family members is reported at midline. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

Overall, results in this Section show that larger family size helps youth sustain or start businesses during crises. In terms of business performance, family size does not significantly impact business sales or profits, except for new businesses, where a positive correlation with profits is observed. The analysis also shows that external funding boosts entrepreneurship, but its impact is reduced for individuals with larger families.

6.3 Robustness Checks

The analysis thus far assumes that family size is exogenous to treatment status. A key concern is that family size is measured at midline, after the interventions were implemented. If respondents or their relatives strategically relocated between baseline and midline in response to treatment, this could introduce bias. For instance, if individuals assigned to grants relocated to another subcounty to avoid sharing business income with family members, or if relatives moved to assist or benefit from the business, the observed family size may not reflect its pre-treatment composition.

As demonstrated in Section 4.1, treatment arms are balanced at baseline in terms of household size and whether the youth was living in their birthplace. These variables correlate with extended family size and suggest balance across treatment arms. However, the absence of baseline data on extended family size prevents direct verification. To address this, I first examine whether family size correlates with treatment status. An OLS regression controlling for stratification variables reveals that individuals assigned to BDS report 1.7 more family members than the control group (significant at the 5% level). Appendix Table A14 shows no significant correlation for grants or grants with BDS, and none of the coefficients are significant when using the binary family measure (columns 3 and 4). Given that treatment heterogeneity in my main results is driven by grants and grants with BDS, the lack of correlation with family size in these treatment groups is reassuring.

To further assess robustness, I restrict the sample to respondents who did not move between baseline and midline ("non-movers"). This mitigates concerns about family size changes due to youth relocation, though it does not account for relatives' relocation. The data indicate that 5,310 youth (70% of the sample) remained in the same subcounty.

While relocation correlates with various baseline characteristics, it is generally unrelated to treatment status (Appendix Table A10). OLS regressions with relocation as the dependent variable confirm no significant treatment effects. Notably, single women are 3.2 pp more likely to have moved since baseline compared to single men, while married individuals at baseline are less likely to relocate (-0.08, significant at the 1% level). ¹⁷ Larger household sizes also reduce the likelihood of relocation.

Appendix A6.2 presents results restricted to the "non-movers" sample, confirming the robustness of the main findings. This alleviates concerns about measurement errors in family size due to post-treatment data collection. However, it remains possible that relatives relocated in response to treatment, affecting the midline family size measure. Interestingly, when restricting to "non-movers" the grant coefficient becomes significant (Appendix Table A15). Those in the grant treatment report around two additional family members compared to the control mean of 13 (significant at the 10% level), suggesting that youth more likely to own businesses due to grants may attract family members to reside nearby.

Finally, I analyze treatment effects by deciles of family size rather than using a median split. The regression results indicate that the relationship between family size and business ownership varies across the distribution (see Appendix Table A19). While the correlation is insignificant for lower deciles, youth in the 9th and 10th deciles are 19 and 15 pp more likely to own a business at midline, respectively. Interaction terms between treatment and family size are negative for the larger deciles but positive for the smaller ones, with significance observed for the grant and BDS interaction with the 9th decile.

6.4 Results using Domestic Organization of Ethnic Groups

Beyond concerns regarding measurement timing, self-reported family size may introduce endogeneity. Youth receiving grants may recall more relatives due to increased financial requests or, conversely, those less prone to sharing may underreport relatives. To address this, I use the alternative measure of family ties based on the traditional domestic organization of ethnic groups, which is more exogenous.

¹⁷It is important to note that the marital residence pattern prevailing among the ethnic groups in my sample is patrilocal, but I do not find heterogeneous behavior for married men and women when running the regressions with female interacted with married.

Appendix Table A21 shows that this exogenous measure of family ties correlates with entrepreneurship and affects the impact of supportive interventions. Youth from ethnic groups with small extended family structures are 9 pp less likely to own a business at midline compared to those from nuclear or large extended families. Furthermore, external financial support has a greater impact on entrepreneurship among those from small extended families. For individuals from ethnic groups with nuclear or extended family structures, grants (alone or with BDS) increase business ownership by 16 pp and the likelihood that the business is the primary income source by 11 pp. Among those from small extended family groups, the effects are even stronger, at 22 and 17 pp, respectively.

The results align with those based on self-reported extended family size. Appendix Table A20 indicates that individuals from small extended family ethnic groups report 3.3 fewer family members than those from nuclear or large extended families, who report an average of 12.7 members.¹⁸

A plausible explanation is that youth from small extended family backgrounds experience weaker kinship obligations and more selective relational ties. In contrast, large extended family systems socialize individuals to maintain close relationships with a broad network of relatives. Urban migration patterns also contribute to the fragmentation of extended kinship ties. While individuals from small extended family backgrounds may have similar numbers of extended kin, geographic dispersion, and weaker kinship obligations lead to lower perceived family size. In my sample, youth from small extended family groups are 2 pp less likely to reside in their birthplace at baseline and 4 pp more likely to migrate to another subcounty between baseline and midline (significant at the 10% and 1% levels, respectively). Without external support, they face greater challenges in starting or sustaining a business. However, grants compensate for limited family support and given their reduced pressure to redistribute funds among kin compared to other family structures, allow for a more substantial entrepreneurial impact.

¹⁸This results are obtained from an OLS regression using winsorized extended family size as the dependent variable, controlling for domestic organization dummies, stratification variables and marital status.

6.5 Mechanisms

The findings in Section 6.2 indicate that larger family size can be advantageous for entrepreneurship during crises, but when there is a public policy providing business support, its positive impact may be mitigated by the larger family size. This section explores potential mechanisms underlying these results, including mutual assistance through financial transfers or employment of relatives, crowding-out effects, managerial interference, and baseline differences in entrepreneurial traits by family size.

One plausible explanation is mutual assistance, whereby family members support young entrepreneurs during crises in the absence of external aid. However, when subsidies are available, recipients may reciprocate by redistributing resources. This support can take the form of redirecting funds for non-business purposes, sharing business profits, or employing relatives. To examine this mechanism, I analyze outcomes such as the number of employees, labor costs as a percentage of total costs, requests for financial assistance from family members, actual transfers made, and the usage of grants, particularly whether individuals from larger families allocate funds to non-business expenses.

Appendix Tables A24 and A25, present OLS regression results for these outcomes related to money-sharing and usage of grants, controlling for stratification variables, business sector, marital status at baseline and interview month.¹⁹

The results confirm the prevalence of mutual assistance in this sample, consistent with the Kenyan context. Among the control group, 79% reported receiving financial requests from relatives in the two years prior to the midline survey, and 90% complied at least once. Conversely, 67% requested money, and 90% received support. Being assigned grants or grants with BDS increased the probability of providing financial assistance to relatives when asked by up to 4.7 pp while reducing reliance on family support by up to 7 pp. However, when individuals did seek financial help, their relatives remained just as likely

¹⁹Appendix Table A25 follows the specification in Equation 2, running separate regressions using as dependent variables those related to money-sharing and grant usage, without controlling for baseline values of the outcome variables due to data unavailability. For grant usage, the sample is restricted to those assigned to grants or grants with BDS, as this question was only posed to them. Variable definitions are detailed in Appendix Table A27. Results are robust when controlling for willingness to share money with relatives, measured through agreement with the statement "If a relative needed Khs.10,000 I would be willing to give it to them. For our purposes relatives are parents, grandparents, siblings, grown children, aunts, and uncles".

to assist, and the amount received did not significantly differ from the control group.

Family size further influences these effects. Youths from larger families were less likely to receive financial support when they requested it if assigned grants with BDS (Appendix Table A25, column 6). Additionally, they were nearly 1.5 pp more likely to use grant funds for household expenses, a considerable relative increase given that only 6% of individuals from smaller families reported this use (column 7).²⁰

Profit analysis suggests that while grants and grants with BDS increased sales equally for individuals from both small and large families, profit gains were lower for the latter. This disparity likely stems from increased expenditures among individuals with larger extended families. One potential channel is employment: entrepreneurs from larger families employed, on average, 0.42 more workers at midline if they had a business at baseline and 0.33 more if they started a business post-baseline (Appendix Table A22). This suggests that hiring relatives may serve as a form of assistance, though data limitations prevent direct identification of employee relationships.

For businesses already operating at baseline, grants and grants with BDS increased employment by 0.33 to 0.52 workers for individuals from smaller families—a substantial increase given the baseline average of 1.1 employees. However, the impact of these support measures for those from larger families was not statistically significant. One possible explanation is that the combination of grants and business training encouraged capital investment over labor hiring or reallocation of funds to non-labor expenses. Consistent with this hypothesis, individuals from larger families exhibited an 8 pp higher labor cost share of total expenses in the absence of external support. However, grants and grants with BDS raised labor costs by 9 pp for individuals from smaller families but had no significant impact for those with larger families (Appendix Table A23).²¹

Family size may also constrain business growth. In weak regulatory environments, em-

²⁰This result should be interpreted cautiously due to potential misreporting incentives. Despite assurances of confidentiality and that responses would not have any consequences, respondents might have selectively reported expenditure categories. Enumerators recorded multiple responses without reading them aloud. Alternative categories included personal expenses, business expenses, business investment, personal investment, or other (see Appendix Table A27).

²¹Alternative expense categories include raw materials, items for sale, transport, electricity, water, fuel, rent, maintenance, taxes, licenses, insurance, phone bills, and miscellaneous costs.

ploying relatives may reduce monitoring costs but limit firm expansion. However, these employees may not be the most competent hires, potentially diminishing firm productivity.²² Further, relatives might prioritize household well-being over optimal business decisions. Entrepreneurs from larger families were 11 pp more likely to report profits allowing them to cover household expenses but there is no significant difference in investing with smaller families in the control group (Table 5). While grants increased the probability of covering household expenses and saving by 17 pp and investment by 9 pp, the impact on saving was 9 pp lower for those from larger families (with no heterogeneous impact on the other uses).²³

Table 5: Uses of the Profits from the Best Month

	(1)	(2)	(2)	(4)
	(1)	(2)	(3)	(4)
	Cover HH	Save	Invest	Cover HH expenses,
	expenses			save and invest
Large family	0.105^{***}	0.098***	0.051	0.054**
	(0.037)	(0.036)	(0.031)	(0.027)
G	0.173^{***}	0.170^{***}	0.094***	0.066^{***}
	(0.031)	(0.030)	(0.025)	(0.022)
Gx(Large family)	-0.044	-0.091**	-0.021	-0.058*
	(0.044)	(0.043)	(0.037)	(0.032)
BDS	0.022	0.024	0.011	0.007
	(0.029)	(0.028)	(0.023)	(0.020)
BDSx(Large family)	-0.026	-0.043	-0.009	-0.017
	(0.042)	(0.041)	(0.035)	(0.030)
G & BDS	0.166***	0.200***	0.098***	0.073***
	(0.030)	(0.028)	(0.024)	(0.021)
(G & BDS)x(Large family)	-0.068	-0.070*	0.003	-0.036
	(0.042)	(0.041)	(0.036)	(0.031)
R-squared	0.088	0.083	0.060	0.038
Sample Size	7513	7513	7513	7513
Dep. Vble. Mean	0.360	0.292	0.168	0.109
Dep. Vble. Mean at Baseline	0.676	0.592	0.444	0.239

Notes: This table presents ANCOVA regression analysis, controlling for stratification variables, business sector, marital status at baseline, and month of interview fixed effects. Each dependent variable is a dummy equal to 1 if the best month profit allows to do that, and 0 otherwise (see details in Appendix Table A27). As I did when analyzing the intensive margin, I replace each dummy variable by zero if the business was not in operation at midline. Large family is equal to one if the number of extended family members is above or equal the median. The dependent variable mean in the control group with zero family members is reported at midline and baseline. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

²²Buera, Sanghi, and Shin (2021) model the role of family businesses in mitigating contractual frictions but highlight that firm size is constrained by family member availability and productivity. See also Alby, Auriol, and Nguimkeu (2018) on the negative productivity effects of hiring relatives over qualified workers, leading to less productive and less profitable firms.

 $^{^{23}}$ The question on profit allocation was asked specifically about profits in the best month. See the details of the questions in Appendix Table A27

Another mechanism is the lack of separation between personal and business finances. Business support measures reduced the likelihood of maintaining separate accounts for individuals with larger families but had no significant impact on those with smaller families (Appendix Figure A4). Additionally, while family involvement in business decisions remained unchanged for pre-existing firms, newly established businesses were more likely to involve relatives if the entrepreneur had a large family and received support, whereas those from smaller families exhibited reduced family participation in decision-making (Appendix Figures A5a and A5b).

A potential crowding-out effect also emerges. Families may decrease financial support when external funding becomes available, or entrepreneurs may reduce requests for assistance. As we saw when analyzing mutual assistance, requests to relatives and the probability of receiving money from relatives decline when youths receive an external source of funding. In terms of start-up capital, I find that young entrepreneurs with smaller families were 15 pp to 17 pp less likely to rely on grants from family or friends if assigned the business grants (either alone or with BDS), whereas the decline was only 1.8 pp to 2.6 pp for those from larger families (Appendix Figure A6a). Interestingly, those from larger families who did not receive support from KYEOP were 16.9 pp less likely to report receiving a grant from family or friends to start their business post-baseline, though this effect was absent for businesses established before the crisis. The impacts on loans, are not significant except for those with large families assigned to grants, who were 7.3 pp less likely to have used this source to start their businesses (Appendix Figure A6b).

Another plausible mechanism explaining the negative interaction between grants and family size is the impact on work effort. Entrepreneurs who receive grants may have weaker incentives to invest time and effort into their businesses if they do not retain the full benefits of their labor. To test this, I examine the number of weekly hours worked in the business and the number of days the business was operational in the past month.²⁴ Among the control group with pre-existing businesses, those from larger families reduced their weekly hours worked by an average of seven hours compared to those from smaller families (Appendix Figure A7a). However, support measures mitigated this decline: while

²⁴I estimate an ANCOVA specification as described in Equation 2, additionally controlling for changes in the number of employees between midline and baseline since they may have reduced the working hours because they reduced their own work by hiring an employee.

grants did not significantly affect effort, business support measures (including grants with BDS) increased working hours for entrepreneurs from larger families, but reduced them for those from smaller ones. For individuals who started their businesses post-baseline, I find no significant effects on hours worked (Appendix Figure A7c). However, receiving grants or grants with BDS increased the number of days the business was operational in the past month by two to three days, regardless of family size (Appendix Figure A7d). For youth who were operating a business at baseline, there were no significant effects on operational days (Appendix Figure A7b).

Finally, I examine baseline differences in entrepreneurial traits and emotional support during the crisis. Individuals from larger families did not exhibit systematically different skills pre-treatment, except for being more risk-averse, less tolerant of ambiguity, more time-inconsistent, and scoring lower at the EAT (Appendix Figure A8).²⁵ This heightened risk aversion and lower overall entrepreneurial aptitudes may partly explain the weaker impact of business support measures among this group. Despite improvements in life satisfaction and economic confidence due to support measures, no heterogeneity by family size was observed (Appendix Table A26).

Overall, this section provides evidence of mutual assistance and potential crowding-out effects shaping the impact of support measures. Additional mechanisms include managerial interference through family involvement, as seen in financial decision-making and profit allocation. While grants did not reduce work effort among individuals from larger families, differences in baseline risk preferences may further explain variations in policy effectiveness.²⁶

²⁵I consider socio-emotional, business knowledge and congnition skills captured at the EAT, which are detailed in Appendix Table A27. I run separate regressions for each of these skills as dependent variables (re-scaled to be between 0 and 1), as well as the EAT score and a "high scorer" dummy variable which is equal to 1 if the respondent scored the median in their county or above, and 0 otherwise. All regressions control for the stratification variables, business sector, marital status at baseline, and interview month fixed effect. When the outcome variable is the EAT score, I control for the total percentage of non-responses in the exam. For each of the skills, I control for the percentage of non-response over the total questions that make up the skill.

²⁶Future research will explore whether larger family networks contribute to customer acquisition (although I did not find significant differences in sales), financial decision-making under pressure (since previous literature showed that pressure to share income with husband or relatives could affect financial decisions), and influences in sectoral and business type choice and its potential effect on business outcomes. It is important to note that business sector controls are included in all regressions.

7 Conclusions

This paper examines how kinship networks influence entrepreneurship by shaping the effects of external support measures for self-employment and by either facilitating or restricting entrepreneurial activity in the absence of such support. By leveraging the timing of a randomized control trial in Kenya coinciding with the COVID-19 crisis, I assess whether entrepreneurs with larger family networks fared better during the crisis and how external funding influenced their business outcomes, compared to those with smaller families. The findings indicate that individuals with larger families were more resilient, with higher rates of business survival and entry. Two years after the pandemic's onset, business ownership remains higher among those with larger families, and they are more likely to rely on their business as their primary income source. However, the results also reveal that having a large family mitigates the positive impact of business support measures—dampening the effects of grants on entrepreneurship and business performance.

To understand the underlying mechanisms, I examine mutual assistance, crowding-out effects, managerial interference, and risk preferences. The evidence suggests that family ties play a dual role—providing crucial support in times of crisis but also redistributing resources away from business activities when external funding is available. I also find that larger families interfere in business decision-making, potentially limiting firm growth. Moreover, individuals from larger families exhibit higher risk aversion, which may influence their entrepreneurial choices. Conversely, I find no significant evidence supporting mechanisms related to lower work effort, or differential emotional support.

To address concerns about measurement timing and potential endogeneity in self-reported family size, I introduce an alternative measure based on traditional domestic organizations of ethnic groups, offering a more exogenous proxy for family ties. The results are consistent with those using self-reported extended family size. Entrepreneurs from ethnic groups with smaller extended family structures are less likely to own a business at midline than those from nuclear or large extended family backgrounds. However, they benefit more from external financial support, showing greater increases in business ownership and reliance on business income. These findings suggest that weaker kinship obligations in small extended family structures amplify the entrepreneurial impact of business support, a dynamic that

warrants further ethnographic exploration.

Overall, my results highlight the importance of considering family dynamics when designing entrepreneurship policies. In contexts where business and household finances are deeply intertwined, programs that solely focus on business support may not yield the expected outcomes. The mutual assistance mechanism and other family-driven influences should be accounted for in policy design, potentially through integrated business and household support initiatives. Additionally, my findings suggest that the full impact of grants may be underestimated if only the direct recipient's outcomes are considered, as there are likely spillovers to family members and indirect effects on control group entrepreneurs.

For future research, a valuable extension of this project would be to incorporate data from two additional follow-up surveys to evaluate the long-term effects of these mechanisms in a post-crisis economic environment. Additionally, I aim to investigate how differing levels of economic distress shape both the effectiveness of business support policies and the role of family assistance in entrepreneurship.

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Appendix

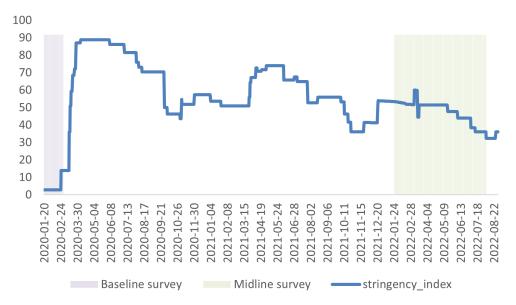
A1 Additional Details on Study Context

Although the program was not planned to provide support in times of crisis, the pandemic hit right after we conducted the baseline survey, and the first interventions were implemented in cluster 1 counties. The first case of COVID-19 was detected on March 13, 2020. The GoK reacted quickly and announced on March 15 several measures that became effective between March 20 and 25, including school closures, limits on social gatherings of five or more people, the closing of restaurants and bars, suspension of international flights, and a nationwide overnight curfew. In addition to this, in early April the GoK put in place a cessation of movements in and out of Nairobi Metropolitan Area, Mombasa, Kilifi and Kwale counties. As reflected by the reduction in the stringency index, restrictions to mitigate the spread of COVID-19 were eased towards the end of 2020 (see Appendix Figure A1a).²⁷ However, given the large increase in the number of cases, a second lockdown was announced in five counties on March 24, 2021, until May 2, 2021, when it was allowed again the openings of bars and restaurants, religious services, and schools (Pape et al., 2021).

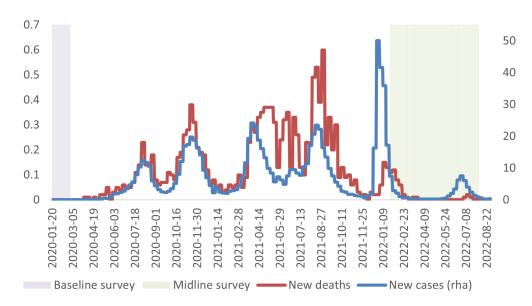
²⁷The stringency index is calculated by the Oxford Coronavirus Government Response Tracker project. It is a composite measure of nine metrics: school closures; workplace closures; cancellation of public events; restrictions on public gatherings; closures of public transport; stay-at-home requirements; public information campaigns; restrictions on internal movements; and international travel controls.

Figure A1: Evolution of COVID-19 and Containment Measures in Kenya

(a) Stringency Index



(b) Daily COVID-19 Cases and Deaths per Million People



Note: data from Our World in Data, downloaded on July 22, 2022. The stringency index is calculated by the Oxford Coronavirus Government Response Tracker project. It is a composite measure of nine metrics: school closures; workplace closures; cancellation of public events; restrictions on public gatherings; closures of public transport; stay-at-home requirements; public information campaigns; restrictions on internal movements; and international travel controls. New daily deaths and new COVID-19 cases are smoothed.

A2 Attrition

Table A1: Differential Attrition

	(1)	(2)
	Followed at Midline	Followed at Midline
	b/se	b/se
Any Treatment	-0.034**	
	(0.013)	
Grants Only		-0.006
		(0.015)
BDS		-0.052***
		(0.015)
Grants & BDS		-0.034**
		(0.015)
R-squared	0.025	0.027
Sample Size	9380	9380
Dep. Vble. Mean	0.850	0.850

^{*} p < 0.10, ** p < 0.05, *** p < 0.01

Table A2: Selective Attrition

	(1)	(2)
	Followed at Midline	Followed at Midline
	b/se	b/se
Any Treatment	-0.034*	
	(0.019)	
Any Treatment×Had a Business at Baseline	-0.001	
	(0.027)	
Grants Only		-0.004
		(0.021)
Grants Only×Had a Business at Baseline		-0.003
		(0.030)
BDS		-0.043**
		(0.021)
BDS×Had a Business at Baseline		-0.019
		(0.029)
Grants & BDS		-0.043**
		(0.020)
Grants & BDS×Had a Business at Baseline		0.019
		(0.029)
Had a Business at Baseline	0.017	0.016
	(0.029)	(0.029)
R-squared	0.025	0.028
Sample Size	9380	9380
Dep. Vble. Mean	0.850	0.850

^{*} p < 0.10, ** p < 0.05, *** p < 0.01

Table A3: Balance between Dropouts and Sample Followed at Midline

		(1) Dropout	Follow	(2) red at Midline	(2)-(1) Pairwise t-test		
Variable	N	Mean/(Var)	N	Mean/(Var)	N	P-value	
Female	1732	0.52 (0.25)	7648	0.47 (0.25)	9380	0.00***	
Age	1732	24.56 (8.09)	7648	24.64 (8.76)	9380	0.28	
Married or Living Together	1732	0.33 (0.22)	7648	0.34 (0.23)	9380	0.22	
Household Size	1732	3.93 (5.45)	7648	4.10 (5.82)	9380	0.01***	
Hast Children Under 4	1732	0.36 (0.23)	7648	0.36 (0.23)	9380	0.81	
Born in this village/town/city	1732	0.44 (0.25)	7648	$0.50 \\ (0.25)$	9380	0.00***	
Born in this county (but not here)	1732	0.16 (0.13)	7648	$0.15 \\ (0.13)$	9380	0.52	
Secondary Education	1732	0.71 (0.21)	7648	0.69 (0.22)	9380	0.09*	
College Education or More	1732	0.13 (0.12)	7648	0.12 (0.11)	9380	0.12	
Confidence in Own Ability	1662	0.62 (0.05)	7337	0.61 (0.05)	8999	0.05*	
Life Satisfaction	1613	0.47 (0.04)	7181	$0.48 \\ (0.04)$	8794	0.11	
Business Training in Last Year	1732	0.20 (0.16)	7648	0.22 (0.17)	9380	0.02**	
Has Wage Job	1732	0.42 (0.24)	7648	$0.40 \\ (0.24)$	9380	0.12	
Has a Business	1732	$0.45 \\ (0.25)$	7648	$0.48 \\ (0.25)$	9380	0.07*	
# of Businesses	786	1.10 (0.10)	3654	1.12 (0.13)	4440	0.11	
Business is Registered	656	0.32 (0.22)	3080	0.33 (0.22)	3736	0.90	
# of Employees	656	1.02 (2.39)	3080	$1.09 \\ (4.59)$	3736	0.38	
Business Sales (KSh)	656	$19703.81 \\ (3.77e+08)$	3080	$19444.37 \\ (3.85e+08)$	3736	0.76	
Business Profits (KSh)	658	$\substack{6691.53 \\ (4.83e+07)}$	3082	$6329.88 \\ (4.64e+07)$	3740	0.22	

A3 Balance using Disaggregated Treatment and Results using Dummy Family Size

Table A4: Effects on Income Generation - Family Dummy

	(1)	(2)	(3)	(4)
	Has a I	Business	Business	s is Main
			Source c	of Income
Any Treatment	0.147***		0.087***	
	(0.028)		(0.028)	
Large family	0.111^{***}	0.111^{***}	0.070^{*}	0.070^{*}
	(0.037)	(0.037)	(0.037)	(0.037)
(Any Treatment) x (Large family)	-0.049		-0.037	
	(0.038)		(0.039)	
G		0.215^{***}		0.137^{***}
		(0.031)		(0.031)
Gx(Large family)		-0.057		-0.034
		(0.042)		(0.043)
BDS		0.028		-0.004
		(0.030)		(0.030)
BDSx(Large family)		-0.031		-0.023
		(0.041)		(0.042)
G & BDS		0.218***		0.142^{***}
		(0.030)		(0.030)
(G & BDS)x(Large family)		-0.062		-0.055
		(0.040)		(0.042)
R-squared	0.097	0.126	0.095	0.110
Sample Size	7632	7632	7632	7632
Dep. Vble. Mean	0.489	0.489	0.397	0.397
Dep. Vble. Mean at Baseline	0.462	0.462	0.366	0.366
*				

Notes: This table presents ANCOVA regression analysis for income generation outcomes using equations 1 (in columns 1 and 3) and 2 (in columns 2 and 4). All regressions include controls for the dependent variable values at baseline, stratification variables, business sector, marital status at baseline, and month of interview fixed effects. The dummy variable "Large Family" is equal to one if the family size is larger than or equal to the overall median in the sample, and zero otherwise. The dependent variable mean in the control group with a small family size is reported at midline and baseline. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

Table A5: Baseline Summary Statistics and Balance Test

		(1)		(2)		(3)		(4)	(2	2)-(1)	(3	5)-(1)	(4	1)-(1)
37	N	Control	3.7	G	3.7	BDS		G&BDS	,		Pairw	ise t-test	·	
Variable Female	N 650	Mean/(Var) 0.45	N 1781	Mean/(Var) 0.47	N 2590	Mean/(Var) 0.47	N 2627	Mean/(Var) 0.48	N 2431	P-value 0.28	N 3240	P-value 0.36	N 3277	P-value 0.24
remaie	050	(0.25)	1701	(0.25)	2590	(0.25)	2021	(0.25)	2431	0.28	3240	0.30	3211	0.24
Age	650	24.70 (7.59)	1781	24.72 (8.61)	2590	24.54 (8.81)	2627	24.67 (9.10)	2431	0.91	3240	0.19	3277	0.82
Married or Living Together	650	0.31 (0.21)	1781	0.36 (0.23)	2590	0.34 (0.22)	2627	0.35 (0.23)	2431	0.02**	3240	0.13	3277	0.04**
Household Size	650	4.15 (5.89)	1781	4.10 (6.06)	2590	4.09 (5.83)	2627	4.10 (5.63)	2431	0.62	3240	0.53	3277	0.65
Hast Children Under 4	650	$0.38 \\ (0.24)$	1781	$0.36 \\ (0.23)$	2590	$0.36 \\ (0.23)$	2627	$0.36 \\ (0.23)$	2431	0.37	3240	0.33	3277	0.30
Born in this village/town/city	650	$0.49 \\ (0.25)$	1781	$0.50 \\ (0.25)$	2590	$0.51 \\ (0.25)$	2627	0.51 (0.25)	2431	0.85	3240	0.46	3277	0.50
Born in this county (but not here)	650	$0.17 \\ (0.14)$	1781	$0.16 \\ (0.13)$	2590	$0.15 \\ (0.13)$	2627	$0.14 \\ (0.12)$	2431	0.59	3240	0.33	3277	0.12
Secondary Education	650	0.71 (0.21)	1781	0.69 (0.21)	2590	$0.68 \\ (0.22)$	2627	0.68 (0.22)	2431	0.51	3240	0.28	3277	0.15
College Education or More	650	$0.12 \\ (0.11)$	1781	0.11 (0.10)	2590	0.12 (0.10)	2627	$0.12 \\ (0.11)$	2431	0.66	3240	0.92	3277	0.77
Confidence in Own Ability	618	$0.62 \\ (0.05)$	1704	0.61 (0.06)	2495	$0.60 \\ (0.05)$	2520	$0.61 \\ (0.05)$	2322	0.18	3113	0.07*	3138	0.27
Life Satisfaction	611	0.47 (0.04)	1667	$0.49 \\ (0.04)$	2445	$0.48 \\ (0.04)$	2458	$0.48 \\ (0.04)$	2278	0.08*	3056	0.43	3069	0.92
Business Training in Last Year	650	$0.25 \\ (0.19)$	1781	0.22 (0.17)	2590	0.22 (0.17)	2627	$0.22 \\ (0.17)$	2431	0.08*	3240	0.09*	3277	0.06*
Has Wage Job	650	$0.42 \\ (0.24)$	1781	$0.40 \\ (0.24)$	2590	$0.42 \\ (0.24)$	2627	$0.38 \\ (0.24)$	2431	0.40	3240	0.75	3277	0.15
Has a Business	650	$0.49 \\ (0.25)$	1781	$0.49 \\ (0.25)$	2590	0.47 (0.25)	2627	0.47 (0.25)	2431	0.82	3240	0.44	3277	0.42
# of Businesses	319	$ \begin{array}{c} 1.13 \\ (0.14) \end{array} $	865	1.14 (0.15)	1227	1.11 (0.12)	1243	1.13 (0.13)	1184	0.69	1546	0.49	1562	0.89
Business is Registered	270	$0.36 \\ (0.23)$	727	$0.30 \\ (0.21)$	1043	0.32 (0.22)	1040	0.34 (0.22)	997	0.08*	1313	0.17	1310	0.47
# of Employees	270	1.26 (7.81)	727	1.17 (5.59)	1043	0.95 (2.68)	1040	1.13 (4.96)	997	0.61	1313	0.08*	1310	0.46
Business Sales (KSh)	270	$^{19421.30}_{(3.90e+08)}$	727	20046.03 $(3.85e+08)$	1043	$^{19190.37}_{(3.95e+08)}$	1040	$^{19284.50}_{(3.76e+08)}$	997	0.66	1313	0.86	1310	0.92
Business Profits (KSh)	270	6133.26 $(4.30e+07)$	728	$\substack{6561.04 \\ (4.53e+07)}$	1044	$\substack{6091.39 \\ (4.85e+07)}$	1040	6458.52 $(4.58e+07)$	998	0.36	1314	0.93	1310	0.47

Table A6: Effects on Business Survival and Entry - Family Dummy

	(1)	(2)	(3)	(4)
	Business	s Survival	Busines	ss Entry
Any Treatment	0.100**		0.187***	
	(0.041)		(0.039)	
Large family	0.107^{**}	0.106^{**}	0.104^*	0.103^{*}
	(0.050)	(0.050)	(0.054)	(0.054)
(Any Treatment) x (Large family)	-0.069	, ,	-0.020	,
, , ,	(0.052)		(0.056)	
G	,	0.155***	,	0.267***
		(0.044)		(0.043)
Gx(Large family)		-0.073		-0.029
()		(0.056)		(0.062)
BDS		-0.000		0.051
		(0.044)		(0.041)
BDSx(Large family)		-0.037		-0.017
~(8,,)		(0.056)		(0.060)
G & BDS		0.164***		0.264***
G & 22%		(0.042)		(0.041)
(G & BDS)x(Large family)		-0.102*		-0.011
(G & DDS)A(Large laminy)		(0.054)		(0.059)
R-squared	0.066	$\frac{(0.094)}{0.089}$	0.048	$\frac{(0.093)}{0.088}$
_	3649	3649	3983	3983
Sample Size		00 =0		0.349
Dep. Vble. Mean	0.653	0.653	0.349	0.349

Notes: This table presents regression analysis for business survival and entry using equations 1 (in columns 1 and 3) and 2 (in columns 2 and 4). The first 2 columns restrict the sample to youth who had a business at baseline, whereas the last 2 columns restrict the sample to those who did not have a business at baseline. All regressions include controls for stratification variables, business sector, marital status at baseline, and month of interview fixed effects. The dummy variable "Large Family" is equal to one if the family size is larger than or equal to the overall median in the sample, and zero otherwise. The dependent variable mean in the control group with a small family size is reported at midline. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

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Table A7: Impact on the Intensive Margin: Sales and Profits - Family Dummy

		Mont	hly Sales		Monthly Profits			
	With a busi	ness at baseline	Without a b	Without a business at baseline		ness at baseline	Without a bu	siness at baseline
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Any Treatment	3633.27		5690.38***		793.95		2116.38***	
	(2262.94)		(1453.09)		(817.91)		(422.49)	
Large family	2518.16	2502.73	1147.94	1141.73	1047.10	1035.48	1038.15	1036.50
	(2829.33)	(2829.21)	(1967.71)	(1967.46)	(1050.85)	(1051.12)	(654.07)	(654.23)
(Any Treatment) x (Large family)	-2162.81		-1165.04		-1110.92		-1200.94*	
	(2956.87)		(2103.54)		(1095.89)		(702.89)	
G		5674.28**		9154.86***		1164.35		3182.04***
		(2557.92)		(1773.52)		(908.37)		(542.47)
Gx(Large family)		-2481.75		-3889.32		-1176.77		-1965.20**
		(3356.70)		(2471.30)		(1214.81)		(830.99)
BDS		-618.21		1532.63		-489.13		947.48**
		(2381.07)		(1556.49)		(865.69)		(468.80)
BDSx(Large family)		-686.77		225.33		-70.89		-748.46
		(3121.99)		(2253.69)		(1161.41)		(755.59)
G & BDS		6543.95***		7424.77***		1845.67**		2538.27***
		(2447.44)		(1632.83)		(886.82)		(491.56)
(G & BDS)x(Large family)		-3685.72		-575.08		-2147.94*		-1098.91
		(3185.04)		(2342.54)		(1176.36)		(783.28)
R-squared	0.16	0.17	0.03	0.04	0.11	0.11	0.03	0.04
Sample Size	3544	3544	3839	3839	3544	3544	3839	3839
Dep. Vble. Mean	26166.73	27999.27	19659.16	21502.11	8901.95	9203.51	6003.18	5512.23

Notes: This table shows ANCOVA regressions for the unconditional sales and profits using equations 1 (in odd columns) and 2 (in even columns). The first two columns and columns 5 and 6 restrict the sample to youth who had a business at baseline, whereas columns 3, 4, 7, and 8, restrict the sample to those who did not have a business at baseline. All regressions include controls for stratification variables, business sector, marital status at baseline, and month of interview fixed effects. I also control for the outcome variable at baseline. In the case of those who did not have a business, sales and profits at baseline are set to zero. The dummy variable "Large Family" is equal to one if the family size is larger than or equal to the overall median in the sample, and zero otherwise. The dependent variable mean in the control group with a small family size is reported at midline. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

A4 Additional Information about the Study Sample

This appendix shows additional information about the study sample. Figure A2 shows the sectoral distribution of the businesses operating at baseline in the study sample, using 1 digit ISIC code.

15% 20% 25% 30% 45% Wholesale and retail trade, repair of motor vehicles 41% Other service activities Agriculture, forestry and fishing Accommodation and food service activities Manufacturing Transportation and storage Information and communication 4% Arts, entertainment and recreation 3% Professional, scientific and technical activities Financial and insurance activities Act. of HHs as employers Construction Other sectors

Figure A2: Sectoral Distribution of Businesses Operating at Baseline

This figure presents the sectoral distribution using 1-digit ISIC code or "sections". "Other sectors" include those with less than 1% among the businesses operating at baseline. These are: electricity, gas, steam and air conditioning supply; water supply, sewerage, waste management and remediation activities; mining and quarrying; administrative and support service activities; education; and human health and social work activities.

Table A8 shows statistics for the extended family size by county of implementation. Table A9 compares the baseline characteristics of those who were living in a different subcounty at baseline compared to midline survey. Finally, the table A10 shows the regression analysis of the relocations. In all regressions, the dependent variable is a dummy variable which is equal to 1 if the youth is living at midline in a different subcounty to the one he was living at baseline, and it is 0 otherwise. As can be seen, treatment does not affect youth relocation.

Table A8: Summary Statistics of Extended Family by County

County	Mean	Median	SD	Obs
Mombasa	7.6	3	11.6	419
Kwale	18.1	9	23.2	235
Kilifi	25.0	10	30.5	512
Kitui	18.3	8	25.6	502
Machakos	14.1	7	20.1	308
Nyandarua	8.2	3	15.5	338
Kiambu	10.2	3	17.4	676
Turkana	13.2	8	14.5	372
Nakuru	8.4	4	14.1	745
Kakamega	20.2	10	26.2	636
Bungoma	16.7	7	24.7	429
Kisumu	9.8	5	15.2	412
Migori	18.2	9	24.1	511
Kisii	15.5	8	21.8	500
Nairobi	4.8	2	9.0	1037
Total	13.2	5	20.8	7632

Table A9: Baseline Summary Statistics and Balance Test by Relocation Since Baseline

	Dig	(1) not relocate	D	(2) telocated	(2)-(1) Pairwise t-test		
Variable	N	Mean/(Var)	N	Mean/(Var)	N	P-value	
Female	5310	0.47 (0.25)	2322	0.48 (0.25)	7632	0.45	
Age	5310	24.91 (8.99)	2322	24.01 (7.69)	7632	0.00***	
Married or Living Together	5310	$0.40 \\ (0.24)$	2322	0.22 (0.17)	7632	0.00***	
Household Size	5310	4.26 (5.82)	2322	3.72 (5.63)	7632	0.00***	
Hast Children Under 4	5310	$0.40 \\ (0.24)$	2322	0.28 (0.20)	7632	0.00***	
Born in this village/town/city	5310	0.56 (0.25)	2322	0.37 (0.23)	7632	0.00***	
Born in this county (but not here)	5310	$0.15 \\ (0.13)$	2322	$0.15 \\ (0.13)$	7632	0.75	
Secondary Education	5310	0.66 (0.22)	2322	$0.74 \\ (0.19)$	7632	0.00***	
College Education or More	5310	0.11 (0.10)	2322	0.13 (0.12)	7632	0.01**	
Confidence in Own Ability	5110	$0.60 \\ (0.05)$	2211	$0.62 \\ (0.05)$	7321	0.03**	
Life Satisfaction	5006	$0.48 \\ (0.04)$	2160	$0.48 \\ (0.04)$	7166	0.49	
Business Training in Last Year	5310	0.22 (0.17)	2322	0.23 (0.18)	7632	0.10	
Has Wage Job	5310	0.39 (0.24)	2322	$0.42 \\ (0.24)$	7632	0.02**	
Has a Business	5310	0.51 (0.25)	2322	$0.40 \\ (0.24)$	7632	0.00***	
# of Businesses	2709	1.13 (0.14)	940	1.11 (0.12)	3649	0.13	
Business is Registered	2305	0.33 (0.22)	771	0.31 (0.21)	3076	0.17	
# of Employees	2305	1.08 (4.80)	771	1.12 (3.99)	3076	0.60	
Business Sales (KSh)	2305	19300.63 (3.84e+08)	771	$19806.74 \\ (3.85e+08)$	3076	0.54	
Business Profits (KSh)	2307	$6257.83 \\ (4.64e+07)$	771	$6536.13 \\ (4.62e+07)$	3078	0.33	

Notes: This table presents baseline summary statistics for the study sample, separately for those who were living in a different subcounty at midline compared to baseline, and those who did not relocate. The last column presents p-values for equality of means tests between groups. * p < 0.1, ** p < 0.05, *** p < 0.01.

Table A10: Relocation Analysis

	(1)	(2)
	Relocated	Relocated
Any Treatment	0.017	
	(0.018)	
Grants only		0.006
		(0.020)
BDS only		0.012
		(0.019)
G & BDS		0.031
		(0.019)
Female	0.033***	0.032***
	(0.011)	(0.011)
Married or Living Together	-0.080***	-0.079***
	(0.011)	(0.011)
Household Size	-0.028***	-0.028***
	(0.002)	(0.002)
R-squared	0.091	0.091
Sample Size	7632	7632
Dep. Vble. Mean	0.278	0.278

Notes: This table presents regression analysis using as dependent variable a dummy equal to one if the youth changed subcounty between baseline and midline, and zero if they did not relocate. All regressions include stratification variables, business sector, and month of interview fixed effects. The dependent variable mean in the control group is reported. Robust standard errors in parentheses. * p < 0.05, *** p < 0.01.

A5 Obtaining Ethnic Group from Native Language

In order to obtain a measure of of family ties more exogenous than the size mentioned by the respondent at midline, I map the ethnic group. To do so, I use the native language of the respondent. At baseline, they were asked to mention up to three languages they could speak, read a newspaper in, and write a letter. Of the 7,632 respondents, only nine don't speak English nor Swahili (i.e., 99.9% of the respondents speak at least English or Swahili). Therefore, I identify the native language as the one mentioned by the respondent besides these 2 languages. In 93.4% of the cases, they mentioned only one additional language, that becomes the "native language" I use for mapping. For those who speak more than one language apart from English and Swahili (1.2% of the sample), I use the first language mentioned, since respondents were asked to order them in terms of larger familiarity. Finally, for those who do not mention any other language (5.5% of the sample), I use either English or Swahili, depending on which was mentioned first by the respondent.

In total, I identify 34 different local languages that I can use to map to an ethnic group (see Appendix Table A11). For this, I first use the Demographic and Health Survey 2014 which asks the native language of the respondent and the ethnic group (The DHS Program, 2015).²⁸ For each language I assign the ethnic group of the majority of the people speaking that language. As can be seen in Appendix Figure A3, for most of the languages, more than 82% of the people speaking the language belongs to one ethnic group (and for the ethnic groups with a higher representation in my study, that percentage is above 91%). I also check with the Afrobarometer Round 8 that the mapping following the same procedure would lead to the same ethnic group assigned (Afrobarometer, 2021).²⁹ Despite 66% of those mentioning Swahili as the native language are identified by Mijikenda/Swahili ethnic group, when I check using the Afrobarometer Round 8 (AR8) data, the main ethnic group of the Swahili native group is the Luhya, with 22% (if I focus on those who mentioned Swahili as the native language and did not mention they can speak any other

²⁸Specific question asked is "What is your ethnic group/tribe?" and it has 12 different ethnic groups as options and the rest is pooled as "Other". Unlike the KYEOP baseline survey which asks for three languages in which the respondent can read/write/read, the DHS only asks about "native language"

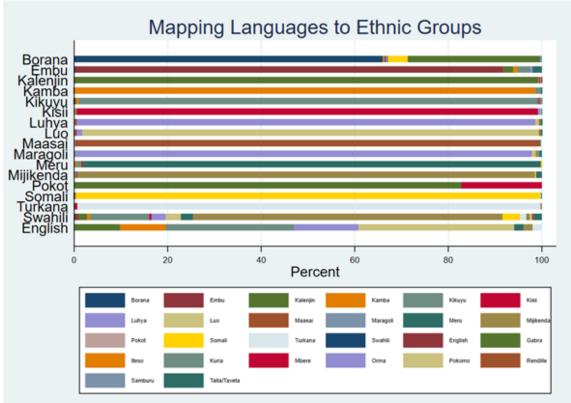
²⁹The questions asked in the Afrobarometer are "What is the primary language you speak in your home now?", "Which Kenyan languages do you speak?", and "Interviewer's ethnic group/tribe". I use the first question to identify the native language, and the latter question to identify the ethnic group.

local language, the main ethnic group in the AR8 is the Kikuyu with 20%). Therefore, I do not assign any ethnic group to those with Swahili as their native language.

Using data from Nunn and Wantchekon (2011), Moscona, Nunn, and Robinson (2017) and my own ethnographic research, I can map the remaining languages with the ethnic groups. I identify 24 different ethnic groups that I can match with the Ethnographic Atlas information. These ethnic groups were assigned to 94% of the sample in my study. The data contained in this Ethnographic Atlas about traditional practices and characteristics of the ethnic groups helps to construct a measure of the strength of family ties. Appendix Table A11 shows the mapping of languages to ethnic groups based on available Ethnographic Data. It also details the number of youths in my sample belonging to each of them. Finally, I specify the languages that were not matched.

Mapping Languages to Ethnic Groups Borana Embu Çalenjin

Figure A3: Correspondence between Native Language and Ethnic Group from DHS 2014



Notes: Own production using data from The DHS Program (2015). This figure shows for each language (in the vertical axis), the distribution of the ethnic groups in the DHS 2014 sample. That is, it details for each language, the percentage of respondents who speak that language and belong to each of the different ethnic groups. It is important to note that the ethnic group "Mijikenda/Swahili" was included as 1 option in the DHS.

Table A11: Mapping Native Language to Ethnic Group

Native language	Ethnicity	Ethnic Group used to Map	# Obs.
	3.51113	with Ethnographic Data	
All the 9 Mijikenda languages	Mijikenda	Nika	1
Ateso	Teso	Teso	16
Bajun	Bajun	Bajun	$\frac{2}{2}$
Borana	Borana	Borana	7
Bukusu	Bukusu	Bukusu	2
Chonyi	Giryama	Chonyi	45
Digo	Digo	Digo	141
Duruma	Duruma	Duruma	66
Ekegusii	Gusii	Kisii	584
Embu	Meru	Meru	26
Giriama	Giryama	Giriama	351
Jibana	Mijikenda	Nika	7
Kalenjin	Kipsigi	Kalejin	246
Kamba	Kamba	Kamba	970
Kambe	Mijikenda	Nika	6
Kauma	Mijikenda	Nika	8
Kibajuni	Bajun	Bajun	1
Kikuyu	Kikuyu	Kikuyu	1789
Kimakonde	Makonde	Makonde	2
Kimbere	Meru	Meru	4
Kimeru	Meru	Meru	1
Kisii	Gusii	Kisii	24
Kuria	Gusii	Kuria	145
Luhya	Luhya	Luhya	1159
Luo	Luo	Luo	1069
Maasai	Masai	Masai	7
Meru	Meru	Meru	49
Pare	Pare	Pare	1
Pokomo	Pokomo	Pokomo	5
Rabai	Mijikenda	Nika	19
Ribe	Mijikenda	Nika	2
Samburu	Masai	Masai	1
Somali	Somali	Somali	18
Taita	Teita	Teita	57
Turkana	Turkana	Turkana	342
Arabic	Not matched	Not matched	13
Swahili	Not matched	Not matched	216
English	Not matched	Not matched	199
Other foreign language	Not matched	Not matched	12
Other local language	Not matched	Not matched	19
Total			7632

Notes: The Mijikenda, include the following tribes: Chonyi, Digo, Duruma, Giriama, Jibana, Kambe, Kauma, Rabai, and Ribe. Other foreign languages spoken are French, German, Chinese, Italian, and Spanish. Other local languages not matched include Elchamus, Ilchamus, Kikebre, Mbeere, Nubi, Nubian, Nubii, Sabaot and Watha.

Table A12: Domestic Organization and Extended Family Size

	(1)
	# of Extended Family Members
Small Extended Family	-3.32***
	(0.78)
Large Extended Family	0.51
	(0.98)
Not Defined	-3.32***
	(0.75)
Female	-1.53***
	(0.59)
Married	3.66***
	(0.68)
$(Female) \times (Married)$	-3.02***
	(0.91)
Constant	9.28***
	(0.80)
R-squared	0.09
Sample Size	7632
Dep. Vble. Mean	12.69
Dep. Vble. SD	20.62

Notes: This table shows the results of an OLS regression using as dependent variable the number of extended family members winsorized at the 1% level. It controls for stratification variables. The variable "Married" is equal to one if the youth is married or living together a partner, and zero otherwise. It is reported the dependent variable mean and standard deviation in the group with the nuclear family domestic organization. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

Table A13: Impact on Income Generation - Domestic Organization

	Has a Business		Business is Main	
	(1)	(0)		of Income
Small Extended Family	$\frac{(1)}{-0.06}$	(2) -0.09***	$\frac{(3)}{0.00}$	$\frac{(4)}{-0.02}$
Sman Extended Family	(0.05)	(0.03)	(0.05)	(0.03)
Large Extended Family	0.00	-0.01	0.02	-0.01
Bargo Bittonaca Family	(0.05)	(0.03)	(0.05)	(0.03)
Not Defined	0.01	-0.04	-0.07	0.00
	(0.08)	(0.03)	(0.08)	(0.04)
Grants only	0.19^{***}	,	0.11***	, ,
	(0.03)		(0.03)	
BDS only	0.03		-0.01	
	(0.03)		(0.03)	
Grants & BDS	0.18***		0.09^{***}	
(G) (G UE (1 1 E U)	(0.03)		(0.03)	
(G) x (Small Extended Family)	0.03		0.02	
	(0.05)		(0.06)	
(G) x (Large Extended Family)	0.00		0.01	
(G) x (Not Defined)	(0.05) -0.03		$(0.06) \\ 0.10$	
(G) x (Not Defined)	(0.09)		(0.09)	
(BDS) x (Small Extended Family)	-0.03		-0.03	
(DDS) X (Smail Extended Family)	(0.05)		(0.05)	
(BDS) x (Large Extended Family)	-0.03		-0.03	
(,,,,,,,,,	(0.05)		(0.05)	
(BDS) x (Not Defined)	-0.06		$0.09^{'}$	
	(0.09)		(0.09)	
(G & BDS) x (Small Extended Family)	0.04		0.04	
	(0.05)		(0.05)	
(G & BDS) x (Large Extended Family)	0.01		0.02	
(2, 2, 2, 2, 2)	(0.05)		(0.06)	
(G & BDS) x (Not Defined)	-0.01		0.09	
A	(0.09)	0 1 0 * * *	(0.09)	0 11***
Any Grants		0.16***		0.11^{***}
(Any C) y (Small Extended Eamily)		$(0.01) \\ 0.06^{**}$		$(0.02) \\ 0.06^*$
(Any G) x (Small Extended Family)		(0.03)		(0.03)
(Any G) x (Large Extended Family)		0.03		0.03) 0.04
(IIII) O) A (Daige Datellided Laminy)		(0.03)		(0.03)
(Any G) x (Not Defined)		0.03		0.02
(, , ((0.04)		(0.05)
R-squared	0.11	0.11	0.09	0.09
Sample Size	7635	7635	7632	7632
Dep. Vble. Mean	0.57	0.60	0.43	0.43
Dep. Vble. Mean at Baseline	0.46	0.46		

Notes: This table presents regression analysis for income generation outcomes using equation 2 (in columns 1 and 3). In columns 2 and 4, I define the dummy variable equal to 1 if the youth was assigned to Grants only, BDS or Grants & BDS, and zero otherwise. All regressions control for stratification variables, and business sector at baseline. Columns 1 and 2 also control for the dependent variable value at baseline. The dependent variable mean in the control group with a nuclear family organization is reported at midline and baseline. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

A6 Robustness Checks

A6.1 Analyzing Correlation Between Family Size and Treatment

Table A14: Correlation between Family Size and Treatment

	# Ext.	Family Members	Large	family
	(1)	(2)	(3)	(4)
Any Treatment	1.393*		0.031	
	(0.785)		(0.020)	
Grants only		1.411		0.031
		(0.883)		(0.022)
BDS only		1.717**		0.029
		(0.851)		(0.021)
Grants & BDS		1.061		0.033
		(0.839)		(0.021)
R-squared	0.089	0.089	0.078	0.078
Sample Size	7632	7632	7632	7632
Dep. Vble. Mean	11.611	11.611	0.498	0.498

Notes: This table presents regression analysis for the number of extended family members winsorized at the 1% level (in columns 1 and 2) and for the dummy variable which is equal to one if the number of members is above the median and zero otherwise (in the last two columns). All regressions include controls for stratification variables (i.e., gender, county of implementation, and having benefited from the other KYEOP component before). The dependent variable mean in the control group is reported at midline. Robust standard errors are in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

A6.2 Restricting the Sample only to Those who did not Change Subcounty since Baseline

Table A15: Correlation between Family Size and Treatment-Sample Restricted to Not Movers

	# Ext.	Ext. Family Members		family
	(1)	(2)	(3)	(4)
Any Treatment	1.743*		0.029	
	(0.935)		(0.023)	
Grants only		1.897^*		0.036
		(1.063)		(0.026)
BDS only		1.824^*		0.020
		(1.019)		(0.025)
G & BDS		1.551		0.034
		(1.009)		(0.025)
R-squared	0.107	0.107	0.106	0.106
Sample Size	5310	5310	5310	5310
Dep. Vble. Mean	13.084	13.084	0.567	0.567

Notes: This table presents regression analysis for the number of extended family members winsorized at the 1% level (in columns 1 and 2) and for the dummy variable which is equal to one if the number of members is above or equal to the median and zero otherwise (in the last two columns). I restrict the sample to those who did not change the subcounty of residence since baseline. All regressions include controls for stratification variables (i.e., gender, county of implementation, and having benefited from the other KYEOP component before this project). The dependent variable mean in the control group is reported at midline. Robust standard errors are in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

Table A16: Effects on Income Generation-Sample Restricted to Not Movers

	(1)	(2)	(3)	(4)
	Has a I	Business	Business	s is Main
			Source o	f Income
Any Treatment	0.148***		0.104***	
	(0.026)		(0.027)	
# Ext. Family Members	0.002**	0.002**	0.001	0.001
	(0.001)	(0.001)	(0.001)	(0.001)
(Any Treatment)×(# Ext. Family Members)	-0.002*		-0.001	
	(0.001)		(0.001)	
Grants only		0.225^{***}		0.156^{***}
		(0.029)		(0.030)
$(Grants only) \times (\# Ext. Family Members)$		-0.002*		-0.001
		(0.001)		(0.001)
BDS only		0.039		0.020
		(0.029)		(0.029)
(BDS only) \times (# Ext. Family Members)		-0.001		-0.001
		(0.001)		(0.001)
G & BDS		0.205***		0.153^{***}
		(0.028)		(0.029)
$(G \& BDS) \times (\# Ext. Family Members)$		-0.002*		-0.002**
		(0.001)		(0.001)
R-squared	0.111	0.138	0.110	0.122
Sample Size	5310	5310	5310	5310
Dep. Vble. Mean	0.554	0.554	0.446	0.446
Dep. Vble. Mean at Baseline	0.542	0.542	0.386	0.386

Notes: This table presents ANCOVA regression analysis for income generation outcomes using equations 1 (in columns 1 and 3) and 2 (in columns 2 and 4), restricting the sample to those who did not change subcounty of residence since baseline. All regressions include controls for the dependent variable values at baseline, stratification variables, business sector, marital status at baseline, and month of interview fixed effects. The number of extended family members is winsorized at the 1 % level. The dependent variable mean in the control group with zero family members is reported at midline and baseline. Robust standard errors in parentheses. * p < 0.1, *** p < 0.05, **** p < 0.01.

Table A17: Effects on Business Survival and Entry-Sample Restricted to Not Movers

	(1)	(2)	(3)	(4)
	Business	Survival	Busines	s Entry
Any Treatment	0.076**		0.223***	
	(0.035)		(0.040)	
# Ext. Family Members	0.002*	0.002*	0.002	0.002
	(0.001)	(0.001)	(0.002)	(0.002)
(Any Treatment) \times (# Ext. Family Members)	-0.002*		-0.001	
	(0.001)		(0.002)	
Grants only		0.131^{***}		0.322^{***}
		(0.038)		(0.044)
$(Grants only) \times (\# Ext. Family Members)$		-0.002		-0.001
		(0.001)		(0.002)
BDS only		0.011		0.073^{*}
		(0.038)		(0.042)
$(BDS only) \times (\# Ext. Family Members)$		-0.002*		0.000
		(0.001)		(0.002)
G & BDS		0.101^{***}		0.313^{***}
		(0.037)		(0.042)
$(G \& BDS) \times (\# Ext. Family Members)$		-0.002*		-0.001
		(0.001)		(0.002)
R-squared	0.078	0.094	0.061	0.106
Sample Size	2709	2709	2601	2601
Dep. Vble. Mean	0.667	0.667	0.421	0.421

Notes: This table presents regression analysis for business survival and entry using equations 1 (in columns 1 and 3) and 2 (in columns 2 and 4), restricting the sample to those who did not change subcounty of residence since baseline. In addition to this, the first 2 columns restrict the sample to youth who had a business at baseline, whereas the last 2 columns restrict the sample to those who did not have a business at baseline. All regressions include controls for stratification variables, business sector, marital status at baseline, and month of interview fixed effects. The number of extended family members is winsorized at the 1 % level. The dependent variable mean in the control group with zero family members is reported at midline. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

Table A18: Impact on the Intensive Margin: Sales and Profits-Sample Restricted to Not Movers

		Mont	hly Sales			Monthly Profits			
	With a busi	ness at baseline	Without a bu	isiness at baseline	With a busi	iness at baseline	Without a business at base		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Any Treatment	1705.60		6032.28***		-438.82		2017.12***		
	(2055.67)		(1448.94)		(784.46)		(431.60)		
# Ext. Family Members	14.81	15.58	5.40	4.57	5.27	5.29	21.89	21.64	
	(66.20)	(66.09)	(47.75)	(47.94)	(25.32)	(25.31)	(23.04)	(23.09)	
(Any Treatment)×(# Ext. Family Members)	-21.62		-1.85		-12.45		-19.83		
	(68.84)		(52.02)		(26.14)		(24.14)		
Grants only		4104.46*		9455.55***		-3.28		3359.28***	
		(2278.38)		(1774.48)		(848.56)		(561.42)	
(Grants only)×(# Ext. Family Members)		-43.85		-80.87		-15.37		-58.82**	
		(74.42)		(59.32)		(27.95)		(25.47)	
BDS only		-769.46		1586.83		-873.69		699.74	
		(2201.45)		(1535.78)		(837.91)		(468.02)	
(BDS only)×(# Ext. Family Members)		-12.14		67.59		-6.08		2.96	
		(73.96)		(59.88)		(27.86)		(26.39)	
G & BDS		2366.94		8437.98***		-322.69		2522.32***	
		(2214.11)		(1652.35)		(830.58)		(501.24)	
(G & BDS)×(# Ext. Family Members)		-14.21		-29.54		-17.56		-21.31	
		(76.15)		(57.43)		(28.15)		(25.57)	
R-squared	0.19	0.19	0.04	0.05	0.12	0.12	0.04	0.05	
Sample Size	2636	2636	2507	2507	2636	2636	2507	2507	
Dep. Vble. Mean	35335.00	35335.00	22875.00	22875.00	11429.67	11429.67	5343.56	5343.56	

Notes: This table shows ANCOVA regressions for the unconditional sales and profits using equations 1 (in odd columns) and 2 (in even columns), restricting the sample to those who did not change subcounty of residence since baseline. The first two columns and columns 5 and 6 restrict the sample to youth who had a business at baseline, whereas columns 3, 4, 7, and 8, restrict the sample to fhose who did not have a business at baseline. All regressions include controls for stratification variables, business sector, marital status at baseline, and month of interview fixed effects. I also control for the outcome variable at baseline. In the case of those who did not have a business, sales and profits at baseline are set to zero. The number of extended family members is winsorized at the 1 % level. The dependent variable mean in the control group with zero family members is reported at midline. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

${\bf A6.3} \quad {\bf Results \ using \ Deciles \ of \ Family \ Size \ Distribution}$

Table A19: Effects on Income Generation - Deciles of Family Distribution

	Has a	Business	Business	s is Main
				of Income
	(1)	(2)	(3)	(4)
Any Treatment	0.103**		0.035	
D 11 0	(0.042)	0.040	(0.041)	
Decile 3	-0.046	-0.046	-0.073	-0.073
D 11 4	(0.061)	(0.061)	(0.060)	(0.060)
Decile 4	-0.050	-0.049	-0.025	-0.024
Decile 5	(0.083)	$(0.084) \\ 0.065$	$(0.084) \\ 0.014$	$(0.084) \\ 0.015$
Deche 5	$0.065 \\ (0.067)$		(0.014)	(0.067)
Decile 6	0.070	$(0.067) \\ 0.070$	0.041	0.041
Declie 0	(0.075)	(0.076)	(0.080)	(0.080)
Decile 7	0.051	0.050	0.016	0.015
Decire ((0.073)	(0.073)	(0.076)	(0.076)
Decile 8	0.053	0.053	0.030	0.030
_ 3333 3	(0.065)	(0.065)	(0.065)	(0.065)
Decile 9	0.190**	0.189**	0.059	0.058
	(0.083)	(0.083)	(0.093)	(0.093)
Decile 10	0.152**	0.153**	$0.091^{'}$	[0.092]
	(0.068)	(0.068)	(0.072)	(0.071)
$(Any Treatment) \times (Decile 3)$	[0.080]	,	0.103	,
, , ,	(0.064)		(0.063)	
$(Any Treatment) \times (Decile 4)$	0.093		0.063	
	(0.087)		(0.088)	
$(Any Treatment) \times (Decile 5)$	0.020		0.068	
(1, 7, 1, 1)	(0.070)		(0.070)	
$(Any Treatment) \times (Decile 6)$	0.007		0.025	
(A T	(0.079)		(0.083)	
$(Any Treatment) \times (Decile 7)$	0.017		0.036	
(A Ttt) \ (D:10)	(0.076)		(0.079)	
(Any Treatment) \times (Decile 8)	0.044 (0.067)		0.032 (0.068)	
$(Any Treatment) \times (Decile 9)$	-0.100		0.008	
(Any Treatment) \(\times\) (Deche 9)	(0.087)		(0.097)	
$(Any Treatment) \times (Decile 10)$	-0.062		-0.058	
(Thy Treatment) × (Beene 10)	(0.070)		(0.074)	
G	(0.010)	0.162***	(0.011)	0.072
<u>.</u>		(0.046)		(0.046)
$G \times (Decile 3)$		0.110		0.152**
,		(0.071)		(0.071)
$G \times (Decile 4)$		[0.057]		[0.032]
,		(0.098)		(0.101)
$G \times (Decile 5)$		0.027		0.119
		(0.077)		(0.079)
$G \times (Decile 6)$		-0.081		-0.035
G (D 11 5)		(0.088)		(0.092)
$G \times (Decile 7)$		0.049		0.056
G (D 11 0)		(0.083)		(0.088)
$G \times (Decile 8)$		0.066		0.057
		(0.072)		(0.075)
		Contin	$ued\ on\ ne$	xt page

	Have a Business			s is Main
	(1)	(0)		of Income
Cy(Dasila 0)	(1)	$\frac{(2)}{0.014}$	(3)	$\frac{(4)}{0.106}$
$G \times (Decile 9)$		-0.014 (0.093)		0.106 (0.109)
$G \times (Decile 10)$		-0.087		-0.071
d × (Beene 10)		(0.076)		(0.082)
BDS		-0.030		-0.059
		(0.045)		(0.044)
$BDS \times (Decile 3)$		0.091		0.091
,		(0.069)		(0.068)
$BDS \times (Decile 4)$		0.143		0.097
DDG (D)		(0.094)		(0.094)
$BDS \times (Decile 5)$		0.039		0.066
DDC (D:1- c)		(0.076)		(0.076)
$BDS \times (Decile 6)$		0.087		$0.070 \\ (0.090)$
$BDS \times (Decile 7)$		$(0.085) \\ 0.044$		0.053
BBS (Declie 1)		(0.044)		(0.084)
$BDS \times (Decile 8)$		0.047		0.013
(_ *********************************		(0.072)		(0.072)
$BDS \times (Decile 9)$		-0.073		0.036
,		(0.094)		(0.103)
$BDS \times (Decile 10)$		-0.008		[0.001]
0.000		(0.075)		(0.079)
G&BDS		0.192***		0.101**
C(-DDC) (D:1- 2)		(0.045)		(0.044)
$G\&BDS\times(Decile\ 3)$		0.049		0.082
$G\&BDS\times(Decile\ 4)$		$(0.068) \\ 0.080$		$(0.068) \\ 0.058$
G&BB5 (Declie 4)		(0.093)		(0.095)
$G\&BDS\times(Decile\ 5)$		-0.015		0.029
(2 cene c)		(0.074)		(0.075)
$G\&BDS\times(Decile\ 6)$		-0.008		$0.025^{'}$
,		(0.083)		(0.090)
$G\&BDS\times(Decile 7)$		-0.015		0.017
		(0.080)		(0.085)
$G\&BDS\times(Decile\ 8)$		0.017		0.026
(100000(D 100)		(0.070)		(0.072)
$G\&BDS\times(Decile 9)$		-0.169*		-0.073
$G\&BDS\times(Decile\ 10)$		(0.092) -0.096		(0.103) -0.108
G&BB5 (Declie 10)		(0.073)		(0.079)
R-squared	0.099	0.131	0.097	$\frac{(0.013)}{0.114}$
Sample Size	7632	7632	7632	7632
Dep. Vble. Mean	0.507	0.507	0.412	0.412
Dep. Vble. Mean at Baseline	0.459	0.459	0.331	0.331

Notes: This table presents ANCOVA regression analysis for income generation outcomes using equations 1 (col. 1 and 3) and 2 (col. 2 and 4). All regressions include controls for the dependent variable values at baseline, stratification variables, business sector, marital status at baseline, and month of interview fixed effects. I use the deciles of the family size distribution: decile 1 has no members; decile 3 has one to two members; decile 4, has three members; decile 5, has four to five; decile 6 has six to eight members; decile

7, has nine to ten; decile 8 has 11 to 20 members; decile 9 has a size of 21 to 30; and decile 10 has 32 to 100 members. The dependent variable mean in the control group with small family is reported at midline and baseline. Robust standard errors in parentheses. * p < 0.1, *** p < 0.05, *** p < 0.01.

A7 Results using Domestic Organization

Table A20: Domestic Organization and Extended Family Size

	# of Extended Family Members
Small Extended Family	-3.32***
Large Extended Family	$(0.78) \\ 0.51$
Not Defined	(0.98) -3.32^{***}
Female	(0.75) -1.53^{***}
Married	$(0.59) \\ 3.66^{***}$
$(Female) \times (Married)$	$(0.68) \\ -3.02^{***}$
Constant	$(0.91) \\ 9.28^{***}$
	(0.80)
R-squared Sample Size	$0.09 \\ 7632$
Dep. Vble. Mean	12.69
Dep. Vble. SD	20.62

Notes: This table shows the results of an OLS regression using as dependent variable the number of extended family members winsorized at the 1% level. It controls for stratification variables. The variable "Married" is equal to one if the youth is married or living together a partner, and zero otherwise. It is reported the dependent variable mean and standard deviation in the group with the nuclear family domestic organization. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

Table A21: Impact on Income Generation - Domestic Organization

	Has a Business		Business is Main	
	(1)	(2)		of Income
Small Extended Family	$\frac{(1)}{-0.06}$	(2) -0.09***	$\frac{(3)}{0.00}$	$\frac{(4)}{-0.02}$
Sman Extended Family	(0.05)	(0.03)	(0.05)	(0.03)
Large Extended Family	0.00	-0.01	0.02	-0.01
Bargo Bittonaca Family	(0.05)	(0.03)	(0.05)	(0.03)
Not Defined	0.01	-0.04	-0.07	0.00
	(0.08)	(0.03)	(0.08)	(0.04)
Grants only	0.19^{***}	,	0.11***	, ,
	(0.03)		(0.03)	
BDS only	0.03		-0.01	
	(0.03)		(0.03)	
Grants & BDS	0.18***		0.09^{***}	
(G) (G UE (1 1 E U)	(0.03)		(0.03)	
(G) x (Small Extended Family)	0.03		0.02	
	(0.05)		(0.06)	
(G) x (Large Extended Family)	0.00		0.01	
(G) x (Not Defined)	(0.05) -0.03		$(0.06) \\ 0.10$	
(G) x (Not Defined)	(0.09)		(0.09)	
(BDS) x (Small Extended Family)	-0.03		-0.03	
(DDS) X (Smail Extended Family)	(0.05)		(0.05)	
(BDS) x (Large Extended Family)	-0.03		-0.03	
(,,,,,,,,,	(0.05)		(0.05)	
(BDS) x (Not Defined)	-0.06		$0.09^{'}$	
	(0.09)		(0.09)	
(G & BDS) x (Small Extended Family)	0.04		0.04	
	(0.05)		(0.05)	
(G & BDS) x (Large Extended Family)	0.01		0.02	
(2, 2, 2, 2, 2)	(0.05)		(0.06)	
(G & BDS) x (Not Defined)	-0.01		0.09	
A	(0.09)	0 1 0 * * *	(0.09)	0 11***
Any Grants		0.16***		0.11^{***}
(Any C) y (Small Extended Eamily)		$(0.01) \\ 0.06^{**}$		$(0.02) \\ 0.06^*$
(Any G) x (Small Extended Family)		(0.03)		(0.03)
(Any G) x (Large Extended Family)		0.03		0.03) 0.04
(IIII) O) A (Daige Datellided Laminy)		(0.03)		(0.03)
(Any G) x (Not Defined)		0.03		0.02
(, , ((0.04)		(0.05)
R-squared	0.11	0.11	0.09	0.09
Sample Size	7635	7635	7632	7632
Dep. Vble. Mean	0.57	0.60	0.43	0.43
Dep. Vble. Mean at Baseline	0.46	0.46		

Notes: This table presents regression analysis for income generation outcomes using equation 2 (in columns 1 and 3). In columns 2 and 4, I define the dummy variable equal to 1 if the youth was assigned to Grants only, BDS or Grants & BDS, and zero otherwise. All regressions control for stratification variables, and business sector at baseline. Columns 1 and 2 also control for the dependent variable value at baseline. The dependent variable mean in the control group with a nuclear family organization is reported at midline and baseline. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

A8 Mechanisms

Table A22: Impact on the Number of Employees

	Number of Employees					
	With a	business	Without a business			
	at ba	aseline		seline		
	(1)	(2)	(3)	(4)		
Any Treatment	0.288*		0.343***			
	(0.166)		(0.074)			
Large family	0.421^{*}	0.419^{*}	0.333***	0.332^{***}		
	(0.216)	(0.216)	(0.126)	(0.127)		
(Any Treatment) x (Large family)	-0.312		-0.245^*			
	(0.233)		(0.139)			
G		0.333^{*}		0.535^{***}		
		(0.184)		(0.140)		
Gx(Large family)		-0.351		-0.359^*		
		(0.253)		(0.193)		
BDS		0.029		0.183^{**}		
		(0.166)		(0.083)		
BDSx(Large family)		-0.051		-0.267^*		
		(0.261)		(0.150)		
G & BDS		0.519^{**}		0.368^{***}		
		(0.209)		(0.077)		
(G & BDS)x(Large family)		-0.549**		-0.138		
		(0.267)		(0.150)		
R-squared	0.065	0.068	0.030	0.037		
Sample Size	3631	3631	3967	3967		
Dep. Vble. Mean	1.112	1.112	0.607	0.607		

Notes: This table presents regression analysis using the number of employees as the dependent variable. The first two columns restrict the sample to youth with a business at baseline, whereas columns 3 and 4 restrict the sample to those who did not have a business at baseline. All regressions include controls for stratification variables, business sector, marital status at baseline, and month of interview fixed effects. In columns 1 and 2, I also control for the outcome variable at baseline. The dummy variable "Large Family" is equal to one if the family size is larger than or equal to the overall median in the sample, and zero otherwise. The dependent variable mean in the control group with a small family size is reported at midline. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

Table A23: Impact on the Importance of Labor Cost over Total Cost

	Labor Cost as a Percentage of Total Cost					
	With a	business	Without a business			
	at ba	seline	at ba	seline		
	(1)	(2)	(3)	(4)		
Any Treatment	0.067***		0.036***			
	(0.014)		(0.012)			
Large family	0.076^{***}	0.075***	0.045^{**}	0.045^{**}		
	(0.022)	(0.022)	(0.021)	(0.021)		
(Any Treatment) x (Large family)	-0.069***		-0.031			
	(0.023)		(0.022)			
G		0.079***		0.048***		
		(0.018)		(0.015)		
Gx(Large family)		-0.081***		-0.031		
		(0.027)		(0.025)		
BDS		0.033**		0.015		
		(0.016)		(0.013)		
BDSx(Large family)		-0.042*		-0.031		
		(0.025)		(0.024)		
G & BDS		0.094***		0.049***		
		(0.017)		(0.014)		
(G & BDS)x(Large family)		-0.089***		-0.030		
		(0.026)		(0.024)		
R-squared	0.069	0.075	0.035	0.041		
Sample Size	3503	3503	3789	3789		
Dep. Vble. Mean	0.113	0.113	0.142	0.142		
Dep. Vble. Mean at Baseline	0.163	0.163	•	•		

Notes: This table presents regression analysis using labor costs as a percentage of total costs as the dependent variable. The first two columns restrict the sample to youth with a business at baseline, whereas columns 3 and 4 restrict the sample to those who did not have a business at baseline. All regressions include controls for stratification variables, business sector, marital status at baseline, and month of interview fixed effects. In columns 1 and 2, I also control for the outcome variable at baseline. The dummy variable "Large Family" is equal to one if the family size is larger than or equal to the overall median in the sample, and zero otherwise. The dependent variable mean in the control group with a small family size is reported at midline and baseline. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

Table A24: Mutual Assistance

	(1)	(2)	(3)	(4)	(5)	(6)
	Requests from	Gave money	Gave money	Requests to	Received money	Received money
	relatives	at least once	(scale)	relatives	at least once	(scale)
G	0.024	0.046***	0.015	-0.047**	0.038**	0.010
	(0.018)	(0.015)	(0.013)	(0.022)	(0.016)	(0.014)
BDS	-0.009	0.022	-0.004	-0.015	0.015	-0.002
	(0.018)	(0.015)	(0.013)	(0.021)	(0.016)	(0.014)
G&BDS	0.013	0.047^{***}	0.017	-0.070***	0.015	-0.008
	(0.017)	(0.014)	(0.013)	(0.021)	(0.016)	(0.014)
R-squared	0.038	0.016	0.020	0.019	0.016	0.018
Sample Size	7632	6099	6099	7632	4820	4820
Dep. Vble. Mean	0.793	0.895	0.593	0.672	0.897	0.558

Notes: This table presents OLS regression analysis for mutual assistance outcomes controlling for stratification variables, business sector, marital status at baseline, and month of interview fixed effects. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

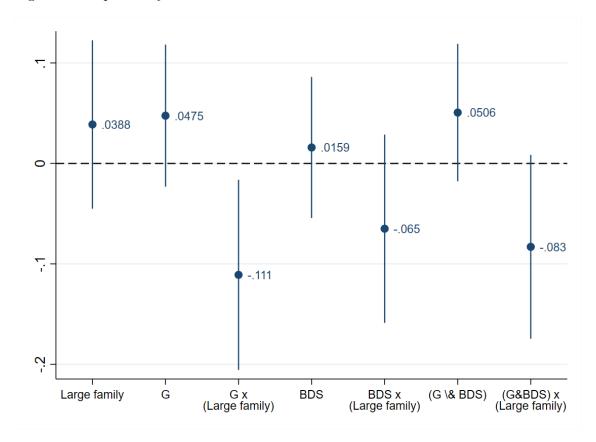
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Table A25: Mutual Assistance with Family Size

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Requests from	Gave money	Gave money	Requests to	Received money	Received money	Used G for
	relatives	at least once	(scale)	relatives	at least once	(scale)	HH expenses
Large family	0.003	0.030	0.013	0.011	0.012	0.026	0.014*
	(0.031)	(0.027)	(0.023)	(0.037)	(0.029)	(0.024)	(0.008)
G	0.029	0.056**	0.025	-0.038	0.034	0.018	
	(0.026)	(0.023)	(0.019)	(0.031)	(0.024)	(0.020)	
$G \times (Large family)$	-0.010	-0.021	-0.020	-0.019	0.006	-0.016	
	(0.036)	(0.030)	(0.026)	(0.043)	(0.033)	(0.028)	
BDS	-0.025	0.047^{**}	0.017	-0.008	0.022	0.020	
	(0.025)	(0.022)	(0.019)	(0.030)	(0.024)	(0.019)	
$BDS \times (Large family)$	0.030	-0.047	-0.040	-0.014	-0.015	-0.042	
	(0.035)	(0.030)	(0.026)	(0.042)	(0.032)	(0.027)	
G&BDS	0.041^*	0.061^{***}	0.030	-0.072**	0.028	0.021	
	(0.025)	(0.022)	(0.018)	(0.030)	(0.024)	(0.019)	
$(G\&BDS)\times(Large\ family)$	-0.052	-0.027	-0.025	0.003	-0.025	-0.056**	
	(0.035)	(0.029)	(0.025)	(0.042)	(0.032)	(0.027)	
R-squared	0.040	0.017	0.021	0.019	0.016	0.020	0.019
Sample Size	7632	6099	6099	7632	4820	4820	3647
Dep. Vble. Mean	0.794	0.876	0.583	0.671	0.890	0.544	0.057

Notes: This table presents OLS regression analysis for mutual assistance outcomes controlling for stratification variables, business sector, marital status at baseline, and month of interview fixed effects. Large family is equal to one if the number of extended family members is above or equal the median. Column 7 shows the use of the grant for household expenses, which was asked only to those assigned to grants or grants and BDS. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

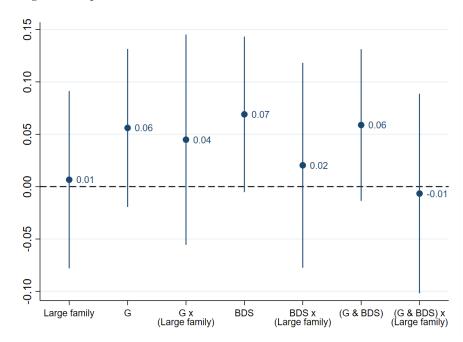
Figure A4: Separability between Personal and Business Accounts



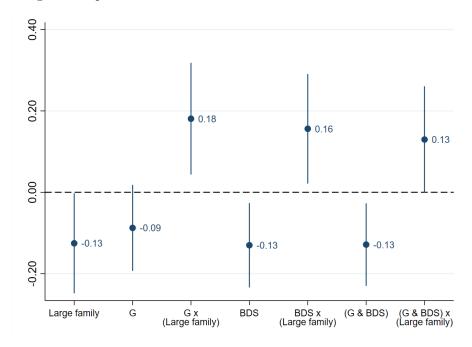
Note: This figure shows the probability of having separate personal and business accounts from an ANCOVA regression, using equation 2.90% confidence intervals included.

Figure A5: Relatives Involved in Business Decision Making

(a) Restricting the Sample to Those who had a Business at Baseline



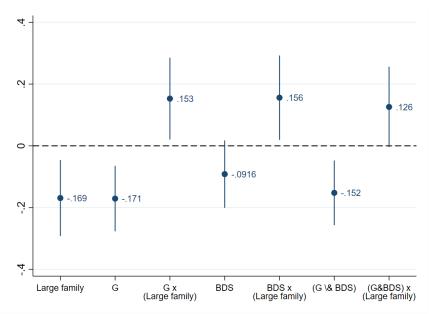
(b) Restricting the Sample to Those who did not have a Business at Baseline



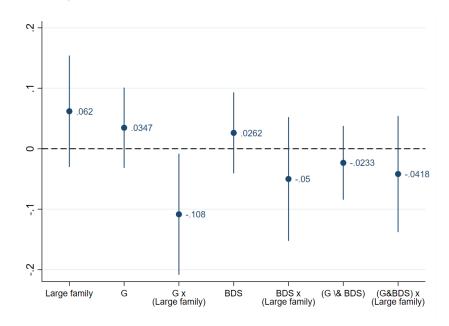
Notes: These figures show the estimates obtained in a regression analysis using equation 2, which controls for stratification variables, business sector and marital status at baseline, and interview month. In Panel a, I also control for the baseline value of the dependent variable. Point estimates and 90% confidence intervals using robust standard errors. The dummy Large Family is equal to 1 when the size is above or equal to the overall median size. The explanation of the outcome variable is included in the Appendix Table A27.

Figure A6: Source of Startup Capital for New Businesses

(a) Grants from Family or Friends

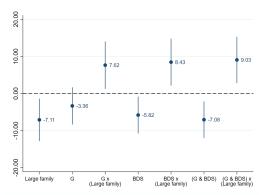


(b) Loans from Family or Friends

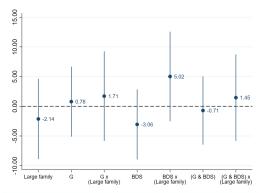


Notes: These figures show the estimates obtained in the OLS regression analysis using equation 2, which controls for stratification variables, marital and business sectors at baseline, and interview month. I restrict the sample to those who were not running a business at baseline but started one afterward. In Panel a, the dependent variable is a dummy equal to one if the source of start-up capital is a grant from family or friends, and zero otherwise. In Panel b, the dependent variable is a dummy equal to one if the source of capital is a loan from family or friends, and zero otherwise. Point estimates and 90% confidence intervals using robust standard errors. The dummy Large Family is equal to 1 when the size is above or equal to the overall median size. The explanation of the outcome variable is included in the Appendix Table A27.

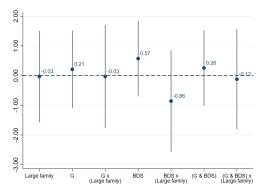
Figure A7: Exerting Effort



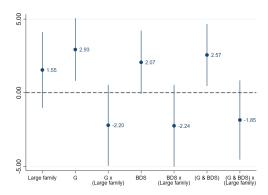
(a) # Weekly hours worked in the business – With business at baseline



(c) # Weekly hours worked in the business – Without business at baseline



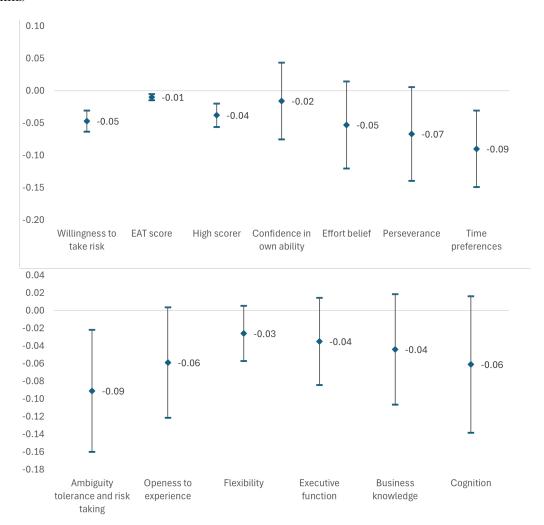
(b) # Days the business open in a month – With business at baseline



(d) # Days the business open in a month – Without business at baseline

Notes: These figures show the estimates obtained in separate regressions using equation 2, which controls for stratification variables, marital and business sectors at baseline, and interview month. I restrict the sample to those who were not running a business at baseline but started one afterward. In Panels a and b, I also control for the baseline value of the outcome of interest, and the sample is restricted to those youths who had a business at baseline. In Panels c and d, the sample is restricted to those who did not have a business at baseline. Point estimates and 90% confidence intervals using robust standard errors. The dummy Large Family is equal to 1 when the size is above or equal to the overall median size.

Figure A8: Correlation of Large Extended Family with Socioemotional and Business Skills



Notes: This figure shows the point estimate for having a large extended family size from separate OLS regression analysis controlling for stratification variables, business sector and marital status at baseline, and interview month. When the outcome variable is the EAT score, I control for the total percentage of non-responses in the exam. For each of the skills, I control for the percentage of non-response over the total questions that make up the skill. The dummy Large Family is equal to 1 when the size is above or equal to the overall median size. All outcome variables are re-scaled to be 0-1. The explanation of the outcome variables is included in Appendix Table A27.

Table A26: Emotional Support

	(1)	(2)	(3)
	Satisfied	Confident HH Will	Prepared to Navigate
	with Life	Maintain Living Standard	Business Environment
		Next Month	or Job Market
Large family	0.003	0.005	-0.004
	(0.012)	(0.019)	(0.035)
G	0.025^{**}	0.022	0.044
	(0.010)	(0.017)	(0.029)
Gx(Large family)	0.003	-0.001	-0.014
	(0.014)	(0.021)	(0.039)
BDS	0.008	0.012	-0.024
	(0.009)	(0.016)	(0.029)
BDSx(Large family)	-0.003	-0.005	0.055
	(0.013)	(0.021)	(0.039)
G & BDS	0.030^{***}	0.041**	0.031
	(0.009)	(0.016)	(0.028)
(G & BDS)x(Large family)	0.003	-0.012	0.004
	(0.013)	(0.020)	(0.038)
R-squared	0.025	0.019	0.021
Sample Size	7632	6639	6639
Dep. Vble. Mean	0.444	0.744	0.808

Notes: This table presents regression analysis using Equation 2. All regressions include controls for stratification variables, business sector, marital status at baseline, and month of interview fixed effects. All dependent variables are normalized to be 0-1. In columns 1 and 2, I also control for the outcome variable at baseline. The dummy variable "Large Family" is equal to one if the family size is larger than or equal to the overall median in the sample, and zero otherwise. The dependent variable mean in the control group with a small family size is reported at midline. Robust standard errors in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

Table A27: Explanation of Outcome Variables used to Study the Mechanisms (Section 6.5)

Variable	Question	Values
Requests FROM	Since February 2020, has any relative	0 if No, 1 if Yes
relatives	asked you to give them money or asked to	
	borrow money from you? (Consider peo-	
	ple living inside and outside your house-	
	hold)	
Gave money at	Did you do it?	0 if No, 1 if Yes
least once		
Money given	How much did you give them in total? (In-	Ksh. Winsorized at 1% level
when asked	cluding in loans)	
Requests TO rel-	Since February 2020, have you asked any	0 if No, 1 if Yes
atives	relative to give you money or asked to bor-	
	row money from them? (Consider people	
	living inside and outside your household)	
Received money	Did they do it?	0 if No, 1 if Yes
at least once		
Received money	Did they do it?	0 if No, 1 if Yes (only once), 2
(scale)		if Yes (few times-sometimes),
		3 if Yes (every time)
Money received	How much did they give you in total? (In-	Ksh. Winsorized at 1%
when asked	cluding in loans)	level, restricting the sample
(restricted)		to those who asked money to
		their family, and their family
		gave/lent them money when
		asked.

Variable	Question	Values
Money received	How much did they give you in total? (In-	Ksh. Winsorized at 1% level,
when asked	cluding in loans)	replacing by 0 if the youth
(unconditional)		did not ask for money to
		their family, or if they asked
		for money but their family
		did not give/lend them money
		when asked.
Used G for HH	What did you use the grant for?	1 if chose <i>Household expenses</i> ,
expenses		0 otherwise
Grant from Fam-	Where did you obtain the money to begin	1 if chose grant from fam-
ily/friends	this business?	ily/friends, 0 otherwise
Loan from Fam-	Where did you obtain the money to begin	1 if chose loan from fam-
ily/friends	this business?	ily/friends, 0 otherwise

Variable	Question	Values
Cover HH ex-	In your best month, after paying for all expenses required to	1 if men-
penses	operate this business for that month, does the profit gener-	tioned, 0
	ated from the business allow (read all the options aloud and	otherwise
	write all that apply): to cover household expenses; to save;	
	to make new investments in the business or activity; does	
	not allow to invest, save nor cover household expenses.	
Save	Idem	1 if men-
		tioned, 0
		otherwise
Invest	Idem	1 if men-
		tioned, 0
		otherwise
Cover HH ex-	Idem	1 if all three
penses, save and		mentioned,
invest		0 otherwise

Variable	Question	Values
Separate accounts	Do you have separate account for your personal and business	0 if No, 1 if
	finances?	Yes
Relatives involved	For decisions about running this business, do you? (Read	1 if spec-
in business deci-	options aloud and select all that apply). Possible options	ified rela-
sions	are: make decisions alone; make decisions with a business	tives are
	partner(s); make decisions with others in the HH; make deci-	part of the
	sions with other no in the HH; do not participate in decision.	decision, 0
	Depending on the answer, With whom? / Who makes deci-	otherwise
	sions about running this business (Write all that apply) Pos-	
	sible options are: spouse; son/daughter; sister/brother; fa-	
	ther/mother; nephew/niece; in-law; grandparent; other rel-	
	ative; non-relative.	
Willingness to	In a scale from 1 to 5, where 1 stands for "Not at all willing	0 if replied
take risk	to take risks" and 5 for "Very willing to take risks", how	1 to 3, 1 if
	willing are you to take risks in life?	replied 4 or
		5
Flexibility	It considers replies to the questions "I avoid dealing with	Scaled be-
	difficult situations involving disagreement" and "I am willing	tween 0 and
	to admit when I don't know something".	1
Effort belief	"Do you prefer work that you can do really well without too	Scaled be-
	much struggle?", "For me; it is possible to influence one's	tween 0 and
	destiny", "Whether a person does well or poorly in a job may	1
	depend on a lot of different things. You may feel that certain	
	things are easier for you to change than others. In a job,	
	how possible is it for you to change BEING TALENTED?",	
	"Do you prefer work from which you can learn, even if you	
	make many mistakes?" and "I have no problem working for	
	someone else".	

Variable	Question	Values
Perseverance	"I stay committed to my goal; even if it takes a long time	Scaled be-
	to achieve", "Carefully checking all aspects of the business	tween 0 and
	is only important when the business is small" and "I often	1
	feel stuck in difficult situations".	
Confidence in	"I am a leader in most groups", "I always worry about what	Scaled be-
own ability	others will think before doing something important", "I be-	tween 0 and
	lieve I am more capable than almost everyone else at what I	1
	do", and "I spend a lot of time dreaming about the future".	
Time preferences	The score for time preferences is calculated by computing	Scaled be-
	the inflection point in the comparison between today and	tween 0 and
	28 days (the amount of money at which they switch from	1
	preferring the money today vs in 28 days) and compare with	
	the inflection point in the comparison between 28 days and	
	56 days. The more consistent are these inflection points, the	
	higher score. That is, if they are the same, they scored the	
	highest score in time preferences.	
Ambiguity toler-	"A certain level of stress motivates me", "I don't work well	Scaled be-
ance and risk tak-	in tough situations" and a question in which they have to	tween 0 and
ing	choose between a pot A where they know the balls it has, and	1
	a pot B where they can't see the composition and depending	
	on what they draw is the payment they win.	
Openness to ex-	"There is no point trying to find new ways of doing some-	Scaled be-
perience and cre-	thing if the old ways work", "The best way to run a business	tween 0 and
ativity	is to do what others have been doing that works, rather than	1
	to try something new" and "When faced with difficulties, I	
	look for alternative solutions"	

Variable	Question	Values
Executive func-	"I am satisfied with the amount and types of things I did.",	Scaled be-
tion	"I was an active person and accomplished the goals I set out	tween 0 and
	to do." and a question in which they have to organize the	1
	shapes to move from start and match the goal position in as	
	few moves as possible.	
Business knowl-	"If transporting raw materials is your biggest business ex-	Scaled be-
edge	pense and you are focused on reducing costs, where should	tween 0 and
	you locate your factory?", "It's better to employ yourself in	1
	your own business than to employ someone else to work for	
	you, because your own time is free" and "Imagine that the	
	interest rate on your savings account was 1% per year and	
	inflation (increase in prices) was 2% per year. After 1 year,	
	would you be able to buy more than, exactly the same as,	
	or less than today with the money in this account?".	
Cognition	"Work out the following question to the best of your ability:	Scaled be-
	9/2 =", a question which asks how a cube would look like	tween 0 and
	if you fold it, and a question that asks to choose the next	1
	shape in a series.	