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SMEs and Workers During Crises: Evidence from the Covid-19 Pandemic in Uganda

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We use a five-year panel of Ugandan SMEs, supplemented with phone-survey data from August 2020, to analyze how the onset of the Covid-19 pandemic affected profits and employment. Most firms had employees, enabling us to investigate whether—and how—the crisis reshaped SMEs' job-creation capacity, with particular focus on gender differences. Profits fell substantially for all firms, yet male entrepreneurs paradoxically expanded their workforce—suggesting that hiring under crisis may arise partly from social obligations. Meanwhile, female entrepreneurs bore heavier caregiving loads and relied more on extended family support, potentially hampering future growth through added caregiving and reciprocal obligations.

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SMES AND WORKERS DURING CRISES: EVIDENCE FROM THE COVID-19 PANDEMIC IN UGANDA

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Small and medium-sized enterprizes (SMEs) account for a large share of global GDP and are often hit hardest by major shocks, including the Covid-19 pandemic and its associated policy responses (OECD, 2023). In May 2020, the International Labour Organization estimated that 94% of workers worldwide were affected by some form of workplace closures (International Labour Organization, 2020). These restrictions were especially disruptive for firms and workers in low-income countries, where remote work was less feasible and public safety nets were weaker (Danquah, Schotte and Sen, 2020; Egger et al., 2021).

We analyze how the Covid-19 pandemic affected trends in SMEs' profits and employment in Uganda, which imposed some of the world's strictest lockdown measures (Hartwig and Lakemann, 2020). Beginning in early 2020, many firms were forced to close or operate under tight distancing rules and curfews for most of April and May, with partial restrictions persisting afterward. Schools and nurseries remained shut from early April 2020 until early 2022, placing extra pressure on owners with young children—a burden likely to fall more heavily on female entrepreneurs, who typically shoulder greater childcare responsibilities (Uganda Bureau of Statistics, 2019; Bjorvatn et al., 2025).

We draw on an extensive panel of Ugandan SMEs tracked for five years before the outbreak. These firms were originally enrolled in a randomized controlled trial run with a major lending institution (Gulesci et al., 2024) and span retail, manufacturing, and services. We augment this pre-pandemic dataset with phone interviews carried out in August 2020—five months into the pandemic—to document changes in key

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firm outcomes such as profits and workforce size, while capturing owners' reports on Covid-19–related challenges.[1] Notably, 27% of these SMEs were run solely by the owner before the pandemic, whereas the remaining 73% employed at least one worker, allowing us to investigate whether—and how—the crisis reshaped SMEs' job-creation capacity, with particular attention to gender differences.

Our results show that profits fell substantially for all firms, with female-owned businesses experiencing more pronounced declines, while male-owned SMEs paradoxically expanded their workforce—suggesting that hiring in such crises may arise partly from social obligations. We also find that female entrepreneurs bore heavier caregiving loads and relied more on extended family support, reflecting distinct social and familial pressures across genders.

With these findings, we add to the growing literature on how the Covid-19 crisis disrupted small enterprises in developing countries. Malik et al. (2020) show that Pakistani SME owners worried about both supply-side disturbances and losing clients, while in Uganda, Mahmud and Riley (2021) report a steep drop in non-farm income due to declines in household enterprise profits and labor income, and Hartwig and Lakemann (2020) find that informal businesses in Kampala initially saw a sharp fall in profits but gradually recovered. Compared to these studies, we focus on larger SMEs with some pre-pandemic employment, thus capturing not just firm-level impacts but also effects on workers, complementing recent evidence on the pandemic's impact on labor (e.g., Schotte et al., 2023; Alfonsi, Namubiru and Spaziani, 2024). Finally, by examining differences by the owner's gender, we contribute to research on gendered effects of Covid-19 in Sub-Saharan Africa (e.g., Biscaye, Egger and Pape, 2022; Clerici and Tripodi, 2024).

1. Data Collection

The firms in our sample had all previously taken out an SME loan from BRAC, one of the main financial institutions in Uganda. As part of a randomized controlled trial implemented between 2014 and January 2020 (Gulesci et al., 2024), firms borrowing from 76 of BRAC's local offices—located in 12 districts across Western, Central, and Eastern Uganda—were sampled and surveyed 14 times. The final pre-Covid-19 survey wave (wave 14) took place from November 2019 to January 2020, concluding about two months before Uganda's nationwide lockdown began.

[1] https://poverty-action.org/covid-19-economic-impact-survey.

Between August 4 and 27, 2020, we conducted a Covid-19 phone survey (wave 15) using the owners' contact details collected in wave 14. We successfully interviewed 1,721 firms, representing a 73% response rate. Of these, 41% are female-owned and 59% are male-owned, while 73% had employees at baseline. In terms of sectors, 384 firms (22%) operate in manufacturing, 1210 (70%) in retail, and 127 (7%) in services.[2] Below, we use these data to document changes in SMEs' profits and employment, focusing on gender differences.

2. Trends in Profits and Labor

We begin our analysis with profits and labor outcomes, two key dimensions of SMEs' performance. Figure 1 shows trends in monthly profits by gender of the business owner across all 15 survey waves. Profits in August 2020 (wave 15) fell sharply compared to November 2019–January 2020 (wave 14), dropping by 48% on average. Male-owned firms experienced a 45% decline, while female-owned firms saw a 55% decrease. Although female-owned firms appear more severely affected, we cannot rule out that part of this gap reflects seasonal variation rather than the pandemic per se.[3]

Next, we turn to employment levels in Figure 2, which plots the time trend for the number of workers (excluding the owner) by survey wave, again separating firms by the entrepreneur's gender. We focus on waves 12–15 because the earlier surveys (waves 0–11) measured employment differently.[4] Between wave 14 (November 2019–January 2020) and wave 15 (August 2020), male-owned firms reported a significant increase in the number of workers (corresponding to 58%), whereas female-owned firms did not.[5] In addition, a substantial share of business owners (about 40 percent of males and 38 percent of females) reported having cut or delayed salaries for existing employees, indicating widespread financial strain.

The rise in employment among male-owned SMEs, despite the sharp drop in their profits, suggests that hiring during the pandemic was non-productive. One possible explanation is informal insurance—male SME-owners may have employed more workers to support a growing pool of unemployed individuals in their local labor market

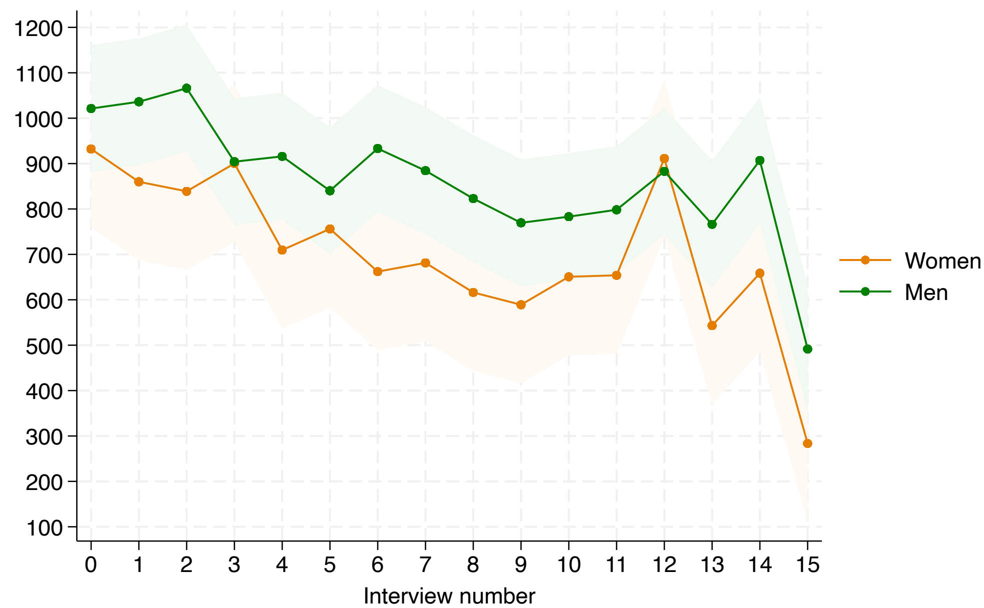
[2]Manufacturing subsectors include garment-making, metalwork, woodworking, and food processing; retail ranges from grocery stores to hardware shops; and service activities include clinics, mechanics and restaurants.

[3]Waves 0–12 were collected on a rolling basis, so interview months varied by firm. Waves 13–15, by contrast, were collected within a narrower window for the entire sample.

[4]In waves 0–11, we recorded employee data via a detailed roster; in waves 12–15, we asked the owner the direct question, "How many employees does this business currently have?"

[5]We conducted robustness checks to rule out attrition bias as a primary driver of these findings. Further details are available upon request.

Figure 1. Trends in profits by gender of business owner



Notes: The figure tracks the trends in monthly business profits, by owner gender, across 15 interview waves. Wave 15 is the Covid-19 survey carried out in August 2020, while waves 0–12 were carried out on a rolling schedule in the first 12 months after the firm's loan, and waves 13–15 represent follow-ups after 2, 4, and 4.5 years on average. Profits are shown in PPP USD, adjusted to reflect 2014 prices (the first year of our experiment).

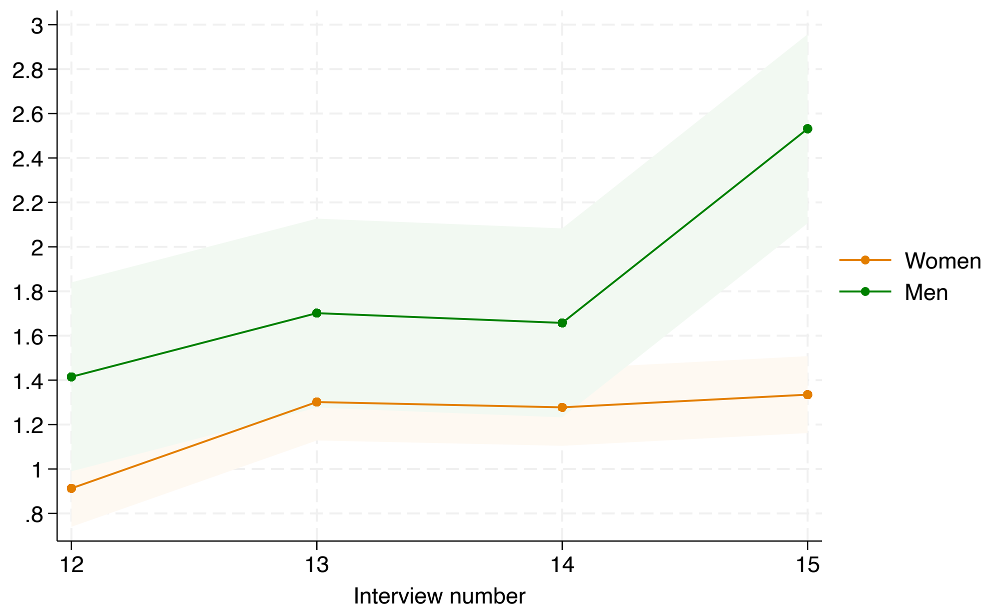
and social networks. This is in line with recent experimental evidence that employment can play a redistributive role (Macchi and Stalder, 2023; Swanson, 2023) and that male SME-owners may face stronger kinship taxes (Squires, 2024).[6]

3. Challenges Faced by Business Owners

To better understand how Covid-19 affected Ugandan SMEs, we also inquired about specific challenges encountered during the past months. We first asked whether business owners had to adjust their operations during the pandemic. About 47% reported modifying their business model to reduce direct physical proximity with customers, with no notable difference by gender. The most common challenge overall—cited by

[6]Macchi and Stalder (2023) show that, among Ugandan SMEs, hiring can function as a form of redistribution within social networks, rather than reflecting strictly profit-maximizing behavior. Swanson (2023) shows that in Zambia, employers face social pressures to hire relatives, even though they may be less productive that non-relatives. Squires (2024) shows, among a sample of Kenyan micro-entrepreneurs, males face greater pressure to share their earnings with their friends and family.

FIGURE 2. Changes in employment by gender of business owner



Notes: This figure shows the average number of employees (apart from the owner) at each firm from waves 12–15, based on the direct question "How many employees does this business currently have?".

88% of owners—was "difficulties in accessing customers," reflecting a sharp drop in demand due to the pandemic and the lockdown restrictions. Two other major concerns, reported by over 70 and 60% of respondents respectively, were a "reduction in availability and/or an increase in price of their inputs" and "difficulties in accessing suppliers".

Alongside these business-level constraints, many owners also faced heightened caregiving demands. To investigate this issue, we asked whether they had had to increase the time spent caring for household members. In response to the question, "In the past two months, have you had to increase the time you spend caring for other members of your household due to coronavirus?," 75% of female business owners and 68% of male owners said yes. This likely stems from prolonged school closures and additional caregiving needs, such as supporting sick or elderly family members. Consequently, greater responsibilities at home may have placed female-owned businesses under more strain than their male-owned counterparts.

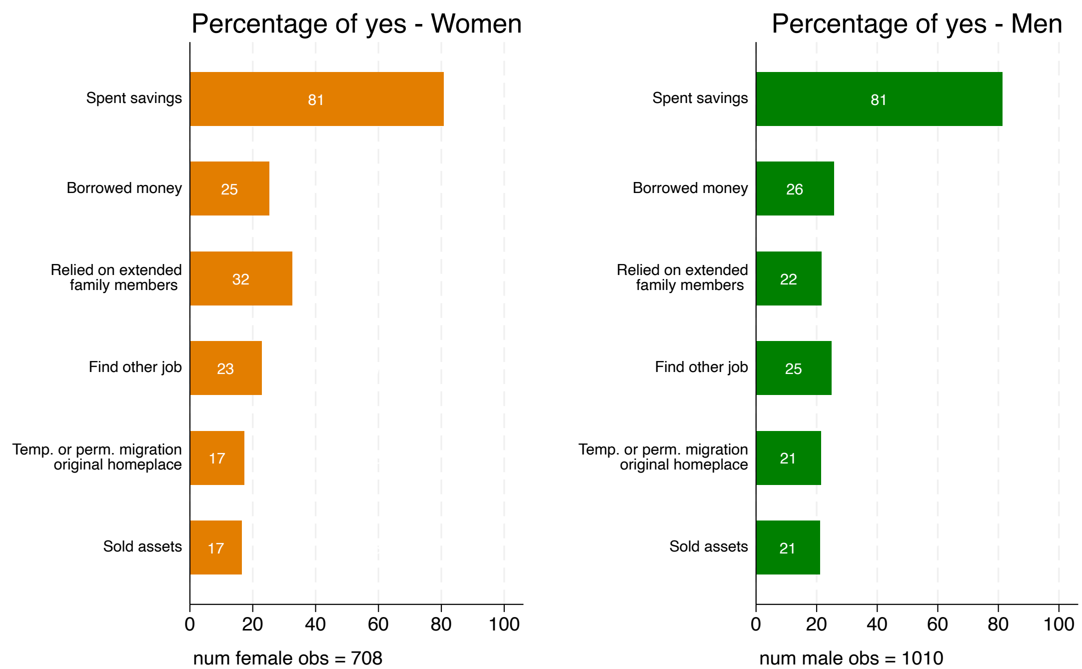
4. Coping Strategies

During the Covid-19 survey, we asked a series of questions to understand the coping strategies SME owners adopted to manage the crisis. Figure 3 reports whether owners had taken certain actions in the last 60 days. It shows that 81% of respondents had to spend their savings, making this the most common coping strategy for both male and female entrepreneurs. About a quarter in each group borrowed money (25% of women, 26% of men) or searched for alternative income sources (23% of women, 25% of men). Other strategies differed by the owner's gender: 32% of female entrepreneurs relied on extended family members, compared to 22% of male owners. One plausible reason for female entrepreneurs' heavier reliance on family could be the higher caregiving demands they faced, leading them to enlist relatives for childcare or other support. A growing literature on "kinship taxation" in Africa highlights that help from extended family members often requires reciprocation, effectively acting as a "tax" on investment decisions (Jakiela and Ozier, 2015; Carranza et al., 2022; Squires, 2024). Thus, female owners who rely more heavily on kin support may be especially vulnerable to such obligations, with potential long-term consequences for their business growth.

5. Conclusions

Drawing on a panel dataset that combines pre-Covid-19 information with survey data collected during the pandemic, we examined how the trends in profits and employment of Uganda's SMEs were affected by the crisis, with particular emphasis on gender differences. Our analysis yields three main findings. First, while all firms experienced a sharp decline in profits, female-owned businesses saw especially steep drops. Second, we observe a marked increase in employment among male-owned enterprises, even as profits fell—suggesting that hiring was motivated more by redistribution than by production. Third, female owners reported spending more time on household care and relying more heavily on extended family support, underscoring how heightened caregiving responsibilities and kinship "taxation" could hinder business growth. Overall, our findings show that economic crises—including Covid-19—significantly affect both businesses and their workers. Policies that support firms during such shocks are likely to benefit both owners and employees, although their effects may differ by owner gender.

Figure 3. Pandemic coping strategies by gender of business owner



Notes: The figure shows the frequency of different coping strategies used by female and male business owners to deal with the pandemic.

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