Final report

COVID-19, SMEs, and workers

Findings from Uganda

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Covid-19, SMEs and Workers: Findings from Uganda

Final Report presented to IGC

by Selim Gulesci, Francesco Loiacono, Andreas Madestam, Miri Stryjan

Introduction

Small and medium-sized enterprises (SMEs) are vital for the Ugandan economy, comprising over 90 % of the private sector (Uganda Bureau of Statistics, 2017). In this report, we present findings from a unique long panel of SMEs in Uganda, focusing in particular on changes in the trends following the onset of the covid-19 pandemic. Uganda experienced some of the strictest lockdown measures in the world (Hartwig and Lakemann 2020), with many businesses being forced to close or operate under strict social distancing rules, regular curfews, and challenges in accessing markets due to higher transportation and input costs. Moreover, schools and nurseries have been shut down since April 2020, which forces female business owners, in particular, to make trade-offs between tending to the business and engaging in childcare. In this report, we aim to understand how this large aggregate shock may have affected the SMEs and whether it led to significant changes in the trends of important SME outcomes. Moreover, we hope to shed light on whether, and if so how, the impact of the pandemic on SMEs may differ depending on the gender of the business owner and/or the sector of operation.

Thanks to generous support from the IGC, we were able to collect information on a sample of SMEs operating in a range of sectors including retail, manufacturing, and services in Uganda. This information was merged with rich pre-crisis panel data we had collected on the same set of firms. In particular, the SMEs in this study were part of a randomized controlled trial (RCT) implemented in collaboration with BRAC Uganda's Small Enterprise Lending Program (SEP), where each firm was followed for more than 6 years. The combination of the pre-crisis panel data with the new information we collected during the pandemic allows us to study the trends in key indicators pertaining to firm growth, such as profits, revenues and number of workers, and explore changes in these trends during the covid-19 pandemic. In addition, we collected information on how firm owners were affected by the pandemic by asking them a set of questions taken from the IGC/IPA survey module for firms.[1] Importantly, one-third of the firms in our sample were, prior to the covid-19 pandemic, run solely by the business owner, whereas two-thirds had one or more hired employee. Therefore, a key question we explore is whether the job creation trends of SMEs changed due to covid-19.

Our study contributes to a small but growing body of evidence on the recent challenges experienced by small firms in developing countries due to the covid-19 pandemic. Work on small businesses in Pakistan during the lockdown confirms that business owners worry both about supply-side disturbances and losing clients due to the shock (Malik *et al.* 2020). There have been a few studies looking at the effects of the crisis on business outcomes in Uganda. Mahmud and Riley (2020) provide survey evidence from rural Uganda on the impact of the covid-19 crisis on households and household businesses. They document a large decline in household non-farm income due to household enterprise profits and labour income being

[1] https://www.covideconsurveys.org/survey

almost wiped out post lockdown. In another related study, Hartwig and Lakemann (2020) report findings from a survey among 336 informal businesses in Kampala. They document a sharp decline in profits during the initial lockdown (March-May 2020) but a slow rise thereafter. Compared to these two studies, the firms in our panel dataset are much larger and are more geographically representative of the country as a whole. In particular, two-thirds of the SMEs in our sample reported hiring 1 or more employees in the survey collected in November 2019-January 2020, prior to the pandemic. As such, our findings shed light on the impact of the ongoing crisis not only on SMEs but also on their employees.

Data collection

The firms in our sample were clients of BRAC SEP. As part of an RCT that was implemented between 2014 and January 2020 (Gulesci *et al.* 2019), all firms borrowing from BRAC's SME lending program in 76 of BRAC's local offices were sampled and surveyed 14 times. The most recent survey wave prior to covid-19 was conducted between November 2019 and January 2020, and ended approximately two months before the country entered into a nationwide lockdown due to covid-19. The firms in our sample come from 12 districts in Western, Central and Eastern Uganda. Figure 1 shows a map demonstrating the geographical scope of our sample.

The recent survey was carried out between August 4 and August 27 2020 and conducted via telephone, using contact details of the business owners that were collected during our previous survey in November 2019- January 2020. We provided the participants with a monetary incentive of 2GBP to participate in the survey. The incentive was paid out to their mobile money accounts. We were able to reach and survey 1,642 firms, which corresponds to a 70% response rate. Among the 1,642 firms surveyed in the recent wave, 450 (27%) are operating in manufacturing, 1023 (62%) in retail and 169 (10%) in the service sector. More specifically, firms in manufacturing are operating in subsectors such as garment-making, metal, wood or food processing; firms in the retail sector consist of supermarkets, groceries, hardware shops, electronic stores, pharmacies, clothing shops; and some examples of firms in the services sector are restaurants, bars, cafes and transportation services.

Trends in Profits and Revenues

Figure 2 shows the trends in profit levels of firms in our sample, broken down by gender of the business owner. It demonstrates a sharp decline in monthly profits during the most recent survey. Relative to the data collected in November 2019-January 2020, the average firm in our sample had experienced a 51.92% drop in profits in August. For male-owned businesses, the fall in profits was 49.52% while for female-owned businesses it was 56.49%. While female-owned businesses suffered heavier losses in terms of their profits in this period, we cannot be certain that this is caused by the pandemic per se. Figure 3 depicts the corresponding pattern for firm revenues. Similar to the trend in profits, we see a sharp break in wave 15, whereby revenues for male-owned firms fall by 40.87% and that of female-owned firms fall by 52.47% relative to the Nov 2019-Jan 2020 levels.

In Figure 4, we plot the time trend of business profits, broken down by sector of operation. Two findings are of note: First, firms in all three sectors have experienced a sharp drop in their profits in August relative to the November-January period. Second, the firms in the

manufacturing sector seem to have experienced the largest drop in profits, given that they had the highest profits in January compared to the firms in the retail and services sectors. On average, firms in the manufacturing sector experienced a 54.63% drop in their profits in August relative to November-January, while firms in retail experienced 52.91% and those in services experienced 52.6% drop in profits.

When we turn to the revenue trends in Figure 5, we see that all sectors experienced sharp falls in revenue. Similar to the profit trends, we see a sharper drop for manufacturing firms than for firms in retail or services. In particular, manufacturing experiencing a 48.32% drop in revenues while the decline for firms in retail is 45.98% and the corresponding drop in service firms is 39.9%.

Challenges faced by Business Owners

In order to better understand the impact of the covid-19 crisis on firms, we explore direct questions in our survey on the adjustments that firms were forced to make to their business practices due to the pandemic and the ensuing restrictions. Figure 6 displays the fraction of firm owners who report having made changes to their business practices to accommodate social distancing regulations, broken down by gender of the entrepreneur (panel a) and by sector of the business (panel b). Approximately 45% of entrepreneurs in our sample reported that they adjusted their business model to reduce instances of direct physical proximity with customers. We do not see any notable difference in this share by gender of the business owner. Interestingly, this share is higher among firms in the manufacturing sector (50%) compared to those in services (44%).

Figure 7 provides an overview of the most common problems reported by business owners due to the crisis, broken down by the gender of the entrepreneur (panel a) and the business sector (panel b). The respondents were asked the question “In the last 30 days, has your business been facing any of the following challenges due to the coronavirus/COVID-19 outbreak and related restrictions?” followed by a list of potential issues. The most common issue, reported by more than 85% of the business owners, was “difficulties in accessing customers”. This suggests that most firms experienced a sharp fall in demand due to the pandemic and the lockdown restrictions. The second and third most common issue reported concerns supply-side challenges: More than 70% of respondents reported experiencing a “reduction in availability and/or an increase in price of their inputs”; followed by “difficulties in accessing suppliers” which is reported by around 60% of the business owners. The latter seems to be a more prevalent issue for businesses in the manufacturing sector (where 66% of them reported experiencing difficulties in accessing suppliers) relative to retail or services (where 60% and 55% reported this concern). These demand and supply-side challenges are followed by an increase in time constraints due to the need to provide care for household members: 54% of business owners report not being able to tend to their business because they had to take care of a family member (e.g. children or a sick relative). Finally, around 40% of business owners report having difficulties accessing financing and around 30% report difficulties with worker absenteeism. These last two issues are more commonly reported by male business-owners relative to females: 43% of male business owners reported difficulties

in securing access to finance and 36% reported challenges due to worker absenteeism; the corresponding rates were 37% and 24% for females.

In order to better understand how the pandemic may have affected time constraints of business owners, we asked them the following question: "In the past 2 months, have you had to increase the time you spend caring for other members of your household due to corona virus?" Figure 8 shows that 75% of female business owners and 68% of males reported having had to increase the time they spend caring for members of their households. This could be due to the increase in childcare needs as all types of schools and nurseries were still closed in August, or due to a need to provide care for the sick or elderly. This highlights one mechanism through which the pandemic may have affected female-owned businesses more severely than male-owned ones: through an increase in the time spent caring for other household members, possibly at the expense of work in the business. The lower panel of the figure shows that this difference is not driven by sectoral differences, as we see that entrepreneurs in manufacturing or retail are equally likely to be reporting an increase in time spent caring for other household members (72% and 71% respectively) followed by services (67%).[2]

Coping Strategies

The survey included a series of questions to shed light on the types of coping strategies that business owners had to adopt in order to deal with the crisis. In Figure 9, we report the responses to a set of questions relating to whether the respondents had to take certain actions to deal with the consequences of the covid-19 crisis in the last 60 days. We see that 81% of respondents report having had to spend their savings. This is by far the most common coping strategy reported, similarly across entrepreneurs' gender and business sector. Following this strategy, the relative importance of different strategies varies by the gender of the entrepreneur. For female business owners, the second most common coping strategy is to "rely on extended family members" (32%) while among male entrepreneurs, only 22% report having to do this. At the same time, male and female business owners are almost equally liked to report having to borrow money (25% for both) or look for alternative sources of income (23% for women, 25% for men). One reason why female entrepreneurs may have had to rely more on extended family members could be due to the higher pressures they faced to care for household members. They may have asked extended family members to, for example, help out with childcare. There is a growing literature on kinship taxation in Africa, highlighting that support from extended family members may need to be reciprocated and this may act as a "tax" affecting investment decisions (Jakiela and Ozier, 2017; Squires, 2017). In light of this, our finding that female entrepreneurs have had to rely more heavily on extended family members to cope with the consequences of the pandemic suggest they may

[2] Note that in Figure 7, we saw that female business owners were no more likely to report difficulties in tending to their business due to the need to take of family members. The difference between this and the pattern we see in Figure 8, panel a, could be due to the way the questions are framed: one is about whether there has been an increase in time spent caring for family members, the other is about whether this is perceived to be a difficulty by the respondent in terms of the time they allocate to their business. The pattern in Figure 8 shows female entrepreneurs spend more time having to provide care for family members compared to males, but they are no more likely to perceive this as a difficulty for their businesses.

be faced with heavier kinship taxes in the future, which could then affect their business investments and profits. Future research is needed to shed light on this.

Effects on SMEs' Labor Force

Next, we turn to the effects of the pandemic on the workers hired by SMEs in our sample. First, we report responses to a series of questions on whether the entrepreneurs had to make any adjustments to the size of their labor force and/or their workers' salaries in the last 30 days preceding the survey. Figure 10 shows that 25% of male and 20% of female entrepreneurs report having had to temporarily lay off or suspend any workers in the past month. The corresponding numbers for permanent layoffs are 7% for male and 6% for female business owners. In Figure 11, we plot the time trend for number of workers employed by firms at the time of survey across the 15 survey waves, broken down by gender of the entrepreneur. We see that compared to the November 2019-January 2020 period (wave 14) female business owners report much fewer workers in August 2020 (corresponding to a 32.29% reduction in number of workers hired by female-owned businesses), while for male business owners the reduction in number of workers in the same time window is much smaller. Comparing this pattern with Figure 10 suggest that female-owned businesses had to lay off workers earlier during the lockdown, so that these layoffs were not captured in survey wave 15, where we only asked for layoffs in a 30-day time window prior to the survey. Finally, Figure 12 shows that even for workers who did not lose their jobs, business owners had to reduce salaries by a significant share. In particular, 40 (38) percent of male (female) business owners who had any workers at the time of our survey report that they had reductions or delays in salary payments.

Next, we compare the trends for the labor force indicators by business sector. Figure 13 indicates that firms in the manufacturing sector experienced the biggest drop in employment – 32% of manufacturing firms report having to temporarily layoff/suspend a worker in the past month, and 9% report having to permanently do so. The corresponding figures for firms in services are 25% for temporary, 8% for permanent job loss; and for retail firms they are 19% and 6%, respectively. Figure 14 plots the trends in number of workers, broken down by sector. The figure confirms that manufacturing firms hire on average more workers than firms in retail or services. In particular, in the Nov 2019-Jan 2020 wave, the average manufacturing firm in our sample had 3.9 employees while the corresponding figures for retail and services were 2.5 and 1.7 respectively. The number of employees in all sectors went down in the recent survey wave. Relative to November-January, in August 2020 there were 13% fewer workers in manufacturing firms, 17.33% fewer in retail and 5.42% fewer in services. Figure 15 shows that, conditional on having workers, around 40% of firms in each sector report having to reduce or delay the salaries of their workers due to Covid-19. This implies that workers employed in the SME sector were severely impacted by the pandemic, either through losing their job or via delays/reduction in payment.

Household Wellbeing

Even though businesses were the target population of our study, we also collected some information to understand the implications of covid-19 for the wellbeing of the business owner's household. In particular, respondents were asked to report if they or anyone in their household experienced various difficulties related to food consumption during the week

preceding the survey. Figure 16 presents the share of respondents who reported having experienced a certain type of difficulty, broken down by gender of the respondent. We find that 71% of female firm owners and 66% of male firm owners report having had to reduce the quality of food they consume at home, while around an equal share (62%) report being unable to buy the amount of food they would normally buy because their household income dropped. In line with these, nearly half of the respondents reported having had to reduce their number of daily meals. Part of the reason for this reduction seems to be linked to supply side constraints, as 41% of women and 47% of men report having difficulty in buying food items due to government restrictions in accessing markets, while roughly 40% of the respondents complain about prices of goods being too high and around a third of them report food shortages in the market. Finally, 26% of women and 33% of men report the markets being closed as a cause of difficulty in buying food for their households. Overall, it is clear that the crisis seems to have caused food shortages for the respondents in our sample of business owners, even though they do not belong to the lowest socio-economic groups in Uganda.

Conclusions

Based on a rich panel dataset that combines pre-crisis data with recently collected survey data, we analyze how the trends in key outcomes of SMEs were affected by the Covid-19 crisis and lockdown in Uganda. Furthermore, we explore the new challenges caused by covid-19 and the lockdown on firms, assessing any differential patterns by gender of the business owners or their sector of operation. A number of findings are of note:

First, our data shows a sharp fall in profits and revenues of all firms in the sample. While female-owned businesses seem to have experienced a larger fall in their profits in relative to pre-covid levels, this could also be due to seasonal variation not related to the pandemic.

Second, female business owners report that they had to dedicate more time to take care of children and other household members. They also report having to rely more on support from extended family members. These responses suggest that there could be negative consequences on female-owned businesses' growth patterns in the future, both due to greater time constraints and to intensified kinship taxation.

Third, a significant share of the firms in our sample describe that they had to lay off workers or reduce their workers' salaries. In line with this, we see a sharp fall in number of workers employed by the SMEs in our sample. This implies that any policies to support SMEs during the crisis are likely to benefit both the firm owners and their employees.

Finally, even though the respondents in our sample are not particularly poor, a majority of them report facing difficulties in accessing food and having had to reduce their food consumption or quality. It is important to assess the long-term consequences of this on health and general wellbeing of households and their businesses in future research.

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Appendix

November 7, 2020

Figure 1: Uganda

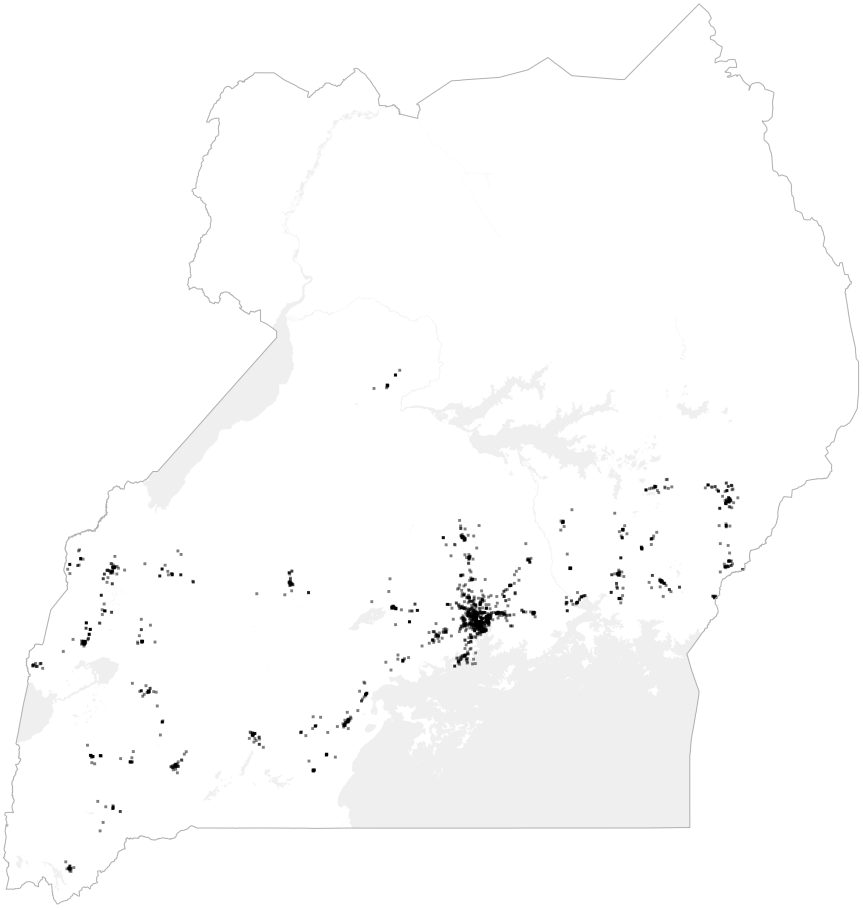


Figure 2: Average Profits over time

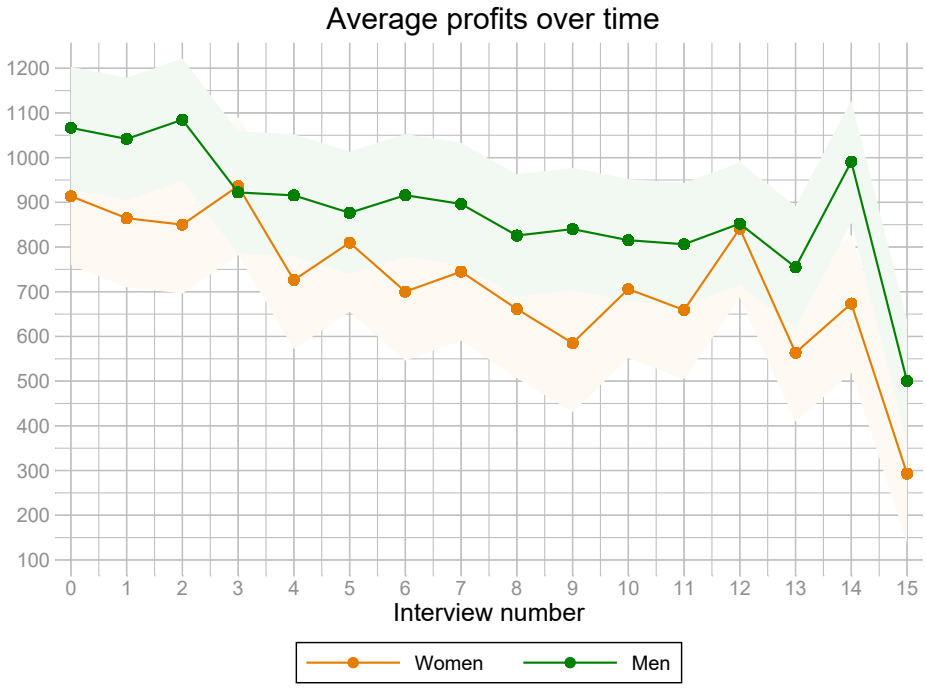


Figure 3: Average Sales over time

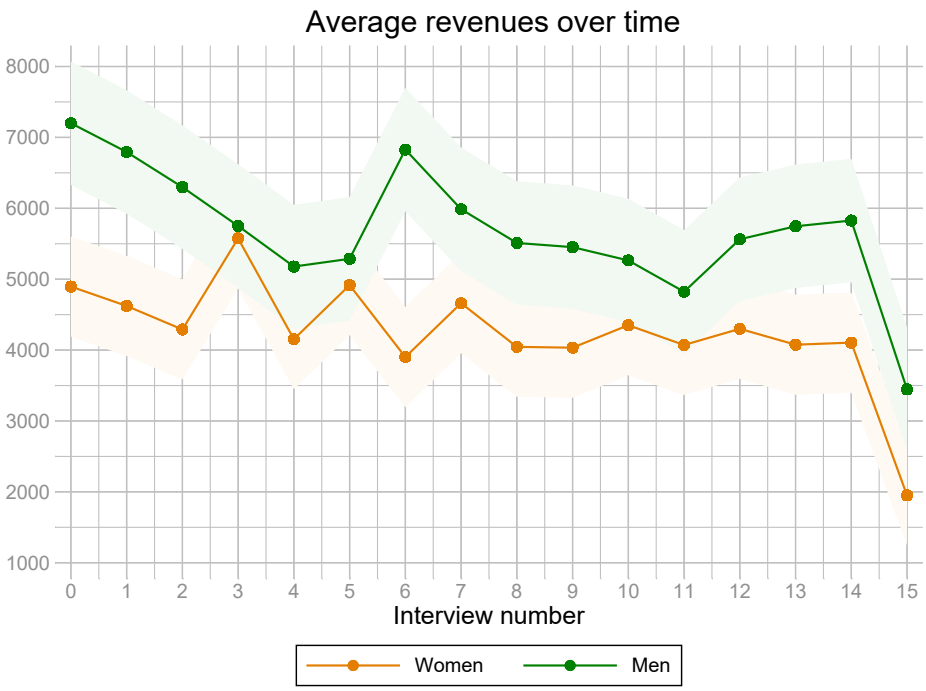


Figure 4: Average Profits over time, by sector type

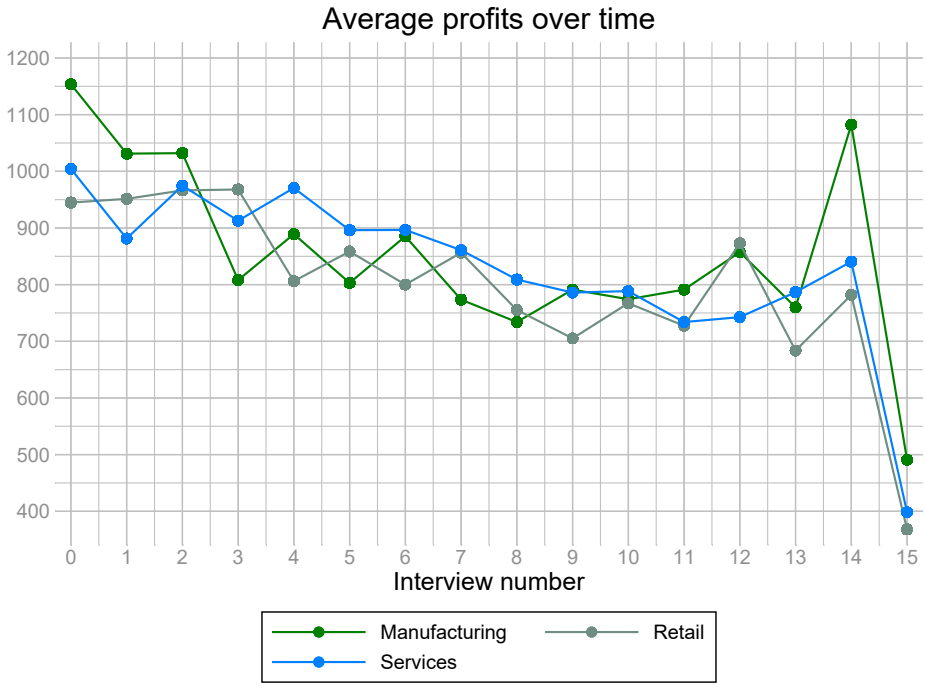
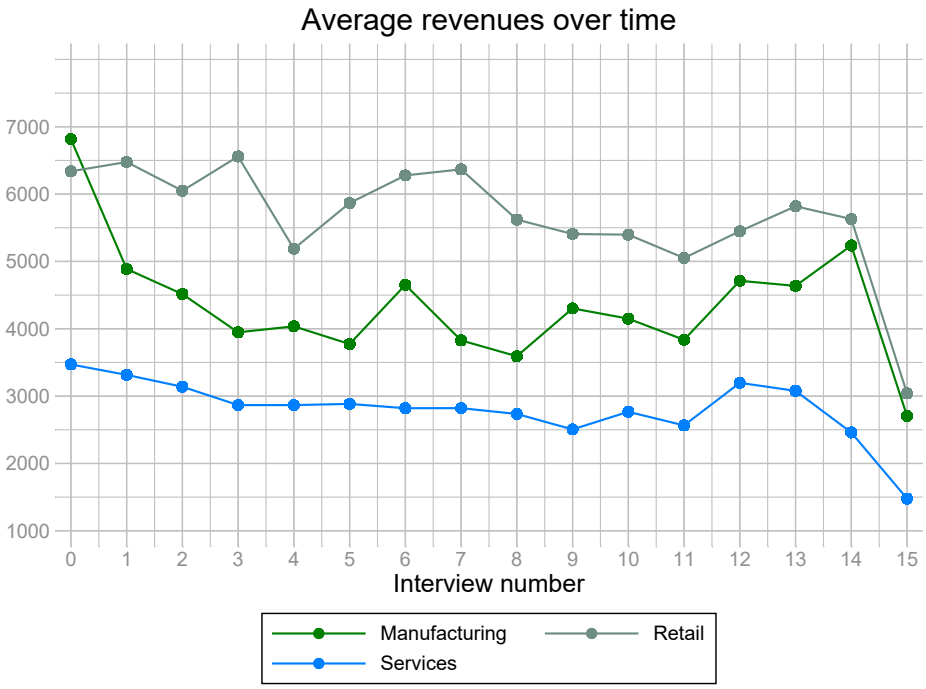
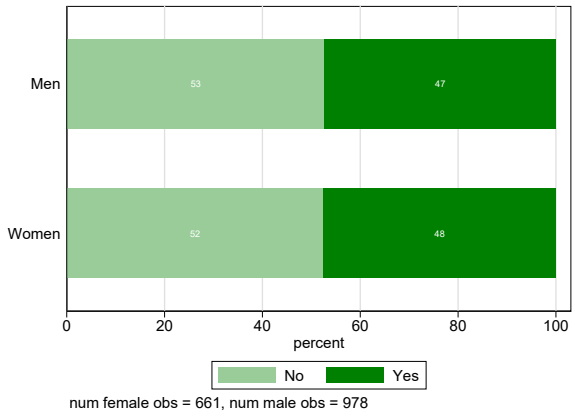


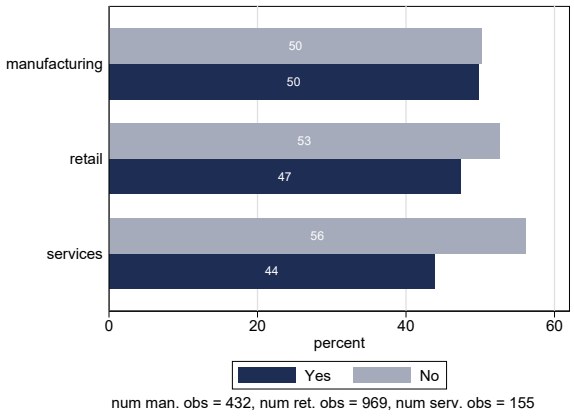
Figure 5: Average Sales over time, by sector type



Q: Has your business adjusted its business model to reduce being directly in physical proximity with customers?



(a) By gender

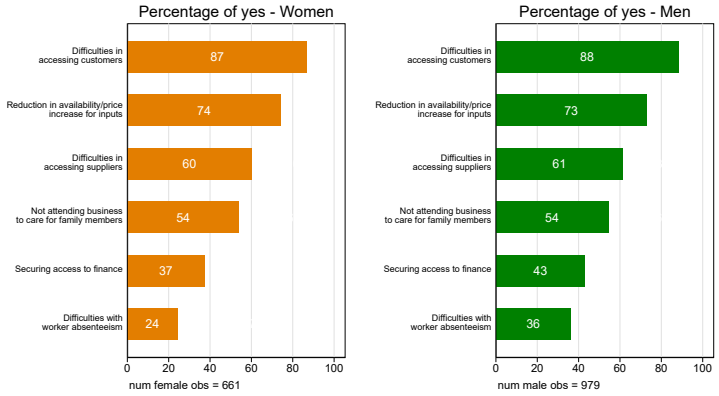


(b) By sector

Figure 6: Adjusted business model from Covid19

Q: In the last 30 days, has your business been facing any of the following challenges due to the coronavirus/COVID-19 outbreak and related restrictions?

- Difficulties in accessing customers
- Difficulties in accessing suppliers
- Reduction in the availability and/or price increases for the main inputs
- Difficulties with worker absenteeism
- Difficulties in securing access to finance (e.g. banks or microfinance institutions are closed or operate at restricted capacity)
- Difficulties tending to my business because I have to take care of a family member (e.g. children, sick relative, etc)

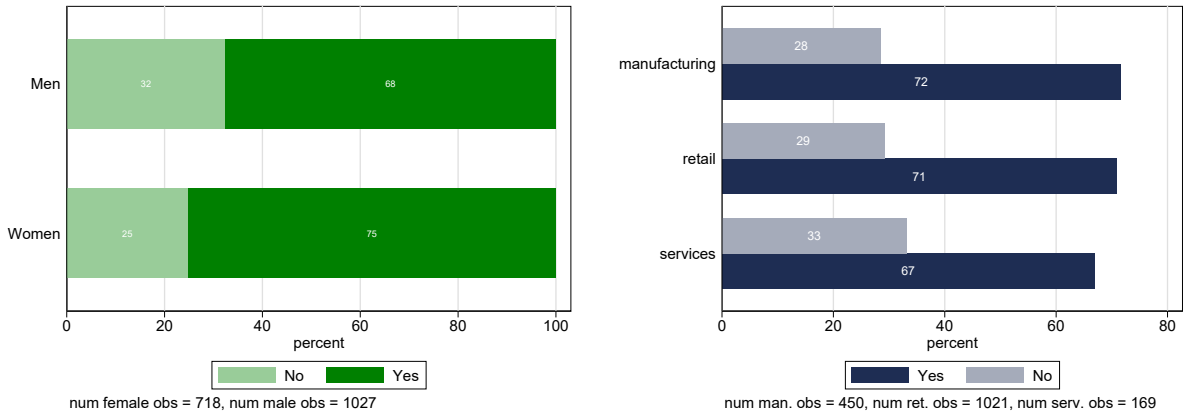


(a) By gender

(b) By sector

Figure 7: Problems Faced Due to COVID19

Q: In the past two months, have you had to increase the time you spend caring for other members of your household due to corona virus?



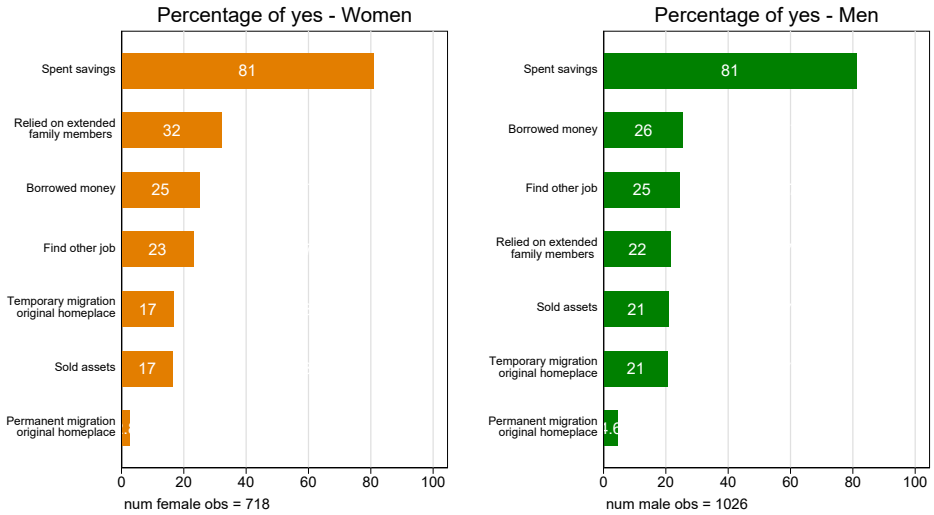
(a) By gender **(b)** By sector

Figure 8: Percentage having to increase time spent caring for family members

Q: In the last 60 days, have you had to do any of the following?

- Temporarily migrated back to my original homeplace
- Permanently migrated back to my original homeplace
- Find another job/earnings occupation
- Spent savings to cover living expenses
- Borrowed money to cover living expenses
- Sold assets to cover living expenses
- Relied on the help of extended family members to cover living expenses

Figure 9: Other COVID19 Related Questions



Q: In the last 30 days, how many of your workers experienced any of the following as a result of the coronavirus/covid-19 outbreak and related restrictions?

- Temporary layoff/suspension of work (without pay)
- Permanent layoff/suspension of work (without pay)
- Reduction in earnings for workers or delays in wage payment
- 71.77% of female-owned businesses and 79.46% of male-owned have at least one employee.

Note: Sample in Figure 12 is restricted to businesses with at least one employee.

Figure 10: Employee covid related problems - Percentage saying yes

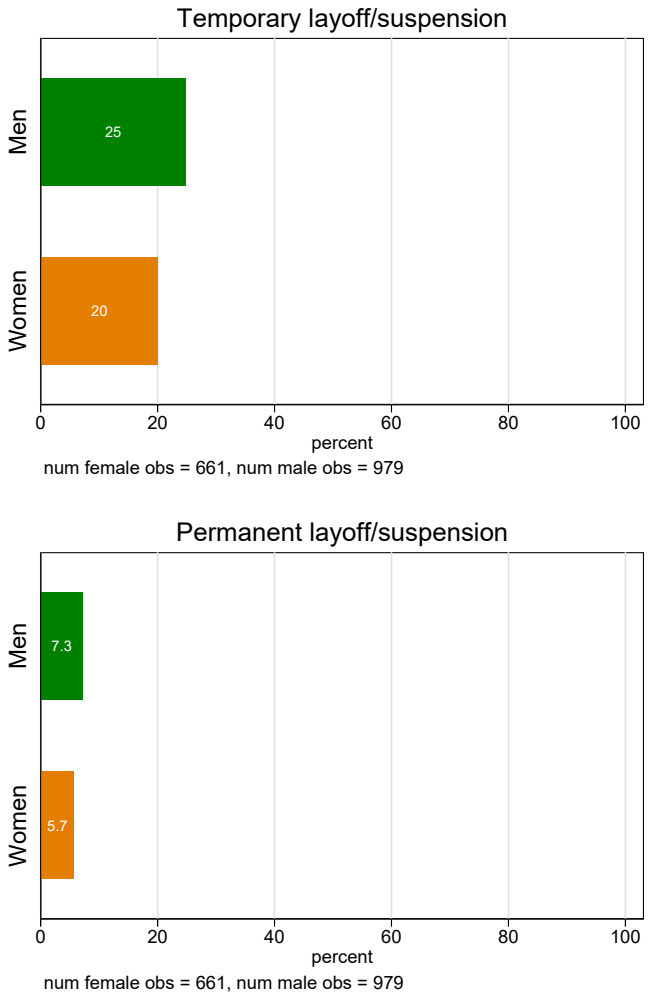


Figure 11: Average number of employees over time

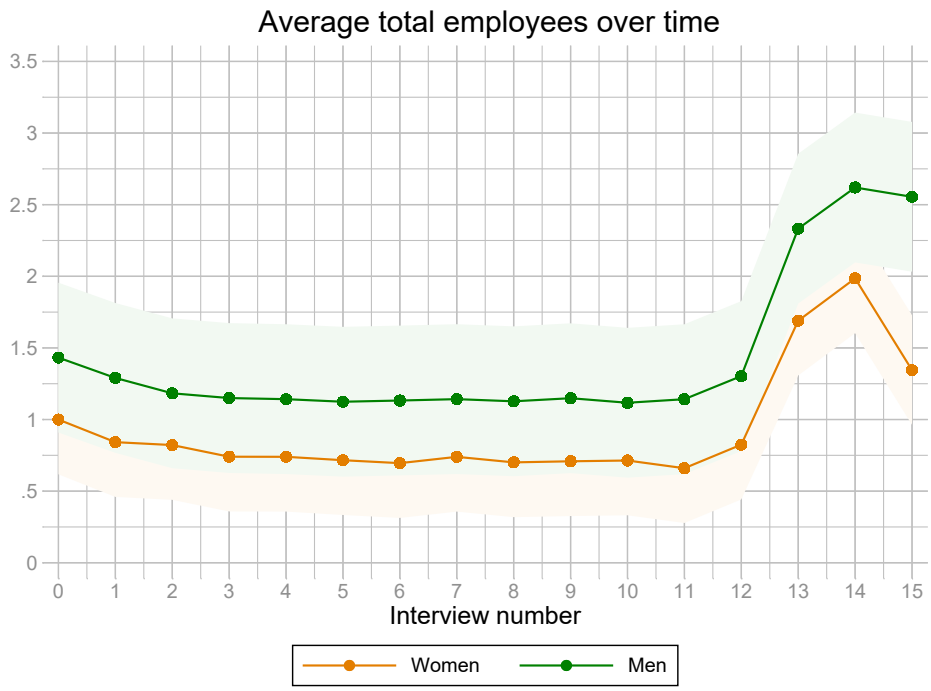
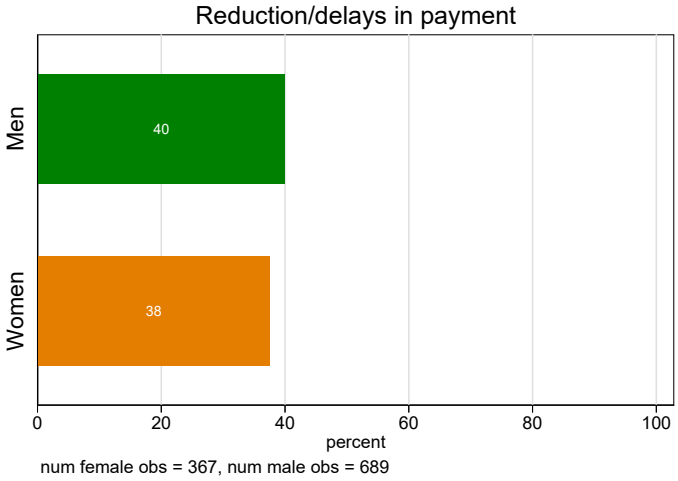


Figure 12: Employee covid related problems - Percentage saying yes

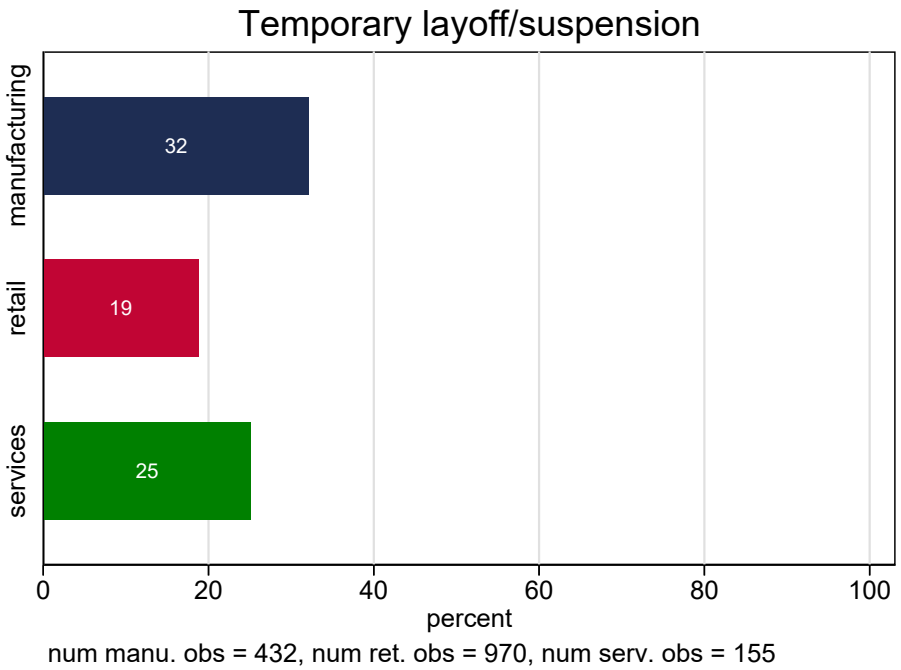


Q: In the last 30 days, how many of your workers experienced any of the following as a result of the coronavirus/covid-19 outbreak and related restrictions?

- Temporary layoff/suspension of work (without pay)
- Permanent layoff/suspension of work (without pay)
- Reduction in earnings for workers or delays in wage payment
- 78.22% of manufacturing businesses, 60.12% of retail and 78.70% of services have at least one employee.

Note: Sample in Figure 15 is restricted to businesses with at least one employee.

Figure 13: Employee covid related problems - Percentage saying yes



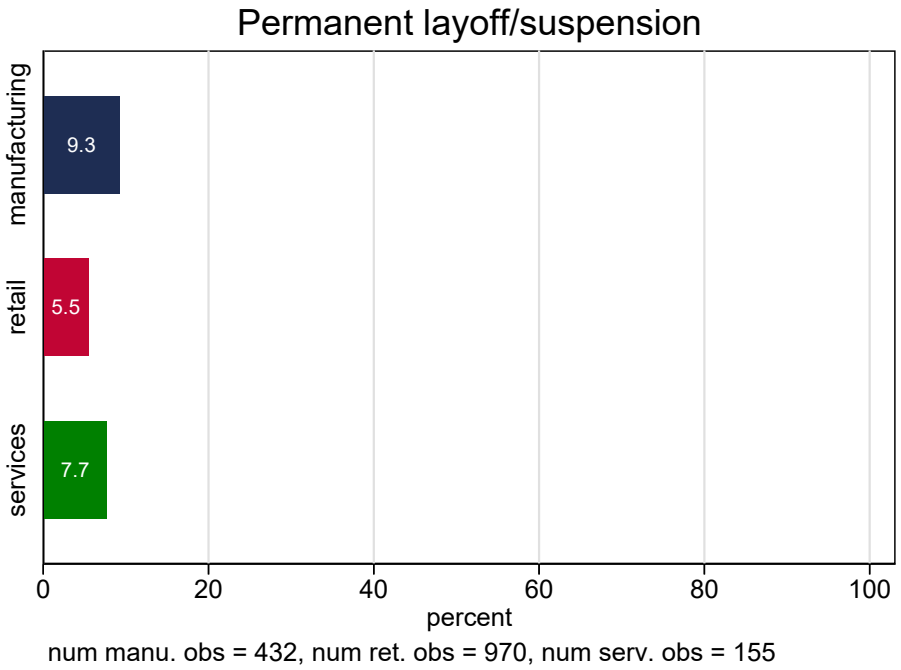


Figure 14: Average Number of Employees over time, by sector type (more aggregate)

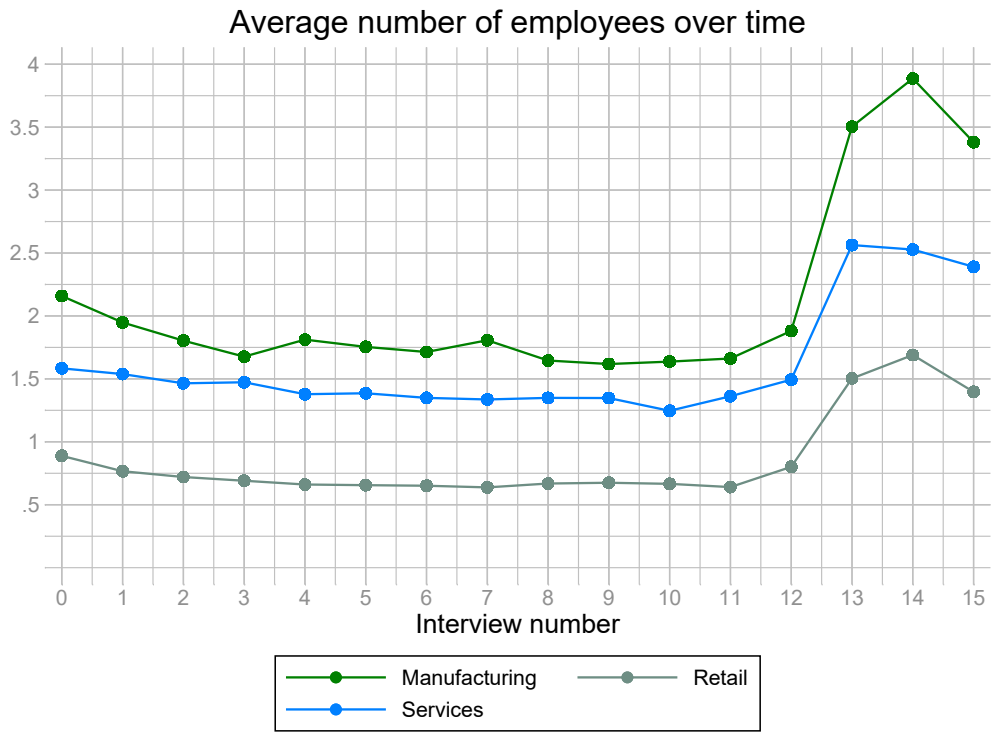
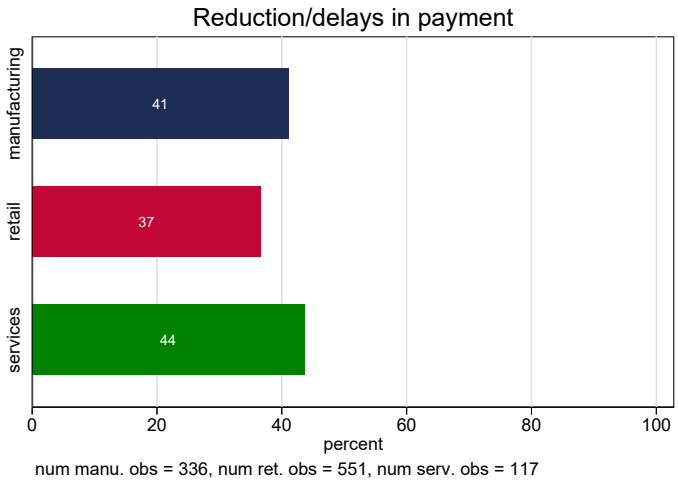


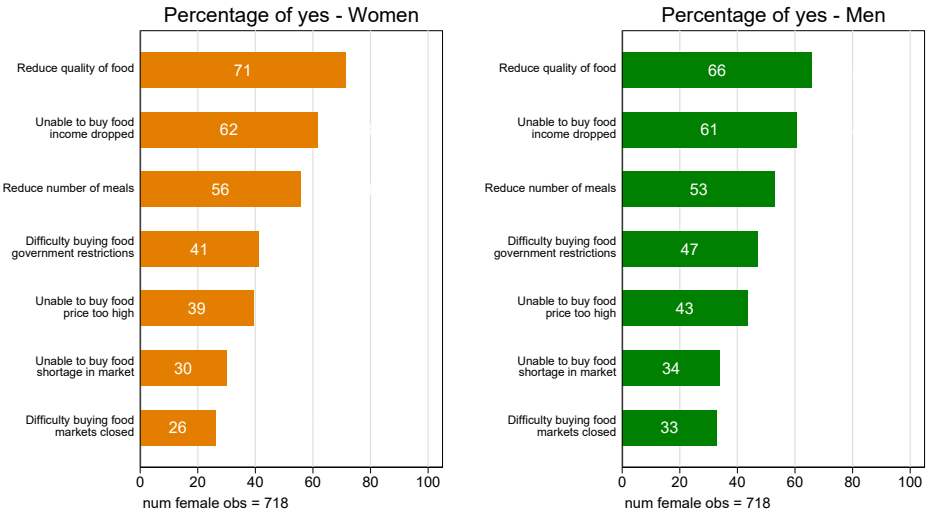
Figure 15: Employee covid related problems - Percentage saying yes



Q: Have you or any of your family members experienced one of these difficulties in the past 7 days

- Difficulties in going to food markets due to mobility restrictions imposed by government
- Difficulties in going to food markets due to most food markets being closed
- Unable to buy the amount of food we usually buy because of shortages in the markets
- Unable to buy the amount of food we usually buy because price of food was too high
- Unable to buy the amount of food we usually buy because our household income has dropped
- Had to reduce the number of meals and/or the portion of each meal we would usually eat
- Had to reduce the quality of food compared to what we usually eat

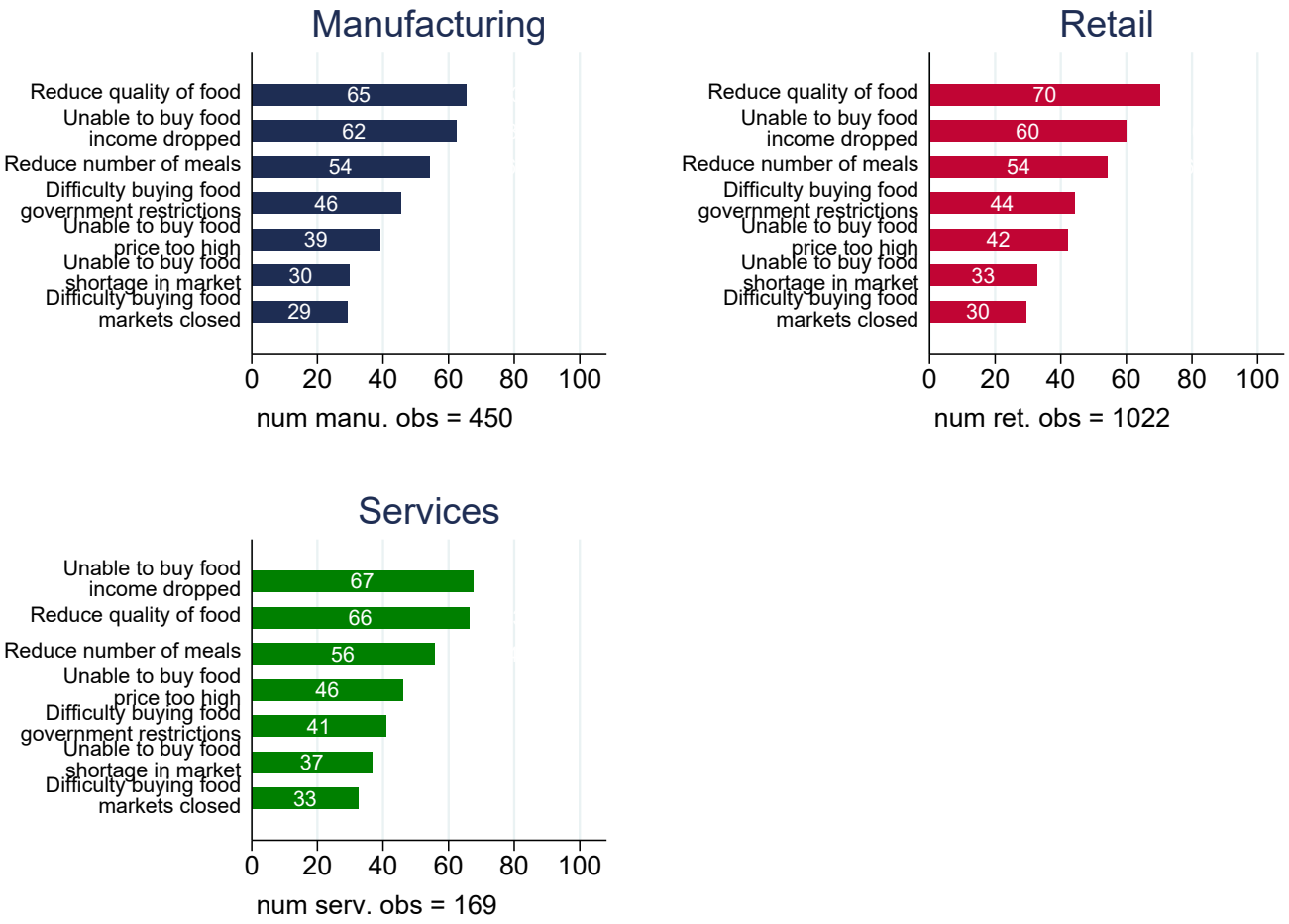
Figure 16: Food Security Questions - Percentage saying yes



Q: Have you or any of your family members experienced one of these difficulties in the past 7 days

- Difficulties in going to food markets due to mobility restrictions imposed by government
- Difficulties in going to food markets due to most food markets being closed
- Unable to buy the amount of food we usually buy because of shortages in the markets
- Unable to buy the amount of food we usually buy because price of food was too high
- Unable to buy the amount of food we usually buy because our household income has dropped
- Had to reduce the number of meals and/or the portion of each meal we would usually eat
- Had to reduce the quality of food compared to what we usually eat

Figure 17: Food Security Questions - Percentage saying yes



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