



**THE WORLD BANK**  
IBRD • IDA | WORLD BANK GROUP



# **COVID-19 RAPID FIRM TRACKER**



## **HIGHLIGHTS OF FINDINGS: WAVES I - III**

**GHANA STATISTICAL SERVICE  
FEBRUARY 2022**

# COVID-19 Rapid Firm Tracker

## Highlights of Findings: Waves I - III

Firms continue to recover from the shocks caused by the COVID-19 pandemic. The Ghana Statistical Service (GSS) in collaboration with the United Nations Development Programme (UNDP) and the World Bank, continues to track the impact of the pandemic on Ghanaian businesses with the Business Tracker Survey. The survey aims at providing critical information to help the Government of Ghana, development partners and other organizations monitor the effects of the COVID-19 pandemic on businesses. The third round was conducted between 1<sup>st</sup> to 30<sup>th</sup> September 2021, following up on the second and first rounds conducted between May 26 and June 7, 2020, and August 15 and September 10, 2020 respectively. A balanced panel of 3,602 firms across the three waves were used for the analyses. Key findings are:

- **Reopening of permanently closed firms:** In Wave III, 97.5% of firms were open, an increase of 22 percentage points since Wave I with firms in accommodation and food recording the greatest increase (32 percentage points). Almost half (49.5%) of firms that fully closed in Wave II were fully opened in Wave III.
- **Employment:** Employment response to the pandemic has also changed considerably with declines in reduced hours of work which was about five times lower in Wave III (14.8% to 3.2%), reduced wages which was about four times lower (16.5% to 4.1%) and leave without pay which fell from 7.2 percent to 0.8%. Across business establishments, 1.0 percent of the workforce were laid off in Wave III compared to 1.3 percent in Wave I.
- **Government intervention:** Government stimulus led to an increase in sales by 11.5 percent with small firms benefitting the most with almost double the increase (22%). Sales increased by 33 percentage points between Waves I and III with the change mainly driven by firms in the top 35th percentile.
- **Access to inputs and finance:** Access to inputs increased six-fold between Waves I and III (3.5% to 24.1%) while access to finance rose from less than 1 percent to almost 8.6 percent.
- **Expectation:** When asked about their most likely scenario for the next six month, firms report that they expect an increase in sales of 26.8 percent on average. Under a more pessimistic and optimistic scenario, the expected change in sales is respectively a decrease of 22.9 percent and an increase of 38.9 percent. This indicates that the overall outlook of firms is positive (and an improvement compared to the first round), but that uncertainty remains.
- **Digital solutions:** During Wave III, the use of mobile money by businesses increased. About 70 percent of firms report using mobile money in the third-round survey, compared to 53.4 percent in the second round. The share of business establishments that have adopted or increased the use of internet for sales increased from 8.4 percent to 13.2 percent.
- **AfCFTA:** Generally, awareness of the Africa Continental Free Trade Agreement (AfCFTA) by firms increased during the third wave. Now more than half of firms (53.1%) report that they are aware, up from a quarter (26.1%) in Wave II.
- **Firms' policy desires:** Across the three waves, Cash transfer (33.5 percentage points) and Access to new credit (26.7 percentage points) were firms' policy desires that recorded the highest percentage points increase.

The findings indicate that there have been remarkable improvements through a variety of channels, and some continuing impacts in the future can be expected. Firms have shown adjustments in their operations – through reopening, increased usage of digital solutions for sales – and also government interventions have provided support to firms. In the longer term, policies that (i) increase customer and business confidence, (ii) help re-establish broken supply channels, and (iii) assist firms adjusting to the new reality (e.g., by leveraging digital technologies) can be expected to help businesses recover from the shock.

## About this survey

The third round of the COVID-19 Business Tracker Survey (BTS) was conducted in September 2021 and re-interviewed firms from the second wave of the survey (August-September 2020). The BTS was conducted by the Ghana Statistical Service (GSS), in collaboration with UNDP and the World Bank, to better understand the impact of COVID-19 on the private sector. A balanced sample of 3,602 business establishments and household firms were consistently interviewed in all three rounds of the survey. The original sample of 4,311 in the first round reduced to 3,658 due to attrition in the second wave. During the third wave, an additional 1,200 new firms were added to arrive at 4,858. The sample for the survey was drawn from the 2013 Integrated Business Establishment Survey (IBES), the 2017 Ghana Living Standard Survey (GLSS), and supplemented with listings of SMEs provided by the National Board for Small Scale Industries (NBSSI) to ensure inclusion of recently established firms. The sample is nationally and regionally representative (see also Box 1 for a description of the methodology).

## Recovery of firms

Over the three waves, firms show signs of recovery from the impact of the pandemic. These recoveries are reflected in multiple channels such as improvements in sales, increased access to inputs, increased access to finance, increases in cashflow among others.

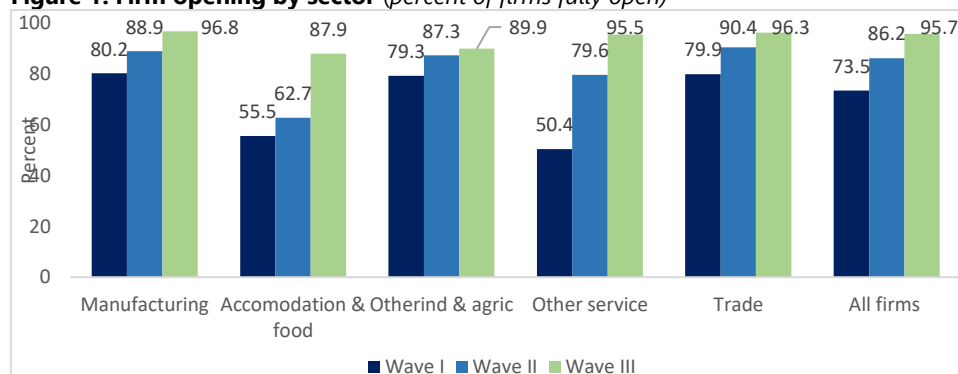


### FIRMS' OPERATING STATUS

During the third round of the survey (September 2021), 95.7 percent of firms reported to be fully opened, much higher than the 73.5 percent reported during Wave I (May-June 2020) and 86.2 percent in Wave II (August-September 2020). Firms in manufacturing (96.8%) and trade (96.3%) were the most opened during the third round. Relative to Wave I, two sectors recorded the highest opening in Wave III: accommodation and food (from 55.5% to 87.9%) and other services (from 50.4% to 95.5%) (Figure 1).

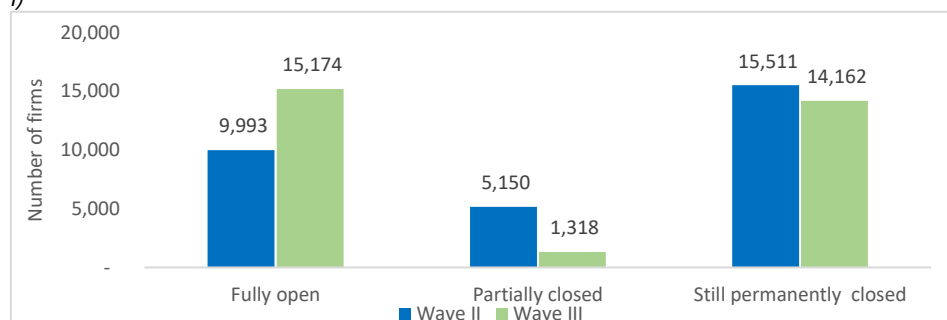
Over the last two waves, firms that reported to be permanently closed during Wave I (6.0%) of all firms have been reopening. Relative to the second wave, 15,174 (2.4%) of these firms have fully reopened in Wave III, indicating a 16.9 percentage point increase between the last two waves (Figure 2). Nevertheless, 14,162 (2.2%) of these firms are still permanently closed in Wave III.

**Figure 1: Firm opening by sector (percent of firms fully open)**



Note: Wave I relates to May-June 2020, Wave II to August-September 2020 and Wave III to September 2021.

**Figure 2: Reopening of fully closed firms (number of firms that were fully closed in Wave I)**





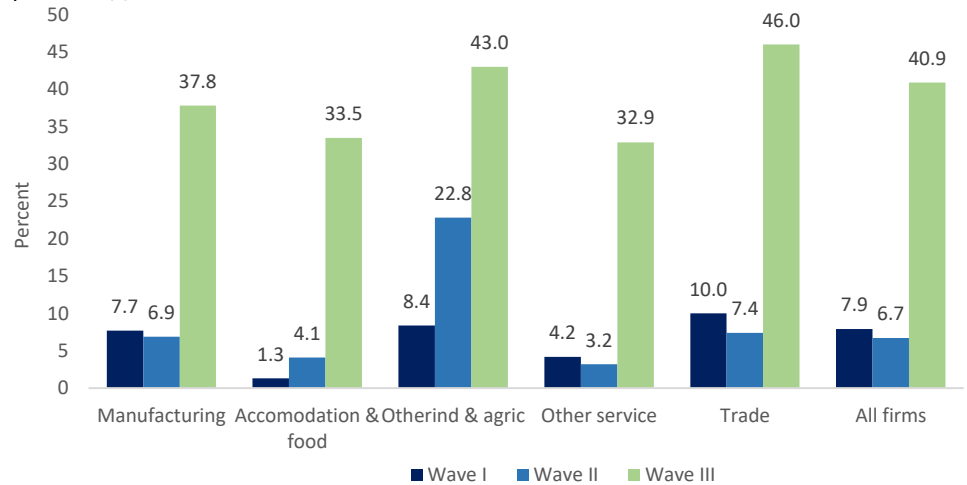
**DEMAND RECOVERY**

Firms reported improvements in sales compared to the earlier waves of the survey. The share of firms reporting increases in sales went up by 33.0 percentage points in September 2021 (Wave III) compared to March-April 2020 (during the lockdown). In the third round, two out of every five firms (40.9%) reported increases in sales compared to 6.7 percent in the second-round.

The pattern of increases in sales is evident across all sectors (Figure 3). Compared to Wave II, the sectors with the largest increase in sales in Wave III are Trade (7.4% to 46.0% respectively), manufacturing (6.9% to 37.8% respectively), other service (3.2% to 32.9% respectively) and accommodation food (4.1% to 33.5% respectively).

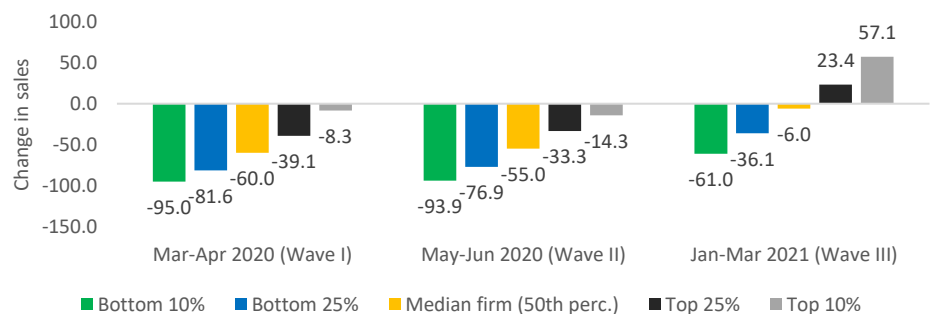
There is nevertheless significant heterogeneity between firms in the extent they have been able to recover sales (Figure 4). Although most firms report higher sales in the third wave, a firm in the bottom 10<sup>th</sup> percentile still saw a decrease of 61 percent in sales, while a firm in the top 10<sup>th</sup> percentile saw an increase of 57 percent. This indicates that recovery has not been the same for every firm.

**Figure 3: Firms with increases in sales compared to the same period in the previous year (percent of firms)**



Note: for wave I, the sales figures refer to March-April 2020, May-June 2020 for wave II and, January-March 2021 for wave III. Note that sales indicators refer to a slightly earlier time period than other indicators for the same wave.

**Figure 4: The distribution of the change in sales (change in sales compared to same period in the previous year)**



Note: the change in sales is reported compared to the same period in the previous year. The groups represent the 10<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup> (median), 75<sup>th</sup> and 10<sup>th</sup> percentile of the distribution in change in sales.

## Outlook of sales

Even though lockdown measures have been relaxed, firms continue to report uncertainty. The survey asked firms for their sales expectations of what they considered most likely, and what a more pessimistic and optimistic scenario could look like. The results show a continued high degree of uncertainty in the sales expectations of firms, with some movement towards a more positive outlook. Uncertainty is an important additional channel affecting firms during the pandemic, and as the economy re-opens, this could still result in a lower desire for risk and investments.



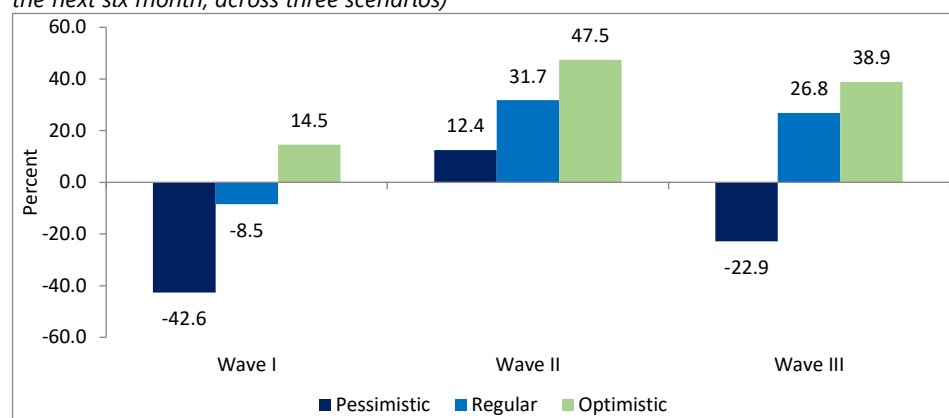
### EXPECTATIONS

The overall projections of firms on future sales are positive. In the scenario that firms perceive as the most likely (the “regular” scenario in Figure 5), firms expect on average an increase in sales of 26.8 percent over the next six months. This is slightly lower than during the second wave, but higher than the first wave<sup>1</sup>,

In the most pessimistic scenario, firms anticipated a decline in demand of 22.9 percent in Wave III, which is worse than the positive sales outlook (12.4%) in Wave II, but lower than in Wave I. The optimistic scenario continues to show positive sales increases (38.9%).

Nevertheless, there is still a wide range between the optimistic scenario (on average a 38.9 percent increase) and the pessimistic scenario (on average a 22.9 percent decline), highlighting that firms still anticipate potential volatility in sales over the next six months.

**Figure 5: Outlook of sales in 6-months from survey period** (expected change in sales in the next six month, across three scenarios)



Note: each firm was asked to give sales projections for the next six months over three scenarios: a regular (most likely) scenario, a pessimistic and an optimistic scenario. The reported figures are the average projections across each scenario.

## Channels impacting firms



### ACCESS TO INPUTS AND SUPPLIES

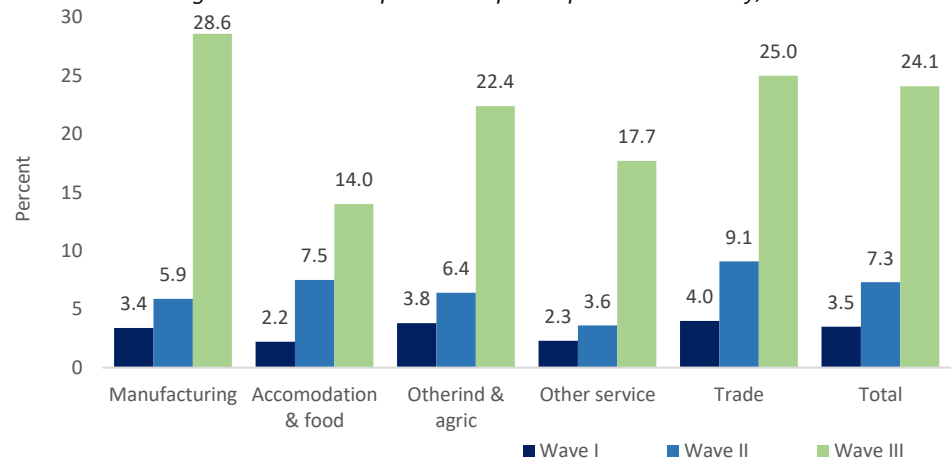
Firms seem to recover from the difficulty in sourcing inputs (Figure 6). In Wave I, for most firms access to inputs worsened. Only 3.5 percent of firms reported of increased access to inputs. Following the same firms in Wave II, there was an increase to 7.3 percent of firms experiencing an increase in accessing inputs. However, the Wave III results show that there was a significant recovery with 24.1 percent of firms reporting an increase in accessing inputs for production in Wave III.

This is also reflected across the sectors. The manufacturing sector has seen the highest increase in accessing inputs for production from 3.4 percent in Wave I to 28.6 percent in Wave III. This is followed by the Trade sector which increased from 4.0 percent to 25.0 percent during the same period. The Accommodation and food sector having experienced the second highest increase in accessing inputs in Wave II recorded the lowest percentage increase in inputs in

<sup>1</sup> In earlier waves, this question was only asked to medium and large firms, while in the third wave the question was asked to all firms. If in the third wave, the sample was restricted to similar firms as in Waves II and III, the results would be qualitatively similar.

Wave III (14.0%). Across the types of firms, household firms recorded the highest recovery of 34.1 percent in terms of access to inputs for production in Wave III (Table 1).

**Figure 6: Increase in accessing inputs by business establishments** (share of firms reporting an increase in being able to access inputs in the period prior to the survey)



Note: This graph reports the share of firms reporting that access to inputs had increased during the period prior to the survey (for Wave III, this covers the period January-September 2021, for Wave II, July-August 2020, for Wave I, March-June 2020).

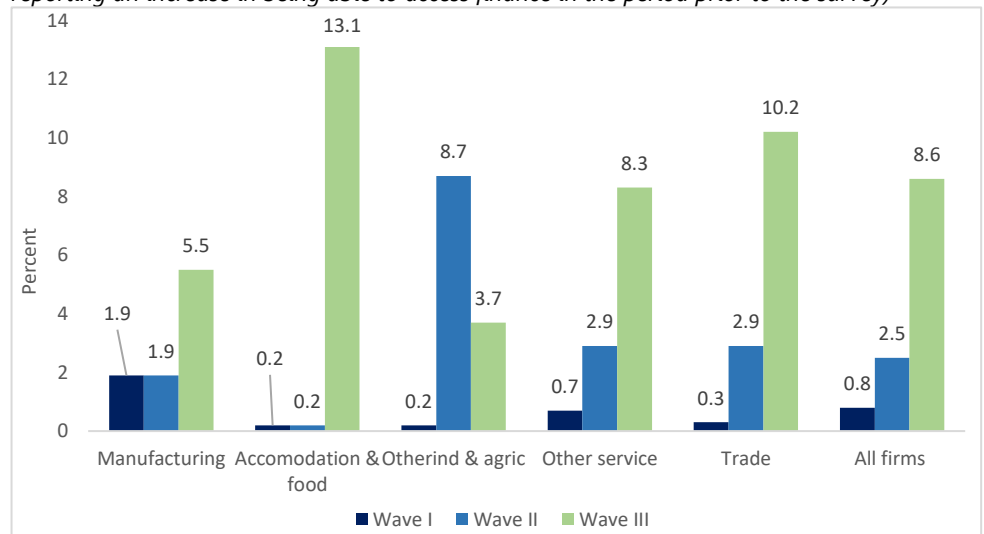


**ACCESS TO FINANCE**

Firms show some level of financial recovery some months after the emergence of Covid-19 pandemic in the country with its accompanied restrictions including the partial lockdown. From 0.8 percent in Wave II to 8.6 percent in Wave III, business establishments (all firms) have experienced an increase in access to financial services (Figure 7). Across sectors, the accommodation and food sector recorded the highest access to financial services in Wave III (13.1%) from 0.2 percent in Waves I and II. The agricultural and other industries sector, however, experienced a decline in access to finance from a recovery of 8.7 percent in Wave II to 3.7 percent in Wave III.

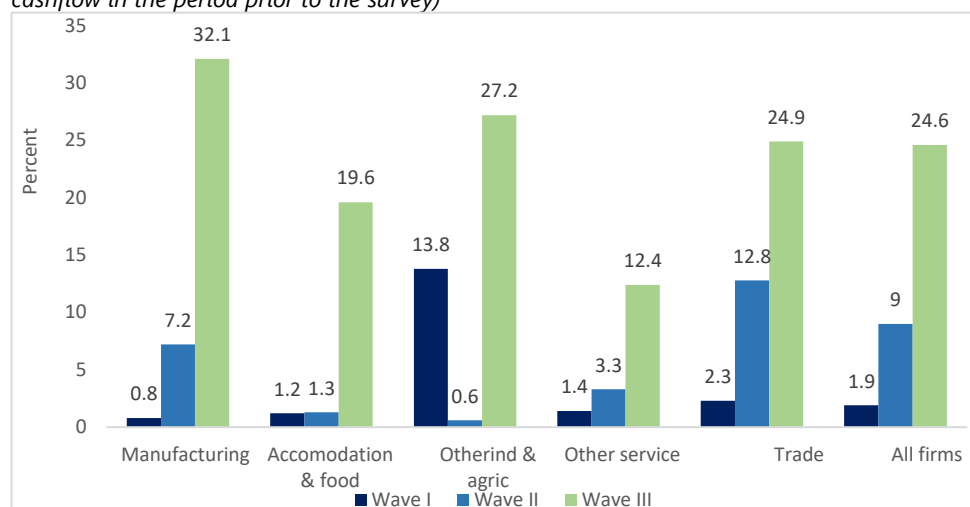
Cashflow for business establishments have also seen significant recovery from as low as 1.9 percent of business establishments reporting an increase in cashflow in Wave I to 9 percent in Wave II and a further increase to 24.6 percent in Wave III (Table 1). Unlike access to finance, all sectors experienced an increase in their cashflows across the three waves. The manufacturing sector experienced the highest recovery with 32.1 percent reporting an increase in cashflow in Wave III from 0.8 percent in Wave I.

**Figure 7: Increase in accessing finance by business establishments** (percent of firms reporting an increase in being able to access finance in the period prior to the survey)



Note: This graph reports the share of firms reporting that access to finance had increased during the period prior to the survey (for Wave III, this covers the period January-September 2021, for Wave II, July-August 2020, for Wave I, March-June 2020).

**Figure 8: Firms reporting an increase in cashflow** (percent of firms reporting an increase in cashflow in the period prior to the survey)



Note: This graph reports the share of firms reporting that their cashflow position had increased during the period prior to the survey (for Wave III, this covers the period January-September 2021, for Wave II, July-August 2020, for Wave I, March-June 2020).

**Table 1: Channels through which firms are recovering** in percent of firms

	Increase in access to financial services			Cashflow increase			Increase in accessing inputs			Sales increase			Firms being fully open		
	Wave I	Wave II	Wave III	Wave I	Wave II	Wave III	Wave I	Wave II	Wave III	Wave I	Wave II	Wave III	Wave I	Wave II	Wave III
Business Establishments*	0.7	2.5	8.6	1.9	9.0	24.6	3.5	7.3	24.1	7.9	6.7	41.0	73.5	86.2	95.7
Household firms	1.0	1.5	13.3	2.7	7.9	25.1	2.9	12.7	34.1	6.0	10.5	31.0	85.0	89.5	96.9
Young SMEs**	9.8	4.1	23.7	1.4	6.3	26.0	10.6	16.5	26.0	6.6	7.6	33.7	78.3	88.0	93.5
<b>Sector</b>															
Manufacturing	1.9	1.9	5.5	0.8	7.2	32.1	3.4	5.9	28.6	7.7	6.9	37.8	80.2	88.9	96.8
Accommodation & food	0.2	0.2	13.1	1.2	1.3	19.6	2.2	7.5	14.0	1.3	4.1	33.5	55.5	62.7	87.9
Agric & Other industries	0.2	8.7	3.7	13.8	0.6	27.2	3.8	6.4	22.4	8.4	22.8	43.0	79.3	87.3	89.9
Other service	0.7	2.9	8.3	1.4	3.3	12.4	2.3	3.6	17.7	4.2	3.2	32.9	50.4	79.6	95.5
Trade	0.3	2.9	10.2	2.3	12.8	24.9	4.0	9.1	25.0	10.0	7.4	46.0	79.9	90.4	96.3
<b>Size of Firm</b>															
Micro (1-5)	0.9	2.2	7.7	1.4	8.9	23.8	3.4	6.4	25.0	8.1	6.1	42.1	71.5	85.1	95.6
Small (6-30)	0.5	3.5	9.3	3.1	9.2	26.7	3.5	11.0	19.7	6.8	8.6	34.0	83.1	91.8	95.9
Medium (31-100)	0.1	1.8	44.9	7.6	9.6	43.4	10.2	5.5	36.5	10.7	12.3	66.2	56.8	70.1	98.0
Large (100+)	4.6	6.2	5.4	27.1	4.2	34.9	3.6	5.0	13.4	29.7	32.5	57.4	90.6	96.9	100
<b>All firms</b>	<b>0.8</b>	<b>2.5</b>	<b>8.6</b>	<b>1.9</b>	<b>9.0</b>	<b>24.6</b>	<b>3.5</b>	<b>7.3</b>	<b>24.1</b>	<b>7.9</b>	<b>6.7</b>	<b>40.9</b>	<b>73.5</b>	<b>86.2</b>	<b>95.7</b>

\* Based on the 2013 IBES sample. \*\* Based on SMEs from NBSSI (currently GEA) client lists founded after 2013

Note: The increase in access to financial services, the increase in cashflow and the increase in being able to access inputs relates to the period prior to the survey (for Wave III, this covers the period January-September 2021, for Wave II, July-August 2020, for Wave I, March-June 2020). The increase in sales is relative to sales in the same period last year (Wave III refers to January-March 2021, Wave II to May-June 2020 and Wave I refers to March-April 2020). This table is based on a balanced panel, including only firms that were interviewed in all three rounds

## Responses by firms

Even though there have been remarkable improvements in sales in the third round of the survey compared to the first two, the implications of COVID-19 on employment and the operating model of firms still exist in minimal form across all the sectors.



### IMPACT ON JOBS

Earlier waves showed that the most common response of firms was to reduce wages or to reduce hours. In the third wave, firms continue to reduce wages for their workers but in moderation compared to Waves I and II (Table 2). About 4.1 percent of the total workforce had their wages reduced in Wave III. This compares to 10.1 percent in Wave II and 16.5 percent in Wave I who had their wages reduced.

These improvements were also exhibited in the proportion of hours worked and persons asked to go on leave without pay. Reduction in the number of hours worked declined from 14.8 percent in Wave I, to 8.0 percent in Wave II and 3.2 percent in Wave III. Improvements can be observed across all the sectors in terms of reduction in wages of workers and hours worked.

Layoffs have been relatively uncommon compared to other adjustments. In the third wave, business establishments report that 1.0 percent of workers were laid off. This share is lower than what was seen in Wave I (1.3%).

**Table 2. Employment responses** (percent of workers)

	Laid off workers			Granted leave of absence			Reduced hours			Reduced wages		
	Wave I	Wave II	Wave III	Wave I	Wave II	Wave III	Wave I	Wave II	Wave III	Wave I	Wave II	Wave III
<b>Firm-Type</b>												
Business Establishments*	1.3	0.5	1.0	7.2	1.5	0.8	14.8	8.0	3.2	16.5	10.1	4.1
Household firms	0.2	0.5	3.0	2.4	0.2	0.0	5.4	3.9	5.7	12.9	9.6	11.4
Young SMEs**	0.0	0.4	0.0	12.2	1.4	1.5	20.1	8.7	2.9	13.7	14.7	13.9
<b>Sector</b>												
Manufacturing	1.3	0.4	0.8	7.5	1.2	1.0	13.1	6.9	2.1	12.2	7.5	2.9
Accommodation & food	4.3	0.3	0.3	11.8	2.3	0.8	27.9	8.5	7.6	34.0	16.1	7.4
Agric & Other industries	0.7	1.2	3.2	17.4	2.9	0.9	13.5	9.6	5.6	21.6	17.4	2.6
Other service	0.9	0.3	1.2	4.3	1.6	0.7	13.8	8.3	4.7	15.9	9.2	7.5
Trade	1.5	0.6	0.4	5.5	0.9	0.3	17.1	8.9	1.5	20.0	13.1	2.5
<b>Size of Firm</b>												
Micro (1-5)	0.9	0.6	1.4	2.6	1.4	1.2	12.0	9.0	4.1	14.1	12.9	8.4
Small (6-30)	2.8	0.7	0.9	9.1	2.1	1.5	21.0	11.8	4.8	22.4	15.1	3.7
Medium (31-100)	0.4	0.3	1.9	11.9	2.1	0.0	22.4	9.8	4.1	25.7	11.4	6.8
Large (100+)	0.4	0.2	0.2	6.2	0.3	0.0	5.6	1.6	0.3	6.4	1.4	0.3
<b>All firms</b>	<b>1.3</b>	<b>0.5</b>	<b>1.0</b>	<b>7.2</b>	<b>1.5</b>	<b>0.8</b>	<b>14.8</b>	<b>8.0</b>	<b>3.2</b>	<b>16.5</b>	<b>10.1</b>	<b>4.2</b>

Note: Employment adjustments relate to the period prior to the survey (for Wave III, this covers the period January-September 2021, for Wave II, July-August 2020, for Wave I, March-June 2020).

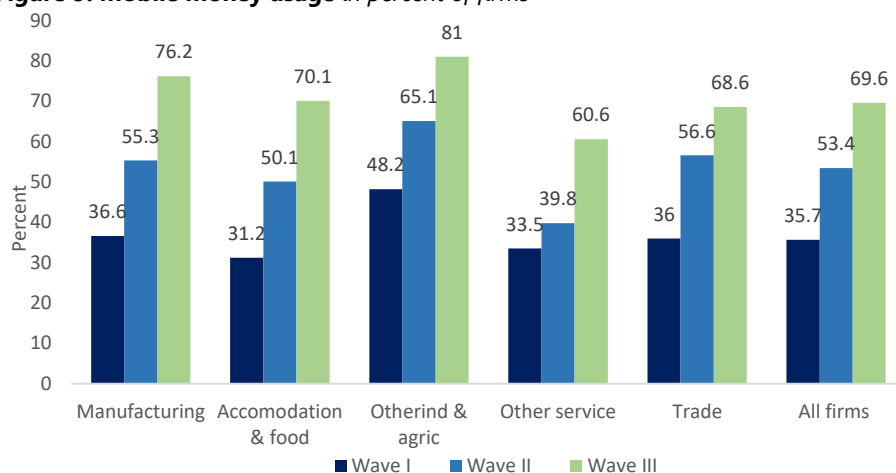




## USE OF DIGITAL SOLUTIONS

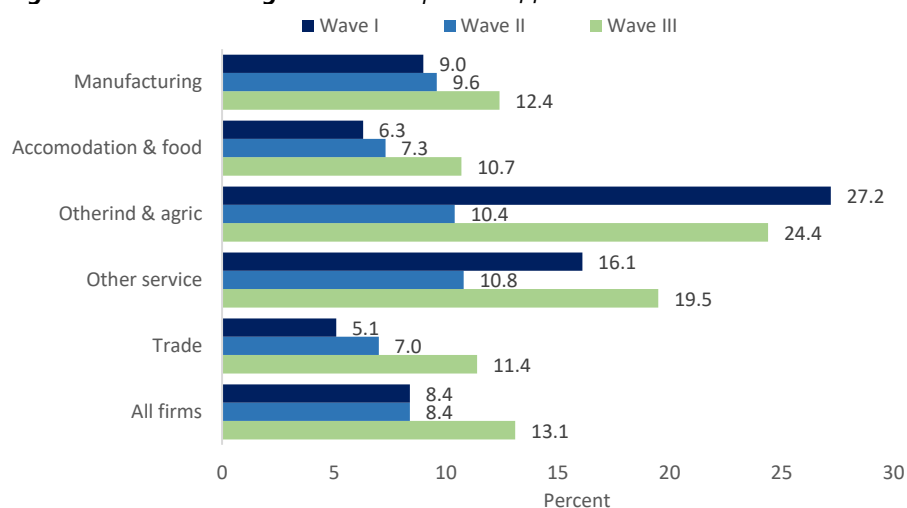
More firms continue to use mobile money and internet for sales across the three waves. About 70 percent of firms report using mobile money in the third wave, compared to 53.4 percent in the second wave. Firms within agriculture and other industries sector are among the highest users of mobile money for sales (81.0%), followed by manufacturing (76.2%) and accommodation & food (70.1%). The use of mobile money increased substantially in all the sectors across the three waves (Figure 9).

**Figure 9: Mobile money usage in percent of firms**



The share of business establishments that have adopted or increased the use of internet for sales increased from 8.4 percent in Waves I and II to 13.1 percent in Wave III. The use of internet by firms within agriculture and other industries increased from 10.4 percent in Wave II to 24.4 percent in Wave III. Firms in the other services sector increased their use of internet for sales by 8.7 percentage points (from 10.8 percent in Wave II to 19.5 percent in Wave III).

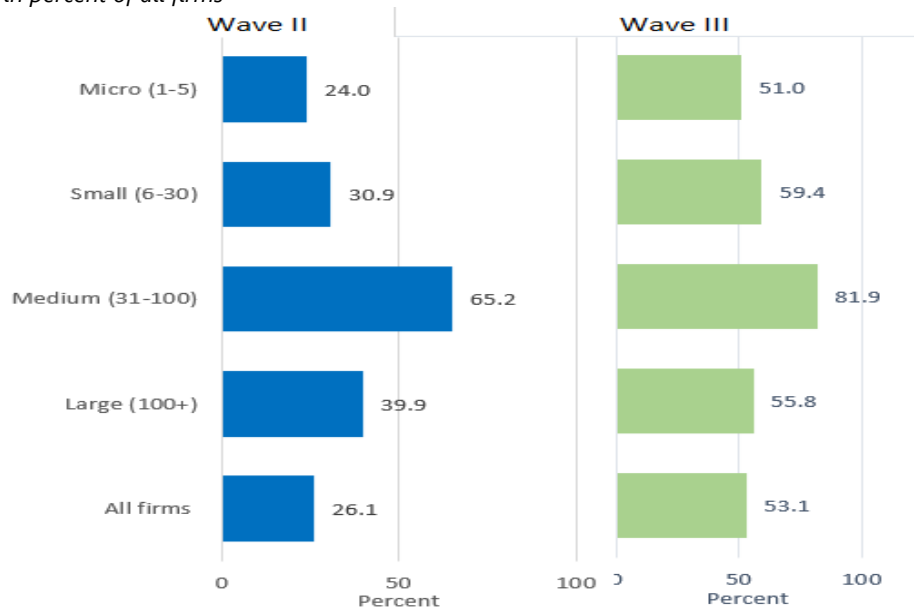
**Figure 10: Internet usage for sales in percent of firms**



## AFRICAN CONTINENTAL FREE TRADE AREA (AfCFTA)

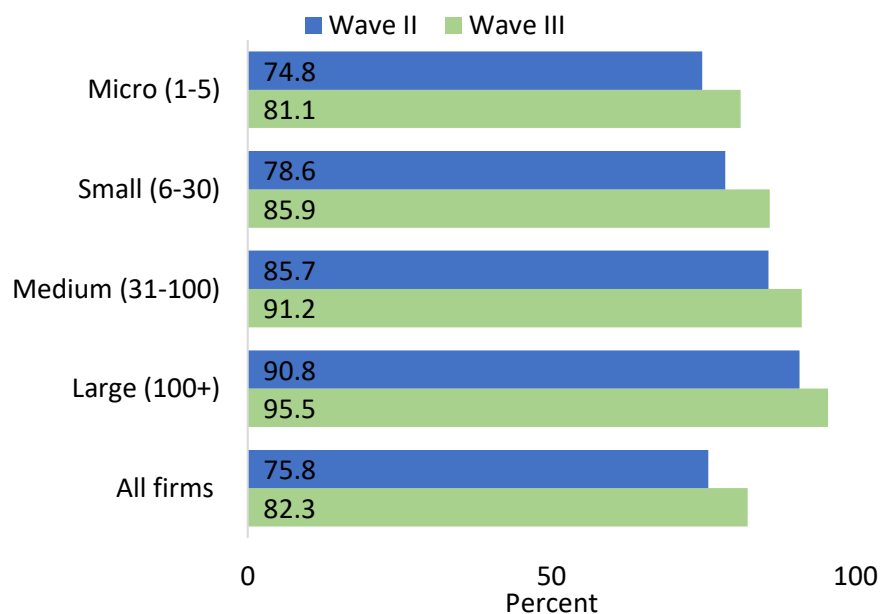
Generally, awareness of AfCFTA by firms increased during the third wave of the survey to 53 percent from 26 percent during Wave II. This awareness increased for all the various sizes of firms within the two waves. Awareness of AfCFTA was highest among medium size firms and increased from 65 percent in Wave II to 82 percent in Wave III. While awareness for large size firms increased from 40 percent in Wave II to 56 percent in Wave III, the increase in small size firms between the last two waves was about 29 percentage points (Figure 11).

**Figure 11: Firm's awareness of the African Continental Free Trade Area (AfCFTA) in percent of all firms**



There is an increase in the belief among firms that AfCFTA will bring some form of transformation to their business. Overall, this belief increased from 76 percent in Wave II to 82 percent in Wave III with large firms dominating (91%). The belief that AfCFTA will transform businesses also increased for the remaining firm sizes across the two waves (Figure 12).

**Figure 12: Firms belief in AfCFTA transformation in percent of firms**



## Policies

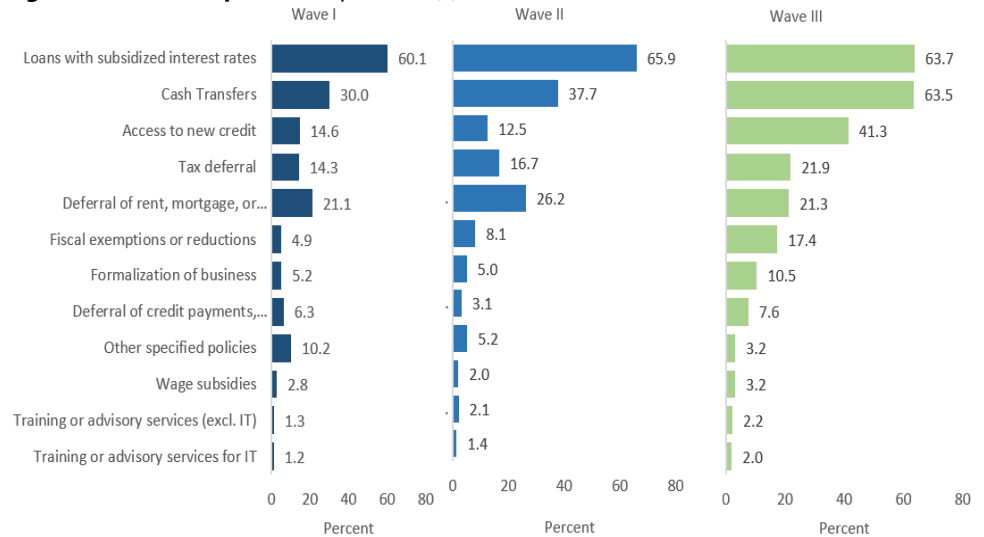
The survey results show that firms continually need support both in the short-and medium-terms. Firms have been consistent with their request to put in measures that will support their businesses. Waves I and II saw loans with subsidized interest rates, cash transfers and deferral of rent, mortgage, or utilities as the three top desired policies of firms. The story however, changed a little in Wave III where the third most desired policy of firms moved from being deferral of rent, mortgage, or utilities to access to new credit. However, firms still maintained their demand for the other two most needed policies with a slight reduction for loans with subsidized interest rates.



## DESIRED POLICIES

Just like previous waves, firms continue to desire policies that help alleviate cash constraints and stay in business. Even though, Waves I and II described loans with subsidized interest rates, cash transfer and deferral of rent as the top three most desired policies of firms, in the third wave more firms report access to new credit as a desired policy (14.6% in Wave I to 41.3% in Wave III). Firms who sought for loans with subsidized interest rates reduced slightly between Wave II (65.9%) and Wave III (63.7%). Cash transfers as desired policy increased remarkably from 30 percent in Wave I to 37.7 percent in Wave II and then to 63.5 percent in Wave III (Figure 13).

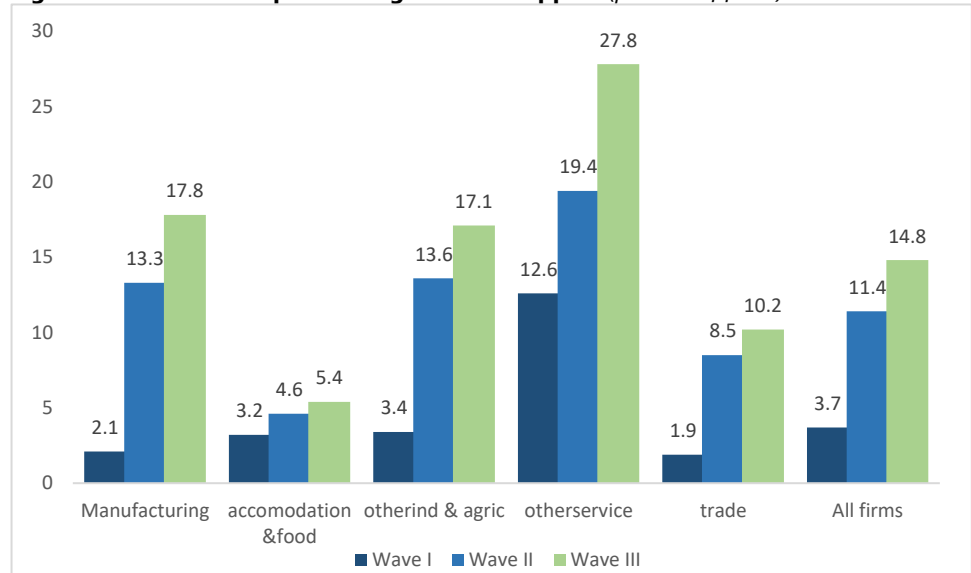
**Figure 13: Desired policies in percent of firms**



## SUPPORT RECEIVED

The share of firms having ever received support is almost four times in Wave III (14.8%) compared to Wave I (3.7%). The share of firms who reported of having received government support increased by 3.4 percentage points in Wave III compared to Wave II (11.4%). Firms in the other services sector recorded the highest for having ever received support in Wave III (27.8%) while accommodation and food recorded the lowest with 5.4 percent (Figure 14).

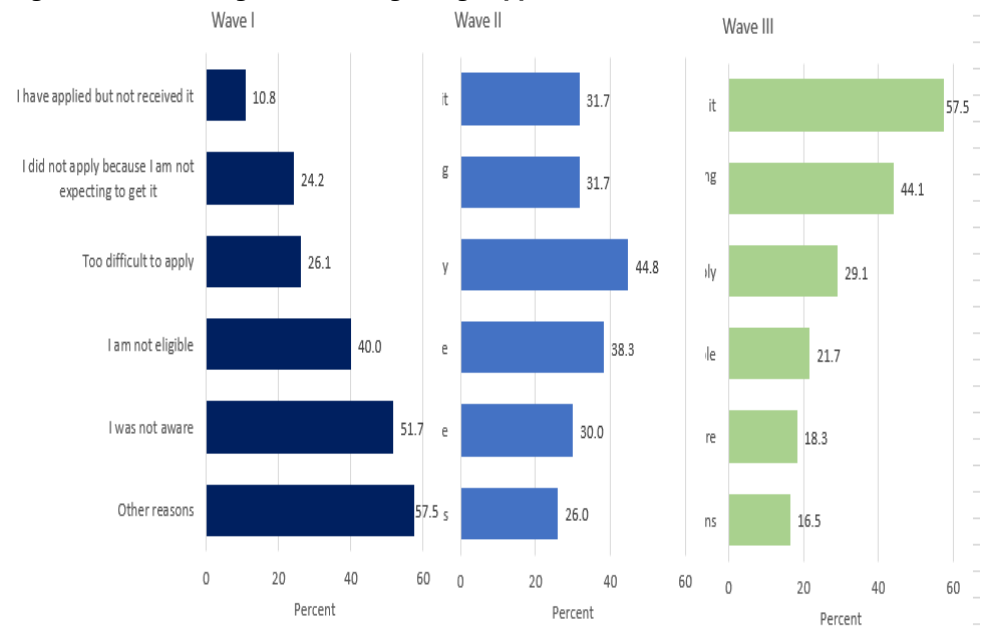
**Figure 14: Firms that report having received support (percent of firms)**



For the firms that did not receive support, a lack of awareness is now less often given as a reason. The share of firms reporting a lack of awareness declined from Wave I (51.7%) to Wave III (18.3%). This indicates that support schemes have now become more known to firms. A higher proportion of firms in Wave III, about 58 percent reported that they have applied for support but did not receive it. The share of firms that did not apply for support because they did not expect to get it increased from 24.2 percent in Wave I to 44.1 percent in Wave

III. The share of firms indicating that it was too difficult to apply decreased to 29.1 percent in Wave III from 44.8 percent during Wave II. Firms who indicated they were not eligible for support, also decreased from 38.3 percent to 21.7 percent between Waves II and III (Figure 15).

**Figure 15: Reasons given for not getting support**



**IMPACTS OF SUPPORT**

Since the pandemic emerged, the national and local government have rolled out support schemes to help cushion the firms to survive the pandemic. Assessing the impact of these schemes is difficult, since the group of firms that receive support and those who did not are often dissimilar in their characteristics and performance. Support schemes often target firms that would benefit the most from a scheme, introducing potential selection biases.

With these caveats in mind, a difference-in-difference analysis allows for some assessment of the relationship between government support and the sales of firms. This analysis compares the trajectories of firms that received support with those who did not receive support.<sup>2</sup> Sales from 2019 reported in Waves I and II were used as the pre-government support sales value. Sales from 2020 in waves 1 and 2 and sales in 2021 from Wave III were used as the period of the government support. Results from the difference-in-difference on sales on the panel data is presented in Table 3.

The results show a positive relationship between government support and the sales of the firms. Thus, firms with government support experienced 11.5 percent higher sales than firms that did not receive any government support. A breakdown by sector of firms and size revealed that the impact was not felt across all types of firms. Manufacturing, and Accommodation and food sectors were the only sectors where firms that received government support experienced higher sales. Higher sales were recorded in firms in Manufacturing sector (26.5%), and Accommodation and food sector (40.7%). Small-size firms with support recorded a 22.0 percent higher sale. On the contrary, other firm sizes are yet to benefit significantly from the government intervention.

<sup>2</sup> Differences-in-differences can be given a causal interpretation when the parallel trends assumption holds. This assumption means that the trajectory of recipient firms had they not received support would have been the same as non-recipient firms. There can be a variety of reasons why this assumption might not hold, including when support schemes target firms with better trajectories. More analysis on the functioning of individual support schemes, for example using administrative data, is needed to establish the validity of this assumption.

**Table 3: Relationship between government support and sales**

Dependent variable: sales (in log)	ATET	p-value
<b>Overall (full sample)</b>	0.115**	0.028
<b>Sector</b>		
<i>Manufacturing</i>	0.265***	0.003
<i>Accommodation &amp; Food</i>	0.407*	0.067
<b>Size</b>		
<i>Micro</i>	0.055	0.425
<i>Small</i>	0.220***	0.009
<i>Medium</i>	0.295	0.187
<i>Large</i>	0.201	0.739

Note: Significance \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.10$ ; ATET: Average Treatment Effect on the Treated.

### Box 1: Methodology of the Business Tracker Survey

These results presented in this note are from the COVID-19 Business Tracker Survey, conducted by the Ghana Statistical Service, with support from the UNDP and the World Bank. The Business Tracker Survey is part of the global Business Pulse Survey (BPS) initiative of the World Bank, surveying the impact of COVID-19 on the private sector in more than 50 countries.

For the Ghana survey, 4311 firms were interviewed during the first round, of which 3658 were re-interviewed during the second-round while 4,858 firms were interviewed during the third round including 1200 new firms. Out of the three waves, a balanced panel of 3602 firms were used to assess channels of recovery of Ghanaian firms. This brief only includes firms interviewed across all three waves. Figures in this note relating to earlier waves might therefore differ from those presented in earlier briefings due to the use of the balanced panel.

The first survey (Wave I) was conducted in May-June 2020, with sales figures referring to March-April 2020. Wave II was conducted in August-September 2020, with sales figures referring to May-June 2020. Wave III was conducted in September 2021, with sales figures referring to Jan-March 2021.

The primary sources for the sample are the Integrated Business Establishment Survey (IBES) conducted in 2013 and the GLSS conducted in 2017. To cover firms founded after 2013, an additional group of young Micro, Small, and Medium Establishments (MSMEs) were sampled from client lists of the National Board for Small Scale Industries (NBSSI, which is now transformed into the Ghana Enterprises Agency, GEA). Firms were stratified by firm size, sector and region to ensure representativeness in these categories. The survey includes both formal (registered) and informal (unregistered) firms.

This note was prepared by GSS with support from the United Nations Development Programme (UNDP) and the World Bank.