

# Monitoring COVID-19 impacts on firms in Ethiopia



## Results from a High-Frequency Phone Survey of Firms

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### INTRODUCTION



The COVID-19 pandemic and its negative economic effects create a need for timely data and evidence to help monitor and mitigate the social and economic impacts of the crisis. To monitor the impacts of the COVID-19 pandemic and related containment measures on formal firms in Ethiopia and inform the policy response, the World Bank, in collaboration with the Jobs Creation Commission (JCC), is implementing a high-frequency phone survey of firms (HFPS-F). The HFPS-F interviews a sample of firms in Addis Ababa every three weeks for a total of eight survey rounds, and an additional sample of firms in four other cities in Ethiopia (Adama, Bahir Dar, Hawassa, and Mekelle) for a total of seven rounds. This high-frequency follow-up allows for a better understanding of the effects of and responses to the COVID-19 pandemic on firm operations, hiring and firing, and expectations of future operations and labor demand in order to better tailor and implement interventions and policy responses and monitor their effects. The sampling strategy is explained in detail in a companion technical note.

This note summarizes the results of round 2 (R2) of the HFPS-F<sup>1</sup>, implemented between May 6 and May 27, 2020 in Addis Ababa<sup>2</sup>. While the original sample in Addis Ababa consisted of 645 firms, only 550 of those firms responded to the R2 survey. The information presented here is based on the sample of 550 firms<sup>3</sup> that responded to both round 1 (R1) and round 2 (R2) surveys.

### KEY HIGHLIGHTS – ROUND 2



Since the last survey round, firms in Addis Ababa have progressively resumed operations. The share of firms that completely ceased operations decreased from 41 percent in R1 to 29 percent in R2. This re-opening has not translated in a rebound in firm earnings, with the share of firms reporting zero earnings in the last completed month (April 2020 for the R2 interviews) increasing from 36 percent in R1 to 40 percent in R2.



The COVID-19 pandemic has affected firms in Addis Ababa mainly through a substantial drop in demand for their products or services. Compared to R1, a higher share of firms in R2 also reports higher prices for materials and intermediate goods as a significant problem.



The financial stress on firms has increased between R1 and R2, with an increasing share of firms reporting difficulties in paying staff wages and invoices. According to firms, the most relevant policy measure that could help them weather the storm is to waive tax payments. One-fifth of larger firms are in favor of wage-subsidies.



A fairly small share of firms—eight percent—laid off workers between R1 and R2, mainly affecting temporary workers.

<sup>1</sup> Data collection was undertaken by Laterite (Ethiopia) Ltd.  
<sup>2</sup> At the beginning of R2 on May 6, the country's total confirmed Covid-19 cases were 162. By the end of R2, on May 27, the confirmed cases had increased to 731.  
<sup>3</sup> Though we use the term "firm" for ease of understanding, our sample actually consists of establishments. An establishment is an economic unit that produces one predominant activity, typically at a single physical location. A firm, on the other hand, can consist of one or more than one establishment.



Expectations remain subdued, with only two percent of firms expecting to hire workers in the next two weeks and 30 percent of firms having cancelled or postponed new investments. On the other hand, expectations of future layoffs have also eased.

## FIRM OPERATIONS AND LABOR



## RECENT OPERATING PERFORMANCE



Evidence suggests that containment measures following the COVID-19 pandemic has caused a perceptible decline in demand, severe disruptions to supply chains and fall in equity markets have affected current operations as well as prospects of firms across the globe. Firms in Ethiopia are no exception. The survey confirms that firms' operations have been heavily affected by the consequences of COVID-19.

In the 21 days preceding the survey of R2 (spanning the period between April 15 and May 27, 2020, depending on when the firm was interviewed), 29 percent of firms in Addis Ababa had still completely ceased operations (were operational zero days). About 41 percent of firms were again operational on a full-time basis (between 15 and 21 days in the past 21 days). Firms in the services sector were more likely to be fully operational relative to firms in the industrial sector. Own-account firms (where the only worker is the owner) were most likely to still be closed (35 percent). On the other hand, close to half of small, medium, and large (SML) firms were again fully open for business (Table 1).

**Table 1: Share of firms by days operational in last 21 days (April 15- May 27, 2020)**

	Firm sector			Firm size		
	Total	Industry	Services	Own-account	Micro-firm	SML firm
0 days	29.0	34.9	28.0	35.0	23.6	24.3
1-9 days	17.4	10.7	18.6	20.8	16.9	6.2
10-14 days	12.4	20.6	10.9	8.5	14.4	19.5
15-21 days	41.2	33.8	42.5	35.7	45.1	50.0

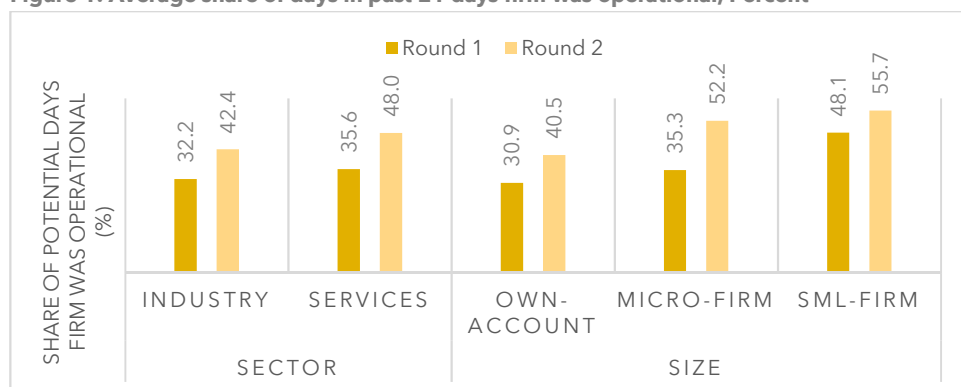
Note: SML denotes small, medium, and large firms (6 or more payroll employees).

Compared to R1, we observe that a progressive re-opening of business has taken place. In the 14 days preceding the R1 interview, the average firm was operational for 35 percent of all possible days. In the 21 days preceding the R2 interview, the average firm was operational for 47 percent of all possible days. Firms in all sectors and size categories have progressively re-started operations in the three weeks prior to the R2 interview (Figure 1). Despite this uptake of activity, however, the average firm was still only operational half of the time.

In line with the progressive re-opening of business, the share of firms that are fully staffed (meaning that none of the firm's workers are unable to come to work due to COVID-19) increased from 61 percent in R1 to 75 percent in R2<sup>4</sup>.

<sup>4</sup> This only concerns firms with workers.

Figure 1: Average share of days in past 21 days firm was operational, Percent



Note: SML denotes small, medium, and large firms (6 or more payroll employees).

## EMPLOYMENT



Reflecting the economic uncertainty, firms are largely refraining from hiring workers. In the 3 weeks preceding the R2 interview, only two percent of firms (12 firms in the sample of 550) hired new workers. A higher share of firms—eight percent—has laid off workers between the R1 and R2 interviews<sup>5</sup>. Layoffs are still rare considering the severity of the shock to firms' operations and revenues, which is likely related to the State of Emergency directive, which prohibits firms from laying off employees. Layoffs mainly took place in firms active in industry, where 17 percent of firms reported laying off at least one worker between the first and second survey round. The bulk of the layoffs concerned temporary employees, though a significant share were also permanent employees<sup>6</sup>.

In lieu of laying off workers, firms have granted leave, with 33 percent of SML firms and 22 percent of micro-firms granting leave to their workers in the three weeks preceding the R2 survey; the large majority of which were granted paid leave. Compared to R1, fewer workers were granted leave during R2, which is consistent with firms having gradually restarted their operations.

## OUTLOOK



Hiring intentions remain subdued. About two percent of firms reported they intend to hire new workers in the coming two weeks. This is somewhat lower than hiring intentions in R1, when four percent of firms reported they intended to hire workers in the two weeks following the interview. Hiring expectations have decreased strongly among firms in the industry sector, from 13.6 percent in R1 to 5.4 percent in R2<sup>7</sup>. On the other hand, expectations for future layoffs have also eased. While in R1 17 percent of firms expected to lay off workers in the coming two weeks and 27 percent to lay off workers in the coming three months, this had dropped to eight percent and 18 percent in R2, respectively (Table 2). The fact that certain firms have already adjusted their workforce following the COVID-19 shock may have contributed to the easing of layoff expectations.

<sup>5</sup> This only refers to firms that had/have employees. Own-account firms cannot lay off workers and are thus not asked this question in the survey.

<sup>6</sup> In the sample, 148 workers were laid off in the 21 days preceding the R2 interview. 43 of those were permanent workers, while the rest were temporary workers.

<sup>7</sup> The trend in hiring expectations needs to be interpreted with care as it can be influenced by hiring behavior. Of the few firms who had the intention to hire workers in R1, only 35 percent did in fact hire workers between R1 and R2. It is possible that the decrease in hiring expectations is (partly) the result of firms having satisfied their hiring requirements.

**Table 2: Share of firms that expect to let go workers in the coming 2 weeks and the coming 3 months, R1 and R2, Percent**

	Full sample		Industry		Services	
	R1	R2	R1	R2	R1	R2
Firm expects to lay-off workers in coming 2 weeks	17.2	7.7	12.3	11.8	18.4	6.7
Firm expects to lay-off workers in coming 3 months	26.9	17.6	26.0	17.7	27.2	17.6

Note: The numbers in the table concern firms that were interviewed in both R1 and R2. Numbers in the table show the share of firms that expect to let go workers in the next 2 weeks and 3 months. SML denotes small, medium, and large firms (6 or more payroll employees). N.a. means not-applicable (own-account firms cannot lay off workers).

In R1, 27 percent of firms reported having decided to cancel or postpone new investments in fixed assets. This increased slightly to 30 percent in R2. This increase was mainly driven by firms in the services sector: In R2, 29 percent of firms in the services sector reported having decided to cancel or postpone new investments, up from 25 percent in R1.

## REVENUES AND PROFITS



The analysis of the first survey round showed that firms' revenues significantly declined since the onset of COVID-19, with 36 percent of firms in R1 not earning any revenue at all in the last completed month<sup>8</sup>. The R2 results paint an even bleaker picture, with 40 percent of firms reporting not having earned any revenues in April 2020 (the reference month for R2). The share of firms not earning any revenues in April 2020 was highest for firms in the industry sector (57 percent) and for both own-account and SML firms (Table 3). Median monthly revenues further declined in R2, with the median firm earning only ETB 1,500 in April 2020<sup>9</sup>. Median revenues in the industry sector dropped to zero and median revenues of small, medium and large (SML) firms declined from ETB 70,000 in R1 to ETB 15,000 in R2. A modest rebound in earnings can be expected in the next survey round, reflecting the progressive re-opening of businesses.

**Table 3: Last month's revenue levels and comparison with same month last year**

	Full sample		Industry		Services		Own-account		Micro-firm		SML firm	
	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2
Firms with zero revenue last month (%)	36.3	39.4	44.8	56.5	34.7	36.9	33.2	42.2	42.4	36.5	27.0	41.0
Median revenues last month (ETB)	2,000	1,500	2,500	0	2,000	1,500	1,000	800	2,000	2,000	70,000	15,000

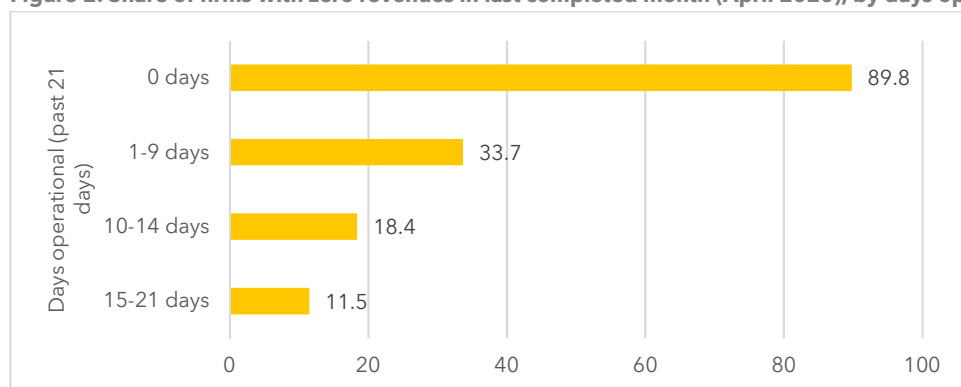
Note: All revenues are in ETB. SML denotes small, medium, and large firms (6 or more payroll employees).

Even firms that remained partially or fully operational experienced a sharp decline in revenues. Approximately 12 percent of firms that were fully operational in the 21 days preceding the survey earned no revenues at all in the last completed month (Figure 2). This suggests that firms' revenue streams are not only affected by business closures but also by a significant slowdown in demand for those firms that remain operational.

<sup>8</sup> The 36 percent refers to R1 firms that were also interviewed in R2.

<sup>9</sup> Though median earnings decreased, average earnings increased from ETB 90,000 in R1 to ETB 119,310 in R2. Average earnings of services firms more than doubled between R1 and R2.

Figure 2: Share of firms with zero revenues in last completed month (April 2020), by days operational, Percent



## COVID IMPACT AND RESPONSE



In R2, almost all firms (98 percent) reported being impacted by the COVID-19 pandemic, slightly up from 94 percent in R1. The channels through which firms are most affected have changed since R1, with the collapse in demand being by far the main mechanism of impact (83 percent of firms in R2 compared to 62 percent in R1). Forced closure of business and closure of marketplaces and shops have become somewhat less of a problem as businesses have gradually re-opened. On the other hand, higher prices for materials and intermediate goods have increasingly become a challenge both for the industrial and the services sector (Table 4). Trends by firm size (own-account, micro-firms and SML firms) largely follow the overall trends and are not shown separately in Table 4.

Table 4: Ways in which firms are affected by COVID-19, Percent

	Full sample		Industry		Services	
	R1	R2	R1	R2	R1	R2
Low demand for products/services	62.1	82.8	60.4	73.1	62.7	84.5
Lower supply of raw materials and intermediate goods	8.2	6.5	16.5	10.8	6.3	5.7
Restricted movement of workers	25.9	21.1	31.0	24.1	25.0	20.7
Forced closure of business	27.0	18.7	13.4	18.5	29.4	18.7
Closure of marketplace/shops	14.9	8.4	11.9	2.5	15.3	9.4
Higher price of raw materials and intermediate goods	7.8	11.2	15.1	18.8	6.6	9.9

Note: The numbers in the table concern firms that were interviewed in both R1 and R2. Other ways in which firms are affected by COVID-19 were marginal in terms of importance and are not shown in the table.

## FINANCIAL IMPACT



As a result of the COVID-19 pandemic, firms face significant financial stress, and this stress has further increased between R1 and R2. Firms still state paying rent as the most significant financial problem they have faced (45 percent in R2). Yet, paying invoices as well as paying staff wages and social security contributions are increasingly becoming difficult (Table 5). Paying staff wages and contributions have increasingly become difficult for larger firms (SML firms), while paying invoices is increasingly difficult for own-account and micro-firms.

Firms were asked to indicate the policy measures that would be most appropriate to help them weather the COVID storm. In both R1 and R2, most firms indicated waiving of tax payments as the most appropriate policy measure (Table 6). The share of firms indicating this as the most appropriate policy measure increased substantially between R1 (40 percent) and R2 (52 percent). Providing access to working capital at beneficial terms also gained in importance between R1 and R2 as firms struggle with interrupted cash

flows amidst the financial fallout caused by COVID-19. In contrast, the reduction of payroll taxes and the provision of wage subsidies became less preferred by firms, except for the larger firms (SML firms in table) that are finding it increasingly difficult to pay staff wages and social security contributions. So far, three percent of firms reported to have received some form of government support since the start of the pandemic in Ethiopia.

**Table 5: Financial problems currently faced by firms, (%)**

	Full sample		Industry		Services		Own-account		Micro-firm		SML firm	
	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2
Staff wages and social security contributions	19.2	26.1	31.1	37.4	17.1	24.1	1.2	2.8	30.7	39.4	45.0	65.0
Rent	42.0	44.9	31.3	37.3	43.9	46.2	39.2	45.3	46.2	44.6	37.3	45.0
Repayment of loans	10.2	11.5	17.1	7.6	9.0	12.1	8.7	9.7	9.0	12.1	20.0	15.9
Payments of invoices	28.7	37.2	23.0	33.8	29.8	37.8	32.2	46.0	25.1	32.1	28.9	23.1
Payment of other expenses	28.1	33.2	22.3	30.5	29.1	33.7	41.0	43.2	19.1	27.9	11.4	15.2

Note: The numbers in the table concern firms that were interviewed in both R1 and R2. SML denotes small, medium, and large firms (6 or more payroll employees).

**Table 6: Most relevant policy measures to help firms though the crisis, according to firms (% of firms)**

	Full sample		Industry		Services		Own-account		Micro-firm		SML firm	
	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2	R1	R2
Covering, reducing, or freezing of operational costs such as costs for sheds and working spaces	22.0	19.4	18.3	17.2	22.7	19.9	21.2	17.9	24.7	23.3	15.5	11.6
Reduction or deferral of payroll taxes or providing wage subsidies	5.7	4.5	5.2	5.0	5.8	4.5	1.9	1.5	6.3	3.5	17.6	19.0
Waiving taxes payment (corporate income tax, VAT, private pension contribution, excise tax)	40.4	52.2	33.9	39.5	41.5	54.5	41.7	55.6	41.7	50.7	31.4	45.4
Freeze of loan repayment, extension of loan terms, or partial debt relief	14.5	12.4	20.4	8.6	13.7	13.1	13.2	10.0	13.7	12.6	22.0	20.4
Providing access to capital through financial grants	12.1	14.0	14.4	13.8	11.6	14.1	14.8	15.8	10.0	12.0	9.2	13.9
Providing access to capital through access to zero-interest loans	10.0	17.1	7.8	24.0	10.4	15.8	5.7	15.2	13.2	19.2	14.7	16.8

Note: The numbers in the table concern firms that were interviewed in both R1 and R2. Other potential policy measures were marginal in terms of importance and are not shown in the table. SML denotes small, medium, and large firms (6 or more payroll employees).

## PROTECTING EMPLOYEES' HEALTH AND SAFETY



COVID-19 does not only seriously impact firms' financial prospects, it also changes how firms operate. The R1 survey showed that firms in Addis Ababa had taken measures to increase the occupational health and safety of their employees. R2 shows that firms have scaled up these measures, with a higher share of firms promoting strict social distancing in the office (45 percent in R2), providing alcohol, soap or sanitizers in the workplace (76 percent in R2), and providing protective gear (67 percent in R2). These represent substantial increases from R1.

## UPCOMING ACTIVITIES



This summary brief is the second in a series of briefs reporting on the findings of the high-frequency phone survey of firms. This brief reports on findings from R2 of the phone survey for which firm owners or managers in Addis Ababa were interviewed about the effects of and responses to the COVID-19 pandemic between May 6 and May 27, 2020. Data collection continues in the coming months by following the same firms every three weeks. Round 3 of data collection started on May 28, 2020 and includes the follow-up of the existing sample of firms in Addis Ababa as well as a sample of firms in Adama, Bahir Dar, Hawassa, and Mekelle. Each round's summary brief, table of indicators, and microdata will be made available via the following website: <https://www.worldbank.org/en/country/ethiopia/brief/phone-survey-data-monitoring-covid-19-impact-on-firms-and-households-in-ethiopia>.

## BOX: SURVEY METHODOLOGY

The high-frequency phone monitoring survey monitors the economic impacts of and responses to the COVID-19 pandemic on firms with a focus on the effects on firm operations, revenues, and jobs. We call a sample of firms every three weeks between mid-April and mid-September 2020 for a total of eight survey rounds in Addis Ababa and seven survey rounds in other cities. The final dataset will consist of a panel of approximately 800 firms (500 in Addis Ababa and 300 in four other cities—Adama, Bahir Dar, Hawassa, and Mekelle).

The sampling procedure was undertaken in three steps. First, the team cleaned the list of registered firms in number in Addis Ababa, Adama, Bahir Dar, Hawassa, and Mekelle, received from the Ministry of Trade and Industry (MoTI), by removing firms with missing or invalid phone numbers. Second, all phone numbers of the cleaned list of firms were shared with EthioTelecom and only active phone numbers were kept constituting the sampling frame. Third, two survey domains were selected (Addis Ababa and other cities) and the team drew a random sample of firms without replacement, stratified by firm size (proxied by capital) and sector (industry and services). The sample size was set by a tight budget envelope, with a panel of 500 firms in Addis Ababa and 300 firms in other cities after round 8 (7) of the survey operation. Expecting a high non-response rate, we drew a sample of 1,550 firms for Addis Ababa and 800 (200 in each city) firms in other cities.

### Data collection parameters, round 2

- ❖ Data collection period: May 6 to May 27, 2020
- ❖ Response rate: 85 percent (of the original sample of 645)
- ❖ Sample size: 550 firms in Addis Ababa
- ❖ Average duration of interview: 15 minutes