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HIGHLIGHTS: FIRST WAVE FEBRUARY 2021

# Rapid Labour Force Survey of COVID-19 Impact on Small and Medium Enterprises in Tunisia

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## Key Findings

- ▶ By late-June 2021, the number of confirmed Covid-19 cases in Tunisia reached 391,411 with 14,318 deaths due to the virus. What started as a global pandemic in February 2020, soon evolved into a large-scale economic crisis, the effects of which reaching businesses and households in Tunisia and the Middle East. As the first case of Covid-19 was detected in Tunisia on 4 March 2020, the government imposed travel restrictions and closed borders by late March 2020. The Tunisian government restricted movement and closing all non-essential businesses, while only allowing companies to use 15 per cent of their workforce.
- ▶ Between March and May 2020, in response to the pandemic, Tunisia's government expanded the healthcare budget by TND 100 mn. The pandemic response package included a social protection component with cash transfers and temporary unemployment benefits for a total cost of TND 450 mn. The government response to support businesses also included postponing payments of corporate income tax and social security contributions, tax exemptions and rescheduling of customs' arrears.
- ▶ Using firm-level data from the first wave, the firms' section extends on the household survey analysis, by looking at the key findings from the data collected on small and medium enterprises in Tunisia. The firms' survey was conducted by phone for firms that had 6-199 workers before the pandemic (i.e. before February 2020).
- ▶ As of February 2020, more than half of the firms surveyed in Tunisia operated in manufacturing and agriculture and services (31 and 24 per cent, respectively), while 22 per cent were in trade and retail, 12 per cent were in construction, and 11 per cent in food and accommodation. The median number of workers in the full sample increased from 12 workers in February 2020 to 14 workers at the time of the interview. In fact, the median firm in any of the economic activities in Tunisia had an increase in the number of workers expect for firms in construction, where the median number of workers remained the same (15 workers). In the full sample, the mean number of all workers increased between February 2020 and the time of the interview for the first wave (from 24.9 to 30.1), with the largest increase in the category of definite duration contract workers (from 11.2 workers in February 2020 to 14.8 currently).
- ▶ Nearly one third of the firms surveyed in Tunisia either imported or exported in the year 2019 (28.6 per cent). The economic sector with the highest mean share of importing and/or exporting firms (traders) is manufacturing and agriculture, where nearly 49.2 per cent of firms were traders. In all economic activities, 10.7 per cent of firms (on average) were either partially or fully foreign owned in Tunisia (51 firms, see Table 3-3), out of the 51 firms partially or fully foreign owned, 28 were in manufacturing and agriculture and 18 were in services. With the highest average size of foreign ownership being in trade and retail (79.6 per cent foreign ownership). The majority of firms surveyed in Tunisia reported adopting no coping strategies (69 per cent, 329 firms out of a total of 477 surveyed). Overall, only a few firms in Tunisia reported adopting any coping strategy. Most of the firms without any coping strategies were in manufacturing and agriculture (28.9 per cent, 95 firms) and in services (27.9 per cent, 92 firms). The majority of firms surveyed in Tunisia reported having business as usual (nearly 68.5 per cent). Out of the firms that experienced disruptions due to the pandemic, most reported reducing hours as a change to their current business status (24.1 per cent) and only 2.7 per cent reported temporarily or permanently closing down.

## Introduction

By late-June 2021, the number of confirmed Covid-19 cases in Tunisia reached 391,411 with 14,318 deaths due to the virus. What started as a global pandemic in February 2020, soon evolved into a large-scale economic crisis, the effects of which reaching businesses and households in Tunisia and the Middle East. Severe disruptions to supply chains, international trade, and travel had its toll on livelihoods and business activities in several sectors (Abay et al., 2021). As the first case of Covid-19 was detected in Tunisia on 4 March 2020, the government imposed travel restrictions and closed borders by late-March 2020. The Tunisian government restricted movement and closing all non-essential businesses, while only allowing companies to use 15 per cent of their workforce. This in turn had adverse impact on economic activity in Tunisia (Elkadhi et al., 2020).

Between March and May 2020, in response to the pandemic, Tunisia's government expanded the healthcare budget by TND 100 mn. The pandemic response package included a social protection component with cash transfers and temporary unemployment benefits for a total cost of TND 450 mn. The government response to support businesses also included postponing payments of corporate income tax and social security contributions, tax exemptions and rescheduling of customs' arrears (Elkadhi et al., 2020). Businesses were also offered relief from interest on loans with a reduction of interest on new loans and suspension of electronic banking fees (IMF, 2021b; MEED, 2020).

Recent estimates show that Tunisia's GDP could have declined by 46.4 per cent during the second quarter of 2020, due to the pandemic, with most of this decline coming from output losses in industries, a decline of 53 per cent (Elkadhi et al., 2020). Other estimates also show that youth unemployment in Tunisia reached 37 per cent in the second half of 2020 (IMF, 2021a).

Using firm-level data from the first wave, the firms' section extends on the household survey analysis, by looking at the key findings from the data collected on small and medium enterprises in Tunisia. **Table 2-1** below show the distribution of the firms (number of firms) surveyed by size and economic activity with row per centages in parenthesis<sup>1</sup>.

► **Table 2-1:** Sample distribution by firm size and economic activity

Firm size		Manu. & Agri.	Const.	Trade & retail	Accom. & food	Services	All activities
6-9 workers	Feb-20	38 (20.6)	18 (9.8)	55 (30)	17 (9.3)	56 (30.3)	184 (100)
	Current	36 (22.3)	16 (10.1)	44 (27.3)	16 (9.9)	49 (30.4)	163 (100)
10-24 workers	Feb-20	42 (29.3)	20 (13.9)	30 (20.6)	19 (13.2)	33 (23.1)	144 (100)
	Current	42 (27.6)	18 (11.5)	39 (25.4)	19 (12.1)	36 (23.5)	154 (100)
25-49 workers	Feb-20	26 (44.3)	9 (15.1)	7 (12.3)	8 (14.4)	8 (13.9)	58 (100)
	Current	25 (40.6)	10 (15.5)	9 (14.2)	9 (14.6)	9 (15.1)	61 (100)

<sup>1</sup> Figures in table 2.1 are weighted using firm weights.

50+ workers	Feb-20	35 (46.3)	7 (9.7)	11 (15)	7 (9.3)	15 (19.7)	75 (100)
	Current	37 (44.3)	10 (12.5)	11 (13.5)	8 (9.4)	17 (20.3)	83 (100)
Total	Feb-20	141 (30.5)	54 (11.7)	103 (22.4)	51 (11.2)	112 (24.3)	461 (100)
	Current	141 (30.5)	54 (11.7)	103 (22.4)	51 (11.2)	112 (24.3)	461 (100)

Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

The firms' survey was conducted by phone for firms that had 6-199 workers before the pandemic (i.e. before February 2020). Tunisia did not have a Yellow Pages or similar databases to roster firms, so administrative data sources had to be used from the National Institute of Statistics (INS) and Agency for the Promotion of Industry and Innovation (APII) databases. The sample started with the INS frame with 1,238 firms with 6-200 wage employees. Firms were stratified into size economic activities, namely: agriculture, industry, construction, trade, accommodation, and services. Firms were also stratified by size in terms of 6-49 versus 50-200 employees, and a random stratified sample (order) was selected. The sample was further restricted to firms with 6-199 workers in February 2020 based on an eligibility question during the phone interview. After the INS sample was exhausted, the APII sample was used. APII only covered firms with 10+ workers and only covered firms in services and transport and in industry. Weights are based on the underlying data on all firms from INS, specifically: *Entreprises privées selon l'activité principale et la tranche de salariés* (RNE, 2020). The firm weights in Tunisia were ultimately stratified by industry and firms sized: 6-9 employees (since APII only covered 10+), 10-49, and 50-199 employees<sup>2</sup>.

Up to five attempts were made to ensure response if a phone number was not picked up/answered, was disconnected or busy, or picked up but could not complete the interview at that time. After the fifth failed attempt, a firm was treated as a non-response and a random firm from the same stratum was used as an alternate. **Table 2-2** below shows the response rates by response for Tunisia.

► **Table 2-2:** Firm response rates by response (%)

Response	(%)
Phone disconnected/busy	3
Not in service	7
Did not answer	22
Picked up and refused	9
Incomplete, and refused	7
Incomplete, return call	7
Complete	44

<sup>2</sup> See ERF sample and weighting technical documentation for more details.



Not Eligible	1
Total	100
Response rate	50

An inverse probability weighting was used to weight the firms' sample in Tunisia to account for non-response rates and the sampling strategy, the weights are then normalized to have a mean of one. All analysis presented in this report are weighted. Firms who were not eligible are excluded from the response rate calculations. The responses are based on the final result, which may have been on the first, second, third, fourth or fifth attempt.

Weights are used in all the analyses in this report to ensure the basic characteristics of the sample reflect the underlying universe of firms. However, the weights used cannot overcome the unobservable characteristics of firms and their respective non-response bias. The weighting of the firms' data is discussed in further detail in the appendix of this report.

The following section summarizes the main findings from the firms' data, section 3 shows analysis for firm characteristics, firm survival, and coping strategies. Sections 4 and 5 presents stylized facts on sales and revenues and employment for firms in Tunisia, respectively. Sections 6 and 7 analyze data on the input challenges faced by the firms due to the pandemic and their business model adaptation. Finally, section 8 presents the future expectations of the firms and their policy needs.

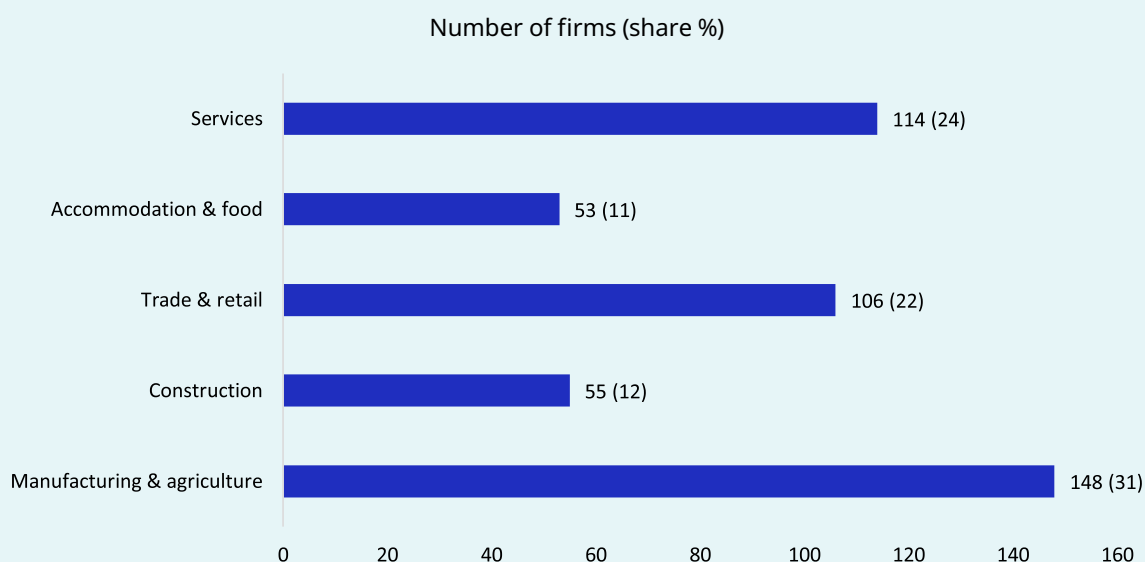




## Firm characteristics, survival, and coping strategies

As of February 2020, more than half of the firms surveyed in Tunisia operated in manufacturing and agriculture and services (31 and 24 per cent, respectively), while 22 per cent were in trade and retail, 12 per cent were in construction, and 11 per cent in food and accommodation. The latest estimates from the World Bank's World Development Indicators, also show that the majority of value added economic activity in 2019 was from services (62 per cent of GDP), while industry and agriculture contributed around 23 and 10 per cent of GDP, respectively (World Bank, 2019). Figure 3-1 below shows the distribution of the 477 firms based on aggregated economic activities, due to low variation at a disaggregated level (given the sample size).

► **Figure 3-1:** Share of firms by economic activity

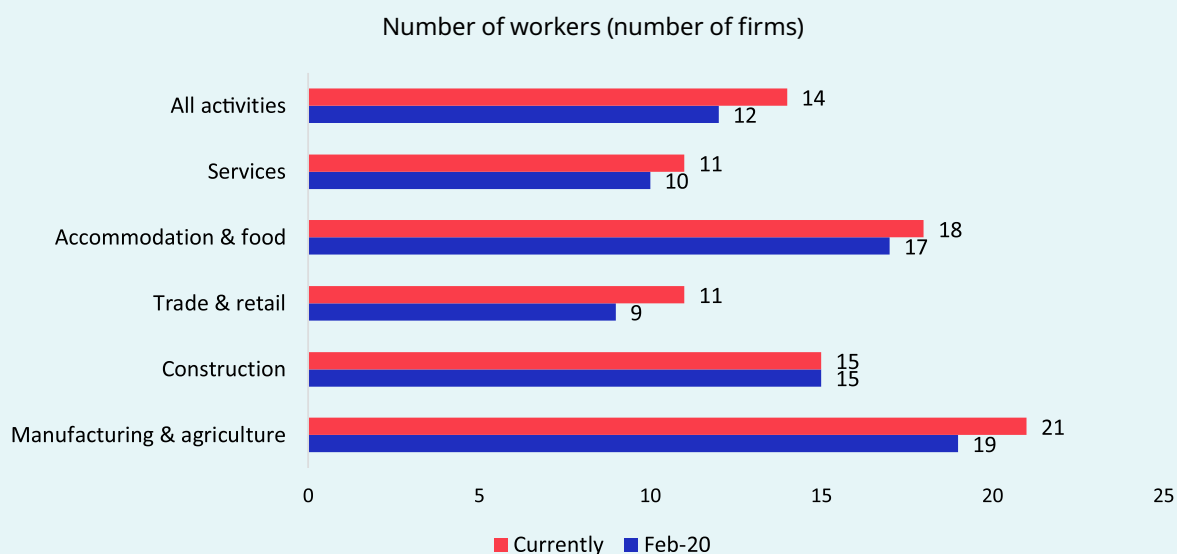


Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

**Figure 3-2** below shows the median number of workers comparison between February 2020 and at the time of interview by economic activity for all firms surveyed in Tunisia. The median number of workers in the full sample increased from 12 workers in February 2020 to 14 workers at the time of the interview. In fact, the median firm in any of the economic activities in Tunisia had an increase in the number of workers except for firms in construction, where the median number of workers remained the same (15 workers). The largest increase in the median number of workers (an increase of two workers) took place in firms operating in trade and retail (from 9 to 11 workers) and in manufacturing and agriculture (from 19 to 21 workers). The median firm in food and accommodation and services had an increase of one worker (from 17 to 18 workers and 10 to 11 workers, respectively).

Looking at the total number of workers by economic activity before and after the pandemic, shows a holistic view of how firms and workers were impacted. In the following **Table 3-1**, we show the impact of the pandemic on firms for different types of workers, from the most stable type of employment (indefinite duration contract workers) to the least (unpaid workers); in addition to other types of employment such as definite duration contract workers and workers without contracts. **Table 3-1** provides more detailed summary statistics on the impact of Covid-19 on firms and workers. More detailed employment analysis will be presented in section 5.

► **Figure 3-2:** Median number of workers by economic activity



Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

**Table 3-1** below shows the summary statistics of the number of workers by type of employment and economic activity for firms in Tunisia. In the survey, firms were only asked to report on the number of unpaid workers as of February 2020. In the full sample, the mean number of all workers increased between February 2020 and the time of the interview for the first wave (from 24.9 to 30.1), with the largest increase in the category of definite duration contract workers (from 11.2 workers in February 2020 to 14.8 currently). Within that type of employment however, the median firm in the full sample had the same number of employees in the same period (four workers).

The largest increase in the mean number of definite duration contract workers took place in firms in the manufacturing and agriculture sector (from 20.4 to 24.9 workers), followed by firms in trade and retail (from 8.2 to 10.7 definite duration contract workers). In fact, the manufacturing and agriculture sector had a considerable increase in the mean total number of workers, from 36 to 44.5 workers. While the sector that saw the smallest increase in the mean number of all types of workers was food and accommodation.

**Table 3-1** also shows that, on average, most firms surveyed in Tunisia saw no decrease in their workforce, except for no contract workers in manufacturing and agriculture, with a slight decline 1.4 workers in February 2020 to 0.6 at the time of the interview. Notably, the median firm in all sectors had zero no contract workers, including firms in manufacturing and agriculture. It is also worth mentioning that the average firm surveyed in Tunisia mostly hired indefinite and definite duration contract workers (14.8 and 13.8 workers, respectively at the time of the interview). On average, firms in Tunisia had only 1.3 no contract workers at the time of the interview and 0.1 workers in February 2020. However, firms in construction had a considerably higher number of no contract workers, and also saw an increase of two workers in that category (from 3.7 in February 2020 to 5.7 workers at the time of the interview).

► **Table 3-1:** Workers by employment type and activity

			Manu. & Agri.	Const.	Trade & retail	Accom. & food	Services	All activities
Total workers	Mean	Feb-20	36	22	18.6	22.8	19.1	24.9
		Current	44.5	28.1	21.8	25.4	22.9	30.1
	Median	Feb-20	19	15	9	17	10	12
		Current	21	15	11	18	11	14
	Sd	Feb-20	40.3	18.9	23	19.3	23.1	29.6
		Current	68.1	29.8	31.6	24.1	31.8	46.2
Indefinite duration contract workers	Mean	Feb-20	14.8	10.6	9.6	14.4	12.9	12.6
		Current	18.5	13.4	10.1	15.9	14.6	14.8
	Median	Feb-20	7	6	6	10	7	7
		Current	7	6	6	10	7	7
	Sd	Feb-20	22.9	13.8	13.1	14.9	19.6	18.5
		Current	32.7	21.1	14.1	19.9	22.1	24.3
Definite duration contract workers	Mean	Feb-20	20.4	7.4	8.2	7.9	5.8	11.2
		Current	24.9	8.6	10.7	8.7	7.6	13.8
	Median	Feb-20	9	4	2	4	2	4
		Current	9	3	3	4	3	4
	Sd	Feb-20	30.7	10.5	15.9	12.2	11.3	21
		Current	45.8	14	22.9	13.1	16.8	30.3
No contract workers	Mean	Feb-20	1.4	3.7	0.5	0.9	0.5	1.2
		Current	0.6	5.7	0.6	1.1	0.8	1.3
	Median	Feb-20	0	0	0	0	0	0
		Current	0	0	0	0	0	0
	Sd	Feb-20	11.3	8.9	2.1	3.5	2.6	7.3
		Current	2.7	14.8	2.1	5.1	4.9	6.3
Unpaid workers	Mean	Feb-20	0	0.3	0.2	0.1	0	0.1
	Median	Feb-20	0	0	0	0	0	0
	Sd	Feb-20	0.3	0.7	0.5	1.1	0.2	0.5

Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

**Table 3-1** shows that overall, for the average and median firms in Tunisia, jobs has increased based on the data collected. Other estimates however, expected a 30 to 50 per cent job loss in the food and accommodation sector, a 15 to 30 per cent job loss in industries and a 21 to 64 per cent job loss in construction (Kokas et al., 2020).

**Table 3-2** below shows other firms' characteristics, including the per centage of firms who import and/or export (traders), the share of firms that are foreign owned (partly or fully), the size of foreign ownership, whether the firm keeps inventory or not and the number of inventory days kept by economic activity.

► **Table 3-2:** Foreign ownership and inventory status

		Manu. & Agri.	Const.	Trade & retail	Accom. & food	Services	All activities
Traders (%)	Mean	49.2	7.7	22.6	3.6	29.1	28.6
	Sd	50.2	26.9	42	18.8	45.6	45.2
Foreign owned (%)	Mean	18.7	2	2.6	3.3	15.6	10.7
	Sd	39.1	14.2	16	17.9	36.5	31
Size of foreign ownership (%)	Mean	68.7	-	79.6	72	72.1	70.8
	Median	63	-	100	49	80	80
	Sd	31.2	-	30.6	35.9	25.6	28.5
Keeps inventory (%)	Mean	26.7	8.9	44.2	7.8	8.9	22.1
	Sd	44.4	28.8	50	26.9	28.5	41.6
Number of inventory days	Mean	417.1	653.3	227.5	18.2	143.5	302.1
	Median	60	998	30	20	45	45
	Sd	478.5	475.3	376.9	10.8	331.1	427.3

Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

Nearly one third of the firms surveyed in Tunisia either imported or exported in the year 2019 (28.6 per cent). The economic sector with the highest mean share of importing and/or exporting firms (traders) is manufacturing and agriculture, where nearly 49.2 per cent of firms were traders. Followed by services where 29.1 per cent of firms were traders, trade and retail (22.6 per cent), construction (7.7 per cent), and accommodation and food (3.6 per cent).

In all economic activities, 10.7 per cent of firms (on average) were either partially or fully foreign owned in Tunisia (51 firms, see **Table 3-3**), out of the 51 firms partially or fully foreign owned, 28 were in manufacturing and agriculture and 18 were in services. With the highest average size of foreign ownership being in trade and retail (79.6 per cent foreign ownership) compared to 100 per cent foreign ownership for the median firm in the same sector (out of the three firms with foreign ownership operating in trade and retail).

It is difficult to draw any inferences from the size of foreign ownership variable in the data, as only a quite small number of firms in Tunisia reported having partial or full foreign ownership (see table **Table 3-3**). **Table 3-3** shows the distribution of firms by foreign ownership and inventory status. In fact, no firms in construction at all reported having any foreign ownership. Looking at the two economic activities with the highest number of firms reporting having foreign ownership (28 firms in manufacturing and agriculture and 18 firms in services), on average, the size of foreign ownership was 68.7 and 72.1 per cent, respectively.

In terms of inventory status, the issue of low variation due to sample size is less applicable compared to the size of foreign ownership variable. Out of the 477 firms surveyed in Tunisia, 106 firms reported keeping inventory, the majority of which are in trade and retail (47 firms, 44.2 per cent of the all the firms in this sector) followed by firms in manufacturing and agriculture (39 firms, 26.7 per cent of the firms in this sector). The lowest share of firms keeping inventory by economic activity was in construction (5 firms out of 55 firms in construction, 8.9 per cent) and food and accommodation (4 firms out of 84 in the same sector).

With the highest average number of inventory days being 653.3 days for firms in construction. Meanwhile, firms in manufacturing and agriculture carried 417.1 inventory days on average and firms in trade and retail kept 227.5 inventory days. However, the median firm in construction carried 998 inventory days on average, and the median firm in manufacturing and agriculture kept only 60 days of inventory and 30 days for the median firm in trade and retail<sup>3</sup>.

► **Table 3-3:** Distribution of firms by foreign ownership and inventory status

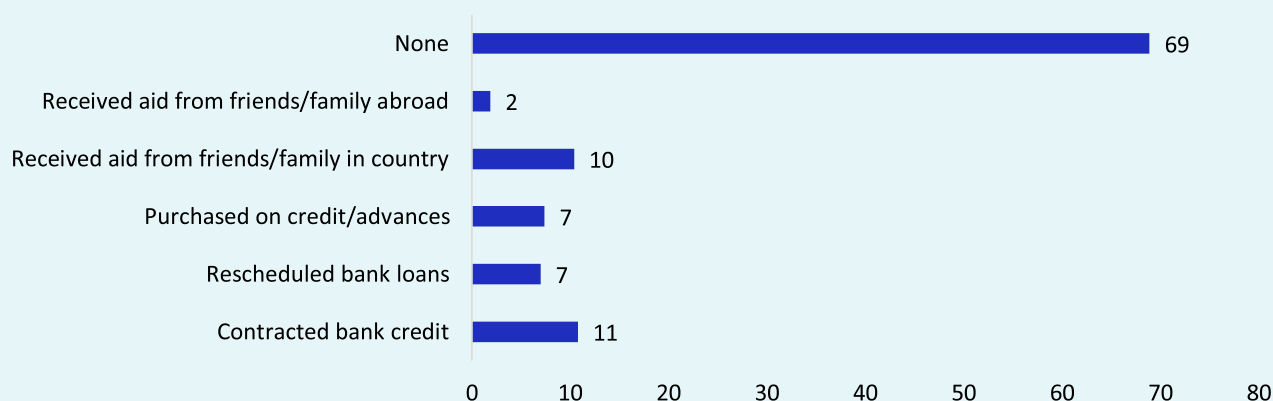
	Manufacturing & agriculture	Construction	Trade & retail	Accommodation & food	Services	All activities
Fully local	120	54	103	52	96	426
Partly or fully foreign	28	1	3	2	18	51
Total	148	55	106	53	114	477
Does not keep inventory	109	50	59	49	104	371
Keeps inventory	39	5	47	4	10	106
Total	148	55	106	53	114	477

Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

In addition to business models, economic activities and types and size of employment offered, firms also differed by their response to the pandemic and adopted different coping strategies. **Figure 3-3** below shows the share of firms adopting different coping strategies. Also, **Table 3-4** presents the detailed breakdown by economic activity.

<sup>3</sup> Numbers from table 3.2 shall not be compared to table 3.3, as the summary statistics presented in table 3.2 are weighted (see the appendix).

► **Figure 3-3:** Firms' coping strategies



Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

The majority of firms surveyed in Tunisia reported adopting no coping strategies (69 per cent, 329 firms out of a total of 477 surveyed). Overall, only a few firms in Tunisia reported adopting any coping strategy. **Figure 3-3** shows that most of the firms contracted bank credit (11 per cent, 51 firms) and received aid from family or friends in Tunisia (10 per cent, 50 firms). Meanwhile, only seven per cent of the firms purchased on credit and rescheduled bank loans (37 and 33 firms, respectively). The least adopted coping strategy was receiving aid from family and friends from abroad (two per cent, nine firms). **Table 3-4** below shows the summary of all firm responses in terms of coping strategies by economic activity. The number of firms is shown in the table along with the row per centage shares in parenthesis. Most of the firms without any coping strategies were in manufacturing and agriculture (28.9 per cent, 95 firms) and in services (27.9 per cent, 92 firms). As for firms that contracted bank credit (51 firms), more than 40 per cent were in manufacturing and agriculture (21 firms), 26.2 per cent were in trade and retail (13 firms) and 15.2 per cent in construction (8 firms).

► **Table 3-4:** Coping strategies by economic activity

Coping strategy	Number of firms (row share, %)	Manu. & Agri.	Const.	Trade & retail	Accom. & food	Services	All activities
Contracted bank credit	Did not adopt	127 (29.9)	48 (11.2)	93 (21.8)	49 (11.4)	110 (25.8)	426 (100)
	Adopted	21 (40.8)	8 (15.2)	13 (26.2)	5 (9.2)	4 (8.6)	51 (100)
	Total	148 (31)	55 (11.6)	106 (22.2)	53 (11.2)	114 (24)	477 (100)

Rescheduled bank loans	Did not adopt	141 (31.8)	49 (11)	93 (21)	50 (11.3)	110 (24.9)	444 (100)
	Adopted	7 (20.6)	6 (19.4)	13 (39.2)	3 (8.9)	4 (11.9)	33 (100)
	Total	148 (31)	55 (11.6)	106 (22.2)	53 (11.2)	114 (24)	477 (100)
Purchased on credit/ advances	Did not adopt	135 (30.5)	50 (11.4)	93 (21.1)	50 (11.3)	113 (25.7)	442 (100)
	Adopted	13 (37.6)	5 (14.1)	13 (36.2)	3 (9.8)	1 (2.3)	35 (100)
	Total	148 (31)	55 (11.6)	106 (22.2)	53 (11.2)	114 (24)	477 (100)
Received aid from friends/family in country	Did not adopt	130 (30.5)	51 (11.9)	95 (22.1)	50 (11.8)	101 (23.7)	427 (100)
	Adopted	18 (35.9)	4 (8.9)	12 (23.3)	3 (6)	13 (25.9)	50 (100)
	Total	148 (31)	55 (11.6)	106 (22.2)	53 (11.2)	114 (24)	477 (100)
Received aid from friends/family abroad	Did not adopt	144 (30.8)	55 (11.8)	104 (22.2)	53 (11.3)	111 (23.8)	468 (100)
	Adopted	4 (41.9)	0 (0)	2 (25.8)	0 (2.6)	3 (29.7)	9 (100)
	Total	148 (31)	55 (11.6)	106 (22.2)	53 (11.2)	114 (24)	477 (100)
None	Did not adopt	53 (35.7)	20 (13.6)	42 (28.3)	11 (7.3)	22 (15.1)	148 (100)
	Adopted	95 (28.9)	35 (10.7)	64 (19.5)	42 (12.9)	92 (27.9)	329 (100)
	Total	148 (31)	55 (11.6)	106 (22.2)	53 (11.2)	114 (24)	477 (100)

Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

Out of the 50 firms that received aid from family and friends inside Tunisia, 18 were in manufacturing and agriculture (35.9 per cent), 13 were in services (25.9 per cent) and 12 in trade and retail (23.3 per cent). Most of the firms receiving aid from abroad from friends and family (nine firms only) were distributed as follows: four firms in manufacturing and agriculture, three in services, and two in trade and retail.

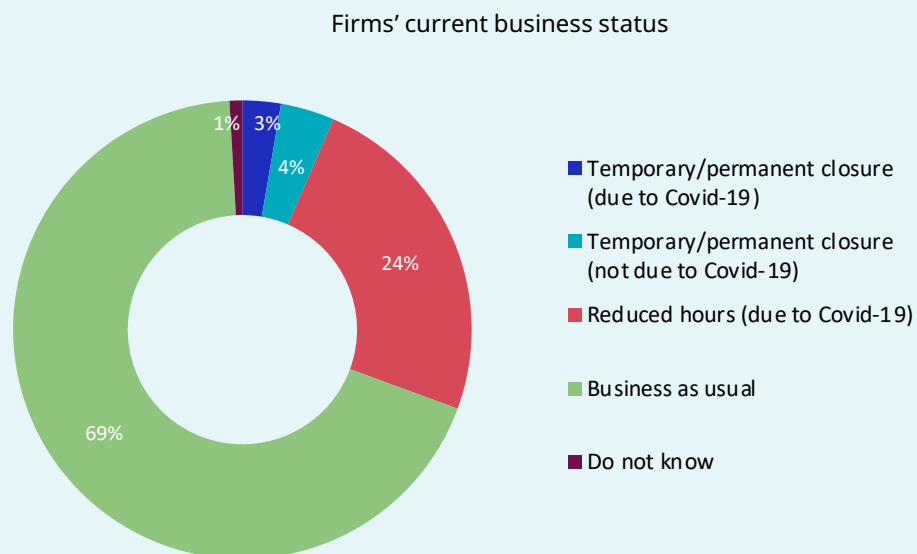
Looking at the largest sector in the firms' data, manufacturing and agriculture (see **Figure 3-1**), firms mostly contracted bank credit (21 firms), received aid from friends or family in Tunisia (18 firms) and 13 firms purchased on credit. As for firms in services (the second largest sector in the sampled data), only four firms contracted bank credit and rescheduled bank loans, and 13 received aid from friends and family in country.

Looking at the current status of businesses at the time of interview also reflects a similar trend found in **Table 3-4. Figure 3-4** below shows the shares of firms reporting different business statuses at the time of the interview. The majority of firms surveyed in Tunisia reported having business as usual (nearly 68.5 per cent). Out of the firms that experienced disruptions due to the pandemic, most reported reducing hours as a change to their current business status (24.1 per cent) and only 2.7 per



cent reported temporarily or permanently closing down. A quite small percentage of firms reported temporary or permanent closure not due to the pandemic (3.8 per cent) and less than one per cent reported not knowing their current business status.

► **Figure 3-4:** Current business status



Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

The following **Table 3-5** shows the breakdown of the business status responses by economic activity. That is later followed by the main challenges faced by businesses that led to their current status and can also be linked to the firms' respective coping strategies. **Table 3-5** above shows a more detailed summary of current business status for firms by different economic activities.

► **Table 3-5:** Business status by economic activity

Number of firms (share, %)	Manu. & Agri.	Const.	Trade & retail	Accom. & food	Services	All activities
Temporary/permanent closure (due to Covid-19)	7 (51.7)	2 (14.2)	0 (0)	3 (22.1)	2 (12)	13 (100)
Temporary/permanent closure (not due to Covid-19)	12 (65.9)	3 (14.6)	0 (0)	1 (5.8)	2 (13.6)	18 (100)
Reduced hours (due to Covid-19)	30 (26.1)	9 (7.7)	25 (22.2)	33 (28.5)	18 (15.6)	115 (100)
Business as usual	98 (30.1)	39 (12)	81 (24.7)	16 (4.9)	92 (28.3)	327 (100)
Do not know	1 (20.5)	3 (68.1)	0 (0)	0 (11.4)	0 (0)	4 (100)
Total	148 (31)	55 (11.6)	106 (22.2)	53 (11.2)	114 (24)	477 (100)

Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

Out of the 115 firms reporting reduced number of working hours, 28.5 per cent were in food and accommodation, 26.1 per cent were in manufacturing and agriculture, 22.2 per cent were in trade and retail, and 15.6 per cent were in services. Quite a few firms (13) reported temporary or permanent closure due to the pandemic (as seen in **Figure 3-4**), more than half of which operated in manufacturing and agriculture (51.7 per cent, seven firms). Temporary and permanent closures not due to the pandemic were also rare (18 firms only), most of which were also in manufacturing and agriculture (12 firms out of 18, 65.9 per cent).

**Table 3-6** shows the detailed breakdown for the distribution of firms by business challenges and economic activity. The most reported challenge faced by businesses Tunisia was difficulties in accessing customers due to mobility restrictions (311 firms out of 477, 65 per cent of firms). Similar to the previous findings in this section, most of the firms reporting challenges with accessing customers operated in manufacturing and agriculture (34.7 per cent, 108 firms), followed by firms in trade and retail (21.9 per cent, 68 firms). The next most reported business challenge, and related to difficulties in accessing customers due to mobility restrictions, was loss in demand (310 firms, 65 per cent). Most of the firms reporting loss in demand, also operated in manufacturing and agriculture (98 firms, 31.6 per cent out of 310 firms), followed by firms in trade and retail (67 firms, 21.7 per cent).

In fact, firms in manufacturing and agriculture and trade and retail were the most firms to report facing business challenges overall. Out of the 477 surveyed firms in Tunisia, 91 firms in manufacturing and agriculture reported difficulties in accessing suppliers and 45 firms in trade and retail reported the same. Similarly, 84 firms in manufacturing and agriculture reported issues with main inputs availability and prices and 48 firms in trade and retail reported the same challenge. Notably, the data in Tunisia show that the majority of business challenges faced by firms were due to mobility restrictions, either with suppliers or customers.

► **Table 3-6:** Business challenges by economic activity

Business challenge	Number of firms (share, %)	Manu. & Agri.	Const.	Trade & retail	Accom. & food	Services	All activities
Difficulties in accessing customers mobility restrictions	Not Mentioned	40 (24.2)	19 (11.7)	38 (22.8)	9 (5.4)	60 (35.9)	166 (100)
	Mentioned	108 (34.7)	36 (11.6)	68 (21.9)	44 (14.2)	55 (17.6)	311 (100)
	Total	148 (31)	55 (11.6)	106 (22.2)	53 (11.2)	114 (24)	477 (100)
Loss in demand due to other customer reasons	Not Mentioned	50 (30)	13 (7.7)	39 (23.2)	10 (6)	56 (33.1)	167 (100)
	Mentioned	98 (31.6)	43 (13.7)	67 (21.7)	43 (14)	59 (19)	310 (100)
	Total	148 (31)	55 (11.6)	106 (22.2)	53 (11.2)	114 (24)	477 (100)
Difficulties in accessing suppliers due to mobility restrictions	Not Mentioned	57 (23)	26 (10.5)	61 (24.7)	29 (11.5)	76 (30.4)	249 (100)
	Mentioned	91 (39.8)	29 (12.9)	45 (19.6)	25 (10.8)	39 (16.9)	228 (100)
	Total	148 (31)	55 (11.6)	106 (22.2)	53 (11.2)	114 (24)	477 (100)
Reduction in the availability/price increases for the main inputs	Not Mentioned	64 (23.8)	25 (9.3)	58 (21.6)	28 (10.2)	94 (35.1)	269 (100)
	Mentioned	84 (40.4)	30 (14.6)	48 (23.1)	26 (12.4)	20 (9.6)	208 (100)
	Total	148 (31)	55 (11.6)	106 (22.2)	53 (11.2)	114 (24)	477 (100)
Difficulties with worker absenteeism	Not Mentioned	120 (29.8)	42 (10.5)	93 (23.3)	46 (11.5)	100 (24.9)	402 (100)
	Mentioned	28 (37.5)	13 (17.3)	13 (16.8)	7 (9.4)	14 (19)	75 (100)
	Total	148 (31)	55 (11.6)	106 (22.2)	53 (11.2)	114 (24)	477 (100)
Difficulties tending to my business b/c care giving	Not Mentioned	124 (29.4)	51 (12.1)	93 (22)	53 (12.5)	102 (24.2)	422 (100)
	Mentioned	24 (43.8)	4 (8.2)	13 (24.4)	1 (1.3)	12 (22.4)	55 (100)
	Total	148 (31)	55 (11.6)	106 (22.2)	53 (11.2)	114 (24)	477 (100)
Other difficulty (specify)	Not Mentioned	143 (31.3)	53 (11.5)	105 (22.9)	50 (11)	106 (23.2)	457 (100)
	Mentioned	5 (23.9)	3 (14.6)	1 (6)	3 (15)	8 (40.6)	20 (100)
	Total	148 (31)	55 (11.6)	106 (22.2)	53 (11.2)	114 (24)	477 (100)
No particular challenge	Not Mentioned	137 (31.3)	54 (12.3)	95 (21.7)	53 (12.1)	99 (22.7)	439 (100)
	Mentioned	11 (28.2)	2 (4.3)	11 (28.8)	0 (0)	15 (38.8)	38 (100)
	Total	148 (31)	55 (11.6)	106 (22.2)	53 (11.2)	114 (24)	477 (100)

Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

Meanwhile, the two least reported business challenges were difficulties tending to business because of care-giving commitments (55 out of 477 firms, 11.5 per cent) and difficulties with worker absenteeism (75 firms, 15.7 per cent). Again, the majority of firms facing both challenges operated in manufacturing and agriculture and trade and retail. Out of the 477 firms surveyed in Tunisia, 38 reported facing no particular challenge due to the pandemic, most of which were in services (15 firms, 29.8 per cent). The sector with the least reported business challenges was food and accommodation, with a total of 149 firms that mentioned facing any of the business challenges (noting that firms were allowed to choose multiple responses for this question during the survey).

**Figure 3-5** below shows the best fit line for the relationship between the most reported business status and the most reported challenge, namely: challenges with accessing customers due to mobility restrictions and reduced working hours as a result of the pandemic, by economic activity. Aside from limited variation (due to sample size) within sectors, firms seem to exhibit a positive trend between difficulties accessing customers and reduction in working hours. Looking at the full sample in the bottom right corner of the panel in **Figure 3-5**, firms that faced challenges with accessing customers seemed to cope by reducing their number of working hours, this trend is more stark in the construction and services sectors. This relationship is slightly negative for firms in food and accommodation. Noting that only 53 firms out of the total 477 surveyed in Tunisia operated in this sector, and even less firms reported facing this challenge and having reduced working hours as their current business status.

► **Figure 3-5:** Fitted line for loss in demand and reduced working hours<sup>4</sup>



Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

<sup>4</sup> The X and Y axes in Figure 3.5 represent the probability of occurrence for the firms surveyed

## Sales and revenue

Firms surveyed in Tunisia were also asked about their total annual revenue in 2019, along with the per centage change between 2019 and 2020. In addition, firms were asked to report the actual revenue change within the last 60 days compared to the same period the year before, along with their expectations for the coming 60 days. Table 4-1 below shows the breakdown of total revenues in thousands of TND in 2019 by economic activity<sup>5</sup>.

Expectedly, the highest earners in 2019 were resilient firms that reported having business as usual at the time of the interview (327 firms, see **Table 3-5**), with an average of TND 5.9 mn compared to a full sample average of TND 4.9 mn. The large difference between the mean and the median for the group of firms that reported different current businesses statuses can also be explained by a considerably large standard deviation, further indicating that the data for this group of firms is widely dispersed from the mean. In fact, the total 2019 revenue data is generally widely dispersed with all categories having a considerably larger standard deviation compared to the mean.

The lowest average earners in 2019 by business status are firms that reported having to close down (temporarily or permanently) due to Covid-19, with TND 69,000 revenue in 2019. This sub sample is however quite small with only 13 firms reporting this status (see **Table 3-5**). Firms reporting the most recorded business status (i.e. reduced working hours) earned nearly TND 2.9 mn in 2019.

► **Table 4-1:** Sales and revenue change

Economic activity	Total revenue 2019 (1000s MAD)			Per centage revenue change last 60 days compared to last year (%)			Expected per centage revenue change over the coming 60 days compared to last year (%)		
	Mean	Median	Sd	Mean	Median	Sd	Mean	Median	Sd
Manufacturing & agriculture	12,099	2	95,385	-37.1	-40.0	31.1	-10.9	-30	50.5
Construction	672	200	943	-44.0	-50.0	38.7	-14.6	20	67.9
Trade & retail	959	6	2,122	-19.9	-25.0	38.4	19.2	30	36.4
Accommodation & food	965	45	1,639	-58.5	-55.0	27.7	-0.1	-20	83.4
Services	1,426	1	5,275	-34.8	-40.0	38.5	-14.4	-30	41.3
All activities	4,938	3	56,281	-35.7	-40.0	36.7	-1.9	15	51

<sup>5</sup> Sales and revenue analysis by economic activity and current business status should be carefully interpreted due to low variation within each subsample (see figure 3.1 and table 3.5).

Current business status									
Temporary/ permanent closure (due to Covid-19)	69	0	185	-95.5	-100.0	7.7	0	0	0
Temporary/ permanent closure (not due to Covid-19)	93	3	150	-64.1	-60.0	29.5	0	0	0
Reduced hours (due to Covid-19)	2,963	6	6,810	-48.3	-50.0	25.1	-34.1	-40	49.6
Business as usual	5,897	2	65,512	-26.8	-30.0	37.5	10.4	20	45.5
Do not know	1,000	1,000	0	-75.0	-80.0	15.9	-100	-100	0
Total	4,938	3	56,281	-35.7	-40.0	36.7	-1.9	15	51

Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

In terms of economic activity, firms that reported the highest total revenue in 2019, were firms operating in manufacturing and agriculture (TND 12.1 mn, 148 firms<sup>6</sup>), followed by firms in services (TND 1.4 mn, 114 firms), food and accommodation (TND 965,000, 53 firms) and trade and retail (TND 959,000, 106 firm). Firms in construction were the least earners in 2019 with only TND 672,000 (55 firms).

Overall, firms reported an average decline in their per centage revenue change over the last 60 days from the time of the interview, compared to the same period last year, reporting a decline in revenue between 20 and 59 per cent on average. Their expectations of the same reference period for the coming 60 days, however, seem to be more optimistic. Firms in trade and retail were the most optimistic, expecting revenue to increase by 19.2 per cent in the coming 60 days (from the time of the interview), followed by firms in food and accommodation (reporting almost no change in expected revenue over the coming 60 days).

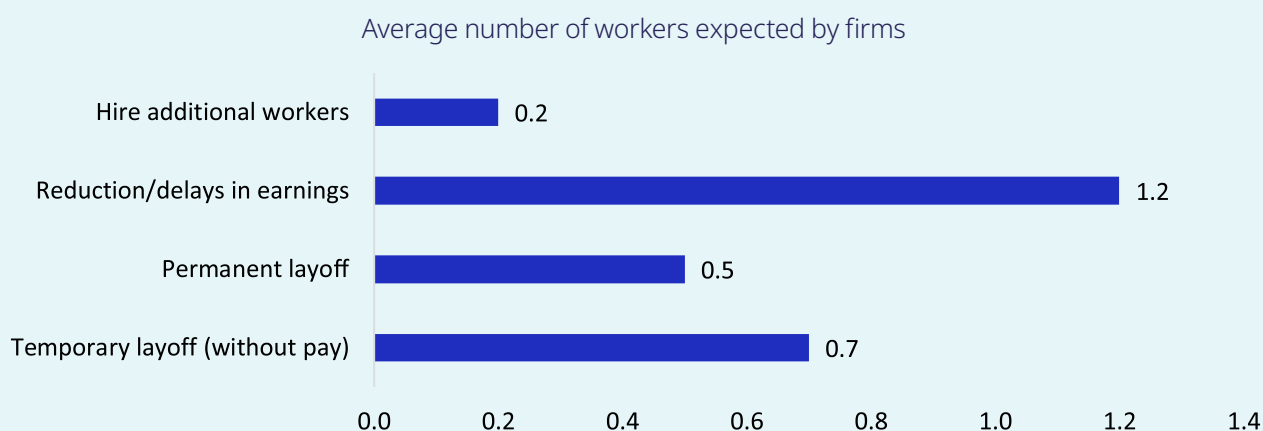
All other firms, expect for firms in trade and retail and food and accommodation, reported expecting a decline in revenue over the coming two months, by 11 to 15 per cent on average. According the data, the surveyed firms in Tunisia operating in construction and in services, reported the highest expected revenue decline of 14.6 and 14.4 per cent over the coming two months, respectively. Based on data on expected revenue change over the short-term (60 days reference period), firms in construction and services seem to be the most affected by the pandemic.

<sup>6</sup> See figure 3.1, section 3.

## Employment

Revisiting **Table 3-1**, it is observed that the mean number of employees increased overall economic activities by more than five workers. This is the same except for no contract workers in firms working in manufacturing and agriculture, when firms were asked to compare their number of employees as of February 2020 and at the time of the interview. In addition, firms were also asked about their expectation for the next 6 months regarding their workforce. **Figure 5-1** below shows the responses given by firms in terms of the number of workers they expect to hire, fire, and reduce or delay earnings of for the upcoming 6 months from the time of the interview.

► **Figure 5-1:** Employment expectations



Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

The most influential adaptation method in terms of the workforce currently hired, is to reduce or delay earnings paid to employees. Firms surveyed in Tunisia, expected to reduce or delay wages of around 1.2 workers on average due to the pandemic. More alarmingly, it is expected that nearly 0.5 workers will be permanently laid off, and 0.7 workers are expected to be temporarily laid off during the coming six months as a result of the pandemic or its related restrictions.

**Table 5-1** below shows the detailed breakdown of firms' expectation regarding their workforce by economic activity. Notably, the median firm in all economic activities expects to hire, fire, or reduce pay of zero workers over the coming six months. Firms in food and accommodation and manufacturing and agriculture, however, expect to reduce or delay the pay of more than two workers on average over the same period, while firms in construction expect to follow the same measure for one worker.

Firms in the food and accommodation sector are the most affected when it comes to layoffs, where they expect to lay off more than one worker on average (temporarily and/or permanently). Firms in manufacturing and agriculture too expect to temporarily lay off more than one worker and permanently one worker, over the coming six months. Firms in trade and retail on the other hand, seem to expect better outcomes for their workforce, forecasting to temporarily or permanently layoff no workers on average. Notably, firms in construction expect to hire the greatest number of workers (0.5 workers) compared to other firms in other sectors.



► **Table 5-1:** Firms' workforce expectation

	Temporary layoff (without pay)			Permanent layoff			Reduction/delays in earnings			Hire additional workers		
	Mean	Median	Sd	Mean	Median	Sd	Mean	Median	Sd	Mean	Median	Sd
Manufacturing & agriculture	1.4	0	10.7	1	0	8.1	2.1	0	12	0.3	0	4
Construction	0.6	0	2.8	0.4	0	1.6	1	0	5.2	0.5	0	1.8
Trade & retail	0	0	0.3	0	0	0.3	0.6	0	3.6	0	0	0
Accommodation & food	1.5	0	8.7	1.2	0	4.2	2.1	0	7.2	0	0	0
Services	0	0	0.2	0	0	0.3	0.6	0	5.1	0.2	0	1.7
All activities	0.7	0	6.5	0.5	0	4.6	1.2	0	7.8	0.2	0	2.4

Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

To better capture the effect of the pandemic on firms' hiring decisions, **Table 5-2** below shows the breakdown of the effect of the pandemic on workers actually hired by type of employment. Similar to the employment expectations presented in **Table 5-1**, the median firm in all activities hired no additional staff since February 2020 to the time of the interview, regardless of the type of contract.

On average and overall economic activities, the highest increase in new hires were definite duration contract workers (3.2 workers), followed by an increase of 2.8 new indefinite duration contract workers. The highest number of definite duration contract workers were 5.3 newly hired in the manufacturing and agriculture sector since February 2020. Firms in manufacturing and agriculture were also the most to hire new indefinite duration contract workers (five workers), on average over the same period. Firms in construction were the most to hire workers without contracts with 2.2 new workers on average. The firms that hired the least number of new definite duration workers were firms in food and accommodation (1.8 workers on average). While the least hiring firms of new indefinite duration contract workers were firms in trade and retail (0.7 workers on average).



► **Table 5-2:** Workers hired since Feb 2020 by contract type

	Workers without contracts hired since Feb 2020			Definite duration contract workers hired since Feb 2020			Indefinite duration contract workers hired since Feb 2020		
	Mean	Median	Sd	Mean	Median	Sd	Mean	Median	Sd
Manufacturing & agriculture	0.2	0	1.7	5.3	0	20.6	5	0	22.2
Construction	2.2	0	7.4	1.9	0	5.9	3.1	0	10
Trade & retail	0.1	0	0.3	3.2	0	11.8	0.7	0	4
Accommodation & food	0.5	0	2.6	1.8	0	4.6	2	0	8.6
Services	0.4	0	2.5	1.9	0	7	2	0	8.8
All activities	0.5	0	3.1	3.2	0	13.5	2.8	0	14

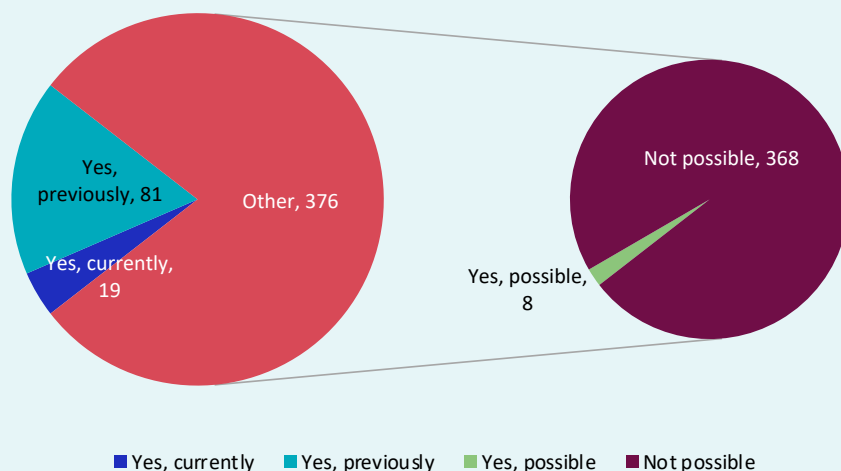
Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

**Table 3-6** shows that 75 firms reported having difficulties due to worker absenteeism since the start of the pandemic. Firms surveyed in Tunisia were also asked about the prospects of remote employment and the difficulties experienced when workers were allowed (if allowed) to work remotely from home.

**Figure 5-2** below shows the distribution of firms by remote employment status. Out of the 477 surveyed firms in Tunisia, 81 observed firms had employees that previously worked remotely, 19 still had employees working remotely at the time of the interview and 376 said their employees never worked remotely since the start of the pandemic. Only a small fraction of the firms that had no remote workers (376), said it was possible for employees to work remotely (8 firms), while the majority said that it was not possible for employees to work remotely (368).

► **Figure 5-2:** Remote employment

Workers ever worked remotely since Feb 2020: Out of those who said no, would it have been possible for workers to work from home?



Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

**Table 5-3** below shows the distribution of the 101 firms recorded having remote workers (either currently or previously) since the start of the pandemic, by economic activity. Firms with remote workers were mostly in the services sector (53 firms), followed by manufacturing and agriculture (22 firms) and trade and retail (17 firms). Expectedly, firms in food and accommodation were the least to have remote workers (with only 4 firms).

► **Table 5-3:** Distribution of firms with remote workers

	Manufacturing & agriculture	Construction	Trade & retail	Accommodation & food	Services	All activities
Number of firms	22	5	17	4	53	101
Share (%)	21.9	5	16.5	3.9	52.7	100

Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

**Table 5-4** shows the summary statistics of the highest number of workers to ever work remotely for the 101 firms with remote employment surveyed in Tunisia. Overall, firms with remote working arrangements had at most more than nine workers, on average, working remotely since the start of the pandemic. With the highest average number of remote workers being in firms operating in services (12.9 remote workers) and the lowest expectedly being in construction (only 1.9 remote workers).

Similarly, the maximum number of remote workers was observed in a firm in services (130 remote workers) and in manufacturing and agriculture the firm with the highest number of remote workers had 30 working from home, compared to only six in construction, and 20 in food and accommodation. However, the highest number of remote workers for the median firm in services was only six, with 10 being the highest number for the median firm in food and accommodation.

► **Table 5-4:** Highest number of remote workers

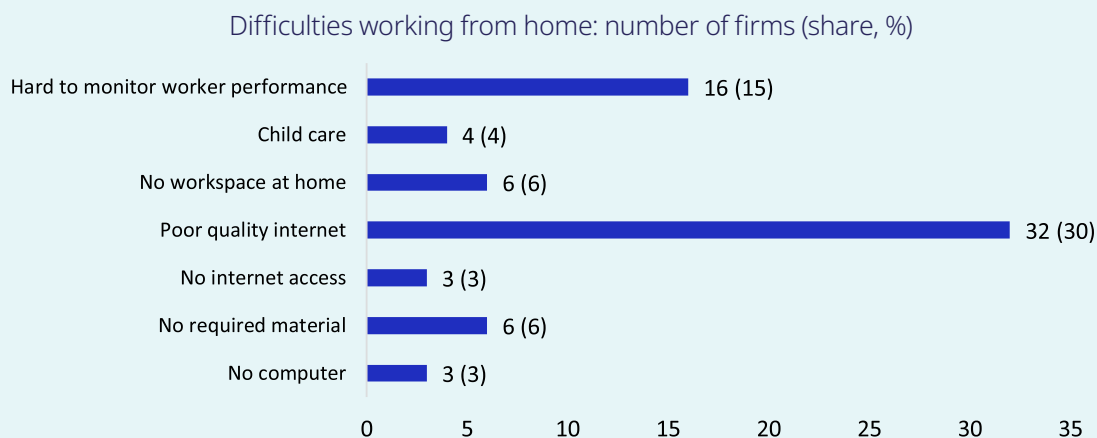
Highest no. workers worked remotely since end Feb. 2020				
	Mean	Median	Max	Sd
Manufacturing & agriculture	6.1	4	30	6.8
Construction	1.9	1	6	1.8
Trade & retail	4.2	4	10	2.5
Accommodation & food	8.9	10	20	6.8
Services	12.9	6	130	18.1
All activities	9.3	5	130	14.3

Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

Revisiting those firms that reported not having any remote workers, and to capture some of the issues faced by firms who wanted to have their employees work from home, **Figure 5-3** below shows the distribution of the responses made by firms on difficulties faced with working from home arrangements.

Out of the 376 firms that reported having no remote workers, 30 per cent of the firms responding to this question cited poor internet quality as the main impediment to making working from home arrangements (32 firms). Also, a considerable share of the 376 firms, cited difficulties with monitoring worker performance (16 firms, 15 per cent). Only a few firms reported that their workers had no workspace at home and not having the required material to facilitate remote employment (six firms, six per cent each).

► **Figure 5-3:** Difficulties with working from home



Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

## Input challenges

**Table 6-1** shows the cross tabulation between firms that reported facing challenges with input prices and availability and firms that reported disruptions to accessing their inputs<sup>7</sup>. Recalling that 228 firms (47.8 per cent) reported having difficulties with accessing suppliers and 208 (43.6 per cent) cited difficulties with accessing main inputs<sup>8</sup>, either due to less availability or higher prices.

► **Table 6-1:** Input challenges

Experienced disruptions in inputs since Feb 2020					
Business challenge:		Yes	No	N/A	Total
Past 60 days: Reduction in the availability/price increases for the main inputs	Not Mentioned	47 (17.3)	136 (50.5)	87 (32.2)	269 (100)
	Mentioned	109 (52.6)	82 (39.7)	16 (7.8)	208 (100)
	Total	156 (32.7)	218 (45.8)	103 (21.6)	477 (100)

Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

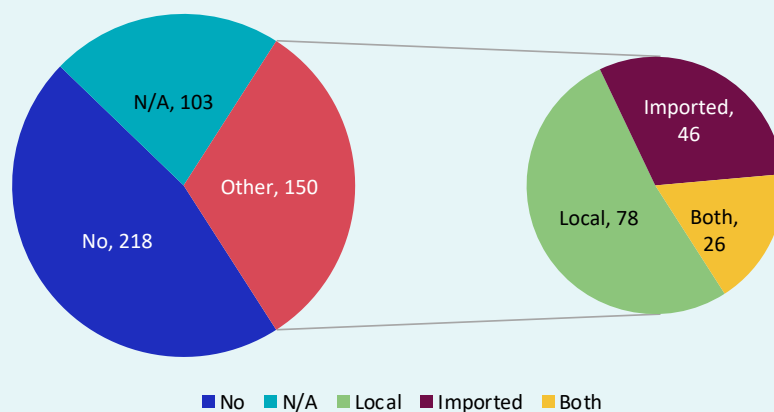
When firms were asked about whether they faced any disruptions to their access to inputs, out of the 208 firms facing difficulties with input availability and/or prices, 109 firms only reported experiencing disruptions in inputs since February 2020. Although 269 firms reported not having any challenges with input availability and prices, 47 firms out of the 269 did in fact report facing disruptions in inputs since February 2020.

<sup>7</sup> The total numbers in table 3.6 should not be compared to the total numbers in table 6.1, as the figures reported are weighted.

<sup>8</sup> See table 3.6, section 3.

► **Figure 6-1:** Source of input disruptions

Faced any challenges with access to inputs: if yes, was it local inputs, imported or both?



Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

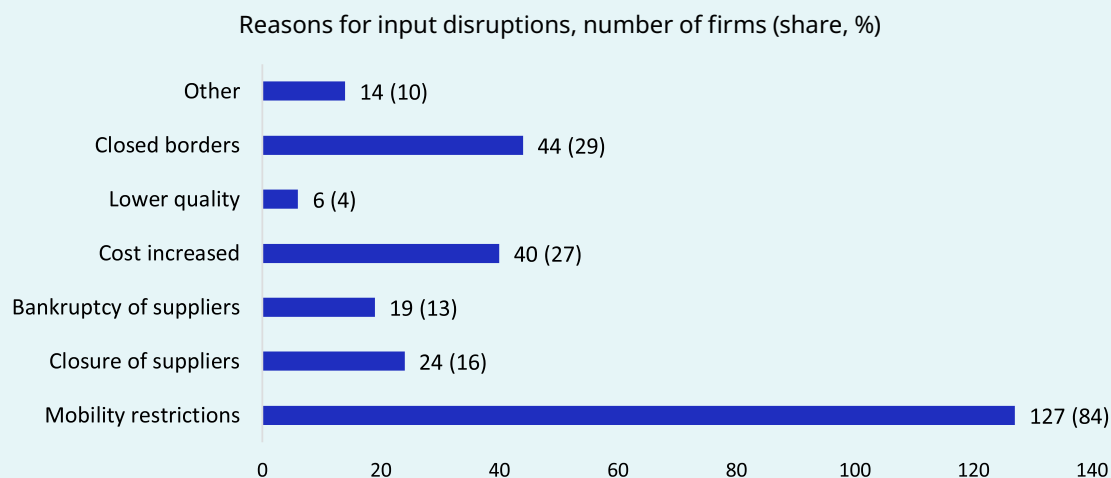
**Figure 6-1** above shows the source of inputs that were disrupted. Firms experiencing disruptions to their inputs (150 firms)<sup>9</sup>, mostly had issues with local disruptions (78 firms), while 46 firms mentioned having disruptions with imported inputs and 26 mentioned having disruptions in accessing both local and imported inputs.

To better understand the reasons why firms in Tunisia were experiencing disruptions in accessing their inputs, the surveyed firms were also asked about the main reasons driving such disruptions. The 150 firms asked this question were allowed to choose multiple responses. **Figure 6-2** below shows that the most cited reason for input disruptions was mobility restrictions (127 firms out of the 150, 84 per cent), followed by closing of borders (44 firms, 29 per cent), and input cost increases (40 firms, 27 per cent). Firms also reported disruptions due to closure of suppliers (24 firms, 16 per cent). Notably, the two most cited reasons for input disruptions were direct results of the lockdown measures mandated by the government at the start of the pandemic.

Only a few firms cited issues with the lower quality of inputs available (6 firms, 4 per cent) and more firms cited bankruptcy of suppliers (19 firms, 13 per cent). Due to low variation within economic activities, the reasons for input disruptions are not presented by sector. However, Table 6-2 below shows the breakdown of firms keeping inventory of inputs and purchasing inventory on credit by economic activity.

<sup>9</sup> The total number of firms facing disruptions with inputs from the cross tabulation in table 6.1 shall not be compared to the total number in figure 6.1 due to sample weights used.

► **Figure 6-2:** Reasons for input disruptions



Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

Most of the firms surveyed in Tunisia kept no inventory of their main inputs (374 firms out of 477) and only 103 firms did. Most of the firms keeping inventory were operating in the manufacturing and agriculture sector (39 firms, 38.1 per cent) and trade and retail (38 firms, 37 per cent), followed by firms in services (13 firms, 12.5 per cent). Expectedly the least number of firms keeping inventory were in construction, only 5 firms (4.9 per cent).

Similarly, more than half of the firms surveyed did not purchase inputs on credit, 268 firms, while only 209 firms did. With most of the firms purchasing inputs on credit also working in the trade and retail (70 firms, 33.7 per cent) and manufacturing and agriculture (66 firms, 31.7 per cent) sectors. The least credit-input-purchasing sector was food and accommodation, with only 21 firms purchasing inputs on credit (10.1 per cent).

► **Table 6-2:** Input inventory management

	Manufacturing & agriculture	Construction	Trade & retail	Accommodation & food	Services	All activities
<b>Do you keep inventory of main inputs? Number of firms (share, %)</b>						
Yes	39 (38.1)	5 (4.9)	38 (37)	8 (7.5)	13 (12.5)	103 (100)
No	109 (29.1)	50 (13.5)	68 (18.1)	45 (12.2)	101 (27.1)	374 (100)
Total	148 (31)	55 (11.6)	106 (22.2)	53 (11.2)	114 (24)	477 (100)
<b>Do you purchase inputs on credit? Number of firms (share, %)</b>						
Yes	66 (31.7)	27 (12.8)	70 (33.7)	21 (10.1)	25 (11.8)	209 (100)
No	82 (30.5)	29 (10.7)	36 (13.3)	32 (12)	90 (33.4)	268 (100)
Total	148 (31)	55 (11.6)	106 (22.2)	53 (11.2)	114 (24)	477 (100)

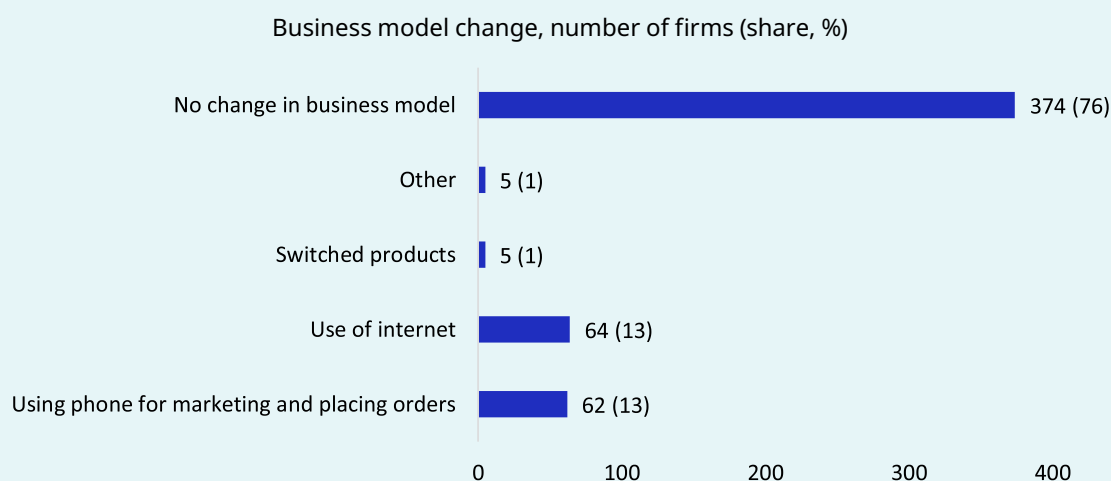
Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor



## Adapting to the pandemic: Business model changes

Adapting to the pandemic has been difficult for several industries around the world. Although more than half of the firms surveyed in Tunisia (327, see **Table 3-5**) reported having business as usual as their current business status, many firms did adapt to the pandemic by changing their business models, in terms of their hiring decisions (see section 5), production processes, and products offered. Firms surveyed in Tunisia were also asked how they adjusted their business models to reduce direct physical contact with their customers. **Figure 7-1** below shows the responses recorded for firms changing their business models (firms were allowed to choose more than one response).

► **Figure 7-1:** Business model change

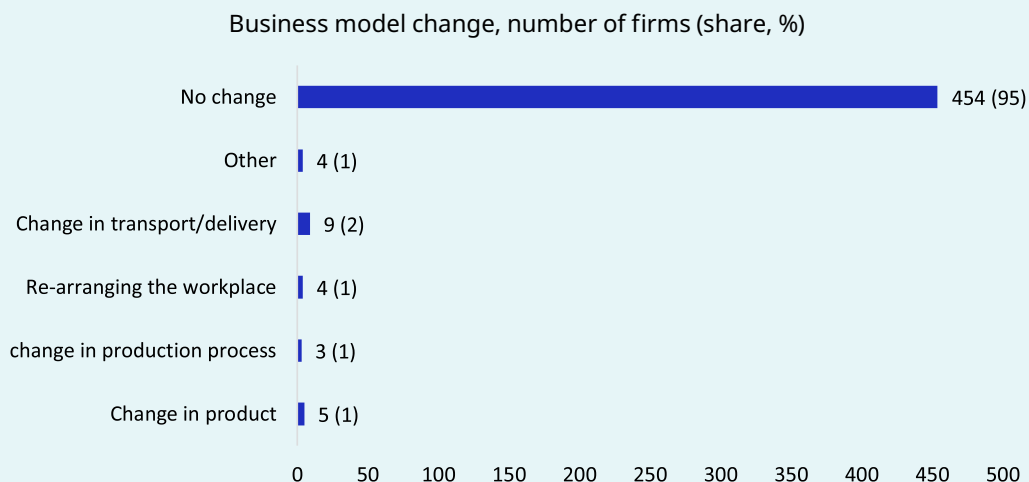


Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

Most firms reduced contact with their customers by using the internet and phones for marketing and placing orders more frequently (64 and 62 firms out of 477, respectively). Only a small fraction of firms switched their products (5 firms, 1 per cent). Concurrent with the findings in **Table 3-5**, the majority of firms answering this question reported making no changes to their business models (374 firms, 76 per cent). Firms were also asked whether they made any modifications to their business activity. **Figure 7-2** below summarize their responses.

Similar to findings in **Figure 7-1** and **Table 3-5**, the majority of firms reported no change to their business activity (454 firms, 95 per cent). Only a few firms changed their transport and delivery methods (nine firms, two per cent). Quite a few firms re-arranged their workplaces (four firms), changed their production processes (three firms) or their products (five firms).

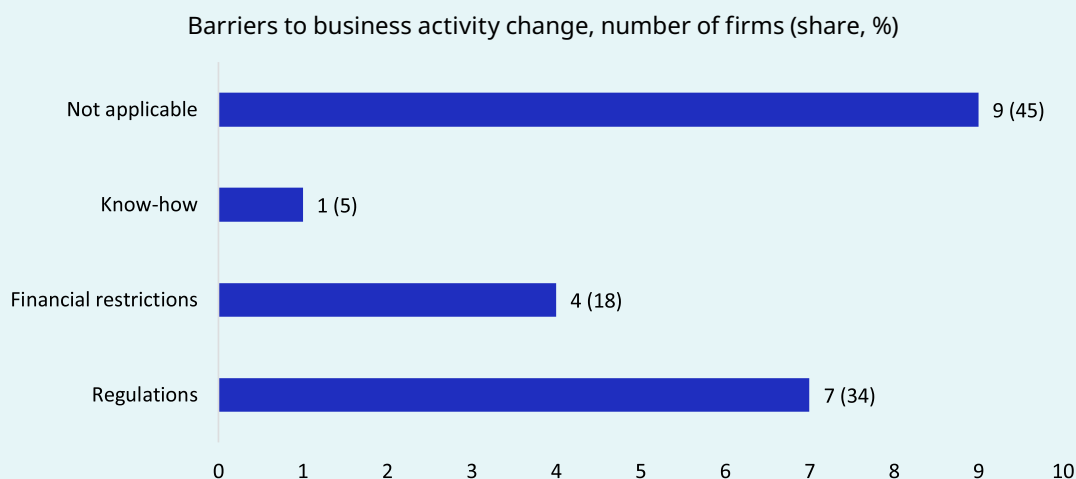
► **Figure 7-2:** Business activity change



Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

Firms that reported making changes to their business activity (a total of 25 firms), were also asked about the barriers they faced to re-orient their businesses. **Figure 7-3** below shows the responses for those firms<sup>10</sup>. The two most cited barriers for firms to adapt their business activities were regulations (seven firms) and financial restrictions (four firms). While only one firm mentioned that they lacked the know-how to re-orient their business activity.

► **Figure 7-3:** Barriers to business activity change



Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

<sup>10</sup> Only 25 firms of the 477 surveyed, that said they made changes to their business activity responded to this question.

## Future expectations and policy needs

Firms that were closed at the time of the interview (27) were asked when they expect to resume their business, **Table 8-1** below summarizes their responses. The highest number of closed businesses was 16 firms in manufacturing and agriculture and four firms each in construction and in services. Alarming, most closed businesses surveyed in Tunisia do not know or are uncertain when they would be able to resume their business (23 out of 27 firms). Out of the remaining firms, two expected to open their businesses again in more than six months, one firm would resume its business in two to six months and one firm in two to four weeks<sup>11</sup>.

► **Table 8-1:** Business resumption expectation (closed businesses)

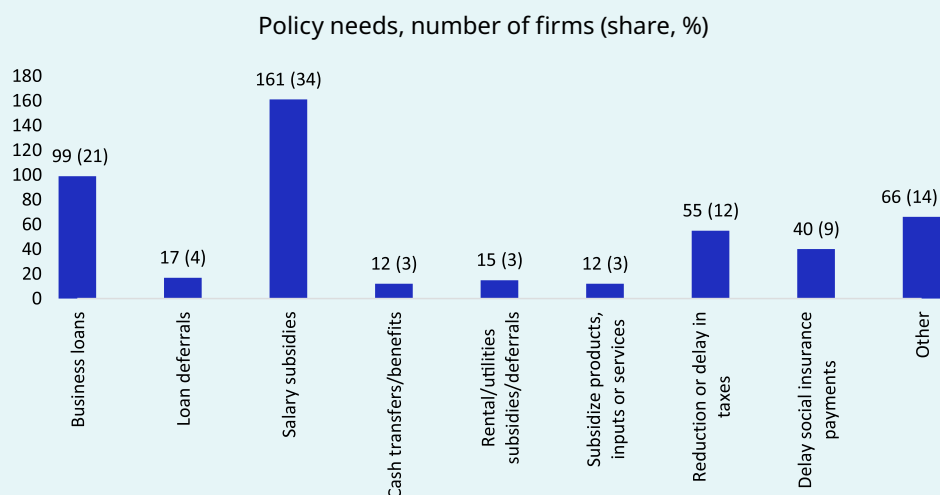
	< 2 weeks	2 - 4 weeks	1 - 2 months	2 - 6 months	> 6 months	Never	Don't know (uncertain)	Total
Manufacturing & agriculture	-	0	-	1	1	-	14	16
Construction	-	0	-	0	0	-	4	4
Trade & retail	-	-	-	-	-	-	-	-
Accommodation & food	-	0	-	0	0	-	3	3
Services	-	1	-	0	0	-	2	4
All activities	-	1	-	1	2	-	23	27

Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

Businesses in Tunisia were also asked about their policy needs and the recommendations they would have for the policymaker to help firms survive the pandemic. **Figure 8-1** below summarizes the most cited policies needed to survive the pandemic. Firms were only allowed to choose one response. The most cited policy need by firms surveyed in Tunisia was salary subsidies (161 firms, 34 per cent), followed by giving more business loans (99 firms, 21 per cent). Also, 55 firms expressed the need for reductions or delays in taxes (12 per cent) and 40 firms cited the need to delay social insurance payments (nine per cent).

<sup>11</sup> The totals and subtotals in table 8.1 are weighted and should not be added manually.

► **Figure 8-1:** Firm policy needs



Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

**Table 8-2** below shows the distribution of firms that applied to different types of government support programs to survive the pandemic by economic activity<sup>12</sup>. The column shares of the firms are between parenthesis. Most of the firms surveyed in Tunisia did not apply to any government support programs since the pandemic started (247 firms, 51.7 per cent), the majority of which are firms in services (75 firms) and in manufacturing and agriculture (68 firms). Overall, 230 firms surveyed in the sample applied to receive government support, with 80 firms being in manufacturing and agriculture and 50 firms operating in trade and retail.

► **Table 8-2:** Government support programs

	Manufacturing & agriculture	Construction	Trade & retail	Accommodation & food	Services	All activities
<b>Business loans</b>						
Not Mentioned	115 (77.7)	37 (67.1)	78 (73.2)	38 (72.2)	95 (83.3)	363 (76.2)
Mentioned	33 (22.3)	18 (32.9)	28 (26.8)	15 (27.8)	19 (16.7)	114 (23.8)
Total	148 (100)	55 (100)	106 (100)	53 (100)	114 (100)	477 (100)
<b>Loan deferrals</b>						
Not Mentioned	140 (94.3)	50 (90.5)	98 (92.2)	52 (97.8)	112 (97.9)	451 (94.6)
Mentioned	8 (5.7)	5 (9.5)	8 (7.8)	1 (2.2)	2 (2.1)	26 (5.4)
Total	148 (100)	55 (100)	106 (100)	53 (100)	114 (100)	477 (100)

<sup>12</sup> Firms were allowed to choose more than one response.

<b>Salary subsidies</b>						
Not Mentioned	26 (97.4)	101 (99.7)	65 (99)	90 (75.5)	176 (94.2)	457 (91.7)
Mentioned	50 (34)	17 (31)	22 (21)	17 (32.5)	11 (9.8)	118 (24.8)
Total	148 (100)	55 (100)	106 (100)	53 (100)	114 (100)	477 (100)
<b>Unemployment benefits</b>						
Not Mentioned	142 (95.8)	55 (100)	100 (94.1)	50 (93.3)	114 (99.4)	460 (96.5)
Mentioned	6 (4.2)	0 (0)	6 (5.9)	4 (6.7)	1 (0.6)	17 (3.5)
Total	148 (100)	55 (100)	106 (100)	53 (100)	114 (100)	477 (100)
<b>Rent/utility subsidies or deferrals</b>						
Not Mentioned	139 (94)	55 (100)	103 (97.4)	53 (98.7)	108 (94.9)	459 (96.2)
Mentioned	9 (6)	0 (0)	3 (2.6)	1 (1.3)	6 (5.1)	18 (3.8)
Total	148 (100)	55 (100)	106 (100)	53 (100)	114 (100)	477 (100)
<b>Subsidized products/inputs/services</b>						
Not Mentioned	144 (97.2)	54 (97)	104 (98.5)	52 (96.7)	113 (98.6)	466 (97.8)
Mentioned	4 (2.8)	2 (3)	2 (1.5)	2 (3.3)	2 (1.4)	11 (2.2)
Total	148 (100)	55 (100)	106 (100)	53 (100)	114 (100)	477 (100)
<b>Tax reduction/delay</b>						
Not Mentioned	138 (93.4)	54 (97)	97 (91.8)	51 (95.4)	100 (87.6)	440 (92.3)
Mentioned	10 (6.6)	2 (3)	9 (8.2)	2 (4.6)	14 (12.4)	37 (7.7)
Total	148 (100)	55 (100)	106 (100)	53 (100)	114 (100)	477 (100)
<b>Social security payment delays</b>						
Not Mentioned	137 (92.2)	52 (93.6)	98 (92.8)	50 (93.4)	105 (91.6)	441 (92.5)
Mentioned	12 (7.8)	4 (6.4)	8 (7.2)	4 (6.6)	10 (8.4)	36 (7.5)
Total	148 (100)	55 (100)	106 (100)	53 (100)	114 (100)	477 (100)
<b>Did not apply</b>						
Not Mentioned	80 (53.7)	34 (61)	50 (47.5)	27 (51.4)	39 (34.3)	230 (48.3)
Mentioned	68 (46.3)	22 (39)	56 (52.5)	26 (48.6)	75 (65.7)	247 (51.7)
Total	148 (100)	55 (100)	106 (100)	53 (100)	114 (100)	477 (100)

Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

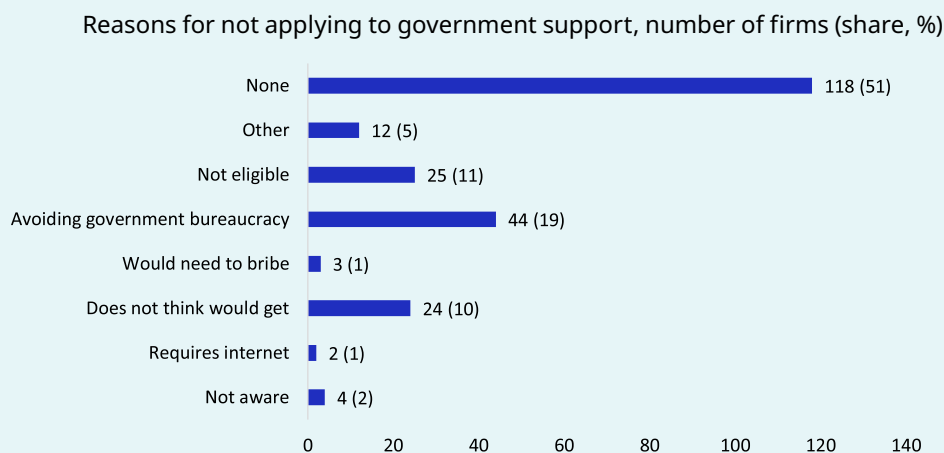
The most applied for support program was in the form of salary subsidies, with 118 firms applying for it. Most of the firms applying for such government support operated in manufacturing and agriculture (50 firms), followed by firms in trade and

retail (22 firms). Also, the least applied for support program was the provision of subsidized products, inputs, or services (only 11 firms applied for it, mostly in manufacturing and agriculture).

Also, several firms applied for government support in the form of business loans (114 firms out of the 477 surveyed). Similar to other support programs, most of the firms applying for government business loans were in manufacturing and agriculture (33 firms) and in trade and retail (28 firms).

To better understand the reasons for such low demand for government support, **Figure 8-2** below shows the responses for firms that did not apply for any government programs when asked why. Out of the 231 firms that did not apply to any government support, only 4 said that they were not aware of any programs offered (two per cent)<sup>13</sup>. A considerable share of the firms responding to this question did not apply to any program to avoid government bureaucracy (44 firms, 19 per cent), which is yet another awareness issues, while 25 firms were not eligible to apply for any program and 24 firms did not think they would get the support they applied for.

► **Figure 8-2:** Reasons for not applying for government support



Source: Constructed by authors using the ILO/ ERF COVID-19 Monitor

Tunisia managed to reopen its economy shortly after the lockdown mandated due to the pandemic, the repercussions of the pandemic, however, extend beyond the lockdown period and are interlinked with other international and local underlying determinants. The application process to receive government support offered to businesses and households in Tunisia would need to be more simplified, and possibly investing more in the digitization of such processes.

Although most of the firms surveyed in Tunisia did not adopt any coping strategy and had business as usual as their current business status, a considerable share of the firms reported having difficulties in accessing customers due to mobility restrictions. However, when firms were asked how they changed their business models to reach to their customers only 126 firms (26.4 per cent) used phones and the internet. This can be related to the issue of poor internet quality in Tunisia, as cited by firms listing the difficulties faced with remote employment.

Revisiting **Table 3-4**, we see that 59 firms received aid from relatives and friends in Tunisia and form abroad, while only 51 firms contracted bank credit and 33 were able to reschedule their loans. Indicating that small and medium enterprises in Tunisia needed financial support to survive the pandemic, but did not have easy access to credit.

<sup>13</sup> The total numbers from figure 8.2 and table 8.2 should not be compared, due to sample weights.



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## Appendix

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Inverse probability weighting was undertaken to account for the sampling strategy and non-response. Weights had the following inputs:

- Total number,  $T$ , of firms in the stratum,  $s$ , in the sampling frame ( $T_s$ )
- Number,  $N$ , of firms in the stratum,  $s$ , successfully completed in the sample ( $N_s$ )
- Share of firms successfully contacted in the stratum that were eligible ( $e_s$ )

The weight for a firm,  $f$ , in stratum  $s$  is calculated as:

$$w_{(f,s)} = (T_s * e_s) / N_s$$

We adjust the total number of firms in the sampling frame to account for the fact that not all firms were eligible by multiplying the sample frame number of firms in the strata,  $T_s$ , by the fraction eligible among contacted firms,  $e_s$ . Weights are then normalized to have a mean of one. The resulting weight is the same for all firms that are in the same stratum.



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HIGHLIGHTS: FEBRUARY 2021 SURVEY