## The Firm-Level Impact of the Covid-19 Pandemic

## Introduction

Myanmar reported its first confirmed case of Covid-19 on March 23, but the pandemic had already begun affecting firms in the first quarter of 2020 through trade and supply-chain disruptions. Manufacturing firms faced shortages of raw materials imported from China, mainly for cut-make-pack (CMP) products, while trade restrictions at overland borders reduced agricultural exports to China. ${ }^{1}$ Order cancellations from the European Union (EU)—the destination for 70 percent of Myanmar's garment exportsprompted the closure of more than 20 garment factories, causing over 10,000 people to lose their jobs. ${ }^{2}$ A sharp decline in tourism arrivals adversely affected both tourism and related industries, such as food services, transportation, and recreational activities, ${ }^{3}$ and this effect was compounded by the cancellation of large-scale events, the adoption of social-distancing measures, and the implementation of stay-at-home orders.

April saw the impacts of the pandemic intensify as the number of confirmed cases increased and mobility restrictions were introduced. The number of online company registrations dropped to 70 percent of its long-term average in April, ${ }^{4}$ reflecting an uncertain business outlook. Along with the cancellation of garment orders, fishery exports to the EU were halted in April. ${ }^{5}$ Real estate transactions in Yangon sharply declined in the beginning of the month; only 10 percent of leasable properties were tenanted, while sales were suppressed as sales events were cancelled. ${ }^{6}$ Construction activity slowed by 30 percent due to both the disruption of input supply chains thereby diminishing cashflow, and an acute labor shortage due to construction workers returning to their hometowns during the lockdown and work-shift rotation policies were introduced. ${ }^{7}$ Trade with China returned to normal levels by mid-March, ${ }^{8}$ but overland border restrictions were re-imposed in April, ${ }^{9}$ placing renewed pressure on agricultural firms that export to China.

The World Bank commissioned a firm-level survey to provide quantitative evidence of the impact of the Covid-19 pandemic. The nationally representative World Bank survey included 500 firms spanning a wide range of industries and firm sizes, as well as the formal and informal sectors. The first round was completed in May, and seven subsequent rounds conducted between June and December 2020 will provide continuous information on the evolving impact of the Covid-19 pandemic. The survey was nationally representative and included firms from a wide range of sectors. Whereas firm-level surveys in Myanmar tend to focus on the manufacturing, retail/wholesale, and service sectors, the World Bank survey provided a more accurate crosssection of Myanmar's firms that encompassed the agricultural sector, small and medium enterprises (SMEs), and informal firms. Distribution of firms in the sample is detailed in the appendix.

## Operational impacts

Overall, 16 percent of firms reported temporarily closing their operations for an average of eight weeks, and representatives of closed firms estimated that an average of four weeks would be required to resume their

[^0]operations. Firms in the service sector were worst hit by Covid-19, with 39 percent of respondents reporting temporary closures (Figure 1). Across regions, ${ }^{10}$ firms in Hilly Zone reported the largest share of firm closures at 23 percent, well above the national average of 16 percent (Figure 2). Since the Hilly Zone states of Shan and Kachin border China, the disruption of overland trade likely intensified the impact of the pandemic on local firms. Respondents in Yangon and Mandalay also reported above-average shares of firm closures, at 20 percent and 18 percent respectively, which may reflect the higher business density of those areas and the greater integration of local firms into international supply chains (Figure 2).


While representatives of closed firms expected to resume operations in an average of four weeks, estimates among firms in the service sector were as high as 25 weeks. The range of responses reflects how differently Covid-19 has affected individual firms, even within the same sector (Figure 3). Only 12 percent of manufacturing firms reported temporary closures, and those firms were closed for an average of 8.6 weeks. (Figure 1 and Figure 3). Agriculture firms were the most likely to continue operating, with only 6 percent of respondent firms reporting temporary closures. Moreover, less share of agricultural firms were negatively impacted by Covid-19 with 70 percent of firms reporting negative impacts compared to 81 percent of all firms, and higher share of service and manufacturing firms were negatively impacted with 87 percent and 86 percent respectively (Figure 4).

[^1]Figure 3: Number of weeks closed and expected number of weeks to resume operations by sector ${ }^{11}$


Figure 4: Share of firms reporting negative impacts of Covid-19


Source: The World Bank's COVID-19 firm survey

Across sectors, the three most commonly reported impacts of Covid-19 were lower sales, cashflow shortages, and reduced credit access (Figure 5). The share of firms reporting lower sales due to Covid-19 ranged from 89 percent in the manufacturing sector to 75 percent in the agricultural sector (Figure 6). Just over half of all firms reported cashflow shortages, and agricultural firms were the most likely to report both cashflow shortages and reduced access to credit. A full 64 percent of agricultural firms experienced cashflow shortages, well above the average of 51 percent for all firms, and about 42 percent of agricultural firms experienced reduced access to credit, versus 29 percent of all firms (Figure 5).

Figure 5: Effects of Covid-19 on firm operations


[^2]Figure 6: Most commonly reported impacts of Covid-19 by sector


Source: The World Bank's COVID-19 firm survey
Among those firms experiencing the disruption of raw materials and supply chains or shortage of inputs, the major contributing factor was the unavailability of raw material supplies. A total of 84 percent of firms reported that raw materials were not readily available while a lesser proportion reported cost increases and lower quality of raw materials with 34 percent and 17 percent respectively (Figure 7). Across sectors, almost all retail, wholesale and manufacturing firms experienced the impacts of the unavailibility of raw materials (Figure 8). Among firms in the service sector, the food and beverages industries were most impacted by the unavailability of raw materials and supply.


## Sales impacts

Compared to the same period last year, 65 percent of firms reported declines in sales in March 2020. In March 2020, 52 percent of agricultural firms reported a decline in sales while 69 percent of firms in other
sectors experienced similar declines as compared to the same period last year (Figure 9). Among those firms experiencing decline in sales, the average decline was 58 percent compared to the same time last year. While there were no material variation of sales decline among sectors, service firms were worst hit with an average sales decline of 62 percent as compared to the same period last year (Figure 10).

Figure 9: Share of firms experiencing sales decline Figure 10: Average sales (in percent) decline in March in March compared to the same period last year compared to the same period last year


Source: The World Bank's COVID-19 firm survey

As sales decline, firms also experienced profit decline in March 2020 compared to the same period last year. Overall, 69 percent of firms experienced a general reduction of profits. Among those firms, the average profit in March compared to the same period last year was 55 percent. Service firms fared worst with 71.2 percent experiencing a decline in profits - slightly higher than the average across firms of 69 percent. More dramatic was the 61 percent average profit decline among service firms from the year prior -6 percent higher than the overall average profit decline across sectors. In general, service firms were worst hit by Covid-19 in terms of sales and profits compared to other firms.


## Employment impacts

While only about one-fifth of firms reported laying off employees, employees in the service sector suffered the most from employee layoff as an impact of Covid-19. In March, Service sector accounted for about 51 percent of employee layoff - the highest among across the sectors- followed by agricultural firms with 21 percent (Figure 13). Among the service firms, employees in the tourism related industry were the worst hit with 83 percent of employee layoff - with 75 percent of food and beverage service firms and 8 percent of accommodation firms (Figure 14). Employment impact in the tourism industry could last much longer than the other industries due to the long closures of international border while domestic travel could pick up when domestic travel restrictions are relaxed.

Figure 13: Service sector firms accounted for the highest share of employee layoff

Figure 14: Among service sector firms, tourism related firms accounted for the most significant share


Source: The World Bank's COVID-19 firm survey

## Financial impacts

With its larger share of outstanding loans, firms in the agricultural sector have a higher risk of indebtedness during Covid-19. While 14 percent of all firms had outstanding loans from commercial banks, this figure rose to 23 percent for firms in the agricultural sector. Some 16 percent of firms in the agricultural sector reported active loans from non-banking financial institutions as compared to an average of 14 percent across other firms. Further, indicative of the reliance on short term credit, 21 percent of agricultural firms had outstanding loans from family and friends compared to an average of 15 percent across all firms.


Covid-19 caused a large share of firms to delay payments to suppliers, and agricultural firms were the most likely to report delaying payments to financial institutions. Overall, 19 percent of firms reported delaying payments to suppliers by more than one week (Figure 16). By contrast, only 3 percent of firms reported delaying payments to employees. Retail/wholesale and manufacturing firms were the most likely to report delaying payments to suppliers, at 26 percent and 23 percent respectively. Firms in the retail/wholesale sector were the most likely to report delaying payments to tax authorities at 15 percent, well above the average of 9 percent for all firms. Some 15 percent of agricultural firms reported delaying payments to banks or

Figure 16: Share of firms reporting delayed
 nonbank financial institutions, confirming the finding that Covid-19 has financially impacted agricultural firms to a greater extent than firms in other sectors despite its limited effect on agricultural sales. The sensitivity of agricultural firms to the pandemic reflects their limited financial security, inherent seasonality, frequent informality, and lack of access to financing during the economic downturn.

Among the firms expriencing cash flow shortages, loans from friends and family was the principal mechanism to deal with operational cash flow shortages. Some 60 percent of firms reported loans from friends and family as the major mechanism for mitigating operational cash shortages. Despite being the major mechanism across sectors, the share of firms reporting loans from friends and family ranged from 44 percent in the retail and wholesale sector to 76 percent in the manufacturing sector (Figure 17). Across all sectors, financing through formal financial channels such as loans from commercial banks and non-banking financal institutions remained relatively low with an average of 29 percent of firms having access to such formal channels - indicating that formal financial institutions still play a key role in improving access to finance for firms across all sectors to ease market impacts, particularly during Covid-19. Consistent with expectations, loans from friends and family was the major mechanism for micro to medium-sized firms and less prevalent in large firms
(Figure 18). More than half of micro and small firms sought loans from family and friends to finance cash shortages - suggesting that smaller sized firms experience challenges in securing credit from formal financial channels .

| Figure 17: Loans from friends and family was the mechanism for dealing with cash flow shortage by sector |  |  |  | Figure 18: Loans from friends and family was the mechanism for dealing with cash flow shortage - by firm size |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Agriculture | 26\% 11\% | 57\% | 6\% | Micro (1-4) | 20\% 7\% | 68\% | 5\% |
| Manufacturing | 13\% 5\% | 76\% | 6\% | Small (5-19) | 21\% 10\% | 50\% | 19\% |
| Retail and wholesale | 14\% 14\% | 44\% | 28\% | Medium (20-99) | 39\% | 12\% 41\% | 9\% |
|  | 34\% 3\% | 51\% | 12\% | Large (>99) | 28\% 6\% | 29\% |  |
| Total | 21\% 8\% | 60\% | 11\%/4 | Total | 21\% 8\% | 60\% | 11\% |
| - Loans from commercial banks <br> ■ Loans from non-banking financial institutions <br> - Loans from friends or family <br> ■ Delaying payments to suppliers/workers/authorities |  |  |  | - Loans from commercial banks <br> ■ Loans from non-banking financial institutions <br> - Loans from friends or family <br> - Delaying payments to suppliers/workers/authorities |  |  |  |

## Resilience

While the majority of firms are confident that they will remain operational for the next month with current cash flow levels, firms could spiral into bankruptcy and shut down business in 4 weeks if the current situation does not improve. Overall, 73 percent of firms are confident to stay in business for the next month (Figure 19). However, only 65 percent of agricultural firms report confidence in business continuity as compared to the 75 percent average reported by firms in other sectors. This again confirms that agricultural firms are generally more susceptible to indebtedness, cash flow issues and the risk of bankruptcy where capital cannot be readily secured to fund operational and running expenses. On the other hand, despite most firms reporting a high degree of confidence to remain in business, firms' resilience varies across sectors. The average number of weeks to shut down and wind up business ranged from 2 weeks for manufacturing firms to 11 weeks for service firms (Figure 20) - indicating that service firms were the most resilient to continue business operations compared to other firms.


While 73 percent of firms reported confidence they would remain operational during the following month, 36 percent of firms expected to fall in arrears on outstanding repayment obligations within the next three months. Over half of agricultural firms expected to fall in arrears on oustanding liabilities over the next three months, compared to an average of 36 percent for all firms, further comfirming the disproportionate degree of financial vulnerability of agricultural firms to Covid-19 (Figure 21). By firm size, medium-sized firms were most likely to report being at risk of falling into arrears on outstanding liabilities at 61 percent, far above the average of 36 percent (Figure 22). While there were only 34 percent and 39 percent of micro and small firms expected to fall in arrears in outstanding liabilities respectively, it would not necessarily mean that those firms would have reduced financial risk given their limited access to formal financial channels.

Figure 21: Share of firms expecting to fall in arrears on outstanding liabilities - by sector


Figure 22: Share of firms expecting to fall in arrears on outstanding liabilities - by firm size


[^3]With a decline in sales as the most reported impact of Covid-19, firms expected to decease sales by an average of 28 percent over the next quarter. Across sectors, service firms expected to experience the highest average sales decrease with 36 percent while retail and wholesale firms expected to suffer a 24 percent decrease (Figure 23). Among service sector firms, firms in information technology and communication industry, the
accommodation industry and other services industries expected greater declines in sales than the other service firms (Figure 24). Despite an average of 27 percent of declined sales for all manufacturing firms, textile and garment firms and other manufacturing firms expected a 31 percent sales decline each in the next 3 month period (Figure 24).

Figure 23: Average expected sales change in next 3 Figure 24: Average expected sales change in next 3

|  | months - | by sector |  |  | mon | dustry |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Service | Agriculture | Manufacturing | Retail and wholesale | -65\% |  | Other Services |
|  |  |  |  |  | -44\% | Information Technology and.. |
|  |  |  |  |  | -33\% | Accommodation |
|  |  |  |  |  | -31\% | Textiles and Garments |
|  |  |  |  |  | -31\% | Other Manufacturing |
|  |  |  |  |  | -30\% | Health and Pharmaceutical... |
|  |  |  |  |  | -30\% | Food and Beverage Services |
|  |  |  | -24\% |  | -27\% | Agriculture and Aquaculture |
|  | -27\% | -27\% |  |  | -25\% | Financial Services |
|  |  |  |  |  | -24\% | Retail and Wholesale |
| -36\% |  |  |  |  | -24\% | Food and Beverage Products |
|  |  |  |  |  | -9\% | Construction |

Source: The World Bank's COVID-19 firm survey

Employment is likely to be less impacted than sales by Covid-19. Firms expect employment to increase by 2 percent in the next quarter while sales are expected to decrease. The expected employment increase is mainly driven by firms in the manufacturing sector with an average of 6 percent increase in reinstated jobs. In contrast, further job losses are expected in service sectors resulting in a 2 percent decrease in employment rates (Figure 25). Comparing industries, major drivers for an expected employment rate increase are the textile and garment industry and food and beverage manufacturing industry with an expected 16 percent and 13 percent increase respectively (Figure 26). Among services, tourism related industries such as accommodation and the food and beverage service industries expect to experience further decreases in employment.

Figure 25: Average expected employment change in next 3 months - by sector

Figure 26: Average expected employment change in next 3 months - by industry


## Adjustment mechanisms

Most firms were not able to adapt operations to the operational and financial impacts of Covid-19. Starting or increasing delivery services was the most common adjustment mechanism adopted by firms in response to Covid-19 impacts - with 36 percent firms reporting adopting this measure (Figure 27). Most firms continued their conventional production or services delivery model as only 26 percent of firms changed their production or mode of services delivery partially or completely. Only 19 percent of firms adopted digital platforms or online systems to perform business functions, and only 6 percent embraced remote-work arrangments. Agricultural and micro-sized firms were the least likely to report adopting new mechanisms to cope with Covid-

Figure 27: Share of firms reporting major adjustment mechanisms


All firms did not have protective measures in place for the safety of employees and customers from Covid-19 at workplaces. While the majority of firms provided hand santizers and cleaning supplies to employees and ensured their employees wore masks, about one-third of firms did not introduce social distancing among employess (Figure 28). Share of firms providing hand santizers and cleaning supplies to customers was slightly lower than the firms providing such supplies to their employees (Figure 29). Similarly, social distancing was not in place among customers and between employees and customers in a significant share of firms (Figure 29). In addition, about half of the firms did not practice social distancing among employees, among customers, and between customers and employees (Figure 29). Less than half of the firms disinfected workplaces, and a majority of firms did not adjust to a 'new normal' working style such as reducing operation hours or rotating shifts, instituting a work-from-home policy or adopting online service delivery.

Figure 28: Measures at workplace for safety of
employees


Source: The World Bank's COVID-19 firm survey

## Government policy

More than half of the respondent firms were aware of economic support programs offered by the government. While there was no significant variation among different sectors for being aware of government support (Figure 30), the share of firms that were aware of government support ranged from 57 percent of small firms to 91 percent of large firms (Figure 31) - indicating that a significant share of smaller firms may have been disadvantaged by a general lack of awareness of government support.


While 60 percent of firms were aware of programs designed to mitigate the impact of Covid-19 on firms, only 9 percent of firms reported applying for public support. Across sectors, the share of firms that applied for government support ranged from 6 percent among agricultural firms to 15 percent among service firms. This supports the finding that service firms (especially tourism related firms) were most impacted by

Covid-19 (Figure 32). In terms of firm size, only 3 percent of micro firms applied to support programs (Figure 33). These results suggest that the government may need to expand its outreach and targeted communication efforts and develop a broader, more inclusive set of programs.


Source: The World Bank's COVID-19 firm survey
Among the firms that applied for government support, only 41 percent reported that the support was helpful for business continuity. Such support would most likely to be helpful for agricultural firms, compared to firms in other sectors (Figure 34). Consistent with the finding that small and medium firms had less access to formal financial channels than larger firms, small and medium firms benefited more from the support received than large firms. However, only 9 percent of firms applied for government support, and less than half of those firms reported the support as being helpful for the business continuity - indicating that the dominant share of firms across sector and size have not been assisted by government support.

Figure 34: Share of firms reporting that government Figure 35: Share of firms reporting that government supports were helpful - by sector supports were helpful - by firm size


Figure 36: Most Urgent Government Policy Response

While the Government of Myanmar has initiated a series of policy responses including the Covid-19 Economic Relief Plan (CERP), a majority of firms reported that fiscal policy responses would support them over the Covid-19 crisis. Most firms suggested that access to loans and credit gurantees, tax deferrals, or tax relief were the most urgently needed forms of government support (Figure 36) - which is consistent with findings of the other surveys. ${ }^{12}$ The GOM included such fiscal policy reponses in the CERP as action plans to ease impacts on the
 private sector.

## Box 1: The Impact of Covid-19 on female-owned firms

Female-owned firms were more likely to report negative effects from Covid-19. Female-owned firms were more likely to report diminished sales (86 percent), cashflow shortages ( 52 percent), and reduced access to credit ( 32 percent) than their male-owned counterparts (Figure 37). This pattern reflects underlying challenges facing female entrepreneurs in Myanmar, and it underscores the importance of crafting Covid-19 response programs that effectively reach vulnerable firms, including female-owned firms and SMEs, which face especially severe challenges during economic crises.

Figure 37: Operational impact on Firms by Ownership Type


Source: The World Bank's COVID-19 firm survey

Figure 38: Adjustment mechanisms of the Firms by Ownership Type

[^4]While female-owned firms were more impacted by Covid-19 in terms of operation, they adjusted the ways of business more than their male-owned counterparts. Female-owned firms were more likely to report starting or increasing delivery or carry-on ( 37 percent), changing its production or services offered (32 percent), adopting online/digital platform(s) for major business functions, and starting or increasing remote work arrangements for its workforce (7 percent) than their male-owned counterparts (Figure 38). This suggests that female-owned firms are more likely to adopt new mechanisms to survive during Covid-19. Although being worst hit operationally by Covid-19, female-owned firms would be more likely to be survive than their male-owned counterparts given their better adoption of new mechanisms.

## Appendix 1: Methodology

The World Bank contracted Thura Swiss, a research and consulting firm, to conduct High-Frequency Phone Survey (HFPS) for impacts of Covid-19 on firms in Myanmar. The HFPS for firms is a multi-topic and multiround survey designed collect information on operational impacts, sales impacts, financial impacts, resilience, government policy and adjustment mechanisms. The survey is to be implemented from May 2020 to December 2020 with 6 to 8 rounds spaced by 3 to 4 weeks. The questionnaire will be adapted as situation in Myanmar evolves.

In this survey, the sample frame is all firms in Myanmar, and this survey used the sample frame based on two sources. The first source is Myanmar Business Survey (MBS) 2015, which included 14,331 businesses representing 126,928 businesses nationally. However, the MBS survey did not cover agriculture and financial firms. Since the HFPS intends to cover all sectors across Myanmar, the firm list provided by Thura Swiss is used to have a sampling frame for agricultural and financial firms. Combining these two sources, the sampling frame used in this survey covered 169,964 firms. From this frame, 500 firms were randomly selected based on three stratum - geographical zone ${ }^{13}$, industry ${ }^{14}$ and firm size. The distribution of samples by sector, firm size, industry and zone are in Table 1, Table 2, Table 3 and Table 4. To allow interference from sample to population, the responses are weighted using inverse probability weights.

The design of the questionnaire was based on existing enterprise surveys such as the World Bank Enterprise Survey (ES), FCI's Business Pulse Survey, the ES Covid-19 survey, and experience of the World Bank team. The questions were designed to assess operational impacts, sales impacts and financial impacts that firms experienced due to Covid-19. In addition, the questionnaire also explored resilience of firms, adjustment mechanisms that they have taken and opinion on the government support and policy.

Table 1: Sample distribution by sector

| Sector | Number of firms | Share of firms |
| :--- | ---: | ---: |
| Agriculture | 87 | $17 \%$ |
| Manufacturing | 167 | $33 \%$ |
| Retail and wholesale | 86 | $17 \%$ |
| Service | 160 | $32 \%$ |
| Total | 500 | $100 \%$ |

Table 2: Sample distribution by firm size

| Firm size | Number of firms | Share of firms |
| :--- | ---: | ---: |
| Micro (1-4) | 177 | $35 \%$ |
| Small (5-19) | 201 | $40 \%$ |
| Medium (20-99) | 94 | $19 \%$ |
| Large $(>99)$ | 28 | $6 \%$ |
| Total | 500 | $100 \%$ |

Table 3: Sample distribution by industry

| Industry | Number of firms | Share of firms |
| :--- | :--- | :--- |

[^5]| Accommodation | 15 | $3 \%$ |
| :--- | :--- | :--- |
| Agriculture and Aquaculture | 87 | $17 \%$ |
| Construction | 11 | $2 \%$ |
| Financial Services | 12 | $2 \%$ |
| Food and Beverage Products | 81 | $16 \%$ |
| Food and Beverage Services | 61 | $12 \%$ |
| Health and Pharmaceutical Services | 11 | $2 \%$ |
| Information Technology and Communication | 10 | $2 \%$ |
| Other Manufacturing | 60 | $12 \%$ |
| Other Services | 40 | $8 \%$ |
| Retail and Wholesale | 86 | $17 \%$ |
| Textiles and Garments | 26 | $5 \%$ |
| Total | 500 | $100 \%$ |
|  |  |  |

Table 4: Sample distribution by ecological zone

| Geographical zone | Number of firms | Share of firms |
| :--- | ---: | ---: |
| Chin and Dry Zone | 80 | $16 \%$ |
| Delta and Coastal Lowland | 90 | $18 \%$ |
| Hilly Zone | 90 | $18 \%$ |
| Mandalay | 100 | $20 \%$ |
| Yangon | 140 | $28 \%$ |
| Total | $\mathbf{5 0 0}$ | $\mathbf{1 0 0} \%$ |

## Appendix 2: Impacts on operations

Table 5: Current operational status of firms - by share of firms

| Sector | Open | Temporarily closed |
| :---: | :---: | :---: |
| Agriculture | 94\% | 6\% |
| Manufacturing | 88\% | 12\% |
| Retail and wholesale | 85\% | 15\% |
| Service | 61\% | 39\% |
| Industry |  |  |
| Accommodation | 34\% | 66\% |
| Agriculture and Aquaculture | 94\% | 6\% |
| Construction | 65\% | 35\% |
| Financial Services | 92\% | 8\% |
| Food and Beverage Products | 91\% | 9\% |
| Food and Beverage Services | 66\% | 34\% |
| Health and Pharmaceutical Services | 32\% | 68\% |
| Information Technology and Communication | 100\% | 0\% |
| Other Manufacturing | 83\% | 17\% |
| Other Services | 44\% | 56\% |
| Retail and Wholesale | 85\% | 15\% |
| Textiles and Garments | 85\% | 15\% |
| Firm size |  |  |
| Micro (1-4) | 85\% | 15\% |
| Small (5-19) | 85\% | 15\% |
| Medium (20-99) | 60\% | 40\% |
| Large (>99) | 88\% | 12\% |
| Female-owned |  |  |
| Yes | 84\% | 16\% |
| No | 83\% | 17\% |
| Ecological zone |  |  |
| Chin and Dry Zone | 87\% | 13\% |
| Delta and Coastal Lowland | 88\% | 12\% |
| Hilly Zone | 77\% | 23\% |
| Mandalay | 82\% | 18\% |
| Yangon | 80\% | 20\% |
| Total | 84\% | 16\% |
| Sample | 393 | 107 |

Table 6: Average weeks closed and expected average weeks to resume operation

| Sector | Average weeks closed | Average weeks to resume operation |
| :---: | :---: | :---: |
| Agriculture | 6.90 | 1.53 |
| Manufacturing | 8.58 | 2.83 |
| Retail and wholesale | 6.94 | 2.73 |
| Service | 7.93 | 5.43 |
| Industry |  |  |
| Accommodation | 8.69 | 2.10 |
| Agriculture and Aquaculture | 6.90 | 1.53 |
| Construction | 6.11 | 2.22 |
| Financial Services | 8.61 | 1.36 |
| Food and Beverage Products | 8.49 | 2.33 |
| Food and Beverage Services | 8.05 | 4.09 |
| Health and Pharmaceutical Services | 5.00 | 2.36 |
| Information Technology and Communication |  |  |
| Other Manufacturing | 8.66 | 2.68 |
| Other Services | 7.58 | 9.07 |
| Retail and Wholesale | 6.94 | 2.73 |
| Textiles and Garments | 8.45 | 8.32 |
| Firm size |  |  |
| Micro (1-4) | 7.53 | 2.27 |
| Small (5-19) | 8.34 | 5.78 |
| Medium (20-99) | 6.72 | 4.73 |
| Large ( $>99$ ) | 10.22 | 8.57 |
| Female-owned |  |  |
| Yes | 7.83 | 3.47 |
| No | 7.64 | 3.98 |
| Ecological zone |  |  |
| Chin and Dry Zone | 7.34 | 1.54 |
| Delta and Coastal Lowland | 8.24 | 5.92 |
| Hilly Zone | 7.80 | 2.49 |
| Mandalay | 7.53 | 2.84 |
| Yangon | 7.45 | 4.66 |
| Total | 7.73 | 3.76 |
| Sample | 106 | 71 |

Table 7: Impacts of Covid-19 on firms - by share of firms

| Sector | Don't know | Very negative | Negative | $\begin{gathered} \text { No } \\ \text { effect } \end{gathered}$ | Positive | Very positive |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Agriculture | 0.0\% | 19.3\% | 50.7\% | 25.1\% | 4.1\% | 0.7\% |
| Manufacturing | 0.0\% | 40.0\% | 46.2\% | 9.1\% | 2.8\% | 1.9\% |
| Retail and wholesale | 3.0\% | 35.2\% | 45.3\% | 16.6\% | 0.0\% | 0.0\% |
| Service | 0.0\% | 53.4\% | $33.9 \%$ | 12.7\% | 0.0\% | 0.0\% |
| Industry |  |  |  |  |  |  |
| Agriculture and Aquaculture | 0.0\% | 19.3\% | 50.7\% | 25.1\% | 4.1\% | 0.7\% |
| Accommodation | 0.0\% | 62.6\% | 37.5\% | 0.0\% | 0.0\% | 0.0\% |
| Construction | 0.0\% | 50.0\% | 48.1\% | 1.9\% | 0.0\% | 0.0\% |
| Financial Services | 5.3\% | 10.1\% | 79.3\% | 5.3\% | 0.0\% | 0.0\% |
| Food and Beverage Products | 0.0\% | 32.9\% | 52.4\% | 7.3\% | 4.1\% | 3.4\% |
| Food and Beverage Services | 0.0\% | 52.0\% | 32.5\% | 15.5\% | 0.0\% | 0.0\% |
| Health and Pharmaceutical Services | 0.0\% | 13.7\% | 86.4\% | 0.0\% | 0.0\% | 0.0\% |
| Information Technology and Communication | 0.0\% | 9.8\% | 75.7\% | 4.9\% | 4.9\% | 4.9\% |
| Other Manufacturing | 0.0\% | 52.0\% | 37.8\% | 8.9\% | 1.3\% | 0.0\% |
| Other Services | 0.0\% | 61.0\% | $33.4 \%$ | 5.6\% | 0.0\% | 0.0\% |
| Retail and Wholesale | 3.0\% | 35.2\% | 45.3\% | 16.6\% | 0.0\% | 0.0\% |
| Textiles and Garments | 0.0\% | 32.3\% | 41.5\% | 26.3\% | 0.0\% | 0.0\% |
| Firm size |  |  |  |  |  |  |
| Micro (1-4) | 0.0\% | 31.7\% | 46.8\% | 18.6\% | 1.9\% | 1.1\% |
| Small (5-19) | 2.4\% | 40.1\% | 42.3\% | 12.5\% | 2.3\% | 0.4\% |
| Medium (20-99) | 0.0\% | 59.3\% | 37.2\% | 3.5\% | 0.0\% | 0.0\% |
| Large ( $>99$ ) | 0.0\% | 19.0\% | 78.1\% | 2.8\% | 0.0\% | 0.0\% |
| Female-owned |  |  |  |  |  |  |
| Yes | 1.7\% | 38.2\% | 49.8\% | 9.2\% | 0.6\% | 0.6\% |
| No | 0.0\% | 33.4\% | 39.8\% | 22.6\% | 3.3\% | 0.9\% |
| Ecological zone |  |  |  |  |  |  |
| Chin and Dry Zone | 0.0\% | 29.8\% | 45.3\% | 22.2\% | 2.7\% | 0.0\% |
| Delta and Coastal Lowland | 0.0\% | 41.3\% | 41.9\% | 13.6\% | 2.9\% | 0.4\% |
| Hilly Zone | 0.0\% | 21.7\% | 61.5\% | 14.1\% | 1.3\% | 1.3\% |
| Mandalay | 0.0\% | 43.0\% | 41.5\% | 14.5\% | 1.0\% | 0.0\% |
| Yangon | 5.4\% | 35.8\% | 40.6\% | 15.1\% | 0.0\% | 3.1\% |
| Total | 0.8\% | 35.6\% | 45.1\% | 15.9\% | 1.9\% | 0.8\% |
| Sample | 2 | 194 | 231 | 62 | 7 | 4 |

Table 8: Effects of Covid-19 on firm operations - by share of firms

| Sector | Reduction of sales | Disruption of the supply of inputs and raw materials | Cash flow shortages | Reduction in access to credit | Reduction in workforce due to layoff | Filed for insolvency or bankruptcy | Having difficulty making payments on loans and other business credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Agriculture | 76\% | 31\% | 64\% | 43\% | 22\% | 13\% | 30\% |
| Manufacturing | 90\% | $33 \%$ | 52\% | 23\% | 18\% | 9\% | 20\% |
| Retail and wholesale | 82\% | 32\% | 41\% | 28\% | 20\% | 12\% | 25\% |
| Service | 92\% | 10\% | 48\% | 34\% | 26\% | 21\% | 33\% |
| Industry |  |  |  |  |  |  |  |
| Agriculture and Aquaculture | 76\% | 31\% | 64\% | 43\% | 22\% | 13\% | 30\% |
| Accommodation | 99\% | 0\% | 43\% | 42\% | 17\% | 9\% | 58\% |
| Construction | 100\% | 33\% | 59\% | 56\% | 0\% | 6\% | 48\% |
| Financial Services | 69\% | 0\% | 65\% | 1\% | 0\% | 0\% | 3\% |
| Food and Beverage Products | 87\% | 32\% | 45\% | 23\% | 4\% | 8\% | 16\% |
| Food and Beverage Services | 92\% | 10\% | 42\% | 36\% | 27\% | 23\% | 34\% |
| Health and Pharmaceutical Services | 100\% | 38\% | 12\% | 0\% | 6\% | 0\% | 40\% |
| Information Technology and Communication | 52\% | 100\% | 68\% | 19\% | 6\% | 0\% | 22\% |
| Other Manufacturing | 94\% | 34\% | 61\% | 22\% | 42\% | 10\% | 24\% |
| Other Services | 91\% | 14\% | 74\% | 26\% | 24\% | 15\% | 21\% |
| Retail and Wholesale | 82\% | 32\% | 41\% | 28\% | 20\% | 12\% | 25\% |
| Textiles and Garments | 82\% | 42\% | 46\% | 31\% | 18\% | 25\% | 33\% |
| Firm size |  |  |  |  |  |  |  |
| Micro (1-4) | 81\% | 30\% | 48\% | 32\% | 21\% | 14\% | 25\% |
| Small (5-19) | 89\% | 24\% | 58\% | 29\% | 21\% | 11\% | 26\% |
| Medium (20-99) | 96\% | 50\% | 51\% | 34\% | 21\% | 9\% | 38\% |
| Large ( $>99$ ) | 95\% | 38\% | 54\% | 31\% | 9\% | 25\% | 41\% |


| Female-owned |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Yes | 88\% | 27\% | 52\% | 34\% | 16\% | 12\% | 26\% |
| No | 81\% | 30\% | 50\% | 27\% | 26\% | 15\% | 27\% |
| Ecological zone |  |  |  |  |  |  |  |
| Chin and Dry Zone | 85\% | 22\% | 45\% | 24\% | 21\% | 10\% | 18\% |
| Delta and Coastal Lowland | 79\% | 30\% | 61\% | 33\% | 27\% | 16\% | 28\% |
| Hilly Zone | 86\% | 44\% | 47\% | 48\% | 17\% | 11\% | 29\% |
| Mandalay | 87\% | 24\% | 53\% | 23\% | 15\% | 13\% | 26\% |
| Yangon | 95\% | 28\% | 38\% | 28\% | 15\% | 11\% | 30\% |
| Total | 85\% | 29\% | 51\% | 31\% | 21\% | 13\% | 26\% |
| Sample | 387 | 107 | 248 | 142 | 91 | 58 | 114 |

Table 9: The Major Reasons for the Firms Experiencing Shortage of Inputs - by Share of Firms

| Sector | No Available | Cost increased | Lower quality |
| :---: | :---: | :---: | :---: |
| Agriculture | 67\% | 46\% | 24\% |
| Manufacturing | 91\% | 25\% | 20\% |
| Retail and wholesale | 94\% | 32\% | 6\% |
| Service | 71\% | 46\% | 0\% |
| Industry |  |  |  |
| Agriculture and Aquaculture | 67\% | 46\% | 24\% |
| Food and Beverage Products | 89\% | 38\% | 26\% |
| Textiles and Garments | 85\% | 33\% | 27\% |
| Other Manufacturing | 65\% | 8\% | 11\% |
| Retail and Wholesale | 100\% | 32\% | 6\% |
| Construction | 0\% | 80\% | 0\% |
| Accommodation | 96\% | 53\% | 0\% |
| Food and Beverage Services | 100\% | 0\% | 0\% |
| Financial Services | 94\% | 30\% | 0\% |
| Information Technology and Communication | 100\% | 5\% | 0\% |
| Health and Pharmaceutical Services | 84\% | 34\% | 17\% |
| Other Services | 0\% | 0\% | 0\% |
| Firm size |  |  |  |
| Micro (1-4) | 84\% | 31\% | 22\% |
| Small (5-19) | 80\% | 42\% | 8\% |
| Medium (20-99) | 98\% | 34\% | 0\% |
| Large (>99) | 81\% | 2\% | 19\% |
| Female-owned |  |  |  |
| Yes | 91\% | 34\% | 25\% |
| No | 77\% | 30\% | 10\% |
| Ecological zone |  |  |  |
| Chin and Dry Zone | 79\% | 29\% | 24\% |
| Delta and Coastal Lowland | 95\% | 33\% | 19\% |
| Hilly Zone | 62\% | 52\% | 13\% |
| Mandalay | 83\% | 24\% | 14\% |
| Yangon | 89\% | 26\% | 9\% |
| Total | 84\% | 34\% | 17\% |
| Sample | 95 | 41 | 13 |

## Appendix 3: Impacts on sales

Table 10: Sales in March 2020 compared to the same period last year - by share of firms

| Sector | Don't know | Increase | Remain the same | Decrease |
| :---: | :---: | :---: | :---: | :---: |
| Agriculture | 3.0\% | 15.4\% | 29.7\% | 51.8\% |
| Manufacturing | 6.2\% | 13.4\% | 11.6\% | 68.9\% |
| Retail and wholesale | 7.1\% | 9.7\% | 14.1\% | 69.1\% |
| Service | 8.9\% | 13.6\% | 8.7\% | 68.8\% |
| Industry |  |  |  |  |
| Accommodation | 5.7\% | 0.0\% | 0.0\% | 94.3\% |
| Agriculture and Aquaculture | 3.0\% | 15.4\% | 29.7\% | 51.8\% |
| Construction | 21.1\% | 0.0\% | 1.9\% | 77.0\% |
| Financial Services | 16.3\% | 7.8\% | 12.9\% | 63.0\% |
| Food and Beverage Products | 8.5\% | 17.6\% | 10.4\% | 63.5\% |
| Food and Beverage Services | 7.5\% | 13.1\% | 9.0\% | 70.4\% |
| Health and Pharmaceutical Services | 0.0\% | 4.0\% | 0.0\% | 96.0\% |
| Information Technology and Communication | 9.7\% | 60.6\% | 14.6\% | 15.1\% |
| Other Manufacturing | 3.7\% | 5.1\% | 14.2\% | 77.0\% |
| Other Services | 15.5\% | 19.8\% | 10.1\% | 54.6\% |
| Retail and Wholesale | 7.1\% | 9.7\% | 14.1\% | 69.1\% |
| Textiles and Garments | 0.0\% | 24.8\% | 6.6\% | 68.6\% |
| Firm size |  |  |  |  |
| Micro (1-4) | 5.8\% | 13.8\% | 16.3\% | 64.1\% |
| Small (5-19) | 6.7\% | 12.3\% | 17.9\% | 63.1\% |
| Medium (20-99) | 3.5\% | 3.4\% | 8.7\% | 84.4\% |
| Large (>99) | 6.0\% | 30.5\% | 3.4\% | 60.1\% |
| Female-owned |  |  |  |  |
| Yes | 8.7\% | 11.2\% | 12.7\% | 67.5\% |
| No | 3.5\% | 13.5\% | 20.5\% | 62.5\% |
| Ecological zone |  |  |  |  |
| Chin and Dry Zone | 2.9\% | 9.7\% | 20.6\% | 66.8\% |
| Delta and Coastal Lowland | 2.3\% | 16.6\% | 16.2\% | 64.9\% |
| Hilly Zone | 7.9\% | 15.2\% | 23.9\% | 53.0\% |
| Mandalay | 15.1\% | 8.7\% | 17.3\% | 58.9\% |
| Yangon | 8.8\% | 10.7\% | 3.8\% | 76.7\% |
| Total | 6.0\% | 12.9\% | 16.5\% | 64.5\% |
| Sample | 37 | 56 | 74 | 333 |

Table 11: Profit in March 2020 compared to the same period last year - by share of firms

| Sector | Don't know | Increase | Remain the same | Decrease |
| :---: | :---: | :---: | :---: | :---: |
| Agriculture | $14 \%$ | 5\% | 10\% | 71\% |
| Manufacturing | 8\% | 11\% | 10\% | 71\% |
| Retail and wholesale | 4\% | 11\% | 16\% | 68\% |
| Service | 11\% | 7\% | 15\% | 67\% |
| Industry |  |  |  |  |
| Accommodation | 6\% | 0\% | 0\% | 94\% |
| Agriculture and Aquaculture | 4\% | 11\% | 16\% | 68\% |
| Construction | 21\% | 6\% | 0\% | 73\% |
| Financial Services | 19\% | 8\% | 10\% | 63\% |
| Food and Beverage Products | 13\% | 16\% | 11\% | 61\% |
| Food and Beverage Services | 14\% | 7\% | 10\% | 70\% |
| Health and Pharmaceutical Services | 0\% | 2\% | 4\% | 94\% |
| Information Technology and Communication | 65\% | 10\% | 10\% | 15\% |
| Other Manufacturing | 3\% | 4\% | 9\% | 84\% |
| Other Services | 16\% | 2\% | 12\% | 70\% |
| Retail and Wholesale | 11\% | 7\% | 15\% | 67\% |
| Textiles and Garments | 0\% | 8\% | 8\% | 84\% |
| Firm size |  |  |  |  |
| Micro (1-4) | 10\% | 9\% | 13\% | 68\% |
| Small (5-19) | 8\% | 8\% | 13\% | 71\% |
| Medium (20-99) | 10\% | 3\% | 9\% | 78\% |
| Large ( $>99$ ) | 11\% | 30\% | 8\% | 51\% |
| Female-owned |  |  |  |  |
| Yes | 10\% | 9\% | 12\% | 68\% |
| No | 8\% | 8\% | 14\% | 70\% |
| Ecological zone |  |  |  |  |
| Chin and Dry Zone | 11\% | 5\% | 16\% | 69\% |
| Delta and Coastal Lowland | 8\% | 10\% | 11\% | 71\% |
| Hilly Zone | 10\% | 12\% | 18\% | 61\% |
| Mandalay | 10\% | 7\% | 13\% | 70\% |
| Yangon | 9\% | 10\% | 9\% | 73\% |
| Total | 9\% | 9\% | 13\% | 69\% |
| Sample | 45 | 44 | 65 | 346 |

Table 12: Average sales and profit decrease (in percent) in March compared to the same period last year

| Sector | Average sales decrease | Average profit decrease |
| :---: | :---: | :---: |
| Agriculture | 57\% | 56\% |
| Manufacturing | 56\% | 50\% |
| Retail and wholesale | 60\% | 55\% |
| Service | 62\% | 61\% |
| Industry |  |  |
| Accommodation | 76\% | 79\% |
| Agriculture and Aquaculture | 57\% | 56\% |
| Construction | 73\% | 69\% |
| Financial Services | 93\% | 25\% |
| Food and Beverage Products | 58\% | 52\% |
| Food and Beverage Services | 57\% | 58\% |
| Health and Pharmaceutical Services | 70\% | 74\% |
| Information Technology and Communication | 70\% | 60\% |
| Other Manufacturing | 55\% | 48\% |
| Other Services | 75\% | 67\% |
| Retail and Wholesale | 60\% | 55\% |
| Textiles and Garments | 55\% | 53\% |
| Firm size |  |  |
| Micro (1-4) | 59\% | 55\% |
| Small (5-19) | 58\% | 54\% |
| Medium (20-99) | 52\% | 59\% |
| Large ( $>99$ ) | 49\% | 54\% |
| Female-owned |  |  |
| Yes | 59\% | 55\% |
| No | 57\% | 54\% |
| Ecological zone |  |  |
| Chin and Dry Zone | 60\% | 55\% |
| Delta and Coastal Lowland | 54\% | 48\% |
| Hilly Zone | 64\% | 54\% |
| Mandalay | 56\% | 53\% |
| Yangon | 63\% | 71\% |
| Total | 58\% | 55\% |
| Sample | 398 | 266 |

## Appendix 4: Impacts on finance

Table 13: Outstanding loans from commercial banks, non-banking financial institutions, friends and family in March

| Sector | Commercial Banks | Non-banking Financial Institutions | Friends and Family |
| :---: | :---: | :---: | :---: |
| Agriculture | 23\% | 16\% | 21\% |
| Manufacturing | 13\% | 14\% | 12\% |
| Retail and wholesale | 9\% | 15\% | 12\% |
| Service | 9\% | 8\% | 16\% |
| Industry |  |  |  |
| Accommodation | 19\% | 0\% | 0\% |
| Agriculture and Aquaculture | 23\% | 16\% | 21\% |
| Construction | $33 \%$ | 0\% | 14\% |
| Financial Services | 5\% | 0\% | 0\% |
| Food and Beverage Products | 14\% | 11\% | 14\% |
| Food and Beverage Services | 9\% | 7\% | 19\% |
| Health and Pharmaceutical Services | 0\% | 0\% | 0\% |
| Information Technology and Communication | 0\% | 5\% | 5\% |
| Other Manufacturing | 13\% | 18\% | 6\% |
| Other Services | 7\% | 18\% | 14\% |
| Retail and Wholesale | 9\% | 15\% | 12\% |
| Textiles and Garments | 7\% | 8\% | 28\% |
| Firm size |  |  |  |
| Micro (1-4) | 14\% | 16\% | 14\% |
| Small (5-19) | 14\% | 12\% | 16\% |
| Medium (20-99) | 12\% | 4\% | 16\% |
| Large ( $>99$ ) | 15\% | 4\% | 7\% |
| Female-owned |  |  |  |
| Yes | 14\% | 15\% | 16\% |
| No | 14\% | 13\% | 15\% |
| Ecological zone |  |  |  |
| Chin and Dry Zone | 18\% | 7\% | 10\% |
| Delta and Coastal Lowland | 20\% | 15\% | 18\% |
| Hilly Zone | 7\% | 18\% | 20\% |
| Mandalay | 3\% | 21\% | 16\% |
| Yangon | 11\% | 11\% | 10\% |
| Total | 14\% | 14\% | 15\% |
| Sample | 61 | 51 | 69 |

Table 14: Share of firms delaying payments more than one week to wuppliers, tax authorities, banks and nonbank institutions and employees due to Covid-19

| Sector | Suppliers | Tax authorities | Banks and nonbank institutions | Employees |
| :---: | :---: | :---: | :---: | :---: |
| Agriculture | 10\% | 61\% | 16\% | 21\% |
| Manufacturing | 23\% | 86\% | $14 \%$ | 12\% |
| Retail and wholesale | 26\% | 79\% | 15\% | 12\% |
| Service | 13\% | 88\% | 8\% | 16\% |
| Industry |  |  |  |  |
| Accommodation | 1\% | 89\% | 0\% | 0\% |
| Agriculture and Aquaculture | 10\% | 61\% | 16\% | 21\% |
| Construction | 6\% | 79\% | 0\% | 14\% |
| Financial Services | 0\% | 40\% | 0\% | 0\% |
| Food and Beverage Products | 15\% | 93\% | 11\% | 14\% |
| Food and Beverage Services | 16\% | 91\% | 7\% | 19\% |
| Health and Pharmaceutical Services | 8\% | $32 \%$ | 0\% | 0\% |
| Information Technology and Communication | 10\% | 39\% | 5\% | 5\% |
| Other Manufacturing | 34\% | 81\% | 18\% | 6\% |
| Other Services | 4\% | 85\% | 18\% | 14\% |
| Retail and Wholesale | 26\% | 79\% | 15\% | 12\% |
| Textiles and Garments | 33\% | 62\% | 8\% | 28\% |
| Firm size |  |  |  |  |
| Micro (1-4) | 20\% | 76\% | 16\% | 14\% |
| Small (5-19) | 18\% | 81\% | 12\% | 16\% |
| Medium (20-99) | 16\% | 74\% | 4\% | 16\% |
| Large ( $>99$ ) | 38\% | 98\% | 4\% | 7\% |
| Female-owned |  |  |  |  |
| Yes | 20\% | 82\% | 15\% | 16\% |
| No | 19\% | 74\% | 13\% | 15\% |
| Ecological zone |  |  |  |  |
| Chin and Dry Zone | 15\% | 76\% | 7\% | 10\% |
| Delta and Coastal Lowland | 16\% | 82\% | 15\% | 16\% |
| Hilly Zone | 24\% | 63\% | 18\% | 10\% |
| Mandalay | 27\% | 88\% | 21\% | 18\% |
| Yangon | 19\% | 75\% | 11\% | 20\% |
| Total | 19\% | 78\% | 14\% | 15\% |
| Sample | 98 | 56 | 38 | 27 |

Table 15: Among the firms experiencing cash shortages due to Covid-19, share of firms using main mechanism to deal with cash shortages

| Sector | Loans from commercial banks | Loans from non-banking financial institutions | Loans from friends or family | Delaying payments to suppliers/workers /authorities |
| :---: | :---: | :---: | :---: | :---: |
| Agriculture | 26\% | 11\% | 57\% | 6\% |
| Manufacturing | 13\% | 5\% | 76\% | 6\% |
| Retail and wholesale | 14\% | 14\% | 44\% | 28\% |
| Service | 34\% | 3\% | 51\% | 12\% |
| Industry |  |  |  |  |
| Accommodation | 61\% | 0\% | 0\% | 39\% |
| Agriculture and Aquaculture | 26\% | 11\% | 57\% | 6\% |
| Construction | 87\% | 3\% | 0\% | 0\% |
| Financial Services | 73\% | 0\% | 0\% | 17\% |
| Food and Beverage Products | 19\% | 8\% | 72\% | 1\% |
| Food and Beverage Services | 40\% | 3\% | 54\% | 3\% |
| Health and Pharmaceutical Services | 10\% | 1\% | 53\% | 36\% |
| Information Technology and Communication | 46\% | 0\% | 0\% | 54\% |
| Other Manufacturing | 7\% | 2\% | 82\% | 9\% |
| Other Services | 21\% | 8\% | 60\% | 11\% |
| Retail and Wholesale | 14\% | 14\% | 44\% | 28\% |
| Textiles and Garments | 6\% | 13\% | 60\% | 20\% |
| Firm size |  |  |  |  |
| Micro (1-4) | 20\% | 7\% | 68\% | 5\% |
| Small (5-19) | 21\% | 10\% | 50\% | 19\% |
| Medium (20-99) | 39\% | 12\% | 41\% | 9\% |
| Large (>99) | 28\% | 6\% | 29\% | 36\% |
| Female-owned |  |  |  |  |
| Yes | 15\% | 11\% | 61\% | 12\% |
| No | 28\% | 6\% | 60\% | 6\% |
| Ecological zone |  |  |  |  |
| Chin and Dry Zone | 53\% | 12\% | 32\% | 3\% |
| Delta and Coastal Lowland | 12\% | 5\% | 73\% | 11\% |
| Hilly Zone | 10\% | 6\% | 60\% | 24\% |
| Mandalay | 21\% | 2\% | 62\% | 15\% |
| Yangon | 18\% | 25\% | 49\% | 8\% |
| Total | 21\% | 8\% | 60\% | 11\% |
| Sample | 50 | 20 | 89 | 16 |

## Appendix 5: Resilience

Table 16: Firms' confidence to remain open in next month

| Sector | Not very confident | Not confident | Neutral | Confident | Very confident |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Agriculture | 0.71\% | 5.46\% | 28.72\% | 16.24\% | 48.87\% |
| Manufacturing | 0.21\% | 4.01\% | 15.13\% | 29.60\% | 51.06\% |
| Retail and wholesale | 0.00\% | 8.18\% | 17.14\% | 29.40\% | 45.29\% |
| Service | 2.75\% | 11.12\% | 16.26\% | 33.74\% | 36.13\% |
| Industry |  |  |  |  |  |
| Accommodation | 0.00\% | 18.20\% | 28.73\% | 19.00\% | 34.07\% |
| Agriculture and Aquaculture | 0.71\% | 5.46\% | 28.72\% | 16.24\% | 48.87\% |
| Construction | 0.00\% | 21.07\% | 32.24\% | 32.91\% | 13.77\% |
| Financial Services | 0.00\% | 7.84\% | 0.00\% | 65.28\% | 26.88\% |
| Food and Beverage Products | 0.00\% | 4.25\% | 13.64\% | 35.03\% | 47.08\% |
| Food and Beverage Services | 2.27\% | 9.05\% | 18.95\% | 34.43\% | 35.30\% |
| Health and Pharmaceutical Services | 0.00\% | 0.00\% | 3.99\% | 75.35\% | 20.66\% |
| Information Technology and Communication | 4.86\% | 0.00\% | 15.08\% | 9.72\% | 70.35\% |
| Other Manufacturing | 0.34\% | 4.11\% | 16.94\% | 19.39\% | 59.21\% |
| Other Services | 5.71\% | 18.40\% | 3.17\% | 31.38\% | 41.34\% |
| Retail and Wholesale | 0.00\% | 8.18\% | 17.14\% | 29.40\% | 45.29\% |
| Textiles and Garments | 1.24\% | 1.35\% | 17.59\% | 41.35\% | 38.48\% |
| Firm size |  |  |  |  |  |
| Micro (1-4) | 0.56\% | 7.68\% | 20.02\% | 24.68\% | 47.06\% |
| Small (5-19) | 0.94\% | 4.71\% | 18.16\% | 31.30\% | 44.89\% |
| Medium (20-99) | 0.91\% | 8.32\% | 19.97\% | 20.71\% | 50.09\% |
| Large ( $>99$ ) | 0.00\% | 3.52\% | 17.34\% | 24.37\% | 54.77\% |
| Female-owned |  |  |  |  |  |
| Yes | 0.56\% | 7.68\% | 20.02\% | 24.68\% | 47.06\% |
| No | 0.94\% | 4.71\% | 18.16\% | 31.30\% | 44.89\% |
| Ecological zone |  |  |  |  |  |
| Chin and Dry Zone | 0.00\% | 7.21\% | 24.69\% | 24.00\% | 44.11\% |
| Delta and Coastal Lowland | 0.33\% | 6.40\% | 14.36\% | 26.22\% | 52.69\% |
| Hilly Zone | 2.76\% | 2.32\% | 25.60\% | 17.85\% | 51.47\% |
| Mandalay | 0.00\% | 8.14\% | 21.26\% | 35.40\% | 35.20\% |
| Yangon | 1.32\% | 9.19\% | 16.11\% | 31.84\% | 41.54\% |
| Total | 0.70\% | 6.67\% | 19.37\% | 26.77\% | 46.49\% |
| Sample | 9 | 35 | 104 | 139 | 213 |

Table 17: Average weeks to shut down the business if the situation does not improve

| Sector | Average weeks |
| :--- | ---: |
| Agriculture | 5.77 |
| Manufacturing | 1.78 |
| Retail and wholesale | 3.12 |
| Service | 10.73 |
| Industry |  |
| Accommodation | 5.38 |
| Agriculture and Aquaculture | 5.77 |
| Construction | 3.16 |
| Financial Services | 3.01 |
| Food and Beverage Products | 1.29 |
| Food and Beverage Services | 2.15 |
| Health and Pharmaceutical Services | 11.32 |
| Information Technology and Communication | 15.47 |
| Other Manufacturing | 2.22 |
| Other Services | 33.64 |
| Retail and Wholesale | 3.12 |
| Textiles and Garments | 4.22 |
| Firm size |  |
| Micro (1-4) | 4.17 |
| Small (5-19) | 4.59 |
| Medium (20-99) | 6.79 |
| Large (>99) | 4.95 |
| Female-owned |  |
| Yes | 4.04 |
| No | 4.76 |
| Ecological zone |  |
| Chin and Dry Zone | 6.11 |
| Delta and Coastal Lowland | 2.19 |
| Hilly Zone | 2.34 |
| Mandalay | 10.16 |
| Yangon | 4.94 |
| Total | 4.42 |
| Sample | 269 |
|  |  |

Table 18: Share of firms falling into arrears in outstanding liabilities in next 3 months

| Sector | Share of firms |
| :---: | :---: |
| Agriculture | 52\% |
| Manufacturing | 24\% |
| Retail and wholesale | 34\% |
| Service | 39\% |
| Industry |  |
| Accommodation | 24\% |
| Agriculture and Aquaculture | 52\% |
| Construction | 44\% |
| Financial Services | 76\% |
| Food and Beverage Products | 23\% |
| Food and Beverage Services | 45\% |
| Health and Pharmaceutical Services | 8\% |
| Information Technology and Communication | 19\% |
| Other Manufacturing | 28\% |
| Other Services | 20\% |
| Retail and Wholesale | 34\% |
| Textiles and Garments | 18\% |
| Firm size |  |
| Micro (1-4) | 34\% |
| Small (5-19) | 39\% |
| Medium (20-99) | 61\% |
| Large ( $>99$ ) | 43\% |
| Female-owned |  |
| Yes | 41\% |
| No | 33\% |
| Ecological zone |  |
| Chin and Dry Zone | 38\% |
| Delta and Coastal Lowland | 35\% |
| Hilly Zone | 43\% |
| Mandalay | 26\% |
| Yangon | 41\% |
| Total | 36\% |
| Sample | 176 |

Table 19: Expected average sales and employment change in next 3 months

| Sector | Sales change | Employment change |
| :---: | :---: | :---: |
| Agriculture | -27\% | 6\% |
| Manufacturing | -27\% | 2\% |
| Retail and wholesale | -24\% | 1\% |
| Service | -36\% | -2\% |
| Industry |  |  |
| Accommodation | -33\% | -8\% |
| Agriculture and Aquaculture | -27\% | -6\% |
| Construction | -9\% | -3\% |
| Financial Services | -25\% | -3\% |
| Food and Beverage Products | -24\% | -2\% |
| Food and Beverage Services | -30\% | -1\% |
| Health and Pharmaceutical Services | -30\% | 0\% |
| Information Technology and Communication | -44\% | 1\% |
| Other Manufacturing | -31\% | 2\% |
| Other Services | -65\% | 4\% |
| Retail and Wholesale | -24\% | 13\% |
| Textiles and Garments | -31\% | 16\% |
| Firm size |  |  |
| Micro (1-4) | -27\% | 7\% |
| Small (5-19) | -30\% | -5\% |
| Medium (20-99) | -37\% | 2\% |
| Large ( $>99$ ) | -39\% | -2\% |
| Female-owned |  |  |
| Yes | -28\% | 2\% |
| No | -28\% | 2\% |
| Ecological zone |  |  |
| Chin and Dry Zone | -32\% | 8\% |
| Delta and Coastal Lowland | -23\% | 3\% |
| Hilly Zone | -24\% | 9\% |
| Mandalay | -26\% | -6\% |
| Yangon | -40\% | -5\% |
| Total | -28\% | 2\% |
| Sample | 366 | 345 |

## Appendix 6: Adjustment mechanisms

Table 20: Share of firms with adjustment mechanisms

| Sector | Changed its production or services offered partially or completely | Started or increased delivery or carry-on | Started or increased remote work arrangement for its workforce | Adopted online/digital platform for major business functions such as sales |
| :---: | :---: | :---: | :---: | :---: |
| Agriculture | 11\% | 17\% | 0\% | 5\% |
| Manufacturing | 25\% | 54\% | 10\% | 26\% |
| Retail and wholesale | 31\% | 38\% | 5\% | 24\% |
| Service | 44\% | 28\% | 6\% | 17\% |
| Industry |  |  |  |  |
| Accommodation | 27\% | 0\% | 20\% | 43\% |
| Agriculture and Aquaculture | 11\% | 17\% | 0\% | 5\% |
| Construction | 39\% | 0\% | 27\% | 60\% |
| Financial Services | 14\% | 0\% | 71\% | 73\% |
| Food and Beverage Products | 22\% | 62\% | 8\% | 32\% |
| Food and Beverage Services | 47\% | $34 \%$ | 3\% | 12\% |
| Health and Pharmaceutical Services | 88\% | 7\% | 13\% | 78\% |
| Information Technology and Communication | 34\% | 15\% | 90\% | 85\% |
| Other Manufacturing | 28\% | 44\% | 12\% | 17\% |
| Other Services | 37\% | 13\% | 13\% | 26\% |
| Retail and Wholesale | 31\% | 38\% | 5\% | 24\% |
| Textiles and Garments | 37\% | 34\% | 11\% | 29\% |
| Firm size |  |  |  |  |
| Micro (1-4) | 19\% | 31\% | 4\% | 13\% |
| Small (5-19) | 37\% | 44\% | 7\% | 26\% |
| Medium (20-99) | 49\% | 41\% | 17\% | 38\% |
| Large (>99) | 66\% | 50\% | 49\% | 59\% |
| Female-owned |  |  |  |  |
| Yes | 32\% | 32\% | 7\% | 20\% |
| No | 20\% | 20\% | 4\% | 17\% |
| Ecological zone |  |  |  |  |
| Chin and Dry Zone | 19\% | 31\% | 1\% | 37\% |
| Delta and Coastal Lowland | 20\% | 35\% | 2\% | 27\% |
| Hilly Zone | 24\% | 40\% | 8\% | 10\% |
| Mandalay | 27\% | 41\% | 6\% | 13\% |
| Yangon | 54\% | 36\% | 17\% | 19\% |
| Total | 26\% | 36\% | 6\% | 19\% |
| Sample | 169 | 181 | 63 | 147 |

Table 21: Share of firms having protective measures against Covid-19 in place for employees' safety

| Sector | Ensuring employees wear masks | Providing hand sanitizers and cleaning supplies | Ensuring social distancing among employees | Work from home policy | Reducing operating hours or rotating shifts | Disinfecting workplace on daily basis |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Agriculture | 73\% | 74\% | 53\% | 1\% | 22\% | 39\% |
| Manufacturing | 86\% | 86\% | 75\% | 14\% | 47\% | 50\% |
| Retail and wholesale | 89\% | 90\% | 76\% | 18\% | 68\% | 53\% |
| Service | 76\% | 82\% | 69\% | 9\% | 54\% | 47\% |
| Industry |  |  |  |  |  |  |
| Accommodation | 100\% | 100\% | 85\% | 28\% | 77\% | 88\% |
| Agriculture and Aquaculture | 73\% | 74\% | 53\% | 1\% | 22\% | 39\% |
| Construction | 97\% | 97\% | 97\% | 61\% | 41\% | 64\% |
| Financial Services | 97\% | 97\% | 97\% | 78\% | 85\% | 94\% |
| Food and Beverage Products | 98\% | 98\% | 87\% | 11\% | 53\% | 58\% |
| Food and Beverage Services | 73\% | 79\% | 66\% | 3\% | 54\% | 43\% |
| Health and Pharmaceutical Services | 100\% | 100\% | 94\% | 86\% | 60\% | 47\% |
| Information Technology and Communication | 100\% | 100\% | 100\% | 90\% | 85\% | 44\% |
| Other Manufacturing | 64\% | 66\% | 54\% | 18\% | 42\% | 32\% |
| Other Services | 77\% | 87\% | 76\% | 21\% | 48\% | 59\% |
| Retail and Wholesale | 89\% | 90\% | 76\% | 18\% | 68\% | 53\% |
| Textiles and Garments | 92\% | 92\% | 76\% | 27\% | 32\% | 75\% |
| Firm size |  |  |  |  |  |  |
| Micro (1-4) | 75\% | 77\% | 64\% | 8\% | 43\% | 40\% |
| Small (5-19) | 90\% | 92\% | 76\% | 12\% | 54\% | 56\% |
| Medium (20-99) | 96\% | 96\% | 72\% | 21\% | 72\% | 69\% |
| Large ( $>99$ ) | 93\% | 93\% | 91\% | 61\% | 36\% | 88\% |
| Female-owned |  |  |  |  |  |  |
| Yes | 82\% | 85\% | 28\% | 8\% | 55\% | 42\% |
| No | 82\% | 82\% | 34\% | 6\% | 44\% | 53\% |


| Ecological zone |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chin and Dry Zone | 85\% | 85\% | 76\% | 8\% | 49\% | 66\% |
| Delta and Coastal Lowland | 78\% | 77\% | 63\% | 6\% | 47\% | 27\% |
| Hilly Zone | 78\% | 82\% | 68\% | 14\% | $37 \%$ | 51\% |
| Mandalay | 74\% | 85\% | 62\% | 19\% | 46\% | 49\% |
| Yangon | 95\% | 95\% | 79\% | 17\% | 60\% | 61\% |
| Total | 82\% | 83\% | 69\% | 11\% | 48\% | 48\% |
| Sample | 382 | 390 | 332 | 66 | 207 | 253 |

Table 22: Share of firms having protective measures against Covid-19 in place for customers' safety

| Sector | Ensuring customers wear masks | Providing hand sanitizers and cleaning supplies | Ensuring social distancing among customers, and between customers and employees | Reducing operating hours to reduce physical contacts | Disinfecting workplace on daily basis | Adopting online service delivery |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Agriculture | 48\% | 57\% | 46\% | 14\% | 27\% | 4\% |
| Manufacturing | 70\% | 82\% | 75\% | 35\% | 42\% | 19\% |
| Retail and wholesale | 77\% | 88\% | 77\% | 55\% | 51\% | 26\% |
| Service | 58\% | 75\% | 81\% | 58\% | 46\% | 22\% |
| Industry |  |  |  |  |  |  |
| Agriculture and Aquaculture | 48\% | 57\% | 46\% | 14\% | 27\% | 4\% |
| Food and Beverage Products | 67\% | 81\% | 90\% | 39\% | 50\% | 25\% |
| Textiles and Garments | 95\% | 95\% | 75\% | 21\% | 66\% | 30\% |
| Other Manufacturing | 71\% | 81\% | 52\% | 30\% | 26\% | 8\% |
| Retail and Wholesale | 77\% | 88\% | 77\% | 55\% | 51\% | 26\% |
| Construction | 64\% | 95\% | 95\% | 52\% | 52\% | 0\% |
| Accommodation | 89\% | 89\% | 62\% | 69\% | 70\% | 17\% |
| Food and Beverage Services | 58\% | 74\% | 86\% | 63\% | 43\% | 22\% |
| Financial Services | 97\% | 97\% | 94\% | 85\% | 97\% | 0\% |
| Information Technology and Communication | 86\% | 100\% | 100\% | 88\% | 35\% | 100\% |
| Health and Pharmaceutical Services | 100\% | 100\% | 100\% | 21\% | 89\% | 100\% |
| Other Services | 41\% | 69\% | 48\% | 27\% | 55\% | 21\% |
| Firm size |  |  |  |  |  |  |
| Micro (1-4) | 56\% | 68\% | 64\% | 34\% | 37\% | 14\% |
| Small (5-19) | 78\% | 90\% | 78\% | 45\% | 47\% | 24\% |
| Medium (20-99) | 84\% | 92\% | 86\% | 69\% | 66\% | 37\% |
| Large ( $>99$ ) | 87\% | 93\% | 93\% | 37\% | 82\% | 54\% |
| Female-owned |  |  |  |  |  |  |


| Yes | 63\% | 75\% | 72\% | 43\% | 60\% | 21\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No | 67\% | 77\% | 67\% | 36\% | 56\% | 14\% |
| Ecological zone |  |  |  |  |  |  |
| Chin and Dry Zone | 71\% | 74\% | 74\% | 42\% | 56\% | 4\% |
| Delta and Coastal Lowland | 56\% | 76\% | 68\% | 29\% | 28\% | 15\% |
| Hilly Zone | 63\% | 68\% | 59\% | 34\% | 40\% | 30\% |
| Mandalay | 76\% | 85\% | $72 \%$ | 49\% | 44\% | 25\% |
| Yangon | 70\% | 81\% | 77\% | 60\% | 57\% | 32\% |
| Total | 65\% | 76\% | 70\% | 39\% | 42\% | 19\% |
| Sample | 277 | 314 | 284 | 156 | 199 | 76 |

## Appendix 7: Government Policy

Table 23: Share of firms that were aware of government support, applied to government support and perceived that government support were helpful for business continuity

| Sector | Aware of government support? | Applied to government support? | Was government support helpful for business continuity? |
| :---: | :---: | :---: | :---: |
| Agriculture | 57\% | 6\% | 50\% |
| Manufacturing | 57\% | 12\% | 36\% |
| Retail and wholesale | 66\% | 8\% | 35\% |
| Service | 58\% | 15\% | 45\% |
| Industry |  |  |  |
| Agriculture and Aquaculture | 57\% | 6\% | 50\% |
| Food and Beverage Products | 62\% | 15\% | 36\% |
| Textiles and Garments | 74\% | 9\% | 59\% |
| Other Manufacturing | 47\% | 6\% | 30\% |
| Retail and Wholesale | 66\% | 8\% | 35\% |
| Construction | 64\% | 19\% | 3\% |
| Accommodation | 100\% | 30\% | 61\% |
| Food and Beverage Services | 48\% | 8\% | 38\% |
| Financial Services | 83\% | 0\% | 93\% |
| Information Technology and Communication | 95\% | 6\% | 47\% |
| Health and Pharmaceutical Services | 86\% | 0\% | 7\% |
| Other Services | 86\% | 27\% | 63\% |
| Firm size |  |  |  |
| Micro (1-4) | 57\% | 3\% | 36\% |
| Small (5-19) | 61\% | 20\% | 49\% |
| Medium (20-99) | 78\% | 23\% | 48\% |
| Large (>99) | 91\% | 30\% | 27\% |
| Female-owned |  |  |  |
| Yes | 63\% | 8\% | 42\% |
| No | 56\% | 13\% | 38\% |
| Ecological zone |  |  |  |
| Chin and Dry Zone | 42\% | 10\% | 40\% |
| Delta and Coastal Lowland | 61\% | 14\% | 38\% |
| Hilly Zone | 63\% | 12\% | 41\% |
| Mandalay | 71\% | 2\% | 45\% |
| Yangon | 67\% | 9\% | 45\% |
| Total | 60\% | 10\% | 41\% |
| Sample | 328 | 48 | 173 |

## Appendix 8: Miscellaneous

Table 24: Average age of firms

| Sector | Average firm age |
| :--- | ---: |
| Agriculture | 18.6 |
| Manufacturing | 18.6 |
| Retail and wholesale | 17.3 |
| Service | 14.8 |
| Industry |  |
| Accommodation | 6.8 |
| Agriculture and Aquaculture | 18.6 |
| Construction | 11.5 |
| Financial Services | 8.0 |
| Food and Beverage Products | 18.7 |
| Food and Beverage Services | 16.9 |
| Health and Pharmaceutical Services | 8.8 |
| Information Technology and Communication | 9.6 |
| Other Manufacturing | 19.5 |
| Other Services | 9.2 |
| Retail and Wholesale | 17.3 |
| Textiles and Garments | 11.1 |
| Firm size |  |
| Micro (1-4) | 19.4 |
| Small (5-19) | 14.4 |
| Medium (20-99) | 17.1 |
| Large (>99) | 12.8 |
| Female-owned |  |
| Yes | 18.4 |
| No | 17.1 |
| Ecological zone |  |
| Chin and Dry Zone | 18.0 |
| Delta and Coastal Lowland | 22.8 |
| Hilly Zone | 13.6 |
| Mandalay | 11.8 |
| Yangon | 14.1 |
| Total | 489 |
| Sample |  |
|  |  |

Table 25: Share of firms that has sales and profit increase

| Sector | Sales | Profit |
| :--- | ---: | ---: |
| Agriculture | $30.87 \%$ | $32.60 \%$ |
| Manufacturing | $31.89 \%$ | $37.48 \%$ |
| Retail and wholesale | $20.00 \%$ | $19.80 \%$ |
| Service | $17.25 \%$ | $10.11 \%$ |
| Industry |  |  |
| Agriculture and Aquaculture | $30.87 \%$ | $32.60 \%$ |
| Food and Beverage Products | $23.53 \%$ | $30.97 \%$ |
| Textiles and Garments | $3.84 \%$ | $1.78 \%$ |
| Other Manufacturing | $4.52 \%$ | $4.73 \%$ |
| Retail and Wholesale | $20.00 \%$ | $19.80 \%$ |
| Construction | $0.00 \%$ | $0.02 \%$ |
| Food and Beverage Services | $12.45 \%$ | $9.33 \%$ |
| Financial Services | $0.08 \%$ | $0.12 \%$ |
| Information Technology and Communication | $0.06 \%$ | $0.02 \%$ |
| Health and Pharmaceutical Services | $0.05 \%$ | $0.04 \%$ |
| Other Services | $4.60 \%$ | $0.59 \%$ |
| Firm-size |  |  |
| Micro (1-4) | $65.62 \%$ | $65.78 \%$ |
| Small (5-19) | $32.07 \%$ | $31.21 \%$ |
| Medium (20-99) | $1.01 \%$ | $1.12 \%$ |
| Large (>99) | $1.30 \%$ | $1.88 \%$ |
| Female-owned |  |  |
| Yes | $44.88 \%$ | $52.23 \%$ |
| No | $55.12 \%$ | $47.77 \%$ |
| Ecological zone |  |  |
| Yangon | $12.44 \%$ | $17.15 \%$ |
| Mandalay | $9.88 \%$ | $12.41 \%$ |
| Chin and Dry Zone | $15.71 \%$ | $11.54 \%$ |
| Delta and Coastal Lowland | $45.52 \%$ | $40.47 \%$ |
| Hilly Zone | $16.45 \%$ | $18.44 \%$ |
| Sample Size | 56 | 44 |

## Appendix 9: Questionnaires for the COVID-19 impacts on enterprises

## Phone interview introduction:

Good morning/afternoon/evening.
I am calling from [insert implementing contractor], on behalf of the World Bank. This establishment was randomly selected to participate in a survey to better understand the impact of the COVID-19 pandemic on businesses in Myanmar.
The results of the survey will be used to inform government responses aiming to support businesses during the crisis. All information and opinions you provide will be anonymized. Neither your name nor the name of your establishment will be used in any document based on this survey.
0. Date and time of the interview (start) [Instruction: To be completed by interviewer/supervisor)

| Date (start_01) |  |
| :--- | :--- |
| Time (start_02) |  |

[Instruction: Section A is to be asked only for the first round]
A. Screener and General Characteristics

1. What is name of the establishment? (a1) [Instruction: To be completed before interview]

| Name of the establishment |  |
| :--- | :--- |

2. Location of the establishment [Instruction: To be completed before interview]

|  | Name |
| :--- | :--- |
| Street address (a2a) |  |
| Township (a2b) |  |
| State/region $(\mathrm{a} 2 \mathrm{c})$ |  |

3. Is this establishment located in the industry zone? (a3) [Instruction: To be completed before interview]

| Yes - Headquarters is in the zone | 1 |
| :--- | :--- |
| Yes - Branches, factory and warehouse are in the <br> zone | 2 |
| No | 3 |

4. What type of product or service represents this establishment's largest share of annual sales? (a4)

> Product or service with largest share of annual sales
5. What is the main industry of activity of your establishment? (a5) 【nstruction: To be filled out by enumerator based on question a4].

| Sector | Industry Name | Code |
| :---: | :--- | ---: |
| Agriculture | Agriculture and Aquaculture | 1 |
| Mining | Mining and Quarrying | 2 |
| Manufacturing | Food and Beverage Products | 3 |


|  | Textiles and Garments | 4 |
| :--- | :--- | ---: |
|  | Other Manufacturing | 5 |
| Retail and wholesale | Retail and Wholesale | 6 |
| Services | Construction | 7 |
|  | Hotels | 8 |
|  | Restaurants or Food and Beverage services | 9 |
|  | Financial Services | 10 |
|  | Tourism | 11 |
|  | Information Technology and Communication | 12 |
|  | Health and Pharmaceutical Services | 13 |
|  | Other Services | 14 |

6. Is this establishment formally registered with any level government authority at present a business registration certificate/license and other necessary certificates/licenses/permits to operate a business? (a6)

| Yes | 1 |
| :--- | :--- |
| No | 2 |
| Don't know (spontaneous) | -9 |

7. What is the firm's ownership status? (a7)

| Private owned by national(s) | 1 |
| :--- | :--- |
| Private owned by foreigner(s) | 2 |
| Joint venture owned by national and foreign company(s) | 3 |
| Other (Specify) | 4 |
| Don't know | -9 |

8. When was this establishment established? (a8)

| Year this establishment was established |  |
| :--- | :--- |
| Don't know (spontaneous) | -9 |

9. Amongst the owners of this establishment, are there any female? (a9)

| Yes | 1 |  |
| :--- | :--- | :--- |
| No | 2 | Go to a10 |
| Don't know (spontaneous) | -9 |  |


|  | Number |
| :--- | :--- |
| What percentage of the establishment is owned by a female(s) (a9a) | \% owned by female(s) |

10. How many employees did this establishment have in January 2020? (a10)

|  | Number |
| :--- | :--- |
| Number of full-time employees (a9a) |  |
| Number of part-time employees (a9b) |  |

11. What was the total share of female employees in January 2020? (a11)

|  | Number |
| :--- | :--- |
| Female full-time employees $(\mathrm{a} 11 \mathrm{a})$ | Share $(\%)$ |
| Female part-time employees $(\mathrm{a} 11 \mathrm{~b})$ | Share $(\%)$ |

12. What was the value of total sales of this establishment in January 2020? (a12)

|  | Number |
| :--- | :--- |
| Value of sales |  |
| Don't know (Spontaneous) | -9 |

13. In January 2020, share of the total sales of this establishment are: (a13)

|  | Share (\%) |
| :--- | :--- |
| National sales (a13a) <br> Indirect exports (sold domestically to third party that exports product) <br> $(\mathrm{a} 13 \mathrm{~b})$ |  |
| Direct exports (a13c) |  |

14. What was the total value of investment, including equipment, machines, software and buildings of this establishment in January 2020? (a14)

|  | Number |
| :--- | :--- |
| Value of investment |  |
| Don't know (Spontaneous) | -9 |

B. Impacts on overall operation

1. How many days did this establishment operate in the last completed month? (b1)

| Days the establishment operated | (insert number of days) |
| :--- | :--- |
| Don't know (spontaneous) | -9 |

2. What is the current status of your establishment? (Instruction: If business is closed to public, but operates, it should be considered open) (b2)

| Open | 1 | Go to question (b5) |
| :--- | :--- | :--- |
| Temporary closed | 2 |  |
| Don't know (spontaneous) | -9 |  |

3. For how many weeks has the establishment been closed due to the COVID-19? (b3)

| Weeks the establishment has been closed | (insert number of weeks) |
| :--- | :--- |
| Don't know (spontaneous) | -9 |

4. In how many weeks do you expect that this establishment will resume operations? (b4)

| Number of weeks that the establishment | (insert number of weeks) |
| :--- | :--- |
| Don't know (uncertain) | -9 |

5. Overall, the effect of the COVID-19 on this establishment was [inset options]? (b5)

| Very negative | 1 |  |
| :--- | :--- | :--- |
| Negative | 2 |  |
| No effect at all | 3 |  |


| Positive | 4 | Go to Section C |
| :--- | :--- | :--- |
| Very positive | 5 |  |
| Don't know (spontaneous) | -9 |  |

6. Did this establishment experience any of the following issues due to the COVID-19? (b6)

|  | Yes | No | Don'tknow <br> (spontaneous) <br> Reduction of production (b6a) <br> applicable |  |
| :--- | :--- | :--- | :--- | :--- |
| Reduction of sales (b6b) | 1 | 2 | -9 | -5 |
| Disruption of the supply of inputs and raw <br> materials (b6c) | 1 | 2 | -9 | -5 |
| Cash flow shortages (b6d) | 1 | 2 | -9 | -5 |
| Reduction in access to credit (b6e) | 1 | 2 | -9 | -5 |
| Reduction in workforce due to layoff (b6f) | 1 | 2 | -9 | -5 |
| Filed for insolvency or bankruptcy (b6g) | 1 | 2 | -9 | -5 |
| Having difficulty making payments on <br> loans and other business credits (b6h) | 1 | 2 | -9 | -5 |
| Having difficulty selling products or <br> services to customers (b6i) | 1 | 2 | -9 | -5 |

7. What was the main reason for the disruption in intermediate materials? (b7) (Choose all that apply) [Instruction: Only ask if b6c=1]

|  | Yes | No | Don't know <br> (spontaneous) |  |
| :--- | :--- | :--- | :--- | :---: |
| Not available (b7a) | 1 | 2 | -9 |  |
| Cost increased (b7b) | 1 | 2 | -9 |  |
| Lower quality (b7c) | 1 | 2 | -9 |  |
| Others (specify) (b7d) |  |  |  |  |

C. Impacts on Sales

1. What was the value of total sales of this establishment in the last completed month of 2020? (c1)

|  | Myanmar Kyat |
| :--- | :--- |
| Value of sales |  |
| Don't know (Spontaneous) | -9 |

2. Comparing this establishment's sales for the last completed month in 2020 with the same month in 2019, did the sales? (c2)

| Increase | 1 |  |  |
| :--- | :--- | :--- | :---: |
| Remain the same | 2 | Go to question c3 |  |
| Decrease | 3 |  |  |
| Don't know (spontaneous) | -9 | Go to question c3 |  |


| Percent |  | Myanmar Kyat |
| :--- | :--- | :--- |


| Increased by how much? (c2a) |  | Or |  |
| :---: | :---: | :---: | :---: |
|  | Percent | Or | Myanmar Kyat |
| Decreased by how much? (c2b) |  |  |  |

3. Comparing this establishment's profit for the last completed month in 2020 with the same month in 2019, did profit? (c3)

|  | Profit |  |
| :--- | :--- | :--- |
| Increase | 1 |  |
| Remain the same | 2 | Go to question c4 |
| Decrease | 3 |  |
| Don't know (spontaneous) | -9 | Go to question c4 |


|  | Percent | Or | Myanmar Kyat |
| :---: | :---: | :---: | :---: |
| Increased by how much? (c3a) |  |  |  |
| Decreased by how much? (c3b) |  |  |  |

4. In the last completed month, what percentage of this establishment's sales were [the total has to be 100 percent] (c4)

|  | Share (\%) |
| :--- | :--- |
| National sales (c4a) |  |
| Indirect exports (sold domestically to third party that exports product) <br> (c4b) |  |
| Direct exports (c4c) |  |

5. Comparing the percentage of direct and indirect export of the last completed month in 2020 with the same month in 2019 did the percentage [insert option]? (c5)

| Increase | 1 |
| :--- | :--- |
| Remain the same | 2 |
| Decrease | 3 |
| Don't know (spontaneous) | -9 |

D. Impacts on labor

1. How many employees did this establishment have in the last completed month? (d1)

|  | Number |
| :--- | :--- |
| Number of full-time employees (d1a) |  |
| Number of part-time employees (d1b) |  |

2. What was the total share of female employees in the last completed month? (d2)

|  | Number |
| :--- | :--- |
| Female full-time employees (d2a) | Share (\%) |
| Female part-time employees (d2b) | Share (\%) |

3. In the last completed month, how many full-time workers were: (d3) [Instruction: Insert 0 if none of the following activities happen]

|  | Number | Don't know (spontaneous) |
| :--- | :--- | :--- |
| Hired (male) (d3a) |  | -9 |
| Hired (female) (d3b) |  | -9 |
| Laid-off (male) (d3c) |  | -9 |
| Laid-off (female) (d3d) |  | -9 |
| Granted unpaid leave of absence (d3e) |  | -9 |
| Had their salary, wages, or benefits reduced (d3f) |  | -9 |
| Had their hours reduced (d3g) |  | -9 |

E. Impacts on finance

1. Comparing the last completed month with the same month in 2019, did the percentage of this establishment's sales of goods and services that were sold on credit [insert options]? (e1)

| Increase | 1 |
| :--- | :--- |
| Remain the same | 2 |
| Decrease | 3 |
| Don't know (spontaneous) | -9 |

2. In the last completed month, did you have any outstanding loans from following institutions/individuals? (e2)

|  | Yes | No | Don't know <br> (Spontaneous) |
| :--- | :--- | :--- | :--- |
| Commercial banks (e2a) | 1 | 2 | -9 |
| Non-banking financial institutions (microfinance institutions, credit <br> cooperatives, credit unions, or finance companies) (e2b) | 1 | 2 | -9 |
| Friends or family members (e2c) | 1 | 2 | -9 |

3. In the last completed month, did this establishment delay payments due to the Covid-19 for more than one week to? (e3)

|  | Yes | No | Don't know <br> (spontaneous) |
| :--- | :--- | :--- | :--- |
| Suppliers (e3a) | 1 | 2 | -9 |
| Tax authorities (e3b) | 1 | 2 | -9 |
| Banks and non-bank financial institutions (e3c) | 1 | 2 | -9 |
| Employees (for salary) (e3d) | 1 | 2 | -9 |

4. Since the of the Covid-19 what is the main mechanism used by this establishment to deal with cash flow shortages? [Instruction: Ask only if b6d=2] (e4)

| Loans from commercial banks | 1 |
| :--- | :--- |
| Loans from non-banking financial institutions (microfinance institutions, credit <br> cooperatives, credit unions, or finance companies | 2 |
| Equity finance (new shareholders or greater capital increase from existing <br> owners/shareholders) | 3 |
| Loans from friends or family | 4 |


| Delaying payments to suppliers/workers/authorities | 5 |
| :--- | :--- |
| Not applicable | -5 |
| Don't know (spontaneous) | -9 |

F. Impacts on Investment

1. What was the total value of investment, including equipment, machines, software and buildings of this establishment in the last completed month in 2020? (f1)

|  | Number |
| :--- | :--- |
| Value of total investment |  |
| Don't know (Spontaneous) | -9 |

2. Comparing this establishment's total value of investment for the last completed month in 2020 with the same month in 2019, did the total investment? (f2)

| Increase | 1 |  |
| :--- | :--- | :--- |
| Remain the same | 2 | Go to section G |
| Decrease | 3 |  |
| Don't know (spontaneous) | -9 | Go to section G |


|  | Percent |  | Myanmar Kyat |
| :--- | :--- | :--- | :--- |
| Increased by how much? (f2a) |  |  |  |


|  | Percent |  | Myanmar Kyat |
| :--- | :--- | :--- | :--- |
| Decreased by how much? (f2b) |  | Or |  |

G. Response and resilience for business continuity

1. With your current cash flow, how confident are you that your business can remain open for the next month? (g1)

| Not very confident | 1 |
| :--- | :--- |
| Not confident | 2 |
| Neutral | 3 |
| Confident | 4 |
| Very confident | 5 |

2. If the current situation does not improve, how many weeks do you anticipate that this establishment will file bankruptcy and shut down the business [insert weeks]? (g2)

| Number of weeks |  |
| :--- | :--- |
| Don't know (spontaneous) | -9 |

3. Do you anticipate that this establishment will fall in arrears in any of its outstanding liabilities in the course of the next 3 months? (g3)

| Yes | 1 |
| :--- | :--- |
| No | 2 |
| Don't know (spontaneous) | -9 |

4. Do you expect this establishment business to recover? (g4)

| Yes | 1 |  |
| :--- | :--- | :--- |
| No | 2 | Go to question g6 |
| Not applicable | -5 |  |
| Don't know (spontaneous) | -9 |  |

5. Looking ahead to the next 3 months ${ }^{15}$, what is the expected change in sales that you anticipate for this establishment compared to the same period last year? (g5)

| Sales change $(\%)$ |  |
| :--- | :--- |
| Don't know | -9 |

6. Looking ahead to the next 3 months, what is the expected change in employment that you anticipate for this establishment compared to the same period last year? (g6)

| Employment change (\%) |  |
| :--- | :--- |
| Don't know | -9 |

7. Looking ahead to the next 3 months, what is the expected change in investment that you anticipate for this establishment compared to the same period last year? (g7)

| Investment change (\%) |  |
| :--- | :--- |
| Don't know | -9 |

H. Policies

1. Are you aware of any local or national government support issued in response to the crisis since the COVID-19? (h1)

| Yes | 1 |  |
| :--- | :--- | :--- |
| No | 2 |  |
| Don't know (spontaneous) | -9 |  |

2. Since the COVID-19, has this establishment applied for any national or local government measures issued in response to the crisis? (h2)

| Yes | 1 |
| :--- | :--- |
| No | 2 |
| Don't know (spontaneous) | -9 |

3. Did any of these measures involve any of the following: (h3)
[^6]|  | Yes | No | Don'tknow <br> (spontane <br> ous) <br> Improved access to credit such as lower <br> interest loans (h3a) <br> Tax exemptions or reductions (h3b) 11 |
| :--- | :--- | :--- | :--- |
| Relaxation of export and import procedures <br> (h3c) | 1 | 2 | -9 |
| Utility subsidies (h3d) | 1 | 2 | -9 |
| Salary subsidies (h3e) | 1 | -9 |  |
| Others (h3f) | Please specify | -9 |  |

4. Were these supports helpful for your business continuity? (h4)

| Yes | 1 |
| :--- | :--- |
| No | 2 |
| Don't know (spontaneous) | -9 |

5. Since the COVID-19, has the government made following procedures easier? (h5)

|  | Yes | No | Don't <br> know | Not <br> applicable |
| :--- | :--- | :--- | :--- | :--- |
| Export/import license procedures (h5a) | 1 | 2 | -9 | -5 |
| Customs clearance procedures (h5b) | 1 | 2 | -9 | -5 |
| Port clearance procedures (h5c) | 1 | 2 | -9 | -5 |
| Tax related procedures (h5d) | 1 | 2 | -9 | -5 |
| Company registration procedures (h5e) | 1 | 2 | -9 | -5 |
| Others (h5f) | Please specify |  |  |  |

6. What would be the most needed policy to support this establishment over the COVID-19 crisis? (h6)

| Tax deferral/deduction or relief | 1 |
| :--- | :--- |
| Reduction of public holidays | 2 |
| Interest payment deferral for bank loans | 3 |
| Principal payment deferral for bank loans | 4 |
| Utility subsidies | 5 |
| Access to loans and credit guarantees | 6 |
| Salary subsidies | 7 |
| Government purchase of goods and services | 8 |
| Relaxation of export and import procedures | 9 |
| Cash transfers to customers | 10 |
| Others (Please specify) | 11 |

I. Adjustment mechanisms

1. Has this establishment made any of the following adjustment due to the COVID-19? (i1)

|  | Yes | No | Don't know <br> (spontaneous) |
| :--- | :--- | :--- | :--- |


| Changed its production or services offered partially or <br> completely (i1a) | 1 | 2 | -9 |
| :--- | :--- | :--- | :--- |
| Started or increased delivery or carry-on (i1b) | 1 | 2 | -9 |
| Started or increased remote work arrangement for its <br> workforce (i1c) | 1 | 2 | -9 |
| Adopted online/digital platform for major business <br> functions such as sales, marketing and payment (i1d) | 1 | 2 | -9 |

2. What is the share of employees currently working remotely from home? (i2) [Ask only if i1c=1]

| Share of employees | $\%$ |
| :--- | :--- |
| Don't know (spontaneous) | -9 |

3. In the last completed month, has the share of workers working from home increased or decreased? (i3)

| Increased | 1 |
| :--- | :--- |
| Decreased | 2 |
| No change | 3 |
| Don't know (spontaneous) | -9 |

4. In response to the COVID-19, did you set the following measures at your workplace for safety of your employees? (i4)

|  | Yes | No | Not Applicable |
| :--- | :--- | :--- | :--- |
| Ensuring employees wear masks (i4a) | 1 | 2 | -5 |
| Providing hand sanitizers and cleaning supplies (i4b) | 1 | 2 | -5 |
| Ensuring social distancing among employees (i4c) | 1 | 2 | -5 |
| Work from home policy (i4d) | 1 | 2 | -5 |
| Reducing operating hours or rotating shifts (i4e) | 1 | 2 | -5 |
| Disinfecting workplace on daily basis (i4f) | 1 | 2 | -5 |
| Others (i4g) | Please specify |  |  |

5. In response to the COVID-19, did you set the following measures at your workplace for safety of your customers? (i5)

|  | Yes | No | Not Applicable |
| :--- | :--- | :--- | :--- |
| Ensuring customers wear masks (i5a) | 1 | 2 | -5 |
| Providing hand sanitizers and cleaning supplies (i5b) | 1 | 2 | -5 |
| Ensuring social distancing among customers, and <br> between customers and employees (i5c) | 1 | 2 | -5 |
| Reducing operating hours to reduce physical contacts <br> (i5d) | 1 | 2 | -5 |
| Disinfecting workplace on daily basis (i5e) | 1 | 2 | -5 |
| Adopting online service delivery (i5f) | 1 | 2 | -5 |
| Others (i5g) | Please specify |  |  |

The survey ends here. I would like to gather a few final details.
Thank you for your time and cooperation.
J. Control Questions

1. The name of the respondent $(j 1)$

| Name |  |
| :--- | :--- |

2. What option best reflect your main occupation in this establishment? (j2)

| Owner, CEO or CFO | 1 |
| :--- | :--- |
| Manager | 2 |
| Accountant or lawyer | 3 |
| Other | Please specify |

3. Contact information (j3)

| Email (j3a) |  |
| :--- | :--- |
| Phone number (j3b) |  |

4. Would like you to participate in the future rounds of the survey? (j4)

| Yes | 1 |
| :--- | :--- |
| No | 2 |

5. Number of calls attempted (j5) [Instruction: To be completed by interviewer/supervisor)

| Number of calls attempted |  |
| :--- | :--- |

6. Date and time of the interview (end) [Instruction: To be completed by interviewer/supervisor)

| Date (End_01) |  |
| :--- | :--- |
| Time (End_02) |  |


[^0]:    ${ }^{1}$ https://www.mmtimes.com/news/businesses-worry-about-virus-impact-border-trade.html
    2 https://www.mmtimes.com/news/more-woes-myanmar-garment-industry-eu-cancels-orders.html
    ${ }^{3}$ The Government of Myanmar banned international commercial flights from March 30 to May 31 and suspended entry visas.
    ${ }^{4}$ https:/ /myanmar.mmtimes.com/news/138858.html
    ${ }^{5}$ https://www.mmtimes.com/news/exports-fisheries-products-slow-crawl.html
    ${ }^{6}$ https://www.mmtimes.com/news/yangon-real-estate-transactions-decline.html?fbclid=IwAR0Tsecv8HyQ3Za-eVoBwsIV2-PO4Xb5H0Vw6zKITmQ3114yR3nzoUC-Ra4
    ${ }^{7}$ https://www.mmtimes.com/news/construction-contraction-due-virus-outbreak.html
    ${ }^{8}$ https://www.mmtimes.com/news/unofficial-chinese-demand-sugar-rises.html
    9 https:// news-eleven.com/article/167998

[^1]:    ${ }^{10}$ States and regions are grouped into zones based on their economic and geographic characteristics. Two of the five zones are single states, Yangon and Mandalay. The Hilly Zone includes the states of Kachin, Kayah, and Shan. The Delta and Coastal Lowland Zone includes the states of Ayeyarwaddy, Rakhine, Mon, Bago, Tanintharyi, and Kayin. Chin and the Dry Zone includes the states of Chin, Sagaing, Magwe, and Nay Pyi Taw.

[^2]:    ${ }^{11}$ This boxplot presents a standardized distribution of data based on a five-number summary: the minimum, the first quartile, the median, the third quartile, and the maximum. The first quartile is the middle value between the smaller value (not the minimum) and the median of the dataset; the median is the middle value of the dataset; the third quartile is the middle value between the median and the highest value (not the maximum). The whiskers represent the smallest and highest value, while the box includes the first quartile, median, and the third quartile. Datapoints that lie outside of the whiskers are outliers.

[^3]:    Source: The World Bank's COVID-19 firm survey

[^4]:    ${ }^{12}$ Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI) survey and the American Chamber of Commerce (AmCham) survey for the impact of Covid-19.

[^5]:    ${ }^{13}$ States and regions are grouped into zones based on their economic and geographic characteristics. Two of the five zones are single regions, Yangon and Mandalay. The Hilly Zone includes the states of Kachin, Kayah, and Shan. The Delta and Coastal Lowland Zone includes Ayeyarwaddy region, Rakhine region, Mon state, Bago region, Tanintharyi region, and Kayin state. Chin and the Dry Zone includes Chin state, Sagaing region, Magwe region, and Nay Pyi Taw
    ${ }^{14}$ Mining and quarrying industry was dropping as no enough sample were not interviewed. In addition, hotels and tourism firms are combined as accommodation as there is only one firm in the sample for tourism firm.

[^6]:    ${ }^{15}$ Could be 3-month if survey period is short

