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Abstract

This study assesses the impact of COVID-19 on Sri Lankan micro- and small-scale enterprises (MSEs) and their workers, using secondary quantitative data and primary quantitative and qualitative data from business owners and workers. The study finds that demand and supply side disruptions, caused by mobility restrictions and limited access to finance, negatively affected MSEs, with women-owned enterprises facing greater difficulties. To continue operations, businesses reduced their scale of operations, provided worker accommodation, and marketed products using digital media. MSEs stated that working capital loans facilitated by the government were useful to pay wages and maintain a steady cash flow. However, fewer women business owners were able to access these loans. Business recovery is slow due to higher prices of raw materials, fuel, and labour, and frequent power outages in Sri Lanka. Women-owned enterprises have been slower to recover. However, weathering the crisis, and the emergence of new marketing strategies during the pandemic period, are causes for optimism. Assistance to MSEs during a crisis should be tailored to their specific needs, with special consideration given to addressing gender inequalities to achieve sustainable development in the sector, while ensuring decent working conditions for workers.

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Acronyms and abbreviations

ANOVA	Analysis of Variance
CBSL	Central Bank of Sri Lanka
CEPA	Centre for Poverty Analysis
COVID-19	Coronavirus Disease of 2019
DCS	Department of Census and Statistics
DVA	Domestic Value Addition
FVA	Foreign Value Addition
GVC	Global Value Chain
ICT	Information and Communication Technology
IT	Information Technology
LFS	Labour Force Survey
MSMEs	Micro, Small, and Medium Scale Enterprises
MSEs	Micro and Small Enterprises
SEDD	Small Enterprise development Division
SMEs	Small and Medium Scale Enterprises

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Introduction

> **After the COVID-19 pandemic, business recovery is slow due to higher prices of raw materials, fuel, and labour, and frequent power outages in Sri Lanka.**

In January 2020, the World Health Organisation declared COVID-19 a global health crisis, prompting countries to enact virus containment measures including border closures, social distancing, and nationwide lockdowns. While these measures were necessary for protecting the health and well-being of populations, they also deeply disrupted supply chains and reduced consumer spending, significantly impacting global economic activities. In developing countries like Sri Lanka, key economic sectors—tourism, agriculture, and textiles—bore the brunt of the pandemic's effects, leading to a 3.6% contraction in the country's GDP in 2020 (Rishandani, 2021). This was largely attributed to a drop in tourism, challenges in exporting and importing goods, and a significant decline in remittances amid economic shutdowns and travel restrictions (Rishandani, 2021). Furthermore, limited fiscal ability to implement stimulus packages, bureaucratic hurdles, and pre-existing underdevelopment of public services further undermined the country's economic and social infrastructure (Eggers, 2020).

Micro, small and medium enterprises (MSMEs) in Sri Lanka, already struggling with limited financial resources, difficulties accessing domestic and international markets, and a high degree of informality compared to larger enterprises, were deeply impacted by the COVID-19 pandemic (World Bank, 2022). The majority of MSMEs reported complete business closures and extensive layoffs (United Nations Conference on Trade and Development [UNCTAD], 2022). While most enterprises across the world suffered severe challenges such as drastically declining revenue, disrupted supply chains, and workforce layoffs—underscoring the particular lack of public and private financial support for MSMEs—COVID-19 particularly exacerbated these challenges (World Bank, 2022; UNCTAD, 2022; Gunawardana, 2020).

MSMEs represent a critical part of Sri Lanka's economy, accounting for 90% of all businesses, 45% of total employment, and 52% of the total GDP (Hewage, 2020). They are central to principal economic sectors such as tourism, apparel, and agriculture. In tourism, MSMEs provide employment to over half of the sector's workforce, and in apparel they account for at least one-third of employment, with women comprising 80% of this, mainly working in the informal sector (Hewage, 2020). MSMEs in the apparel sector were also responsible for a third of Sri Lanka's exports. Moreover, they were particularly dominant in the rural sector, primarily in agriculture, making up 75% of the sector (Gunawardana, 2020).

MSMEs in Sri Lanka also perform vital roles, including complementing larger ventures through subcontracting, fostering linkages between formal and informal sectors (Nisantha, 2018), and reducing transaction costs (Premaratna et al., 2018). However, a lack of institutional and legislative support for MSMEs in Sri Lanka has led to their substandard performance (Rajapakshe et al., 2020). While the Sri Lankan government has formulated several policy papers and frameworks on SMEs, the direction and practical implementation of these policies have been unclear. This has led to a failure to develop the MSME sector and being linked to successive governments' unsuccessful economic policies (Gamage, 2003).

While a considerable body of literature exists on the challenges faced by MSMEs, this study aims to provide a comprehensive analysis that synthesises these various insights, with a particular focus on Sri Lanka's unique economic and regulatory landscape. We consider the diversity in scale of operations, ownership characteristics, and sector-specific issues, as well as the impact of public policies and relief measures targeted at MSMEs.

This study seeks to examine the disparities that MSMEs, their owners, and workers have encountered during the COVID-19 pandemic. The findings of this study aim to provide a scale-wise breakdown of inequalities experienced by MSMEs. Therefore, we offer a nuanced analysis, categorising findings based on sector, gender, skill levels, and the type of employment involved. The study is anchored in the framework of key Sustainable Development Goals, including gender equality (SDG 5), poverty eradication

(SDG 1), and decent work and economic growth (SDG 8). Moreover, the weakening of MSMEs has critical implications for Sri Lanka's pursuit of various SDG targets, such as contributions to GDP (Target 8.1) and the provision of quality employment (target 8.5). This study aims to propose recommendations that address the unique needs of MSMEs for a more effective recovery, thereby impacting other interlinked SDG targets, including those related to poverty (Targets 1.1 and 1.2) and social protection measures Target 1.3). The goal is to guide policy frameworks toward more inclusive service provision, enhanced digital access, and fortified worker protections.

Beginning with a literature review, this study then follows with a detailed outline of the research design and data collection methods. The core of the study consists of the presentation of findings, derived from primary survey results, secondary data analysis and qualitative insights. It then culminates in a set of policy recommendations, offering actionable insights to stakeholders involved in MSMEs, laying the groundwork for more robust and inclusive support mechanisms for this vital sector.

Literature review

Pre-existing vulnerabilities in the MSME sector and gendered inequalities

In Sri Lanka, the National Policy Framework for Small and Medium Enterprise (SME) Development establishes a classification of enterprises by scale. Micro-scale enterprises are defined as those generating an annual turnover less than 15 Rupees Millions (Rs Mn) and employing fewer than 10 people. Small-scale enterprises have an annual turnover ranging between 16-250 Rs Mn and employing 11-50 people. Medium-scale enterprises generate an annual turnover between 251-750 Rs Mn and employ 51-300 employees. These classifications encompass a variety of business types, with some variations found within the manufacturing and service sectors.

The informal sector in Sri Lanka accounts for 42% of the country's total businesses with 98% of these being micro-scale businesses (authors' calculations from MSME Economic Indicators database, 2019). However, only 25% of firms in the formal SME sector are women-owned, highlighting a significant gender disparity in ownership (International Finance Corporation [IFC], 2020). This disparity in ownership is set against a backdrop of broader challenges faced by the MSME sector—access to financial support, productivity issues, high infrastructure costs, and regulatory barriers. These issues have historically impeded growth across all scales of enterprise but have more severely impacted micro and small-scale firms, particularly those owned by women (UNDP, 2022).

Relatedly, the lack of formal registration for micro-scale and women-led enterprises hinders their ability to secure loans from licensed commercial banks, which in turn limits their operational efficiency, scalability, and access to essential resources, and creates systemic barriers in transitioning from informal to formal sectors (Karunarathne et al., 2021; Balasooriya, 2007). Furthermore, general financial barriers include MSME owners' over-reliance on collateral, prevailing information asymmetries, and a lack of financial literacy among MSME owners (Central Bank of Sri Lanka, 2020). These systemic issues are compounded by specific factors such as ownership type, firm location, gender of the owner/manager, and lack of audited financial information, all adding constraints to accessing finance (Gamage, 2003).

Historically, the government of Sri Lanka and international development aid actors have perceived entrepreneurship within the MSME sector as a multifaceted solution to socio-economic challenges (Lokuge et al., 2019). The focus has ranged from reducing regional inequalities to fostering regional development, promoting inclusive economic growth, creating youth employment, and more recently, integrating women into the labour force to combat poverty (Lokuge et al., 2019). Yet, despite these initiatives, as of 2021, women still make up only 31% of Sri Lanka's labour force, with over 60% of women employed in the informal sector (Ratwatte, 2023). The female labour force participation rate has stagnated over the last two decades (DCS, 2000-2021), hindered by underlying factors such as discriminatory practices in accessing credit and societal expectations that limit womens' ability to thrive as entrepreneurs (Cesaroni, Pediconi & Sentuti, 2018).

On the technological front, MSMEs in Sri Lanka lag behind in adopting modern technologies such as cloud computing, automation, and e-commerce platforms, which could help firms reduce operational costs (Rasool & Dissanayake, 2019). This lag is primarily due to their thin profit margins, which restrict their ability to invest in such technologies (Hewage, 2020). Amidst the financial limits preventing adoption of modern technology and the resultant cost disadvantage that impedes firms' ability to competitively penetrate the market with lower prices, MSMEs have struggled to capture a larger market share (Central Bank of Sri Lanka, 2021a). Evidence from the Centre for Poverty Analysis' fieldwork also finds lack of access to technical assistance to be a key constraint regarding product development (Centre for Poverty Analysis, 2022).

Premaratna et al. (2018) shed light on critical weaknesses in infrastructure and how limited access to essential facilities adversely impacts the market share of MSMEs in Sri Lanka. The study pinpoints challenges that disrupt production processes: First, transport bottlenecks often create delays in the movement of goods, slowing down the entire supply chain. Second, weaknesses in communication infrastructure can hinder coordination within the business and with suppliers or customers, leading to inefficiencies. Third, frequent power outages pose a severe hindrance to consistent production, often leading to unforeseen delays and wasted resources. Finally, the high unit costs of electricity in Sri Lanka, especially when compared to other regional counterparts, increases the overall cost of doing business.

These infrastructure challenges disproportionately burden MSMEs by adding to the overall cost of conducting business, undermining competitiveness (Perera et al., 2021). Larger companies may have the means to mitigate some of these issues, but for smaller enterprises, the ability to cope can be a defining factor in their success or failure (Amarakoon et al., 2021). Consequently, the identified infrastructure challenges are not merely inconveniences but serious barriers to growth, potentially stifling innovation, hindering market expansion, and constraining the economic potential of MSMEs in the region (Perera et al., 2021; Amarakoon et al., 2021).

Sri Lanka ranks 99th out of 190 economies in the overall ease of doing business index, and the country faces significant hurdles in key areas like enforcing contracts, paying taxes, and registering property (World Bank, 2020). Unlike other regional counterparts that implemented business-friendly reforms between 2019 and 2020, Sri Lanka lagged behind without any significant regulatory changes during that period (World Bank, 2022).

Warusavitarana's 2020 study highlights the complex regulatory hurdles that hinder micro, small, and medium-sized enterprises (MSMEs). 45% of micro- and 10% of small-scale enterprises remain unregistered with the relevant government institutions. Unawareness about timeframes and costs of registration, fear of indirect costs such as taxes, corruption that allows for discretion in the application of rules, and female ownership of micro enterprises are noted as factors contributing to lower levels of business registration. Consequently, MSMEs exclusion from formal financial channels, business networks, and government assistance places them in a vulnerable position where they operate unregulated and lack access to essential benefits and protections. The lack of official registration with national and local chambers of commerce not only constrains business growth but leaves MSMEs unprepared to respond to crises and hampers recovery efforts.

Impact of COVID-19 on MSMEs

The effects of the COVID-19 pandemic on Sri Lanka's industries are broken down into the most prominent outbreak periods: March–June 2020 and October 2020-April 2021. In the initial lockdown phase between March and June 2020, revenue losses reportedly exceeded 75% across all major industrial sectors (Institute of Policy Studies, 2022). The mining and quarrying, construction, and service sectors suffered the worst blows due to lack of demand and increasing costs (Institute of Policy Studies, 2022). In addition, micro-scale enterprises—who maintain limited savings and resultantly rely on continuous cash flows—had greater revenue losses when compared to enterprises that were larger in scale with access to savings and the ability to secure loans, grants, and backup cash flow (Institute of Policy Studies, 2022).

Demand and supply side disruptions from COVID-19 measures such as shutdowns have been key reasons for revenue losses for micro enterprises (Karunarathra et al., 2023). A sharp decline in demand owing to changed consumer behaviour, with a lack of new orders placed due to customers' reduced purchasing power, were among the most notable demand side disruptions (Robinson & Kengatharan, 2020). On the other hand, the shortage of raw materials caused by transportation interruptions was a key supply side disruption which increased production costs (Deyshappriya & Padmakanthi, 2022) and reduced the production volume of enterprises (Santhirakumar et al., 2021). The pandemic thus not only triggered currency fluctuations but also drove up the cost of raw materials, placing additional financial strain on MSMEs (Karunarathra et al., 2023). This made it increasingly difficult for MSMEs to acquire essential production materials, thereby impacting their income-generating capabilities (Karunarathra et al., 2023).

The pandemic also had a notable effect on MSME employees. A survey conducted by the Department of Census and Statistics Sri Lanka (2020) reports that an estimated total of 70.4% of people employed in the mining and quarrying sector had lost their jobs as a result of the pandemic. COVID-19 induced job losses recorded for the construction sector is nearly 66.7%, followed by 65.8% in the services sector, 58.9% in the manufacturing sector, and 54.3% in the trade sectors, out of the total number of people previously employed in these respective sectors. These job losses differ significantly from the 0.6% observed in January 2020 across the aforementioned sectors. While women-owned enterprises were less likely to lay off staff or reduce salaries, this can be attributed to these enterprises employing fewer workers than their male- or jointly-owned counterparts, thus being unable to take such action in the first place (IFC, 2020).

The economic impacts of the pandemic have profoundly impacted businesses, causing flow on effects for workers who were underemployed or retrenched as a consequence of reduced business revenue. The sector, which provides employment for nearly one million people (Wijayasiri, 2020), saw revenue losses of 26% in 2020 (Sri Lanka Apparel Exporters' Association, 2022). Impacts faced by apparel sector workers include temporary retrenchment with partial or no pay during the initial COVID-19 wave, resulting in increased debt and changes in food consumption patterns even after returning to the workforce (Hewage & Pathirana, 2021).

The effects of the pandemic have also been gendered. Even in the absence of crises, women-owned enterprises have been more disadvantaged than men-owned enterprises with regards to accessing finance, technology, and markets (CEPA, 2022). Therefore, the pandemic has caused women-owned SMEs to be even more vulnerable (Ariyarathne & Lakmali, 2021). By intensifying financial barriers, leading to growing numbers of bankruptcies, shutdowns, and mass layoffs among MSMEs, the pandemic has thrust these pre-existing vulnerabilities into the spotlight, magnifying the challenges in financial accessibility and revealing the reality that the government's efforts to promote female entrepreneurship have fallen short (IFC, 2020).

The IFC (2020) recognises that women-owned enterprises were less likely to have taken loans through formal financial channels during COVID-19, resorting instead to friends and family. However, those that have access to formal financial channels have also reported fewer difficulties when dealing with requirements, as their operational scales are comparatively lower than male—or jointly—owned enterprises (IFC, 2020).

Despite both the financial and operational performance of MSMEs declining during COVID-19, Deyshappriya and Padmakanthi (2022) observe that they have discovered new avenues for conducting business and staying afloat. Development Alternative Incorporated [DAI] and Ipsos (2022) reveal that COVID-19 has catalysed an uptake of digital technology as the pandemic encouraged MSMEs to pivot swiftly to internet-based technologies. However, while women-owned enterprises were less likely to adopt new digital technologies during COVID-19, (IFC, 2020), they have resorted to using Facebook for business purposes such as marketing and communicating with customers. This has allowed them to reach a clientele broader than they could pre-pandemic (DAI & Ipsos, 2022; CEPA, 2022).

Policy support and relief

Loayza and Pennings (2020) emphasise that while macroeconomic policies play a crucial role in COVID-19 recovery, their effectiveness in aiding business recovery may be compromised. In particular, the inefficiency in how central bank policy changes translate into broader economic conditions, known as weak monetary transmission, along with a tight budget that limits the government's ability to stimulate the economy, referred to as limited fiscal space, could impede recovery efforts. This is of particular concern in Sri Lanka, which already faces a restricted budget that makes it vulnerable to external economic shocks, as highlighted by the Asian Development Bank Institute (2021). Consequently, Sri Lanka has had to lean more heavily on debt financing instruments to navigate the crisis (Hewage, 2020). This approach, however, exacerbates the challenges faced by MSMEs. Unlike larger businesses, MSMEs often lack the resources and financial resilience to take full advantage of these forms of economic relief, thereby exacerbating their vulnerabilities and making their recovery even more difficult (IFC, 2017).

A key monetary instrument employed by the Central Bank of Sri Lanka (CBSL) to aid MSMEs affected by COVID-19 is the Saubagya COVID-19 Renaissance Loan Scheme Facility (SCRF), which provided working capital loans to MSMEs at a concessionary interest rate of 4% per annum with a 24-month repayment period. As of November 2021, the CBSL has released Rs 179,280 million (approximately USD 550,000) under the SCRF (Central Bank of Sri Lanka, 2021b). However, micro- and small-scale enterprises have not benefited from the scheme due to the risk-averse behaviour of banks. Amid economic uncertainty and the increased likelihood of default, banks have been reluctant to extend loans to small-scale operations (Hewage, 2020). Moreover, with medium- and upper- scale enterprises borrowing up to the maximum ceiling, the share of credit available to micro and small-scale enterprises has been minimal (Perera, 2021).

"As MSMEs play a crucial role in economic vitality and poverty reduction, their slowdown and reduced profitability will impact Sri Lanka's progress towards SDG 8.

Gaps in information regarding the total amount of credit disbursed by the banking sector, as well as the interest rates charged on loans, have become more pronounced in the wake of the COVID-19 pandemic. In response, the Central Bank of Sri Lanka (CBSL) initiated a monthly SME credit survey to gauge the cost of credit extended to MSMEs. The survey indicates that lending rates to MSMEs have decreased, a trend attributed to monetary policy measures aimed at increasing the money supply and lowering interest rates, often referred to as monetary easing. The survey reveals that the rate of lending for loans below Rs 10 million, which are usually granted to smaller enterprises, has been higher than loans above Rs 10 million (Central Bank of Sri Lanka, 2020). This can be attributed to the risk-averse nature of lending of the Sri Lankan banking sector (Economy Next, 2019). Due to the risk averse behaviour adopted by Licensed Commercial Banks (LCBs), MSMEs have resorted to Licensed Specialised Banks (LSBs)—despite higher interest rates – in search of financial assistance (Central Bank of Sri Lanka, 2021a).

Methodology

This case study employs a mixed-methods research design, incorporating qualitative and quantitative data from primary and secondary sources. It is organised around three key dimensions of the pandemic's impact on MSMEs.

First, the study analyses the pandemic's influence on business owners. The analysis considers variables such as the gender of the business owner, the industry in which the enterprise operates, and the scale of the business in terms of employees and revenue.

Second, the study delves into the experiences of workers employed in these MSMEs during the pandemic. It examines several factors, including the workers' gender, industry of employment, skill level, nature of work (permanent, contract, or casual), and the specific employment category they belong to, such as managerial or frontline staff.

Finally, the research explores strategies deployed by both governmental bodies and the MSMEs themselves to counteract the negative repercussions of the pandemic. In this context, the study pays attention to the experiences of both business owners and their employees, evaluating the effectiveness of various mitigation efforts.

Data collection and analysis

The section below describes how the different types of data were collected and analysed to examine the three focus areas (firm owners, workers, and policy responses):

The desk review is a comprehensive analysis of both quantitative and qualitative literature, focusing on the global and local ramifications of the pandemic on the MSME sector, as well as the efficacy of related policy interventions. Sources for this review were identified through targeted keyword searches that included terms such as "MSMEs," "COVID-19," "women-owned enterprises," "access to finance," "business scale," "policy measures," "relief efforts," and "inequality," among others. Additionally, the review incorporated previous research conducted by CEPA, encompassing both published and unpublished works. All literature was organised and managed using Zotero, an open-source reference management tool. In total, the review assessed more than 70 documents, ultimately utilising 44 of them to provide insights to the study's findings.

The study utilises secondary survey data, primarily drawn from the Annual Labour Force Surveys (LFS) and a specialised COVID-19 survey conducted by the Department of Census and Statistics (DCS) in Sri Lanka. The LFS aims to capture a comprehensive picture of the labour market, including characteristics of the workforce, employment rates, and unemployment metrics. Data for the LFS is collected from approximately 80,000 households and is strategically designed to be representative of Sri Lanka's civilian population, excluding those in institutional settings like prisons or military bases. The COVID-19 survey serves as an extension of the 2020 LFS, focusing specifically on the pandemic's effects on employment. This survey gathered data from around 18,000 households during the months of August, September, and October 2020.

The Annual Labour Force Surveys (LFS) collect data from 80,000 households each month, offering valuable macro-level statistics on employment rates, unemployment levels, labour force participation, and working hours. This dataset was employed to analyse the employment impact of COVID-19 in 2020, using data from the preceding three years for comparison. Given that the Sri Lankan economy experienced multiple shocks in 2019—such as the Easter Sunday attacks and COVID-19 lockdowns—the LFS data from 2017 and 2018 serve as a baseline for evaluating the years 2019 and 2020. The use of these weights on the survey estimates generated by the Department of Census and Statistics ensures that the results and tabulations from the survey are representative to the country.

However, one limitation of this approach is that it does not account for the delayed effects of external shocks, such as the 2019 Easter Sunday attacks. To quantify the specific impact of lockdowns on employment and unemployment, a dummy variable was created based on the lockdown months as recorded by Sri Lanka's Epidemiology Unit. The Akaike Information Criterion (AIC) was applied to assess the statistical significance of the models, while post-estimation techniques were used to check for any issues that could affect the reliability of our results, such as closely related variables or inconsistent variance in the data.

In addition to broader employment metrics, this section also explores whether there has been a significant shift in working hours among main occupations[1] during the COVID-19 lockdowns, as compared to the years 2017-2019. This allows for an in-depth understanding of how the pandemic has disrupted traditional work patterns for employees.

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1 Managers, Senior Officials and Legislators, Professionals, Technical & Associate Professionals, Clerks and Clerical support workers, Services and Sales workers, Skilled Agricultural, Forestry and Fishery workers, Craft and Related Trades workers, Plant and Machine operators and Assemblers, Elementary occupations (ISCO Occupations Classifications used by the Department of Census and Statistics)

The COVID-19 survey ran concurrently with the 2020 Annual Labour Force Survey (LFS) and was conducted from August to October of the same year. This specialised survey aimed to assess the pandemic's impact on MSMEs as well as workers in Sri Lanka. While the COVID-19 survey gathered data from 18,000 households, this sample size is notably smaller than that of the LFS. To ensure that the findings from this smaller dataset are statistically meaningful, the coefficient of variance (CV) was applied throughout the analysis. The CV serves as a valuable metric for gauging whether the number of responses is sufficiently large to allow for reliable inferences about the broader population.

Non-random, purposive sampling—accessed through lists of enterprises provided by the district chambers of commerce and industry representative bodies—combined with snow-ball sampling, was used to recruit respondents for the primary data collection at the business level. The authors used preliminary findings from the secondary data analysis to identify a group of sectors for the primary data collection. These sectors were food processing and manufacturing, apparel, IT, and construction (see Appendix 1 for the main characteristics of the survey sample).

The research team conducted 60 quantitative surveys, over the phone or in-person, with businesses located in the Hambantota, Colombo, and Gampaha districts in Sri Lanka. Business contact lists were obtained from district-based chambers of commerce and district secretariats in Colombo and Hambantota where networks have been developed by members of the research team during previous research. Data collected from central and urban locations such as Colombo and Gampaha and peripheral locations such as Hambantota were used to contextualise any regional variations in how MSMEs were affected by, or may have coped with, the pandemic.

Parallel to the business level survey, the authors also conducted 10 in-depth interviews, drawn from the same sample, to obtain detailed information about business characteristics, channels of impact from the pandemic, and employee management. The primary data collection tools were developed jointly by the members of the South Asia consortium.

The survey for business owners was digitised through KoboToolbox—a field-tested platform that allows the collection of high-quality data using mobile phones, tablets, or computers. In-built validation techniques and automated error checks ensured minimal errors in data collection and minimal data loss. Two researchers conducted the interviews with one researcher completing the coded questionnaire and the other recording qualitative notes of the experiences and narratives of the firm owners.

To determine how the pandemic affected workers, the authors conducted 4 focus group discussions with a minimum of 10 workers per group. Both male and female workers, working informally or otherwise, and who have lost jobs, suffered cuts in wages or hours, were identified through networks with relevant regions and sectors.

Business owners' and workers' discussions were complemented by semi-structured, in-depth interviews with government officials, academics, and other experts working on relevant issues with MSMEs who understood the pandemic's effects on the sector. The business-level interviews and the focus group discussions were conducted in-person.

The quantitative data was processed using STATA statistical software, guided by predefined analytical frameworks to explore specific themes and variables connected to our research questions. The qualitative data was thematically coded using Nvivo software, following a ground-up coding process, building towards identifying channels that shaped inequalities in the sector. The responses were categorised by attributes such as scale, sector, firm owner characteristics, etc.

One of the limitations with the primary data is that the relatively small sample size of 60 does not allow for cross tabulation without increasing skewness in data in the analysis.While the sample size is adequate to hold the central limit theorem[2] true, it still risks increasing bias in data upon cross tabulation. The limitation encountered in secondary data is that the employees identified in the COVID 19 survey cannot be identified based on the type of MSME sector they work for.

Findings

The impacts of COVID-19 on micro and small-scale enterprise owners and how they differed across different types of enterprises.

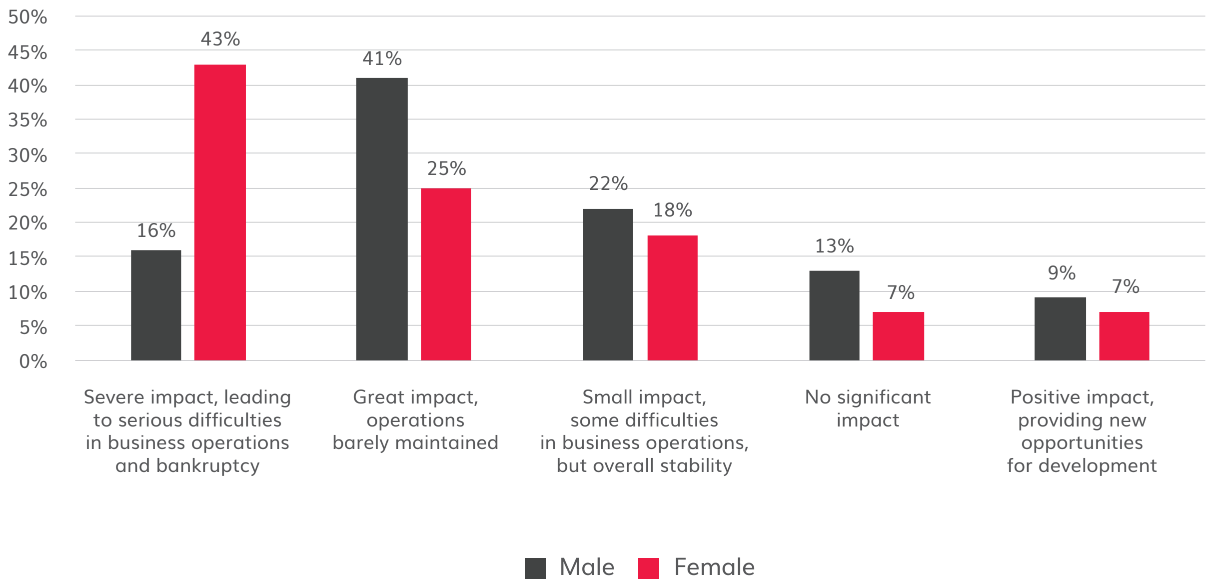
Of the businesses surveyed, 77% have remained in operation, either partially or intermittently, during the pandemic. While 51% of micro-scale enterprises have generated a sales turnover less than LKR 1 million, 56% of small-scale enterprises and 100% of medium-scale enterprises have generated a sales turnover greater than LKR 5 million in 2021. Among businesses that closed during COVID-19, the imposition of

2 Central limit theorem states that the sampling distribution of the mean will always follow a normal distribution, irrespective of the population distribution, as the sample size gets larger. For the central limit theorem to hold true, there should be a sample size of 30 or more.

lockdown measures (43%), a decline in demand (36%), and shortage of production (34%) were highlighted as causes for termination of operation.

The quantitative secondary survey data also shows that the impacts of the pandemic on business owners differed based on the sex of the firm owner and the sector. The pandemic led to a severe impact on women business-owners (43%), as opposed to men business-owners (16%) (see Figure 1). Further, 13% of men owned businesses noted no significant impact of COVID-related measures and 9% stated there was a positive impact. In contrast, only 7% of women noted no significant impact and another 7% stated that COVID-related measures had a positive impact. Being concentrated in micro and informal enterprises, with limited access to formal financial mechanisms, low business capacity and financial literacy (IFC, 2020), these women business owners have struggled to keep businesses afloat.

Figure 1. Operational challenges disaggregated by gender of the business owner



Note. Elaborated by the authors.

The impact of COVID-19 on businesses varies by sector. Although most businesses surveyed experienced negative effects, 13% of those in the Information and Communications Technology (ICT) sector and 11% in the food processing and manufacturing sector reported that the pandemic opened up new avenues for development, fostering growth opportunities. This finding aligns with our secondary data analysis, which differentiates between firms that managed to grow during the pandemic and those that did not.

The secondary data shows that 90% of micro-scale manufacturers in the "other food products" category, mainly related to confectionery, experienced increased production compared to before the pandemic. In contrast, sectors like manufacturing, education, and transportation saw a 60% reduction in production during the COVID-19 lockdown from March to August 2020. For instance, micro-scale firms in the manufacturing and construction sectors, as well as small-scale passenger land transport firms, stated that their operations came to a complete standstill during the lockdown due to travelling restrictions that hampered the production and usage of transport vehicles. These findings, which are statistically significant, highlight the varying impact of the pandemic across different types of industries.

Financial challenges exacerbated by the COVID-19 pandemic

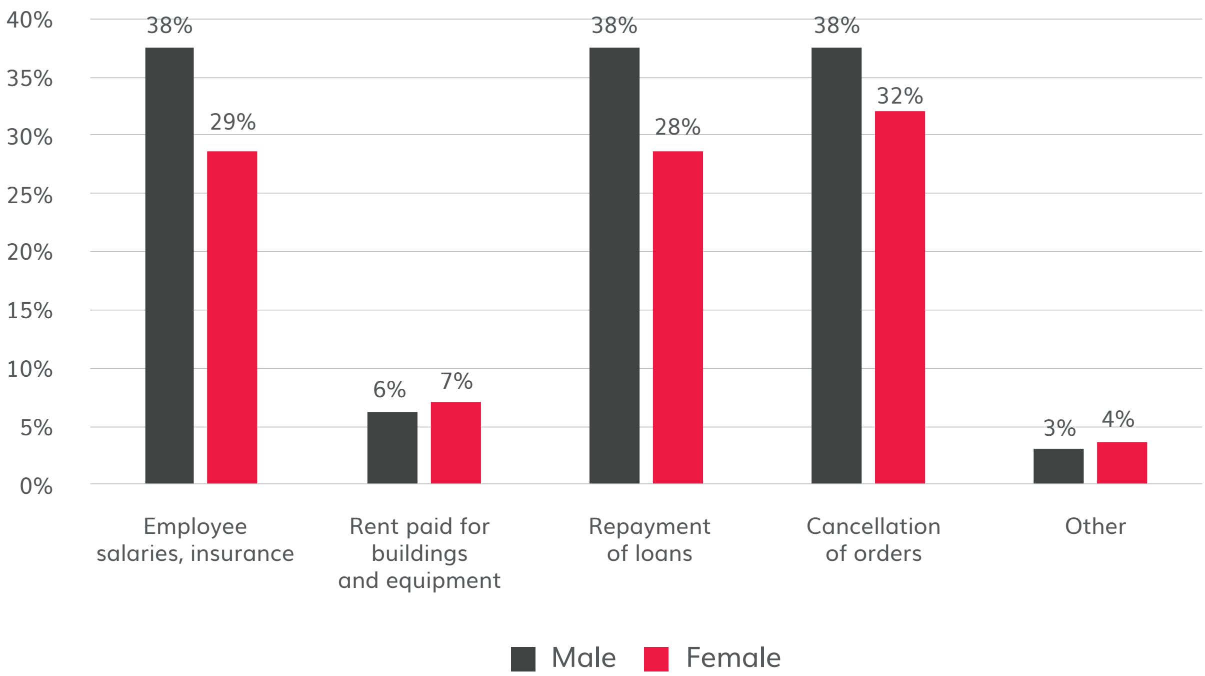
Sri Lankan businesses had to contend with extended power cuts, lasting 13 hours a day, at the height of the pandemic in February to May 2022. An ICT sector firm owner, during qualitative discussions, stated that mobility restrictions during the pandemic caused challenges in procuring computer hardware and restricted client visits. Although transportation challenges have also been severely felt by ICT, food processing, apparel and construction businesses amidst frequent fuel shortages and steep price hikes, the percentage of these businesses perceiving transportation as a challenge reduced from 43% in 2020/21 to 37% in 2022. This suggests that the effects of disrupted electricity supply on firms exceed that of fuel price hikes (See Appendix 2).

Further, 52% of all survey respondents across sectors reported that financial challenges brought forth by the pandemic have been the most significant challenge. This was closely followed by challenges associated with the sale of products and services (45%) and transportation (43%) due to measures imposed to curtail the spread of the virus. Notably, financial challenges during COVID-19 were less pronounced for business owners in the ICT sector given the increase in demand for technology-based products and services.

Overall, the financial challenges faced by MSME owners during the pandemic have been related to payment of wages and insurance (38%), cancellation of orders (35%), and loan repayments (33%). In fact, the majority of micro-scale enterprises spent up to Rs 100,000 on monthly salaries while small-scale enterprises spent up to Rs 500,000. The only medium-scale firm interviewed spent in excess of Rs 1,000,000 on monthly salaries. Qualitative discussions with firm owners revealed that the continued payment of wages of this scale, particularly against reduced operations, has been a significant challenge for MSMEs.

However, as Figure 2 shows, among the MSME owners surveyed, only 29% of female owners stated that continued payment of wages was an issue, as opposed to 38% of male owners. This, however, can be attributed to the fact that most female run enterprises in Sri Lanka generally operate at an extremely micro scale with no employees, as opposed to their male run counterparts, thus illustrating the gendered nature of financial challenges faced by MSMEs.

Figure 2. Financial challenges disaggregated by gender of the business owner



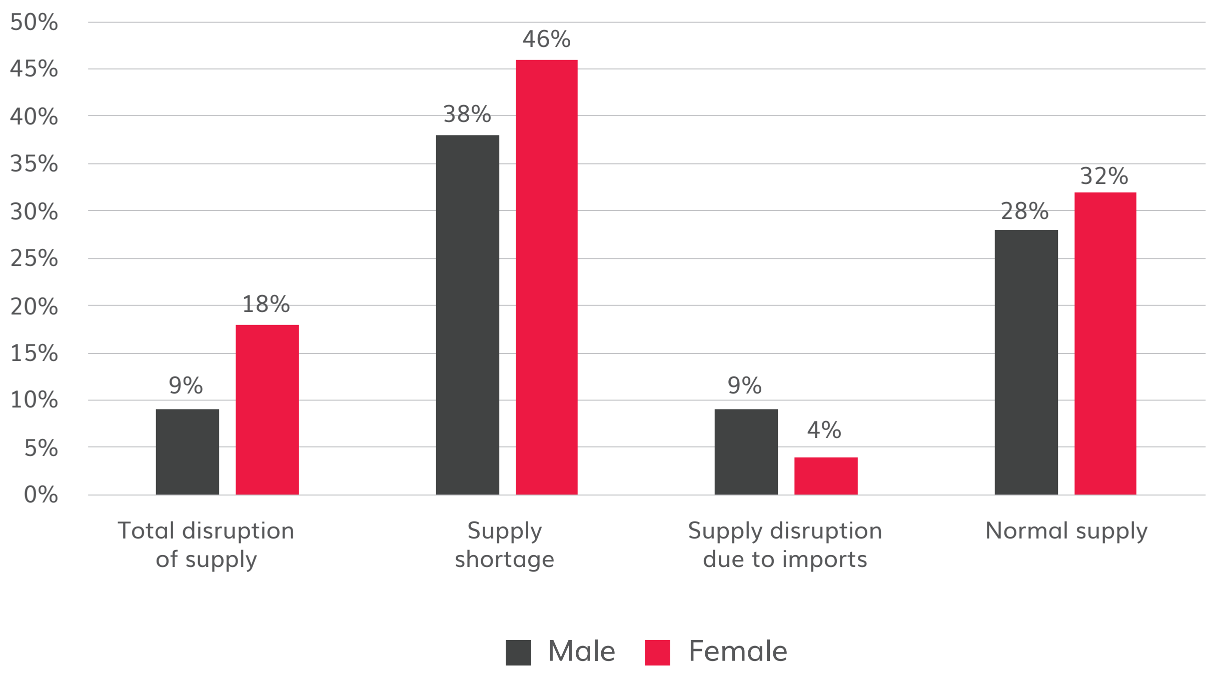
Note. Elaborated by the authors. Multiple options were allowed

Demand- and supply-side disruptions during COVID-19

Demand side disruptions during COVID-19 had a sectoral effect on firms, with the food processing and manufacturing sector seeing the fewest order cancellations (19%). Despite observing order cancellations, albeit limited, the food processing and manufacturing sector has discovered opportunities for growth, with home delivery options rising in popularity and the government encouraging them to do so by facilitating curfew passes during lockdown periods. On the other hand, the apparel and ICT sectors saw the highest demand side disruptions, with 50% of their orders being cancelled. However, qualitative discussions with ICT sector business owners revealed that the trend of the pandemic catalysing growth for the ICT sector, as found in the literature, only holds true for higher end, value-added ICT services such as web and software development, and not for lower end ICT services which require in-store purchases such as printing and typesetting. Nevertheless, opportunities for growth fostered by the pandemic in the ICT sector could not be disaggregated further by the type of service provisions and the gender of the firm owner given the relatively limited sample size which may skew results upon cross tabulation.

Overall, 42% of respondents experienced supply side disruptions with shortages of raw material and 13% faced complete disruption of raw material supply. On the other hand, obtaining raw materials displays gendered effects as more female business owners reportedly experienced challenges when sourcing raw materials (Figure 3). On the contrary, 9% of male business owners experienced supply disruptions due to import restrictions, which highlights their greater integration into global supply chains—although it may not be very advanced—as opposed to women-run businesses.

Figure 3. Raw material challenges disaggregated by gender of the business owner



Note. Elaborated by the authors.Multiple options were allowed

Overall, 47% of survey respondents experienced a decrease in sales and 48% experienced a decrease in profits exceeding 50%. The resultant decline of liquid cash pushed 65% of respondents to limit their general investments planned for the 2020-2021 period, particularly regarding scaling up production and improving existing production facilities. Even though both male and female business owners faced limitations with regards to investments in general development plans, its effects were more pronounced for female business owners, as 95% of female business owners were compelled to reduce or forgo their business development plans as opposed to 71% of male business owners.

The pandemic's impacts on sales and profits compelled 82% of businesses surveyed to compromise their development plans to find new or alternative markets, build or rent new office spaces and/or equipment, and restrict their opportunities for growth and expansion. However, despite the challenges present, 71% of female and 47% of male business owners surveyed stated they would like to expand their business over the next year (see Appendix 3).

Qualitative interviews with business owners show that the new contacts they have made during the pandemic, the satisfaction of providing continued employment opportunities despite financial challenges, and the desire to take up challenges have inspired them to scale up their enterprises. However, 7% of the surveyed female owned enterprises in the apparel sector stated they wanted to close down the businesses, as opposed to none of the surveyed male owned enterprises in the same sector. These women business owners stated that the skyrocketing prices of raw materials and fuel, frequent power cuts, high labour costs and an inability to face increasing competition have motivated them to close down their businesses.

The impact of COVID-19 on workers and employees

To analyse the impact of COVID-19 on workers and employees, this study uses the Labour Force Survey to assess a) overall employment trends during the COVID-19 lockdown and b) how working hours have been affected due to pandemic restrictions and working from home in particular sectors. Furthermore, the COVID-19 survey attempts to capture the impact of COVID-19 on employees; whether employees encountered loss of wages findings were further proven through the primary data collection. It should be noted that both data sources (LFS and COVID-19 survey) offer a broader perspective on employees irrespective of them being employed in MSMEs. One of the limitations of the secondary data analysis (COVID 19 survey and LFS) is that the employees cannot be disaggregated by the type of MSMEs they work for. Therefore, impacts of the pandemic on workers in MSMEs are analysed and presented using primary quantitative data, complemented by qualitative data.

COVID-19 creating job loss and increasing unemployment

Since 2017, there has been an ongoing trend in Sri Lanka's unemployment, which increased from 4.05% in 2017 to 6.71% in 2022 as a result of economic contractions, the pandemic that followed in 2019, and other external shocks including the Easter Sunday assaults and political instability (Macrotrends, n.d.). A binomial[3] logistic regression was estimated for a) employment b) unemployment using lockdown months as a variable to identify if there's an impact on employment and unemployment in Sri Lanka. The marginal effects reveal that the lockdown had impacted permanent job loss by 0.02% overall in the country revealing that COVID 19 lockdowns had impacted unemployment positively but to a lesser extent.

Temporary job loss without pay was mostly experienced by lower skilled workers. The secondary data confirms that only a small percentage (less than 10% across all occupations) of workers were laid off while most employees whose job was temporarily stopped without pay were low skilled workers such as in elementary occupations[4], crafts related work, and plant and machine operators. For example, occupations which require lower skill levels such as clerks and elementary workers (nearly 15%) had their jobs temporarily stopped without pay. This is opposed to less than 7% whose jobs were temporarily stopped without pay for white collar jobs. This trend persists when employment is disaggregated according to main occupations in Labour Force Surveys 2017 to 2020. Therefore, this illustrates the unequal impacts of COVID-19 based on skill levels of the workforce, highlighting their vulnerability to crisis and precarity in working arrangements.

While 43% of employees temporarily did not report to their work during the pandemic,[5] it is important to understand which employment categories showed this trend. For example, 57% of clerks did not report to work, with this being the highest percentage recorded among the nine categories of occupations. More than 40% of senior officials, managers and legislators, professionals, skilled agricultural and fishery workers, craft and related workers, and plant and machine operators and assemblers had responded that they did not report to work temporarily, either.

48% of workers in skilled agricultural and fishery industries had to work fewer hours than usual. This is the highest percentage recorded for this response for any occupation type, whilst employers stated that they worked as usual in the agriculture sector.

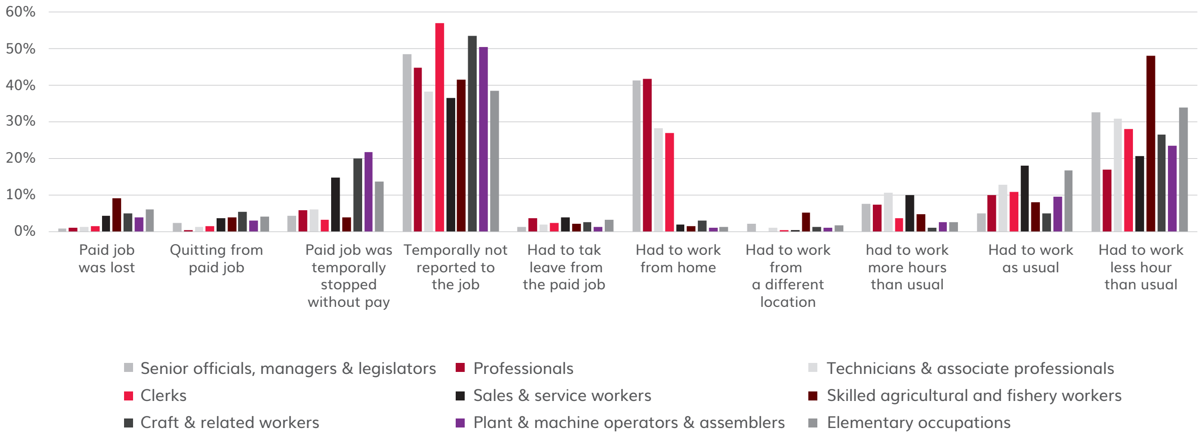
3 In a binomial logistic regression, the dependent variable is binary which is regressed with other variables. In this study, we utilised two regressions; one for employment and one for unemployment in order to identify whether COVID 19 lockdowns had an impact on these statistics.

4 Include occupations such as cleaners, helpers, construction workers, labourers and street vendors.

5 Impacts of COVID-19 on the survey such as "paid job was lost", "quitting from paid job", "had to work from a different location" and "had to take leave from the paid job" are not reported given the higher CV statistic.

The fewer hours reported by workers is plausible as the Central Bank reports that the agricultural sector contracted by 3% in 2020 as compared to 2019.

Figure 4. Impact of COVID-19 according to occupation categories for employees



Note. Adapted from the *COVID-19 Survey* by DCS (2020).

COVID-19 and job losses in the MSME sector

From 2021 to 2022, 37% of businesses surveyed for this study reduced the number of workers employed, as opposed to 23% that increased the number of employees. Among businesses that have reduced in size, five have scaled down from small- to micro-scale, one has scaled down from medium- to micro-scale, and one has scaled down from large- to medium-scale. Qualitative discussions reveal that the pandemic caused job losses mainly due to the imposition of travel restrictions to curb the spread of the virus. In fact, 40% of businesses surveyed stated that up to 30% of their employees have been unable to travel to work during the pandemic.

Data collected from businesses surveyed also shows that, while both male and female workers have endured job losses, they were more pronounced for women employees, with 31% of women and 22% of men reporting job loss (see Appendix 4). Qualitative discussions with workers revealed that women employees found it more challenging to travel to work during the pandemic given their responsibilities of caring for children and other household members during the pandemic, given school closures. One strategy used by firm owners to retain minimum staff and continue operations at a reduced scale was to provide accommodation for workers close to or at the workplace. Male workers, who could perform strenuous tasks such as lifting heavy loads, were given these temporary accommodation options and not women workers, as finding workers to replace those who could perform these strenuous tasks was difficult.

Surveys with business owners indicate that job losses differed by skill level; more unskilled workers (36%) lost their jobs in 2021 and 2022 compared to skilled works (7%). Further, qualitative discussions with business owners found that MSMEs tended to hire unskilled labour, based on skill levels identified through training at a vocational training centre or those with 'on-the-job' training, particularly in the food sector. Qualitative group discussions with MSME workers confirm this trend; most workers have ten years of education or less, and most workers in the construction and ICT sectors do not possess a vocational training qualification. In the ICT sector, some of the employees were interns following vocational training courses and in one food processing firm that operated on shifts, university undergraduates were employed on a part time basis.

Job losses experienced by contractual employees (29%) were more pronounced compared to their permanent counterparts (12%). Qualitative discussions with both business owners and workers reveal that MSMEs tend to hire more employees on a contractual basis. For example, business owners and workers revealed that none of the workers had permanent employment contracts with employment benefits such as the Employment Provident Fund[6] payments included, except in one of the ICT and one of the food sector businesses interviewed. In this food processing business, 10 workers were paid daily or weekly and were hired on a casual basis, while four workers based in the office or the showroom were paid a monthly salary, including employment benefit schemes such as the Employee Provident Fund. In the apparel sector, subcontracting is common and this increased during the pandemic, as more workers preferred to work from home due to travel restrictions and care duties that entailed supervising children's virtual education and preparing food.

Similar trends were also observed in the migrant status of workers. Non-migrant workers (33%) experienced more pronounced job losses during the pandemic, as opposed to migrant workers (13%). The higher job loss of non-migrant workers is congruent with more MSMEs hiring non-migrant workers, usually within a commutable distance to the business. Where migrant workers were hired, particularly in the construction sector, it was observed that workers were stationed in their workplaces with accommodation and food, lowering the risk of job loss from having to commute to work.

Despite the trends of job loss highlighted by survey data, both qualitative and quantitative data from the study indicate that job loss is not synonymous with being

6 Employment Provident Fund (EPF) is a social security scheme in Sri Lanka for the employees of Private Sector firms, State Sponsored Corporations, Statutory Boards and Private Business. The aim of the EPF is to assure financial stability to the employee in the retirement stage of life and to reward the employee for his or her role in the economic growth of the country.

laid off. This is due to workers, especially those on non-permanent work arrangements, willingly leaving work or withdrawing from work owing to the various interventions taken by the State to curb the spread of the virus. In fact, only six firms (12%) had laid off employees during this period.

Reduction in working hours as a result of COVID-19

Reduction in working hours varies by occupational category. The secondary data analysis of LFS data from 2017 and 2020 on actual working hours reveals they have decreased by 7 hours per week in 2020 compared to 2017 across all the occupations except for sales, services and elementary occupations[7] (Table 1 below). One of the main impacts COVID 19 lockdown had on employment is the reduction in working hours.

Table 1. ANOVA results by working hours by occupations

Occupation category	Difference in mean hours worked per week
Armed Forces Occupations & Unidentified Occupations	-8.17
Senior Officials, Managers & Legislators	-7.81
Professionals	-6.82
Technicians & Associate Professionals	-8.60
Clerks	-7.88
Sales & Service Workers	-0.70
Skilled Agricultural and Fishery Workers	-7.66
Craft & Related Workers	-10.34
Plant & Machine Operators & Assemblers	-5.01
Elementary Occupations	+0.55

Note. Adapted from the *Labour Force Surveys 2017-2020* by DCS (2020).

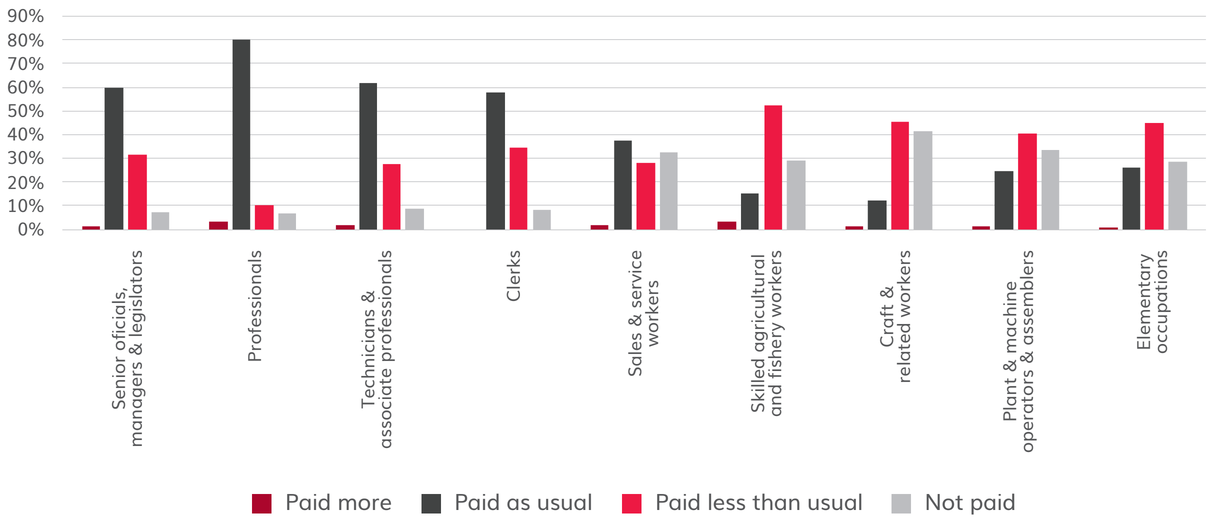
7 Include occupations such as cleaners, helpers, construction workers, labourers and street vendors.

The above table indicates that other than sales and service workers and those who were engaged in elementary occupations, work hours per week had reduced as compared to the year 2017. Most of the occupations (other than elementary occupations) have reported a loss in work hours compared to 2017 and the difference in means are larger for occupations related to crafts, technicians, and associate professionals.

Wage loss as a result of COVID-19 measures in the MSME sector

The analysis of secondary data shows that wage loss as a result of the pandemic differed by occupation category. The wages of professionals and senior managers remained constant during the COVID-19 lockdown (see Figure 5), such as in the agricultural and service sectors, while all other occupations were paid less than usual, with most evidence among those working in the industrial sector.

Figure 5. Impact of COVID-19 on wages by occupation



Note. Adapted from the *COVID-19 Survey* by DCS (2020).

Qualitative discussions with business owners and workers show that approximately 50% of wage cuts occurred in sectors where demand and sales dropped, such as apparel. The number of hours or days they worked also dropped due to reduced demand and resultant scaled down operations. Conversely, as demand grew in the ICT services sector, so did the number of hours at work, especially when travel restrictions were lifted. As a result, salaries were not reduced.

Discussions with workers reveal that continued payment of salaries by business owners resulted in relatively steady levels of wellbeing for mostly lower or unskilled workers from socio-economically marginalised communities during the pandemic. Construction workers and food processing workers revealed that about half had received Rs5000 relief packages once or twice from the government. This tied them through strict lockdowns, in place from March to May 2020. This is confirmed in the secondary data, which shows that around 10% of employees in low-skilled occupations lost their jobs.

Government, non-government and firm-level responses to mitigate the impacts of COVID-19

To deal with challenges in liquidity during the pandemic, the MSME sector in Sri Lanka received external support, ranging from financial support, business development services, and market access from government, semi-government, and private entities. Among those surveyed, 85% of business owners received financial support, 63% received business support and 67% were provided consultancy, and technical support.

The pandemic-induced lockdowns also increased inequalities regarding the inability to mitigate cash flow shortages. As the survey results reveal, 44% of male-owned businesses have opted for bank loans, including the Saubhagya COVID-19 Renaissance Facility, to cope with cash flow shortage, whereas only 18% of female owners have benefitted through formal channels such as bank loans. Instead, 25% of the female respondents have chosen non-formal options including pawning jewellery, mortgaging, and borrowing from private individuals and micro-finance institutions (see Appendix 5) The in-depth interviews with female owners revealed that their enterprises have not formally registered with the government or private agencies that provide services to MSMEs such as the Chamber of Commerce or Small Enterprise Development Division (SEDD), as they are not qualified to access formal channels like bank loans.

> **Women-led enterprises were already at a disadvantage due to systemic inequities: limited access to formal financing, lack of government registration, and exclusion from major business forums.**

For example, to assist businesses who were experiencing difficulties in paying wages during the COVID-19 restrictions, financial schemes such as the Saubhagya COVID-19

Renaissance facility and a 6-month debt moratorium were made available by the Central Bank of Sri Lanka. The two schemes were accessed by 28% and 15% of firms surveyed, respectively. Although government support was meant to be equally accessed by both male and female firm owners, in reality, accessing the Saubhagya loan shows stark gender differences. While 41% of male business owners have been able to access the loan scheme, only 11% of women business owners have been able to do so. Qualitative discussions with business owners revealed that the Saubhagya loan was more useful than the debt moratorium in helping pay wages and maintaining a steady cash flow. The debt moratorium was viewed as an added burden due to the interest-on-interest pay back, stifling potential growth of the business, especially given the ongoing political and economic crisis in Sri Lanka.

While the Saubhagya loan helped businesses pay salaries and ensured cash flow, there were obstacles in accessing the loan as only registered businesses which maintained payrolls and were linked to service providers such as the Small Enterprises Development Division (SEDD) or the chamber of commerce could access this, excluding most micro scale enterprises. For instance, only 22% of micro-scale businesses accessed the loan scheme as opposed to 33% of small- and 100% of medium-scale counterparts. As per qualitative discussions with business owners, the lack of registration stems from the lengthy, bureaucratic procedure for registration that has discouraged many businesses to secure it.

Red tape in doing business is also seen as a barrier discouraging the registration of MSMEs at divisional secretariats—the regional administrative sub-units of Sri Lanka. Further, this red tape is seen as regressive and discriminatory against the poor, discouraging entrepreneurship (Economy Next, 2019). In fact, such barriers to entry and barriers to operation, have compelled 45% of micro enterprises and 10% of small enterprises to remain unregistered. Therefore, they are excluded from formal financial channels, business networks, and government assistance (Warusavitarana, 2020). Despite introducing several policy reforms such as the revenue administration management information system (RAMIS), the Customs Act, and the National Single Window to overcome regulatory barriers, they have been marred by operational failures and delays in implementation (Echelon, 2022).

Gendered coping strategies and recovery processes of men and women owned businesses

As the survey reveals (see Appendix 6), over 50% of enterprises continued their business operations during the pandemic. However, recovery after the pandemic has been notably unequal between male and female business owners. Among respondents surveyed, more women firm owners (18%) have taken more than one year to recover, in comparison to only 3% of men, showing that such effects are gendered. The extended recovery period experienced by female-run businesses, as opposed to their male counterparts, could potentially hinder their opportunities for business growth, thus perpetuating existing gendered inequalities in the MSME sector.

In contrast to the aforementioned issues faced by women owned MSMEs due to COVID-19 related government lockdowns, the ICT and food processing sectors, at all scales, capitalised on increased demand for their services and products. Qualitative interviews with ICT firm owners show that service providers had started selling hardware in parallel to service provision, capitalising on the increased demand for devices as a result of education shifting online due to lockdowns. One ICT business owner stated they had scaled up their service provision to include selling these devices, and had increased their turnover by 50% during the pandemic. The owner and the six employees of this firm had taken an online course on service provision offered by a Chinese company to enable this scaling up, illustrating the importance given to planning, re-strategising and diversifying their business.

Furthermore the unequal effects of Sri Lanka's pandemic-related measures were evident among women and men. When business models were adjusted, 79% of surveyed women-owned enterprises have reduced their scale of operations and none scaled-up, compared to 57% of surveyed men-owned enterprises reducing their scale of operations, and 10% increasing, during the pandemic (see Appendix 7). The enterprises which could scale up operations were male-owned ICT businesses. The sudden increased demand for online platforms such as online payment, home delivery, and education apps have contributed to an increased scale of operations through supplying WiFi routers and dongles at a time when work-from-home increased and during government-mandated lockdowns.

To deal with the effects of preventative measures in response to COVID-19, business strategies such as diversification, and scaling down stood out in qualitative interviews. One woman business owner, who was primarily producing lady's handbags and ready-made garments, noted that she had diversified her products and started supplying new-born baby packages and scrubs to a private hospital, free of charge at first to ensure continued operations and payment of wages and then at the market price, once her products gained popularity. Further, she had moved away from a factory-based production mode to subcontracting. She had allowed more of her workers who worked in the factory—all women—to work as sub-contractors from their homes in response to the transport challenges they faced during the lockdown. The workers also cited their preference to remain at home and be subcontracted workers, given that their care responsibilities for their children increased with education moving online. As the lockdown in Sri Lanka was lifted towards the end of 2021, the business owner returned to producing her main product, however the prevailing political-economic crisis and the resulting import restrictions in the country continued to cause critical raw-material shortages for her, as the main raw materials for handbags are imported from China.

In another example, a woman who owned an ice cream producing business had used the time during the lockdown to "experiment" with her product range and introduce new products, which opened new markets for her. She declared that during COVID-19, her "business thrived" and that her sales improved by 75%. She had introduced new products such as "kurakkan" (finger millet) based ice cream and Milo flavoured ice cream, which had created a high demand among school children.

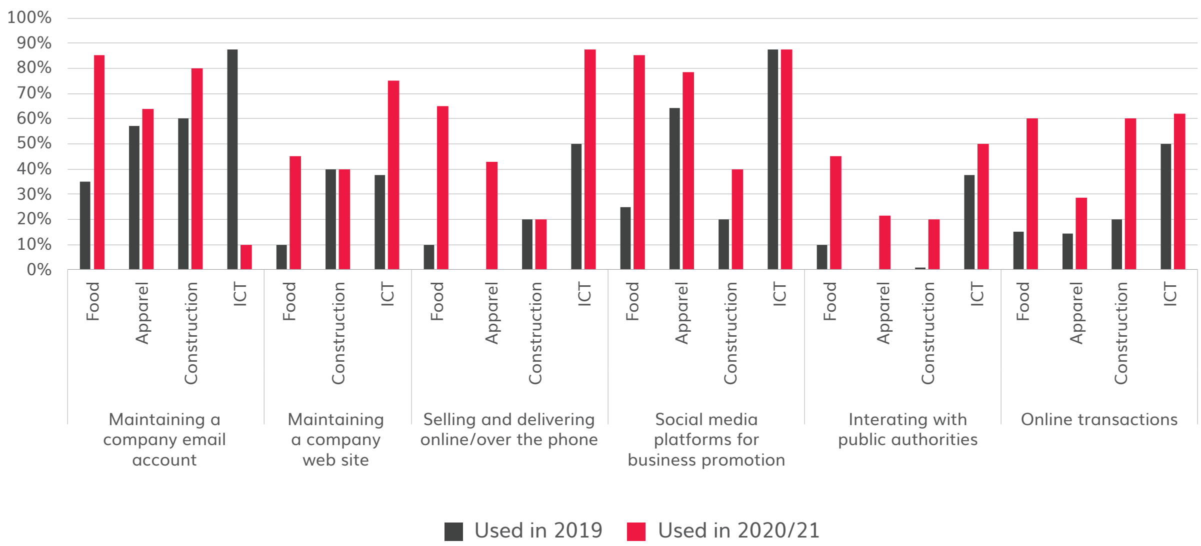
To deal with raw material shortages caused by the pandemic and measures in response, enterprises surveyed adapted in different ways. 43% of women enterprise owners and 34% of the male owners reduced their production during the pandemic. Moreover, reductions in production (43%), seeking new procurement channels (36%) and lowering prices (11%) were the most prominent coping strategies among women business owners. Some male business owners had also adopted outsourcing orders (6%) as coping strategy. But only 4% of the surveyed women owned enterprises could increase procurement prices and none of the female owners could outsource their orders during the pandemic. These trends illustrate the inequality between the women and men business owners, where women owners are not as financially capable to diversify their coping strategies as their male counterparts (see Appendix 8).

Use of digital technologies during COVID-19

Although all businesses surveyed used social media channels to sustain their profitability, the construction sector demonstrated the lowest use of social media at 40% of respondents. 88% of the surveyed ICT enterprises had used social media before the pandemic, and continued to do so. 78% of businesses surveyed in the apparel sector, and 85% of food processing and manufacturing (85%) businesses, utilised social media, more than doubling their use prior to the pandemic (see Figure 6). The travel restrictions imposed during the pandemic have compelled them to look for new platforms, such as social media, to reach out to customers.

Firms that adopted digital marketing platforms and social media for selling and marketing their products, across all sectors and scales, managed to continue their operations, except during the curfew period of March-May 2020. A majority (78%) of MSMEs utilised IT tools to sustain business operations during the pandemic, such as online selling and delivery services. Surveyed MSMEs in the apparel sector reported that they had never offered online selling and delivering options to their customers prior to the pandemic. During the pandemic, their use of these technologies increased by 42% (see Figure 6).

Figure 6. Use of IT tools for business during the COVID-19 pandemic



Note. Adapted from the *COVID-19 Survey* by DCS (2020).

Moreover, the pandemic triggered women business owners to offer online selling and delivering options. Prior to the pandemic, no female respondents used online selling or delivering. During the pandemic, 48% of female owned businesses moved towards online selling. Among those surveyed, the one large-scale firm launched their own website with a payment gateway for delivery of products. Pre-pandemic, this firm used food and grocery delivery apps such as Uber and Pick Me (a local Sri Lankan food delivery app) and continued their deliveries through these, combined with offering their products through supermarket delivery apps. As a result, except during the first two weeks of lockdown, this company managed to stabilise their selling and market channels. All other businesses surveyed used social media channels such as Facebook, and messaging platforms such as Whatsapp, to sell and market their products and services online.

The pandemic boosted the use of social media platforms for promoting the business of 81% of male and 76% of female business owners (see Appendix 9). Further, more than half of businesses across all four sectors have increased the use of company email and websites. In terms of using websites, 42% of the male owners and 28% of female owners have their own website. As per the qualitative interviews with female business owners, lack of awareness and poor financial ability can be identified as the reasons behind the low use of websites by female enterprise owners.

> **During the pandemic, women-led enterprises faced heightened operational challenges and are experiencing a more difficult recovery in the post-pandemic landscape.**

Many businesses have used IT tools, including email and government websites, to connect with public authorities during the pandemic. This demonstrated a significant shift from pre-pandemic practices. Apparel- and construction- related MSMEs stated that they never engaged in such forms of communication with public authorities prior to the pandemic. Furthermore, 38% of female business owners have stayed ahead in using IT tools to interact with public authorities (38%) and 29% have utilised e-commerce platforms, when compared to their male counterparts, where 23% have utilised e-commerce platforms and 35% have used IT tools to interact with public authorities (see Appendix 8).

38% of men and women owned enterprises alike have reported that digital platforms immensely supported them in sustaining their business operations during the pandemic. However, the uptake and impact of digital platform usage varied across businesses, the scale of operation, the skill level of the business owner, and their previous experience in using digital tools.

A large-scale food processing company in Colombo managed to scale up and diversify their online marketing and delivery options very quickly. Conversely, a small-scale traditional food production business in rural Hambantota, guided by a business development service, initiated a social media marketing strategy for its products, but had struggled to meet the resulting demand. The owner of this business had taken the advice of a business development service and launched a social media page, using photographs taken by a professional photographer, and had experienced a sharp increase in demand. However, the business was using a courier company for deliveries and faced delivery delays, high courier charges, and difficulties in dealing with returned products.

In contrast, two microscale businesses producing ice cream and ready-made garments used social media pages for marketing and their own transport for deliveries, which was obstructed in some cases as they did not possess curfew passes for travel during the lockdown. Further, past exposure to international working environments, and the ability to work in English, has helped stability for micro enterprises and helped when adopting digital marketing and social media.

A majority of surveyed MSME owners—62% of male owned enterprises and 43% of female owned enterprises—are willing to use digital platforms for business operations in the future. However, 12% of male and 14% of female owned enterprises are not willing to make use of digital platforms to sustain their business operations. During the in-depth interviews with female business owners, it was revealed that the reasons behind this unwillingness are the lack of awareness about digital platforms and not having required knowledge, skills, and infrastructure to operate it on their own. Moreover, some women shared experiences of online harassment while using social media for business purposes, which have reduced their willingness to continue with social media platforms.

Innovation among MSME firm owners is not a finding unique to this study. For example, Deyshappriya and Padmakanthi (2022) observe that, despite financial and operational performance of MSMEs declining during COVID-19, innovation has increased as businesses discover new avenues for conducting businesses and staying afloat. DAI and Ipsos (2022) reveal that COVID-19 has encouraged MSMEs to pivot swiftly to internet-based technologies, against the backdrop of the pandemic. While women-owned enterprises were less likely to adopt new digital technologies (IFC, 2020), DAI and Ipsos (2022) and CEPA's (2022) field experiences show that women-owned enterprises used Facebook for business purposes such as marketing and communicating with customers.

Conclusions and implications

Before the pandemic, the MSME sector in Sri Lanka was characterised by unequal access to finance (Gamage, 2003), low productivity (Hewage, 2020), high cost of infrastructure (Premaratna et al., 2018), and regulatory barriers (World Bank, 2020). As the study has shown, COVID 19 and the economic crisis have also then added more burden on the MSMEs. As a group they have been more affected than other scales of businesses but within the MSME sector impacts were also varied, across businesses and among workers. As MSMEs are seen as a means out of poverty, especially regional poverty, and a way to empower and increase women's participation and economic opportunities, the reduced economic vibrancy will then affect Sri Lanka's ability to meet the commitments to the SDGs.

As MSMEs play a crucial role in economic vitality and poverty reduction, their slowdown and reduced profitability will impact Sri Lanka's progress towards SDG target 8.1[8] in terms of contribution to GDP, and SDG target 8.5[9] on the ability to provide adequate and decent employment for both men and women. Efforts at recovery will require greater attention to adapt policy frameworks and tailored actions to address the needs of MSMEs, which will assist in achieving target 8.3[10] towards greater support to formalise and grow MSMEs. This will be a considerable challenge under national level budgetary constraints coupled with the rising costs of raw materials/equipment. The decline in the sector and the continued lack of appropriate policy, financial and technical support geared towards addressing the economic crisis will also impact SDG targets on eradicating poverty in all its forms and reducing the percentage of people in poverty (SDG targets 1.1[11] and 1.2[12]). Furthermore, it will create more burden on social protection measures (SDG target 1.3[13]) as owners and workers of MSMEs struggle to earn adequate incomes and require support for both consumption and livelihoods revitalisation.

The experience of MSME owners shows that COVID-19 has led to different impacts for different types and scales of enterprises. Certain businesses which require in-person work, such as construction, were negatively affected as firm owners were unable to provide adequate measures to keep their employees safe from contracting or spreading the virus in the workplace. In addition, they were unable to access building materials as construction was not considered an essential service. Therefore, construction operations came to a standstill. In comparison, the food processing and manufacturing and ICT sectors saw greater demand for their products and services during lockdowns. Larger firms were able to cope better as they had greater access to savings, networks, and

8 Target 8.1: Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries.

9 Target 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

10 Target 8.3: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalisation and growth of micro-, small- and medium-sized enterprises, including through access to financial services.

11 Target 1.1: By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day.

12 Target 1.2: By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions.

13 Target 1.3: Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable.

market links to absorb shocks. Thus, COVID-19 did not impact all enterprises equally as some managed to maintain or increase their revenue while others faced a decline in revenue and operational capacity.

The pandemic's effects on MSME owners displayed distinct gender disparities. Even before the pandemic, women-led enterprises were already at a disadvantage due to systemic inequities: limited access to formal financing, lack of government registration, and exclusion from major business forums. During the pandemic, these enterprises faced heightened operational challenges and are experiencing a more difficult recovery in the post-pandemic landscape. Therefore, their ability to cope with, and adapt to, COVID-19 and the subsequent political and economic crisis in Sri Lanka is even more limited compared to male enterprise owners. During the pandemic, female owned businesses faced greater challenges to access markets and raw materials, information, formal financial services, and technical support, and relied on support from primarily male family members.

Generally, women are underrepresented in entrepreneurship, constituting only 25% of owners in formal, small to medium-sized enterprises (IFC, 2020). The majority of women-owned enterprises predominantly fall into the informal, micro-scale category. Our study reveals that specialised support mechanisms for women-led businesses at this scale are noticeably absent. Compounding this issue, women also bear a disproportionate burden of domestic responsibilities, including supervising children's online education. These dual pressures hamper their ability to manage businesses as effectively as their male counterparts. This inefficiency widens the productivity gap between men and women, undermining the objectives set forth in several Sustainable Development Goals (SDGs). Specifically, it hinders progress towards Target 8.1, which focuses on economic growth, and Target 10.1[14], which calls for sustaining income growth of the bottom 40% of the population and also hinders the achievement of full participation in decent and secure jobs and opportunities for leadership and equal pay for both men and women as intended over several targets - Targets 8.5, 8.8[15], and 5.5[16]). Moreover, the lack of support for women's domestic roles goes against SDG

14 Target 10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average.

15 Target 8.8: Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.

16 Target 5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision making in political, economic and public life.

Target 5.4[17], which advocates for better recognition and support for care and domestic duties. In summary, the current situation highlights the inadequacies in existing policies and frameworks aimed at meeting the needs of MSMEs, while also ensuring decent work conditions for both men and women and promoting equality).

During the pandemic, workers in MSMEs have faced reduced work hours and job instability, leading to a significant drop in income. This has been particularly acute for informal and unskilled workers, who have experienced job losses, limited working hours and income, or voluntary departures due to travel limitations and caregiving obligations. The situation has been even more detrimental for women, who have seen a greater reduction in working hours compared to men. Although the government provided some relief in the form of food packages and a Rs 5,000 financial grant—disbursed twice to those hardest hit—these measures were insufficient in providing comprehensive, long-term social protection. Consequently, this has escalated poverty rates, hindering the achievement of SDG Targets 1.1 and 1.2 focused on poverty alleviation. The situation also exposes significant gaps in existing social protection frameworks, especially for informal workers, for women and other marginalised groups, undermining progress toward SDG Targets 1.3, and 10.4[18]. Additionally, these labour market disruptions have slowed advancements toward SDG Targets 8.3 and 8.5, which aim for decent work, and target 8.8, which seeks secure and safe employment. They have also stymied progress on target 10.1, which focuses on increasing growth and incomes for the bottom 40% of the population. The disproportionate impact on women exacerbates inequalities, affecting progress toward Target 5.5, which aims for gender equality in economic participation.

Throughout the pandemic, employers have been instrumental in sustaining their businesses and mitigating the impact of COVID-19 on their workforce. They have extended additional support such as providing food, free lodging, and transportation, which aided in the continuation of business operations and offered critical assistance to employees. In addition, many businesses adapted their operational strategies to the changing landscape, leveraging digital tools and implementing work-from-home or rotational schedules to minimise layoffs in the face of dwindling work and revenue. These adjustments often necessitated loans and tapping into reserves, partially filling the void left by insufficient state support for both firms and workers during the crisis. Conversely, firms unable to offer such support had to layoff employees. The pandemic has further heightened the existing vulnerabilities in the MSME sector, raising concerns

17 Target 5.4: Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate.

18 Targe10.4: Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality.

about its long-term viability, especially given ongoing economic challenges. This study's findings underscore the urgent need to focus on creating safer working conditions, aligning with SDG target 8.8, and the necessity for enhanced social protection measures, particularly during crises, as specified in SDG target 1.5[19].

In the labour market, opportunities available to men and women often differ, leading to gender-specific impacts across various sectors. For instance, sectors like construction that primarily employ semi-skilled or unskilled male workers face severe setbacks due to the inherent nature of their work, which often requires physical presence and cannot easily transition to remote settings. However, more technical fields such as ICT, which also predominantly employs men, showed greater resilience. The skills in these sectors were in high demand during the pandemic, and businesses could quickly adapt by offering services online or through door-to-door services, facilitating faster recovery.

On the other side of the spectrum, women-led businesses are more prevalent in the apparel sector, which also employs a majority of female workers in the factory. This sector experienced mixed outcomes during the pandemic. Some businesses adapted by pivoting their product lines—switching from garment production to manufacturing face masks, for example—or enabling their workforce to operate from home. Yet, for many women, the additional burden of domestic responsibilities, like cooking and overseeing children's online education, impeded their ability to adapt professionally. These domestic tasks further complicated the challenges of working remotely or maintaining productivity during the pandemic.

From a policy perspective, these gender-based disparities in employment can have significant implications for achieving targets on decent work conditions and poverty alleviation. For women workers, the pandemic has not only disrupted their current employment status but also posed setbacks in progress towards these socio-economic objectives. Therefore, these gender-specific challenges require targeted strategies to ensure that both men and women can navigate future disruptions more effectively.

The impact of the COVID-19 pandemic has prompted MSMEs to adapt to digital spaces, finding innovative ways to sustain their businesses. This transition aligns with the broader goals of SDG Target 8.3, which focuses on policies that support the productive activities, entrepreneurship, and innovation of MSMEs. Across all scales of business, the shift to digital platforms for marketing, sales, and the introduction of new products and

19 Target 1.5: By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.

services have proven vital for survival. This digital transformation was further facilitated by the necessity for online education due to the pandemic, which compelled households to invest in digital tools. Smartphones, computers, and internet packages became essential household items, creating a conducive environment for businesses to thrive in digital spaces.

The increased adoption of these tools suggests a longer-term shift in business strategies, contributing to the resilience of the sector amidst ongoing economic challenges. Both state and non-state entities, like the Small Enterprise Development Division and the Chamber of Commerce, have supported this digital migration. Their services have proved to be invaluable, echoing the significance of public and private sector support in crisis adaptation. Moreover, this shift towards digital spaces has had additional benefits, most notably in driving technological upgrading and innovation, thereby contributing positively towards other SDG targets like 8.2[20], focused on technological innovation, and 9.C[21], which aims for wider access to ICTs. As highlighted in the study, these digital adaptations are likely to endure, offering a more resilient framework for MSMEs to navigate future economic uncertainties.

The implementation of digital tools in businesses has been notably influenced by the age and gender of the business owner. Especially in businesses owned by women and older individuals, there has been a reliance on younger family members to manage digital innovations. This highlights the significant role of both technological familiarity and English proficiency in the effective application of digital tools. The data suggests that women and older people often require support from male relatives, staff members, or children to navigate digital spaces effectively. These challenges indicate that technology has yet to serve as an equaliser, complicating progress towards achieving SDG target 5.B[22], which aims to leverage technology like ICT to empower women.

Existing business development services and financial support mechanisms were largely unprepared for the unique challenges faced by MSMEs during the pandemic. Although some assistance was available, such as low-interest loans through the Saubaghya COVID-19 Renaissance Facility and technical support for digitalisation and alternative marketing channels, the support was insufficient and sporadically

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20 Target 8.2: Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors.

21 Target 9.C: Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020.

22 Target 5.B: Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women.

distributed. This limited reach can be partly attributed to information asymmetry as the effectiveness of these support services was also dependent on their promotion to MSMEs. Furthermore, the dispersed and unorganised nature of these small businesses made them difficult to reach, particularly when face-to-face meetings were constrained by the pandemic. These challenges underline the pressing need to refine policies in line with SDG target 8.3, which focuses on supporting MSMEs. Such policy improvements can contribute to achieving other SDG targets, including 1.4[23], 8.10[24], 5.A[25] and 9.3[26], which deal with expanding access to economic assets, technology, financial services and insurance, and means for value addition.

MSMEs are a critical component of Sri Lanka's economic fabric, particularly in supporting lower-income groups. However, the ongoing COVID-19 pandemic has resulted in these businesses operating sub-optimally. This is affecting their profitability and long-term sustainability, a situation further exacerbated by Sri Lanka's entanglement in a broader economic and political crisis. The global economic downturn, coupled with local challenges such as import restrictions, a devalued rupee, and high inflation, is undermining the competitiveness of Sri Lankan businesses. While the pandemic has presented its own set of unique challenges, the enduring economic crisis is generating long-term issues that go beyond the immediate impact of COVID-19. Businesses are struggling with access to raw materials, transportation, and markets. As a result, small business owners are increasingly cautious and pessimistic about future investment in their enterprises. Many find themselves supplementing their income through alternative work, a trend likely to cause further economic contraction. These adverse conditions are not only making it difficult for businesses to recover to pre-pandemic operational levels but also hampering progress towards several SDGs. Specifically, this situation threatens to erode advancements in SDG targets 8.1, which focuses on per capita economic growth, and 10.1, which aims for increased growth in the lower income

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23 Target 1.4: By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.

24 Target 8.10: Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all.

25 Target 5.A Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws.

26 Target 9.3: Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets.

quintiles. Furthermore, the lack of capital and technical support is making it challenging to implement environmentally sustainable practices, thereby affecting progress toward SDG target 9.4[27].

By aligning to the SDGs it can be seen how support to the MSMEs are linked to ambitions in 5 goals (1, 5,8,9 and 10) and 19 targets. Technology and financial services will certainly be accelerators along with supportive policy. It can also be seen how intrinsically linked economic growth of the MSME sector is with achieving aspects of decent work, gender parity and equality. Social protection is also a buffer that can support these communities as they look to regain lost ground. Achieving these objectives will then contribute to reducing poverty.

Policy recommendations

Developing an environment that accelerates the recovery of MSMEs is critical for several interconnected reasons: it is essential for economic revitalisation, generating employment, and achieving Sustainable Development Goals (SDGs). Our study outlines a roadmap of actionable steps for policymakers.

Our data underscores the urgency of enhancing digital literacy across MSMEs. The pandemic has fast-tracked the adoption of technology but gaps remain. Specifically, women entrepreneurs have been slower to embrace digital platforms. To bridge this digital divide, specialised training programs targeting women entrepreneurs would be an effective strategy. These programs should focus not only on basic digital skills but also on leveraging technology for business optimisation, thereby fostering resilience and adaptability.

On the operational side, geography poses a significant challenge. MSMEs are not concentrated in urban centres alone; they are spread across various regions, including remote areas. To bring effective support services to these diverse locations, digital solutions are imperative. Comprehensive databases can help identify regional needs and challenges, and online educational platforms can deliver training and support regardless of location. To ensure these strategies are effective, we recommend the establishment of regular monitoring mechanisms and public awareness campaigns that can measure impact and adapt interventions as needed.

27 Target 9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities

Additionally, the welfare of MSME workers should be a primary concern for governments. Programs focusing on worker upskilling can offer dual benefits: they can enhance employability while providing enterprises the operational flexibility to adapt to fluctuating market conditions and emergencies. The implementation of equitable workplace policies is equally important; these policies should guard against potential discriminatory practices, ensuring that work environments are inclusive and supportive for all employees.

Lastly, our study shines a light on the often-overlooked barrier that traditional caregiving roles pose for women's full engagement in professional settings. To dismantle this barrier, redistributive policies within households, as well as the provision of affordable, high-quality care services, should be prioritised. These steps can free up women's time and mental bandwidth, enabling them to engage more meaningfully in their professional roles, which, in turn, can significantly contribute to the stabilisation and growth of MSMEs.

References

Ariyarathne, N., & Lakmali, K. (2021). The impact of covid-19 on small-scale women entrepreneurs in sri lanka: a qualitative study of the matara area (sk town and meddawatta). *Pakistan Journal of Women's Studies, 28*(2), 19-44.

Amarakoon, P., Braa, J. & Sahay, S. (2021). Building Agility in COVID-19 Information Systems Response in Sri Lanka: Recommendations for Practice. *Arxiv.* https://doi.org/10.48550/arXiv.2108.09727

Asian Development Bank Institute. (2021). *Enhancing SME participation in global value chains: determinants, challenges, and policy recommendations.* https://www.adb.org/sites/default/files/publication/682891/adbi-book-enhancing-sme-participation-global-value-chains.pdf

Balasooriya, N. (2007). *Informal Economic Activity of Women in Sri Lanka.* Proceedings of the Annual Research Symposium 2007, Faculty of Graduate Studies, University of Kelaniya, pp 52. http://repository.kln.ac.lk/handle/123456789/7574

Central Bank of Sri Lanka. (2020). *Annual Report of the Monetary Board of the Central Bank 2020,* 177–179. Central bank of Sri Lanka. https://www.cbsl.gov.lk/sites/default/files/cbslweb_documents/publications/annual_report/2020/en/13_Box_06.pdf

Central Bank of Sri Lanka. (2021a). *Annual Report of the Monetary Board 2021* (Annual Report of the Monetary Board of the Central Bank, pp. 83–86). Central bank of Sri Lanka. https://www.cbsl.gov.lk/sites/default/files/cbslweb_documents/publications/annual_report/2021/en/13_Box_04.pdf

Central Bank of Sri Lanka. (2021b) *Moratoria to COVID-19 affected businesses and individuals has exceeded Rs. 4,000 billion: Saubagya loans amount to over Rs. 179 billion* [Press Release]. https://www.cbsl.gov.lk/sites/default/files/cbslweb_documents/press/pr/press_20211108_moratoria_for_covid19_affected_businesses.pdf

Centre for Poverty Analysis. (2022). *Rapid Mapping Assessment of District-based Chambers of Commerce in the Northern and Southern Provinces of Sri Lanka.* CEPA. Unpublished manuscript.

Cesaroni, F.M., Pediconi, M.G., & Sentuti. A. (2018). It's Always a Women's Problem! Micro-Entrepreneurs, Work-Family Balance and Economic Crisis. *Administrative Sciences, 8*(4), 1-16. https://doi.org/10.3390/admsci8040074

Development Alternative Incorporated & Ipsos. (2022). *Insights From Emerging Markets: MSMEs and Digital Tool Use Amidst the COVID-19 Pandemic: Sri Lanka Country Brief.* https://www.dai.com/uploads/final-msme-reports/sri-lanka-country-brief.pdf

Department of Census and Statistics. (2015). Key Indicators of Industry Trade and Servics Sector. Economic Census 2013/14. *News.LK*

Department of Census and Statistics. (2020). *Survey to Assess the Impact of COVID-19 (MSeME Sector).* http://www.statistics.gov.lk/Resource/en/Industry/Other_Tables_Reports/COVID_Report_2020A.pdf

Deyshappriya, N., & Padmakanthi, N. (2022, February). Modelling the Impact of COVID-19 on SMEs' Performance Econometrics Evidence from Sri Lanka. *SSRN*. http://doi.org/10.2139/ssrn.4030934

Economy Next. (2019, June 20). Sri Lankan banks too risk-averse, regulator says. Economy Next. https://economynext.com/sri-lankan-banks-too-risk-averse-regulator-says-14491/

Eggers, F. (2020). Masters of disasters? Challenges and opportunities for SMEs in times of crisis. *Journal of Business Research, 116*, 199–208. https://doi.org/10.1016/j.jbusres.2020.05.025

Gamage, A. (2003). *Small and Medium Enterprise Development in Sri Lanka: A Review.* http://wwwbiz.meijo-u.ac.jp/SEBM/ronso/no3_4/aruna.pdf

Gunawardana, D. (2020). *The impact of COVID19 on the MSME sector in Sri Lanka.* United Nations Department of Economic and Social Affairs, Division for Sustainable Development Goals [UN DESA/DSDG]. https://sustainabledevelopment.un.org/content/documents/26277Report_The_Impact_of_COVID19_to_MSME_sector_in_Sri_Lanka.pdf

Hewage, K. (2020, September 14). Protecting Sri Lankan MSMEs During a Pandemic: A Need for Innovative Solutions. *Talking Economics*. https://www.ips.lk/talkingeconomics/2020/09/14/protecting-sri-lankan-msmes-during-a-pandemic-a-need-for-innovative-solutions/

Hewage, K., & Pathirana, A. (2021, March 22). Stitching Solutions: Protecting Sri Lanka's Apparel Workers During COVID-19. *Southern Voice*. http://southernvoice.org/stitching-solutions-protecting-sri-lankas-apparel-workers-during-covid-19/

Institute of Policy Studies. (2022, June 28). Supporting MSMEs amid Mounting Macroeconomic Challenges in Sri Lanka. *Development Asia*. https://development.asia/policy-brief/supporting-msmes-amid-mounting-macroeconomic-challenges-sri-lanka?s=08

International Finance Corporation. (2020). *Gendered Impacts of COVID-19 on Small and Medium Sized Enterprises in Sri Lanka.* https://www.ifc.org/en/insights-reports/2020/gendered-impacts-of-covid19-on-small-and-medium-sized-enterprises-in-sri-lanka

Karunarathne, A. C. I. D., Ranasinghe, J. P. R. C., Sammani, U. G. O., & Perera, K. J. T. (2021). Impact of the COVID-19 pandemic on tourism operations and resilience: Stakeholders' perspective in Sri Lanka. *Worldwide Hospitality and Tourism Themes, 13*(3), 369–382. https://doi.org/10.1108/WHATT-01-2021-0009

Karunarathra, N., Siriwardhane, D., & Jayarathne, A. (2023). Exploring the measurements of COVID-19-induced supply chain disruptions and their implications on the economic vulnerability of small-scale farmers. *International Journal of Industrial Engineering and Operations Management.* https://www.emerald.com/insight/content/doi/10.1108/IJIEOM-03-2023-0028/full/html

Loayza, N., & Pennings, S. M. (2020). Macroeconomic Policy in the Time of COVID-19: A Primer for Developing Countries (World Bank Research and Policy Briefs No. 147291). https://ssrn.com/abstract=3586636

Lokuge, G. Senn, A. & Ranawana, A. (2019). *Policy Dissonance in Enterprise Development Programming in Sri Lanka.* Secure Livelihoods Research Consortium. https://securelivelihoods.org/publication/policy-dissonance-in-enterprise-development-programming-in-sri-lanka/

Nisantha, B. (2018). Small and Medium Enterprise Sector (SMEs) in Sri Lanka: Significance, Opportunities and Challenges. *Institute of Certified Management Accountant of Sri Lanka, 6* (3), 29-36. https://www.researchgate.net/publication/341931472_Small_and_Medium_Enterprise_Sector_SMEs_in_Sri_LankaSignificanceOpportunities_and_Challenges

Perera, M. (2021, October 16). Staying afloat: The impact of COVID-19 to access to credit for SMEs. *CEPA*. https://www.cepa.lk/blog/staying-afloat-the-impact-of-covid-19-to-access-to-credit-for-smes/

Perera, R., Welilgampola, H., Marikkar, U., Sritharan, S., Godaliyadda, R., Ekanayake, P., Herath, V., Rathnayake, A. & Dharmaratne, S. (2021). Spatial analysis of COVID-19 and socio-economic factors in Sri Lanka. *Arxiv.* https://doi.org/10.48550/arXiv.2108.05651

Premaratna, S. P., Priyanath, H. M. S., Kodippiliarachchi, P., & Karunanayake, K. (2018). Role of SMEs in Industrial Development in Sri Lanka: Are SME subsidies worthwhile? *Sri Lanka Economic Journal, 15*(2), 119–143. https://www.researchgate.net/profile/Sandaram-Premaratna-2/publication/343988318_Role_of_SMEs_in_Industrial_Development_in_Sri_Lanka_Are_SME_subsidies_worthwhile/links/624ec96aef013420665f2516/Role-of-SMEs-in-Industrial-Development-in-Sri-Lanka-Are-SME-subsidies-worthwhile.pdf

Rajapakshe, P.S.K., Jayasundara, J.M.S.B., Prasanna, R.P.I.R., Ekanayake, E.M.S., Gamage, N.S.K., Abeyrathne, G.A.K.N.J., Aravinda, M.A.K.N., Bandara, K.B.T.U.K., and Senarath, B.T.D.N. (2020). *Investigation of Institutional and Legislative Barriers and Drivers for Sustainable Transition Development of SMEs in Sri Lanka: A Literature Review* (Munich Personal RePEc Archive, Paper No. 105052). https://mpra.ub.uni-muenchen.de/105052/1/MPRA_paper_105052.pdf

Rasool, R. & Dissanayake, R. (2019). Digital transformation for Small & Medium Enterprises (SMEs): with special focus on Sri Lankan context as an emerging economy. *International Journal of Business and Management Review,* 7(4), 59-76. European Centre for Research Training and Development UK. https://www.researchgate.net/publication/335028085_DIGITAL_TRANSFORMATION_FOR_SMALL_MEDIUM_ENTERPRISES_SMES_WITH_SPECIAL_FOCUS_ON_SRI_LANKAN_CONTEXT_AS_AN_EMERGING_ECONOMY

Ratwatte, L. (2023). Converging Crises and the Cost of Exclusion: Unveiling the Invisible Women of Sri Lanka's Economy. *Journal of International Women's Studies, 25*(3), Article 3. https://vc.bridgew.edu/jiws/vol25/iss3/3

Rishandani, D. (2021, August 30). COVID-19 and its Impact of Sri Lanka Economy. Uva Wellassa University of Sri Lanka, Faculty of Business Management. http://doi.org/10.2139/ssrn.3914025

Robinson, J., & Kengatharan, N. (2020). Exploring the effect of Covid-19 on small and medium enterprises: Early evidence from Sri Lanka. *Journal of Applied Economics & Business Research, 10*(2), 115–124. http://www.aebrjournal.org/uploads/6/6/2/2/6622240/joaebrjune2020_115_125.pdf

Santhirakumar, S., Narmilan, A., & Puvanitha, N. (2021). The economic impact of Covid-19 on the micro, small and medium enterprise (MSME) sector in Batticaloa district, Sri Lanka. Covid-19 : labour issues and responses. *Annual Research Journal 2020*. Ministry of Labour, 27-41. http://ir.lib.seu.ac.lk/bitstream/123456789/5614/1/Santhirakumar.pdf

Sri Lanka Apparel Exporters' Association. (2022). *Export Performance Report*. https://www.srilanka-apparel.com/export-performance

United Nations Conference on Trade and Development.(2022). *The Covid-19 Pandemic Impact On Micro, Small And Medium Sized Enterprises: Market Access Challenges And Competition Policy.* https://unctad.org/system/files/official-document/ditcclp2021d3_en.pdf

Warusavitarana, A. (2020, July 1). Reform for our micro and small businesses. *Advocata Commentary Archives*. https://www.advocata.org/commentary-archives/2020/07/01/reform-for-our-micro-and-small-businesses

Wijayasiri, J. (2020). COVID-19 and Impact on Export Sector in Sri Lanka. In C. Choongjae (Eds.), *Crisis and Fragility: Economic Impact of COVID-19 and Policy Responses*, 56–69. Korea Institute of International Economic Policy. https://www.researchgate.net/profile/Messay-Mulugeta/publication/349073744_Food_Security_Impact_of_COVID-19_and_Policy_Responses_in_Ethiopia/links/601e2e9ca6fdcc37a80640ed/Food-Security-Impact-of-COVID-19-and-Policy-Responses-in-Ethiopia.pdf#page=57

World Bank. (2020). *Economy Profile of Sri Lanka: Doing Business 2020 Indicators (No. 17).* https://www.doingbusiness.org/content/dam/doingBusiness/country/s/sri-lanka/LKA.pdf

World Bank. (2022). The World Bank in Sri Lanka: Overview. https://www.worldbank.org/en/country/srilanka/overview

Appendices

Appendix 1

Tabla A1. Survey with firm owners

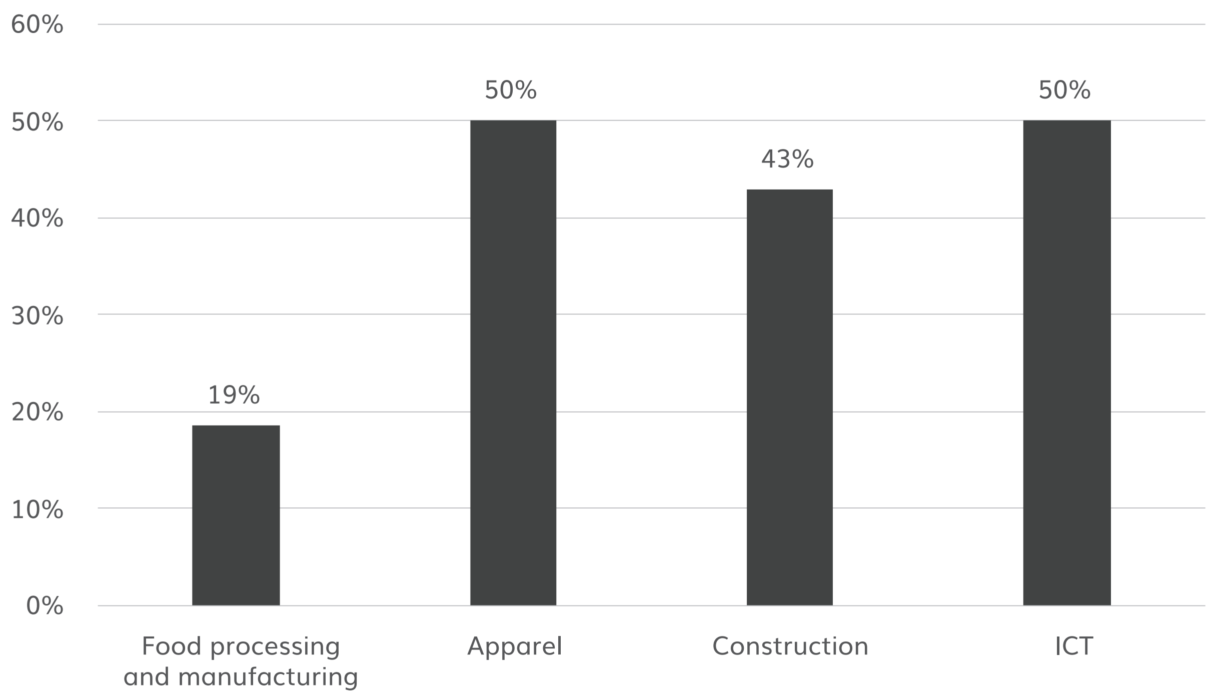
Variable	Codes	Frequency	Percentage
Sector	Food processing and manufacturing	27	45%
	Apparel	18	30%
	ICT	8	13%
	Construction	7	12%
Employer status	Owner	57	95%
	Manager	1	2%
	Head of operations	2	3%
Gender	Male	32	53%
	Female	28	47%
Age	20-29	3	5%
	30-39	16	27%
	40-49	31	52%
	50-59	8	13%
	60-69	2	3%
Marital status	Single	6	10%
	Married	50	83%
	Divorced	1	2%
	Widowed	2	3%
	Separated	1	2%

Education	Up to primary education	1	2%
	did not sit for O/Ls	1	2%
	Sat for O/Ls	12	20%
	did not sit for A/Ls	7	12%
	Sat for A/Ls	17	28%
	Degree	8	13%
	Other	14	23%
Location	Colombo	19	32%
	Hambantota	31	52%
	Gampaha	10	17%

Note. Elaborated by the authors.

Appendix 2

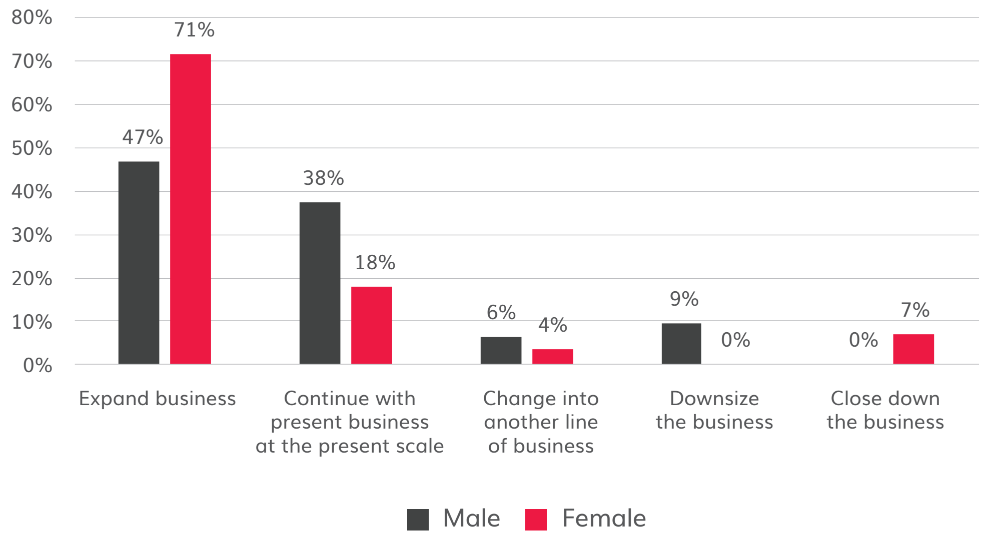
Figure B1. Major challenges faced by firms in 2020/21 and 2022



Note. Elaborated by the authors. Multiple options were allowed

Appendix 3

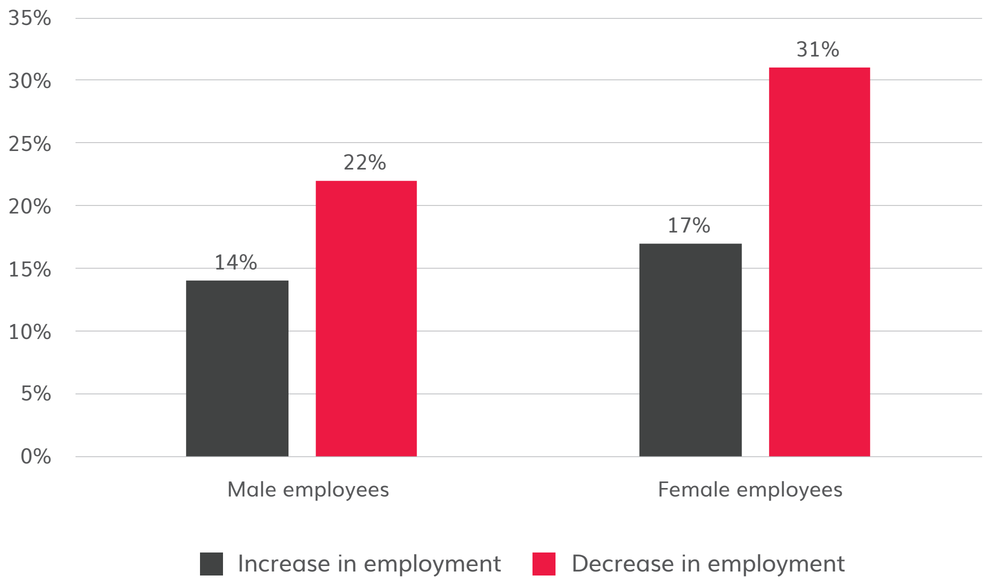
Figure C1. Future aspirations concerning the business over the next year disaggregated by the gender of the firm owner



Note. Elaborated by the authors

Appendix 4

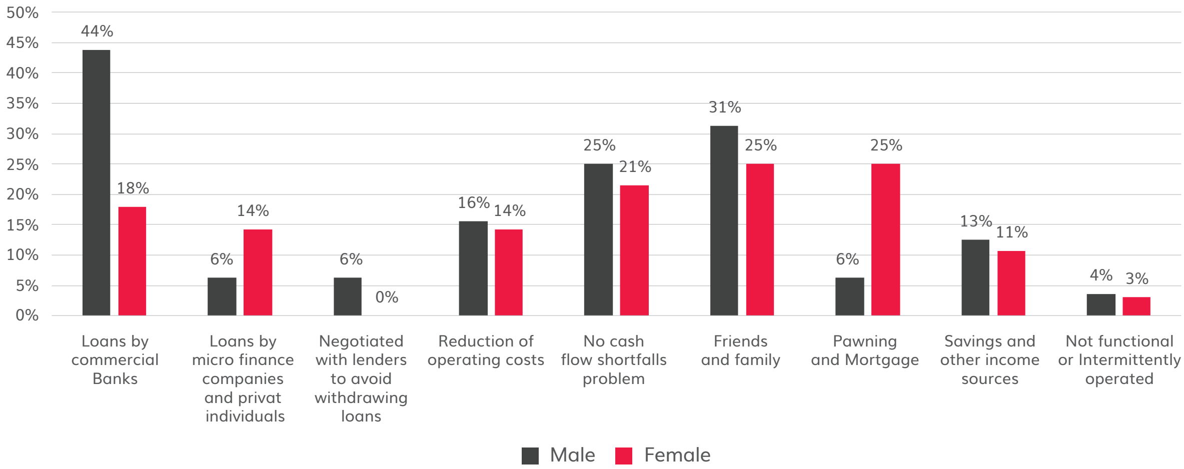
Figure D1. Percentage of firms reporting changes in employment between 2020 and 2022 by gender of the workers



Note. Elaborated by the authors. Multiple options were allowed.

Appendix 5

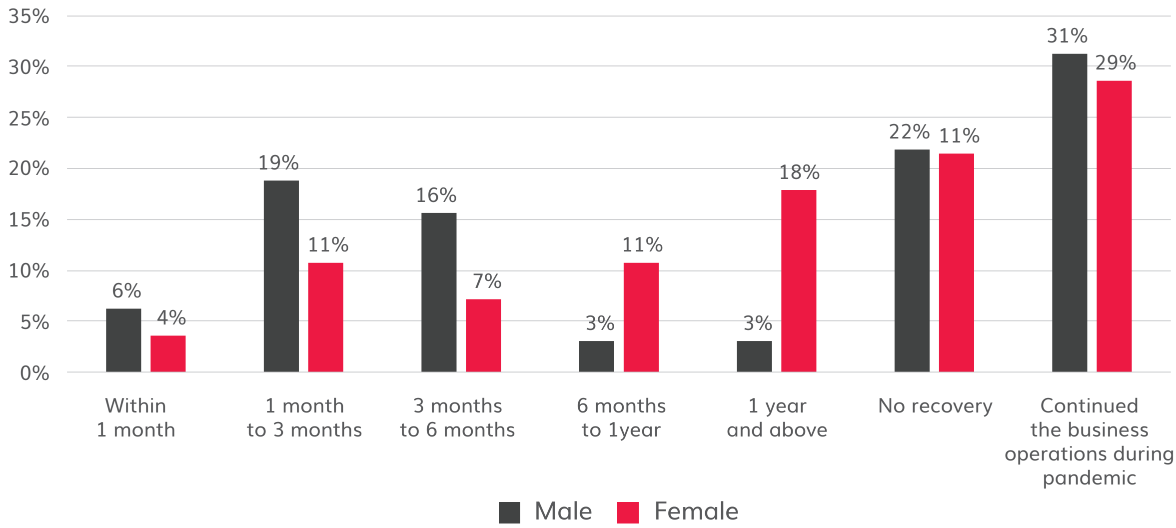
Figure E1. Strategies adopted to deal with the cash flow shortage disaggregated by the gender of the firm owner



Note. Elaborated by the authors

Appendix 6

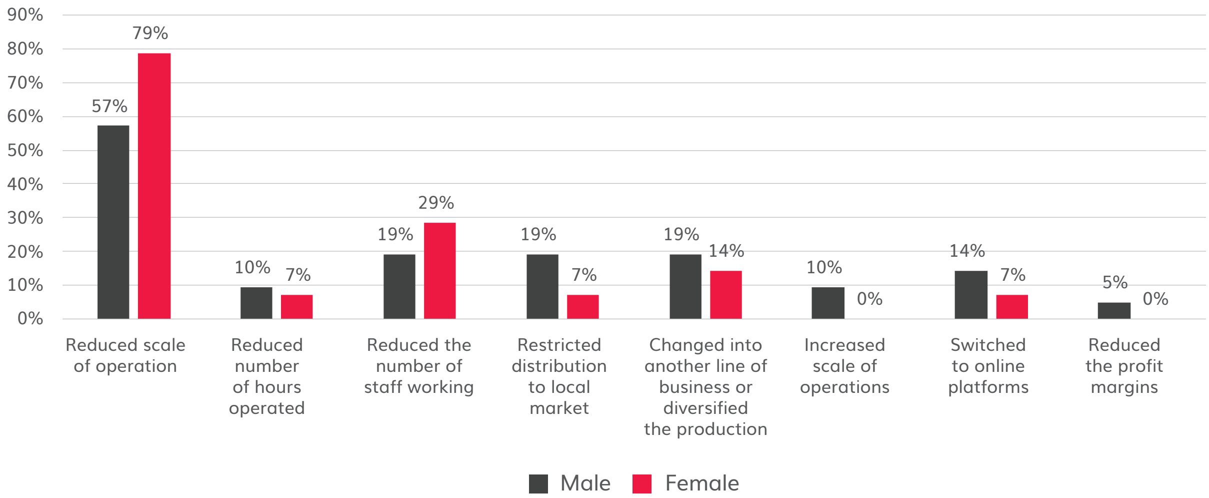
Figure F1. Time of business recovery after pandemic disaggregated by the gender of the firm owner



Note. Elaborated by the authors

Appendix 7

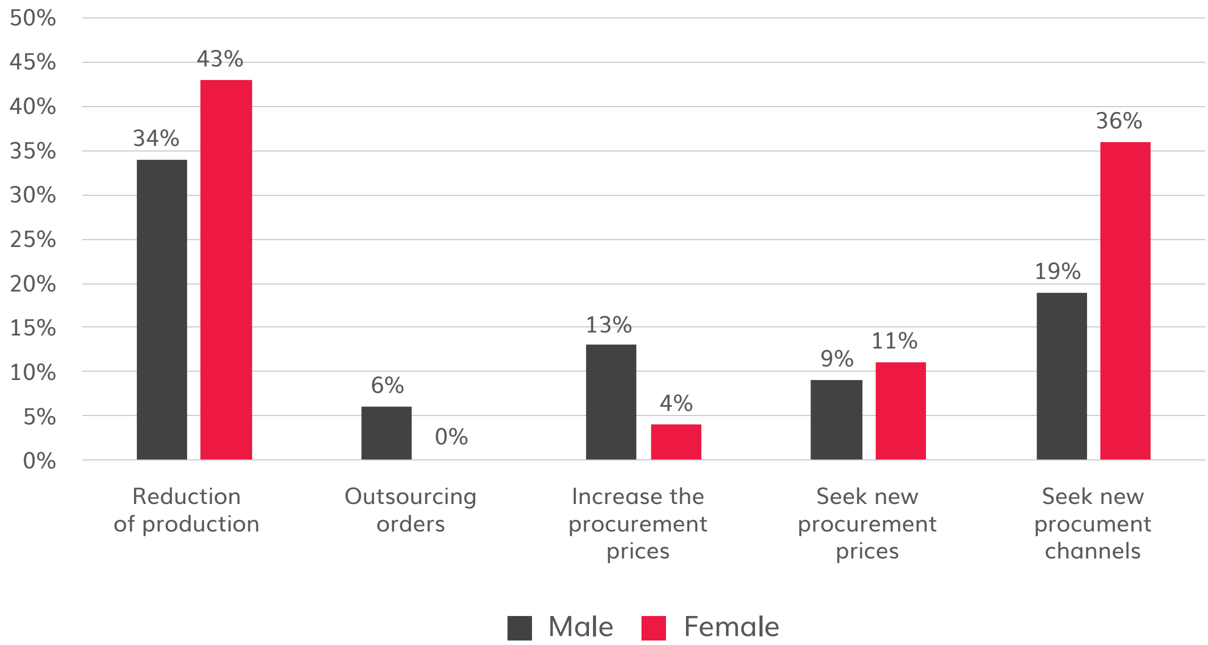
Figure G1. Adjustments made in the business model disaggregated by the gender of the firm owner



Note. Elaborated by the authors. Multiple options were allowed.

Appendix 8

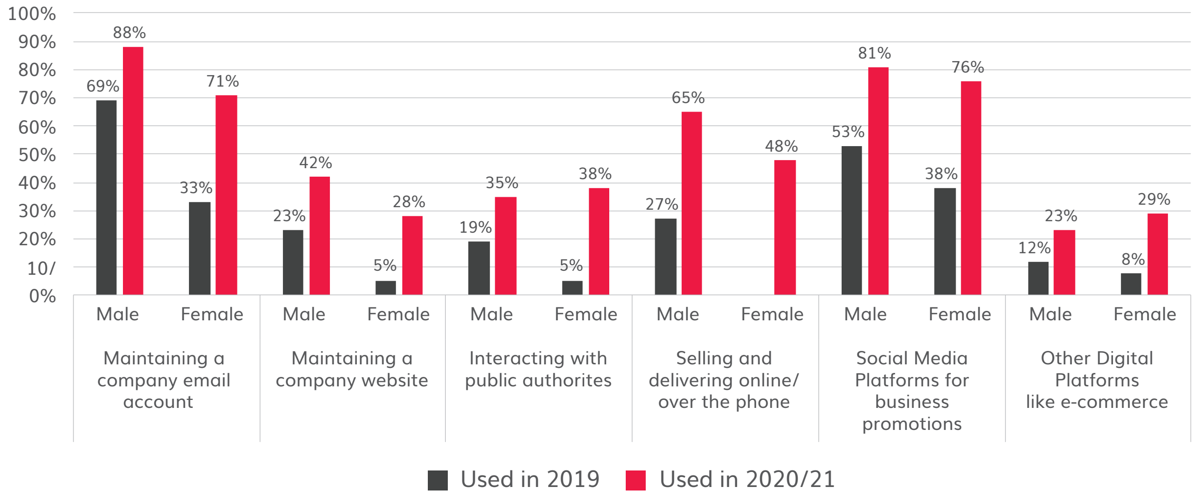
Figure H1. Measures taken to deal with the raw material shortage during the pandemic disaggregated by the gender of the firm owner



Note. Elaborated by the authors. Multiple options were allowed

Appendix 9

Figure I1. Use of IT tools during the pandemic disaggregated by the gender of the firm owner



Note. Elaborated by the authors

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