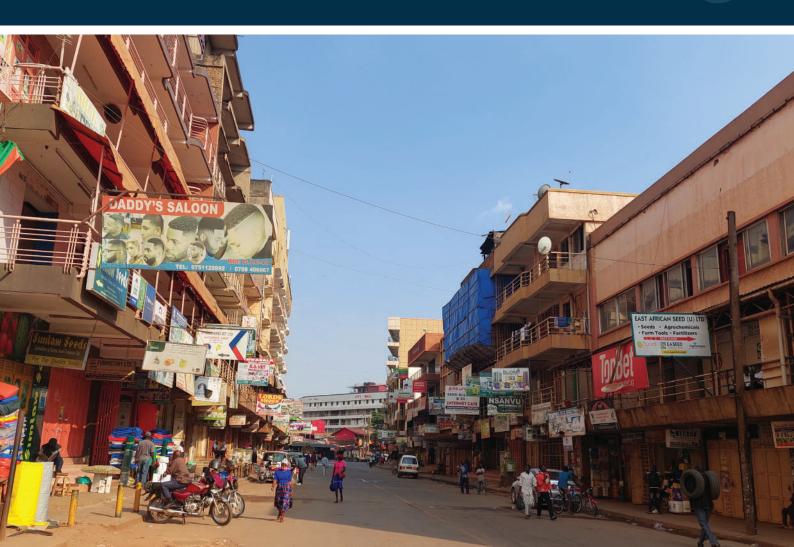




RESEARCH REPORT NO. 32

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January 2024

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Economic Policy Research Centre

PO. Box 7841, Kampala, Uganda Tel: +256-414-541023/4 Fax: +256-414-541022 Email: eprc@eprc.or.ug Web: www.eprcug.org

Plot 51, Pool Road, Makerere University Campus

ACKNOWLEDGEMENT

The report was prepared by the Economic Policy Research Centre (EPRC) with funding from the International Development Research Centre (IDRC) - Canada. EPRC expresses sincere gratitude towards all Micro Small and Medium Enterprises that participated in the primary data collection phase of the survey and stakeholders that participated in the qualitative key informant interviews. In addition, the Centre appreciates the full guidance of the technical advisory committee on this project chaired by Dr. Joshua Mutambi, the Commissioner, MSMEs, Ministry of Trade, Industry and Cooperatives.

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ABSTRACT

Micro, Small and Mediu-Om-sized Enterprises (MSMEs) play a pivotal role in private sector development. This report presents findings from a nationally representative panel of 1,111 MSMEs that we tracked between 2020 and 2022 at a time when the government enforced measures to contain the spread of COVID-19. Ideally, the key rationale for this study is to provide detailed evidence on the short, medium, and long-term effects of the COVID-19 pandemic on MSMEs in manufacturing, tourism/hospitality, and education sectors in Uganda. Six key insights from the findings are that (1) small enterprises were the most affected by the closure of both premises and operations from the onset of the COVID-19 pandemic (Jan-June 2020) until after the economy fully reopened (Jan-June 2022) when the share of micro-enterprises slightly went above that of small businesses. The education sector had the largest share of enterprises that closed operations and premises until the schools resumed operations in January 2022. A larger share of male-owned enterprises closed both premises and operations during lockdowns, and most enterprises across all sectors could not keep their operations running while their premises were closed; (2) enterprises across different business sizes and sectors increasingly sourced raw materials locally after the COVID-19 pandemic outbreak and this trend had not changed after full reopening of the economy; (3) all businesses suffered a reduction in sales revenue and profits during lockdowns; (4) an estimated 366,000 jobs were lost from 2019 to the end of second lockdown period (June-August 2021). A total of 11,000 jobs had not yet been recovered by October 2022. Specifically, small and medium-sized enterprises had not yet recovered 26,000 and 2,000 jobs respectively. The manufacturing sector had a slow job recovery, with an estimated 16,000 jobs having not been recovered by October 2022, followed by the education sector at 8,000 jobs. Nonetheless, tourism enterprises created 13,000 more jobs than before the pandemic in 2019; (5) MSMEs had weak resilience and female-owned enterprises were less resilient compared to male-owned businesses; (6) common strategies adopted by businesses to survive the pandemic were laying off workers and changing the line of business while e-commerce was not widely adopted by businesses. MSMEs require financial and non-financial support to recover their businesses sustainably from the COVID-19 pandemic. These include providing patient financial support to small and micro enterprises, capacity building of businesses to improve their adaptive abilities and resilience to shocks, and supporting MSMEs to adopt e-commerce.

1. INTRODUCTION

Micro, Small and Medium-sized Enterprises (MSMEs) are pivotal in private sector development. MSMEs contribute to GDP, employment, revenue, innovation, and knowledge transfer. Uganda's private sector, which is dominated by about 1.1 million MSMEs, contributes 80 percent to GDP, 77 percent to formal employment and 80 percent to domestic revenues (NPA, 2020). However, MSMEs are vulnerable to shocks and their resilience, i.e., the ability to withstand and adapt to shocks, depends mainly on internal factors. Others are external, such as business characteristics (e.g., sector and managerial practices), government policy responses (e.g., credit support) and the shock type (e.g., natural, economic, or political) (Nan & Park, 2022; Miklian & Hoelscher, 2022).

The COVID-19 pandemic and the associated containment measures adopted by governments created a global social, economic, and public health crisis with varying impacts on MSMEs by sector. The movement restrictions imposed by governments led to reduced economic activities and mobility. For example, in Kenya, 46 percent of the MSMEs temporarily closed their businesses for more than one year following the COVID-19 pandemic and its containment measures, 92 percent of the enterprises scaled down their size of operations, 33 percent laid off some employees, whereas 56 percent of the MSMEs experienced reduced profitability (UNDESA, 2022). On the other hand, in Tanzania, businesses faced difficulties in accessing customers (28.5 percent) and inputs (17.1 percent), while in Nigeria, most enterprises experienced loan repayment difficulties (69.0 percent), more than half of the enterprises reduced wages and salaries (57.8 percent), and 45.9 percent of the businesses experienced rent challenges (Aladejebi, 2020).

In Uganda, a study by the Economic Policy Research Centre (EPRC) revealed that the first COVID-19 lockdown imposed in March 2020 led to a substantial reduction in sales and profitability of MSMEs by more than 60 percent, and business costs increased by more than 40 percent (Mwesigye et al., 2021). Another EPRC study showed that 87 percent of the enterprises faced challenges accessing inputs during the lockdown, and access to credit became more problematic for 85 percent of the firms (Sunday et al., 2021). Businesses also experienced a decline in product demand (83 percent);

nine out of ten businesses reported increased operating expenses, while 76 percent reduced their workforce size (Lakuma et al., 2020a).

While several studies have previously investigated the impact of the pandemic on MSMEs in Uganda, gaps still exist in what the literature has addressed. Based on a panel sample, this study analyses changes that occurred in businesses following the COVID-19 pandemic and its containment measures (December 2019-October 2022). Specifically, we conducted the baseline survey (1st round) in 2021 during COVID-19 and the 2nd round in 2022, almost a year after the full reopening of the economy. We covered a panel of 1,111 MSMEs across three sectors in Uganda: tourism/hospitality, manufacturing, and education (primary and pre-primary).

Specifically, the study answers the following questions:

- i. How has the COVID-19 pandemic affected business operations? Were the effects different based on the size of the business and sectors of operation?
- ii. How did access to inputs, cost of inputs, sales revenue, profitability, and employment of businesses change since the first COVID-19 lockdown? Have these changes been positive or negative or nothing has changed?
- iii. How resilient were MSMEs in the face of COVID-19 pandemic?
- iv. What coping mechanisms were adopted by businesses to survive the pandemic?

The rest of the report follows this structure: In the second section, we provide an outlook of MSMEs in Uganda before the pandemic. In the third section, we delve into the outlook of MSMEs in Uganda during the pandemic. The fourth section explains the research methodology, including data collection and analysis methods. The presentation and discussion of the results are found in the fifth section, whereas the conclusion is presented in the last section.

2. CONTEXT

This section provides the MSME's outlook in Uganda before and during the COVID-19 pandemic to contextualise the effect of the pandemic on MSMEs.

2.1 MSMEs outlook in Uganda before the pandemic

Before the COVID-19 pandemic, MSMEs accounted for at least 90 percent of Uganda's private sector, with over 70 percent of the enterprises being informal (MoFPED, 2022). MSMEs in the country remain informal partly to evade taxes because they do not see value in the taxes they pay or to avoid high registration costs (*ibid*). However, this informality limits them from accessing government support and other financing opportunities, increasing their risk of mortality. Besides informality, MSMEs face various challenges which hinder their operations and survival, such as inadequate management and business skills, technology, markets, and business information services (MTIC, 2015). The MSME sector was dominated by micro enterprises (71 percent), followed by small businesses (18 percent) and mediumsized enterprises (11 percent) (FSME, 2021). Most of the enterprises were in the services sector (49 percent), followed by commerce and trade (33 percent), manufacturing (10 percent) and 8 percent in other sectors (MoFPED, 2017). In terms of jobs, it was estimated that the sector employed over 2.5 million people in 2015 (MTIC, 2015).

Multiple economic shocks have been faced and survived by Ugandan MSMEs throughout history, and the best way to explain this is through various economic planning periods. First and foremost, it is worth noting that businesses in Uganda suffered a serious setback due to the political instability experienced between 1971 and 1986, especially the expulsion of about 70,000 Ugandan traders of Indian descent who were running most of the businesses. However, businesses started to gain momentum during the implementation of the Poverty Eradication Action Plan (PEAP) period between 1997 and 2008, following several economic reforms to reactivate the economy through private sector growth and investment (Mugisha & Ijjo, 2022).

During the National Development Plan (NDP I) period (2010/11-2014/15) and NDP II period (2015/16-2019/20), Uganda witnessed regional conflicts and devastating climate change effects which affected trade prospects. The South Sudan conflict affected the market for a significant proportion of goods produced by the informal sector (Rolandsen et al., 2015). Similarly, the conflict spikes in the Eastern Democratic Republic of Congo (DRC) affected market conditions and informal cross-border trade in North and Western Uganda (Titeca, 2012; Eberhard-Ruiz, 2022). Similarly, the closure

of the Rwanda-Uganda border during 2019-2022 also significantly caused disruptions in the business operations of MSMEs exporting or importing products. On the other hand, climate change-related shocks have affected the livelihoods of MSMEs. For example, the Karamoja region experienced severe droughts that caused food shortages, and the region also suffered an invasion of desert locusts in 2020, which affected grazing land for livestock (FAO, 2021).

Such unforeseen shocks can cause a diversion of financial resources to deal with emergencies, thus constraining the fiscal space, and businesses have to feel the pinch directly or indirectly. The Government can reallocate resources meant to support businesses to deal with the emergency, or they can impose more taxes on businesses to generate additional revenue and fill the budget gaps. In short, Uganda's economy faced multiple shocks before the COVID-19 pandemic, and some businesses were already struggling due to such shocks and other deep-rooted challenges.

2.2 MSMEs and the COVID-19 pandemic

The COVID-19 pandemic and its associated containment measures significantly impacted business operations worldwide. The United Nations Economic Commission for Africa (UNECA) surveyed African businesses' reactions and outlook to COVID-19 in April 2020. The survey indicated that the pandemic severely affected African businesses, with micro and small-sized companies facing a lack of cash flow as their top challenge and medium-sized enterprises experiencing business closure(UNECA, 2020).

In Uganda, several containment measures were adopted by the Government to reduce the risk of contagion among the population after the first case in March 2020, and these hit business operations hard by making it difficult for businesses to access raw materials (inputs) and markets. The initial lockdown was enforced between March 18th and June 2020, while the second COVID-19 lockdown spanned from June 10th to July 31st, 2021. Movement restrictions within and across borders, curfews, closure of schools, and a ban on public gatherings (religious, cultural, markets, discotheques, etc) characterised the lockdowns. MSMEs suffered substantial impact due to their informality, reliance on physical interactions for inputs and markets, and high vulnerability to personal and business risks such as sickness and bankruptcy.

The pandemic severely affected business operations. After the first lockdown was imposed, the study conducted by EPRC showed that sales and profitability of MSMEs were substantially reduced by more than 60 percent. In comparison, business costs increased by more than 40 percent. Femaleowned businesses registered a higher cost increase of 51.4 percent compared to male-owned enterprises (Mwesigye et al., 2021). The same study showed that job losses were higher among female workers (28.7 percent) than male workers (23.6 percent). An earlier study by Lakuma et al. (2020b) showed that micro and small enterprises suffered a sharper decline in business activity compared to medium and larger businesses. More recent evidence indicated that the direct and indirect COVID-19-related factors accounted for over 60 percent of the permanent business closure and 41 percent of jobs lost among the MSMEs (Odokonyero et al., 2022).

The pandemic had a differential impact on sectors, with a pronounced effect on businesses that were fully closed compared to their counterparts that were partially closed or did not close. Most businesses (hotels, bars, and restaurants) closed in the tourism sector and 89 percent of the enterprises reported a complete stop in sales (FSME, 2021). Additionally, 85 percent of the businesses believed they would not survive beyond six months compared to 55 percent in manufacturing and 35 percent in the trading and low-level services sector. On the other hand, MSMEs in the utilities and ICT sectors (85 percent, respectively) and the financial services sector (70 percent) are expected to survive indefinitely. Some sectors recorded huge losses: tourism (91 percent), manufacturing (82 percent) and trading (67 percent) while others made profits: agriculture (46 percent), ICT (56 percent) and utilities sector (75 percent) (ibid).

In the education sector, schools in Uganda were closed for nearly two years (84 weeks) — registering the most extended school lockdown in the world. Over 15 million learners, most of whom are in rural areas, could not go to school and could not attend virtual classes due to limited internet access and smartphones. Private schools—the country's leading formal sector employers—struggled to pay their teachers and support staff, forcing them to look for alternative ways of survival in other jobs such as agriculture, bricklaying, and informal trade. Many private school proprietors struggled to keep afloat with the operational costs of the schools, such as electricity, water, and rent, among other utility costs.

Consequently, reports indicated that over 1,000 private schools faced the risk of being auctioned due to accumulated bad loans immediately after the lockdown (Mukhaye, 2021).

By contrast, enterprises in the manufacturing sector were permitted to keep operating during the pandemic while implementing some measures. These included keeping workers at the business premises, strict implementation of the standard operating procedures (SOPs) like installing handwashing facilities and putting in place alcohol-based sanitisers, observing social distancing and wearing face masks, to name but a few. Enterprises that could not meet such requirements had to suspend operations while others grappled with implementing the SOPs since they attracted additional costs amidst the tough business environment characterised by a reduction in sales and revenue. Some enterprises reduced the size of their workforce and maintained only staff they could manage to feed, provide accommodation, and pay.

Relatedly, the COVID-19 pandemic forced global oil-producing countries to reduce production following a decline in demand because of movement restrictions. After lifting the lockdowns, global petroleum demand rose faster than supply, increasing fuel and crude oil prices. Uganda, like other countries, was affected. The average petrol price increased by nearly 21 percent, whereas diesel by about 16 percent between January and November 2021 (Odokonyero & Bulime, 2022). This increase in fuel prices worsened the pandemic-induced business hardships the MSMEs were already grappling with, further making it costly to access inputs and markets.

Besides the COVID-19 pandemic, other shocks emerged, further disrupting business operations. The recovery journey from the pandemic was further weakened by the Russia-Ukraine war starting in February 2022, as it led to a significant increase in international prices for food, fuels, fertilisers, and other essential commodities. This price increase negatively impacted the local economy, including MSMEs (UNDP, 2022). A spike in fuel prices affects most businesses because of increased transportation costs to source raw materials or deliver products to the markets.

Additionally, health authorities declared an outbreak of Ebola in Uganda in September 2022. To contain the spread of the deadly disease, authorities put the two districts

of Kasanda and Mubende, which were the epicentres of the Ebola outbreak, under lockdown for two months (from 15th October – 10th December 2022). Specifically, the Government implemented various containment measures, which include a dusk-to-dawn curfew, a ban on personal travel to and from the two districts, and closure of markets, bars, worship places, and entertainment places in the two districts. These restrictions also affected business operations in the two districts and the neighbouring districts where a few cases were detected, such as Bunyangabu, Kagadi, Kampala, Kyegegwa, and Wakiso districts. It was reported that prices for agricultural commodities such as beans and Irish potatoes sharply fell. At the same time, other perishables like tomatoes and vegetables were damaged due to the limited transport from and within the districts (Ashaba & Tumuhimbise, 2022).

Since 2020, shocks from both domestic and global sources have entangled MSMEs. However, the COVID-19 pandemic has had the most devastating effects on business operations in Uganda and worldwide. This panel study tracks how the MSMEs' operations evolved over various COVID-19 episodes, focusing on enterprises in three sectors: manufacturing, hospitality/tourism, and education (i.e., primary and preprimary). We selected the three sectors, manufacturing, hospitality/tourism, and education (i.e., primary and preprimary) because they accounted for the largest share of MSMEs in Uganda and were affected differently by the COVID-19 pandemic and its containment measures.

3. METHODOLOGY

3.1 Data

This study followed a mixed methods approach. The enterprise survey was used to collect primary quantitative data, while Key Informant Interviews (KIIs) and In-depth interviews (IDIs) were used to collect qualitative data. We adopted a panel design, and the first round of the survey was conducted in October and November 2021, while the second wave was carried out in September and October 2022. We collected and transmitted survey data electronically to a central server at EPRC using the CAPI (Computer Assisted Personal Interview) software.

The quantitative survey set out to track a nationally representative sample of 1,666 enterprises spread across the four traditional regions of Uganda (Central, Western, Eastern, and Northern regions), selected based on their presence on the Uganda Business Register maintained by the Uganda Bureau of Statistics (UBOS). However, 437 (26.2 percent) businesses were not interviewed in the first round because they had closed or could not be traced. The closed enterprises were mainly from the central region (72.3) percent), followed by the western region (15.8 percent). The central region had the largest share of closed enterprises (72.3 percent), primarily due to the strict enforcement of COVID-19 containment measures (e.g., curfews, movement restrictions, etc.) and the high population density, which increased the risk of contagion. In terms of sectoral distribution, the tourism sector accounted for the majority of closed or untraceable enterprises (75.7 percent.). Closing borders and suspending public gatherings, including bars and restaurants, primarily affected tourism enterprises.

The panel design dictated that only enterprises surveyed in the first round (1,229) would be followed up in the second survey round. A total of 1,111 businesses were surveyed in both waves, thus constituting the panel. This represents a response rate of 90.4 percent (Table 1), which is a relatively adequate response rate. The normal response rates for firm surveys in Uganda (including during the COVID-19 era) averages at less than 90 percent, with most surveys in the range of 70 percent or less. To place the MSME attrition rate in the COVID-19 context, the Uganda Bureau of Statistics (UBOS) achieved a response rate of only 50 percent in a survey of private business establishments in 2020 (UBOS, 2020). Gulesci et al., (2020) achieved 70 percent, and the United Nations Capital Development Fund (UNCDF) achieved 89 percent in a Ugandan MSME survey conducted in 2020 (UNCDF, 2020).

Table 1: MSME panel survey coverage

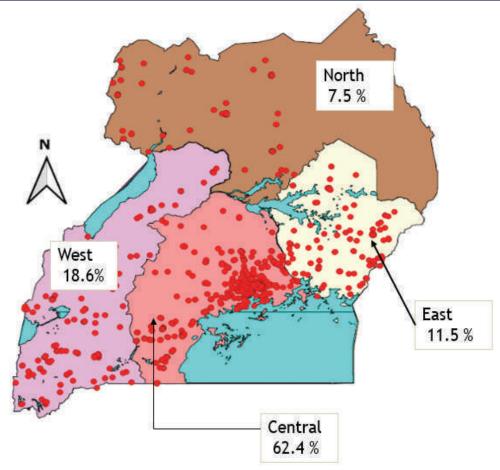
	Wave I (Oct–Nov 2021)		Wave II (Sept –Oct 2022)	
Firm Status	Number of businesses	Share (%)	Number of businesses	Share (%)
Surveyed	1,229	73.8	1,111	90.4
Not surveyed	437	26.2	118	9.6
Total	1,666	100	1,229	100

Source: EPRC computations using the EPRC panel MSME survey data, 2022

Additionally, we attribute the high response rate in this study to the robust follow-up approach we employed during the data collection exercise. For example, whenever the enumerator found the enterprise closed or not traceable, they would have to confirm with local authorities and provide their contact in CAPI. The enumerator teams were supported by the team lead and supervisors, who were responsible for verifying that the business was indeed closed or not traceable in the area through a physical visit to the locality.

During the second round of the survey, the enterprises in the districts of Kasanda and Mubende, which were the epicentres of the Ebola outbreak, did not undergo interviews because they were under lockdown for two months (from 15th October — 10th December 2022) which coincided with the data collection period. The geographical distribution of the surveyed enterprises in the panel is illustrated in Figure 1. Most of the enterprises were in the central region (62.4 percent).

Figure 1: Geographical distribution of surveyed enterprises



Source: EPRC panel MSME survey data, 2022

Table 2: Distribution of surveyed MSMEs by size, and sector

Characteristic	Number	Proportion, %
Size		
Micro	457	41.1
Small	630	56.7
Medium	24	2.2
Sector		
Tourism	493	44.4
Manufacturing	382	34.4
Education	236	21.2
Total	1,111	100

Source: EPRC computations using the EPRC panel MSME survey data, 2022

We adopted the 2015 Ministry of Trade, Industry and Cooperatives (MTIC) definition of MSMEs, which classifies MSME size based on the firms' number of employees.¹ Following the policy definition of MSMEs, most of the enterprises in the study were small enterprises (56.7 percent), followed by micro enterprises (41.1 percent), as shown in Table 2. The tourism sector had the largest share of enterprises (44.4 percent), followed by manufacturing (34.4 percent).

The study's sector disaggregation followed the International Standard Industrial Classification of All Economic Activities (ISIC). Specifically, manufacturing included food and nonfood activities, including agro-processing (ISIC codes 1030 - 3300). Hospitality (including tourism) includes activities such as food and beverage services, accommodation services, tours, travel, arts and crafts, and amusement and recreation services (ISIC codes 5510-5630). The education sector only covered primary and pre-primary levels (ISIC codes 8511-8512).

Besides the quantitative survey, the qualitative research was conducted in March and April 2023 in purposively selected regional locations — Gulu City in Northern Uganda, Kampala metropolitan area in central Uganda, Mbale district in Eastern Uganda, and Mbarara district in Southwestern Uganda. This follow-up qualitative research aimed to capture context-specific details on the effect of COVID-19 and outline evidence-informed (mitigation) measures, strategies and interventions needed to enhance the resilience and recovery of MSMEs. Specifically, we conducted Key

Informant Interviews and individual in-depth interviews with local government technocrats and enterprise group representatives. Additionally, we interviewed MSMEs with an eye on representation of each of the selected sub-categories (hospitality/tourism, education, and manufacturing). The list of participants for KIIs and in-depth interviews is herein included in Appendix 1.

3.2 Approach to Data Analysis

The panel analysis considered eight (8) COVID-19 episodes based on how the COVID-19 situation evolved in Uganda (including major policy pronouncements such as the lockdowns).

- (i) The first episode was before COVID-19, from July to December 2019, since economic activities were still relatively normal (not yet impacted primarily by COVID-19).
- (ii) The second period is from January to June 2020 this considers the period of the first COVID-19 total lockdown in Uganda, and questions related to the effects of COVID-19 here focused on how the business situation was in the first COVID-19 lockdown in Uganda (i.e., between March and June 2020).
- (iii) The third episode is immediately after the first lockdown (i.e., July–December 2020).
- (iv) The fourth episode is 2021 before the second lockdown (i.e., January—May 2021).
- (v) The fifth episode is the period of the second COVID-19 lockdown in Uganda (June—August 2021).
- (vi) The sixth episode covered the period immediately after the second lockdown (September-December 2021)
- (vii) The seventh episode covered the period immediately

¹ MSME policy 2015 definition classification of MSMEs: Micro=Less than 5, Small=5 - 49, and Medium= 50-100.

- after the economy was fully reopened (January-June 2022).
- (viii) Lastly, the eighth episode is the period following the immediate reopening of the economy (July-October 2022).

We analysed the changes in business operations over the COVID-19 episodes. The changes in the effect of COVID-19 on the source of raw materials, access to inputs/supplies, cost of inputs, sales revenue, profits, and employment benefits were also analysed. The data was weighted using sampling weights generated by the Uganda Bureau of Statistics and accounted for the attrition of some businesses. We adopted resilience attributes from Tibay et al. (2018), measured through a set of 26 individual-level resilience indicators and employed factor analysis to estimate the resilience index.

4. DYNAMIC EFFECT OF COVID-19 ON ENTERPRISE OPERATIONS

This section contains information on the changes in operations that happened to MSMEs during the COVID-19 pandemic from 2019 to 2022. The MSMEs responded to the COVID-19 pandemic in three different ways: (i) some businesses closed both premises and operations, (ii) others had their premises closed, but business operations continued, and (iii) some MSMEs closed neither premises nor operations (businesses remained steadfast). We monitored the changes (dynamics) that emerged within the different categories of MSMEs (along with the three categories of responses) over the two-year period of the pandemic (2019-2022) at an interval² as captured during this study. The results of changes to the MSMEs studied across the three responses are presented in Figures 2, 3, 4, 5, 6, 7, 8,9,10 and 11 The imputed figures capture the percentage change in the number of business enterprises in the period (before) and a given current period.

2 That is:

4.1 Enterprises that closed both premises and operations

The section examines the dynamics among the businesses that closed both premises and operations over two years of the pandemic (2019-2022).

4.1.1 Enterprises that closed both premises and operations by size

A sizeable proportion of business enterprises across the MSME business sizes closed both premises and operations in the first lockdown (Jan-June 2020) compared to the second lockdown, June — August 2021 (ranging from 66.2 percent to 78.6 percent). Figure 2 also shows that small enterprises were the most affected during the 1st lockdown (78.6 percent), followed by medium - enterprises (70.5 percent), and micro enterprises were the least affected (66.2 percent). After the 1st lockdown, medium and micro enterprises were relatively more resilient - as only 16.6 percent and 17 percent, respectively, closed compared to the 43.9 percent of small enterprises that suffered total closure of both premises and business operations.

In the period just before the 2nd lockdown (Jan-May 2021), medium enterprises showed relative resilience, as they reported almost no cases of ceasing operations, compared to 13.9 percent among micro-enterprises and 34.3 percent among small enterprises. This pattern in coping mechanisms is also reflected during the 2nd lockdown in Jun-Aug 2021 for reasons that the pandemic severed fewer (16.9 percent) medium enterprises compared to 67.2 percent of small and 34.9 percent of the micro-enterprises. This could be attributed to more aggressive adoption of coping mechanisms such as digitalisation and adherence to standard operating procedures.

The steady recovery period from Jan-June 2022 to July-Oct 2022 marked the climax of the total business closure of enterprises because of the COVID-19 pandemic. The enterprises that survived the pandemic were the more resilient, hence levelling off complete enterprise closures.

First interval covered the period Jan – Jun 2020 (that marked the 1st lock-down) of the economy to Jul – Dec 2020;

Second interval from Jul — Dec 2020 to Jan-May 2021

Third Jan-May 2021 to Jun-Aug 21 (marked the 2nd lock down);

Fourth Jun-Aug 21 to Sep-Dec 2021;

[•] Fifth interval from Sep-Dec 2021 to Jan -Jun 2022 (end of 2nd lockdown)

Sixth covers the interval between Jan -Jun 2022 to Jul – Oct 2022 (when the economy was opened)

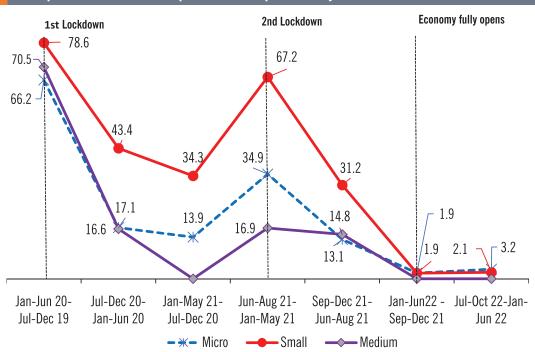


Figure 2: Enterprises that closed both premises and operations by size (%)

Source: EPRC computations using the EPRC panel MSME survey data, 2022

4.1.2 Enterprises that closed both premises and operations by sector

The COVID-19 pandemic had a differential effect on sectors. Figure 3 shows that the education sector had the highest share of businesses closing premises and operations during the COVID-19 pandemic from January to June 2020. The trend in cessation of operation remained unchanged until schools reopened in January 2022. This can be attributed to Uganda's school closure - the longest in the world. The share of tourism and manufacturing enterprises that closed both premises and operations (61.0 percent and 46.0 percent, respectively) was higher during the first lockdown (Jan-June 2020) compared to the second lockdown (June – Aug 2021), where only 25.0 percent of tourism enterprises and 10.3 percent of manufacturing businesses closed. This could be attributed to the reduction in fear of the COVID-19 contagion and the implementation of SOPs. However, the proportion of businesses in the two sectors that closed premises and operations marginally increased after the full opening of the economy in January 2022. This could result from the induced long-term adverse effects of the pandemic on businesses through reduced liquidity, capital requirements, and limited credit, among other factors.

The manufacturing sector, as expected, accounted for the smallest share of businesses that closed premises and operations from January 2020 until the immediate period after the second lockdown (*Sept-Dec 2021*) because they were allowed to keep operating even during the lockdown periods. Some enterprises diversified into manufacturing products that were in high demand during the pandemic. A key informant in a factory in Mbarara shared their experience of shifting their focus from herbal drinks to herbal medicine:

"... During COVID, we realised that people wanted herbal medicine, and we therefore quickly shifted from producing the herbal drinks to herbal medicine for flue, cough, and other health challenges. We therefore survived on the uniqueness of the product and our ability to understand the environment" (A male KII, Mbarara, 2023).

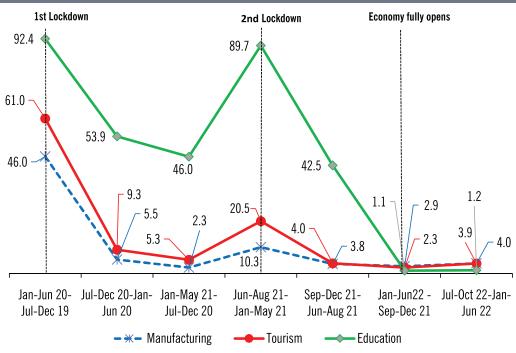


Figure 3: Enterprises that closed both premises and operations by sector (%)

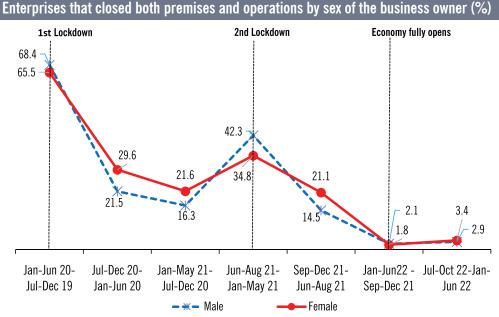
Source: EPRC computations using the EPRC panel MSME survey data, 2022

Figure 4:

4.1.3 Enterprises that closed both premises and operations by sex of the business owner

As Figure 4 shows, more male-owned enterprises closed both premises and operations (68.4 percent) during the first lockdown than female-owned enterprises (65.5 percent). After the first lockdown, more female-owned enterprises closed both premises and operations. This trend was

reversed during the second lockdown, with more maleowned enterprises closing both premises and operations (42.3 percent) than female-owned enterprises (34.8 percent). This can be attributed to government decision to allow businesses dealing in food stuffs, including markets which are dominated by women to keep operating during the lockdowns. Unlike men, some women resorted to sleeping in the markets and this was also attributed to culturally rooted



persistence among women as narrated during KIIs:

"...we are more persistent and patient than men, even when money reduced during the pandemic, we kept working earning some little money to sustain our families. Most men want to earn much money which was nowhere at that time..." (A female KII, Kampala, 2023).

4.1.4 Enterprises that closed both premises and operations by ownership

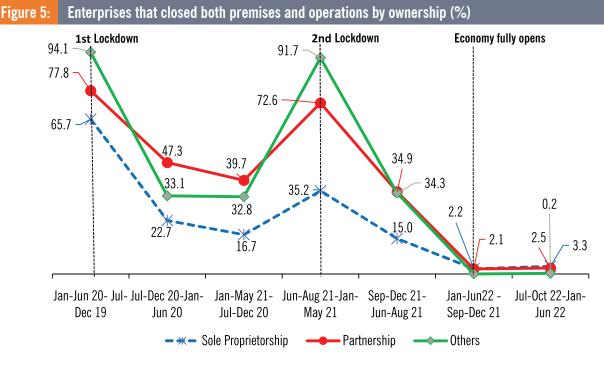
Figure 5 shows that during the first lockdown, closing both premises and operations was a common phenomenon for other enterprises (NGOs, Government-owned and social enterprises) (94.1 percent), followed by partnerships (77.8 percent), and sole proprietorships (65.7 percent). A similar scenario was exhibited during the second lockdown, whereby 91.7 percent of the other enterprises closed compared to partnerships (72.6 percent) and sole proprietorships (35.3 percent). The fact that most NGOs, Government-owned, and social enterprises are registered and face a threat to operate informally, which could lead to losing their licenses, explains this situation. At the same time, most sole proprietorships are small and informal, thus able to operate illegally and flout the COVID-19 lockdown guidelines. However, the proportion of enterprises that closed both premises and operations

slightly increased after the reopening of the economy in January 2022, which suggests that some businesses may have survived the pandemic only to collapse after the economy fully reopened.

4.2 Enterprises that closed premises but continued to operate

4.2.1 Enterprises that closed premises but continued to operate by size

Figure 6 shows that during the first lockdown (*Jan-June 2020*), more medium enterprises (16.4 percent) closed premises but continued to operate compared to micro (10.1 percent) and small (9.4 percent) enterprises. After the first lockdown, the proportion of medium enterprises that closed premises but continued to operate was smaller (0.7 percent) compared to small enterprises (4.8 percent) and micro enterprises (5.3 percent). During the second lockdown (*June-Aug 2021*), medium enterprises (40.3 percent) were most likely to continue operating even when their premises were closed compared to small enterprises (7.2 percent) and micro enterprises(4.4 percent). This could be explained by the limited capacity among micro and small businesses to adapt and continue operating during the pandemic, such as adopting e-commerce. Businesses also continued to



2nd Lockdown **Economy fully opens** 40.3 16.4 13.2 9.4 7.2 3.6 10.1 0.4 0.3 1.1 4.4 Jan-Jun 20-Jul-Dec 20-Jan-May 21-Jun-Aug 21-Sep-Dec 21-Jan-Jun22 - Jul-Oct 22-Jan-Jul-Dec 19 Jan-Jun 20 Jul-Dec 20 Sep-Dec 21 Jun 22 Jan-May 21 Jun-Aug 21

Small

Figure 6: Enterprises that closed premises but continued operations by size (%)

Source: EPRC computations using the EPRC panel MSME survey data, 2022

operate even when their premises closed immediately after the second lockdown (*Sept—Dec 2021*) because enterprises realised that they could still operate with their premises closed to reduce operational costs. This could also point to the gradual adoption of e-commerce as enterprises may prefer to operate online rather than physically.

4.2.2 Enterprises that closed premises but continued to operate by sector

← Medium

During the first lockdown (*Jan-June 2020*), more manufacturing firms (12.5 percent) continued to operate with their premises closed compared to tourism (11.5 percent) and education (7.0 percent) (Figure 7). After the

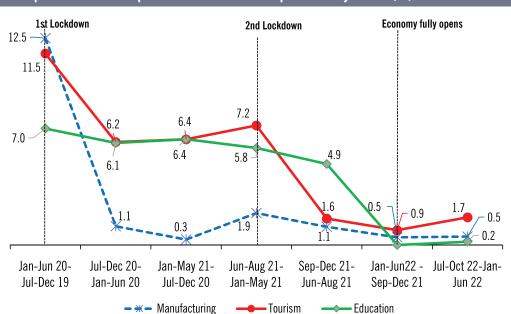


Figure 7: Enterprises that closed premises but continued operations by sector (%)

first lockdown, the proportion of manufacturing firms that closed premises but continued to operate declined sharply (1.1 percent) compared to education (6.1 percent) and tourism (6.2 percent). The trend remained unchanged even during the second lockdown (*June-Aug 2021*) until Jan 2022, when the schools reopened. This could be attributed to the Government's decision to allow manufacturing enterprises to keep operating without closing their premises while strictly observing the SOPs.

4.2.3 Enterprises that closed premises but continued to operate by sex of the business owner

Figure 8 shows that female owned enterprises were more likely to continue operations while their premises are closed (10.9 percent) during the first lockdown (Jan-June 2020), compared to male-owned enterprises (10.0 percent). After the first lockdown, more male-owned enterprises continued to operate with closed premises, but this trend was reversed in the immediate period (Jan-May 2021). During the second

lockdown, 7.7 percent of the female-owned enterprises continued operations with closed premises compared to 4.5 percent of male-owned enterprises. This can be attributed to e-commerce adoption of some enterprises in the food industry and tailoring, especially making of masks. Some businesses could close premises, but continue working and supplying their clients as detailed by the KII participants:

"...we used to close the office, enter from the behind door and make masks. Everyone wanted a mask and it was an opportunity for us to make some money which kept us moving unlike our colleagues that were seated at home..." (A female KII, Gulu, 2023).

"...we were forced to enrol on Glovo, an online food app during the second lockdown because we had waited for the pandemic to end, but in vain. Fortunately, we got some clients ordering food although not many...(A female KII, Kampala, 2023).

1st Lockdown 2nd Lockdown **Economy fully opens** 10.9 7.7 7.4 1.2 Jan-Jun 20-Jul-Dec 20-Jan-May 21-Jun-Aug 21-Sep-Dec 21-Jan-Jun22 - Jul-Oct 22-Jan-Jul-Dec 19 Jan-Jun 20 Jul-Dec 20 Jan-May 21 Jun-Aug 21 Sep-Dec 21 Jun 22

• Female

— ★ — Male

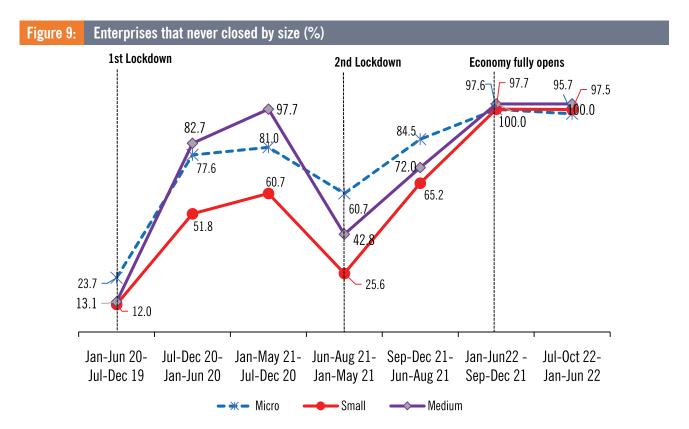
Figure 8: Enterprises that closed premises but continued operations by sex of business owner (%)

4.3 Enterprises that never closed

4.3.1 Enterprises that never closed by size

The study findings indicate that the share of enterprises that never closed was higher during the second lockdown (June-Aug 2021) than during the first lockdown (Jan-June 2020). Still, micro-enterprises did not close as much as medium and small businesses (Figure 9). In the latter period, during the second lockdown, the enterprises were no longer in panic, and some had adopted copying mechanisms

like SOPs. During the first lockdown (Jan-June 2020), 23.7 percent of the micro-enterprises never closed compared to 12.0 percent of small businesses and 13.1 percent of medium enterprises. Similarly, more micro enterprises never closed during the second lockdown (60.7 percent) compared to small (25.6 percent) and medium enterprises (42.8 percent). This could be attributed to micro-enterprises' flexibility and ease of flouting COVID-19 restrictions. After the reopening of the economy in January 2022, the share of enterprises that did not close as expected was over 95 percent, regardless of the size.



Source: EPRC computations using the EPRC panel MSME survey data, 2022

4.3.2 Enterprises that never closed by sector

By sector, Figure 10 shows that a larger proportion of enterprises never closed during the second lockdown (*June-Aug 2021*) compared to the first lockdown (*Jan-June 2020*). The non-closure of business was higher among manufacturing firms, followed by tourism enterprises from the first lockdown until January 2022, when the economy fully reopened and schools resumed operations. Specifically, 41.5 percent of the manufacturing firms never closed in the first lockdown compared to 27.5 percent of tourism and 0.6 percent of education enterprises. During the second lockdown, non-closure was a common phenomenon among manufacturing businesses (87.7 percent), followed by tourism (72.3 percent) but a rare occurrence for education (4.5 percent). A significant number of tourism and manufacturing enterprises did not close during the second lockdown due to the implementation of coping mechanisms learned from the first lockdown experience.

1st Lockdown 2nd Lockdown **Economy fully opens** 95.5 98.6 97.4 96.7 95.2 93.4 87.7 94.4 96.8 88.3 72.3 52.6 47.7 41.5 27.5

4.5

Jan-May 21-

Jul-Dec 20

Manufacturing

Jun-Aug 21-

Jan-May 21

Sep-Dec 21-

Jun-Aug 21

Figure 10: Enterprises that never closed by sector (%)

Source: EPRC computations using the EPRC panel MSME survey data, 2022

0.6

Jan-Jun 20-

Jul-Dec 19

4.3.3 Enterprises that never closed by ownership

Firms that operate as sole proprietorships had the largest share of enterprises that never closed from the first lockdown (*Jan-June 2020*) until Jan 2022, when the economy fully reopened, and more enterprises never closed during the second lockdown compared to the first lockdown (Figure 11).

Jul-Dec 20-

Jan-Jun 20

In the first lockdown, 23.8 percent of sole proprietorships never closed, compared to 9.0 percent for partnerships and 2.9 percent for other enterprises. During the second lockdown, the share of sole proprietorships that never closed increased to 58.7 percent, while that for partnerships and other category marginally changed (24.2 and 3.6 percent, respectively). Unlike other enterprises (NGOs, Governmentowned and social), which tend to operate formally, sole

Jan-Jun22 - Jul-Oct 22-Jan-

Jun 22

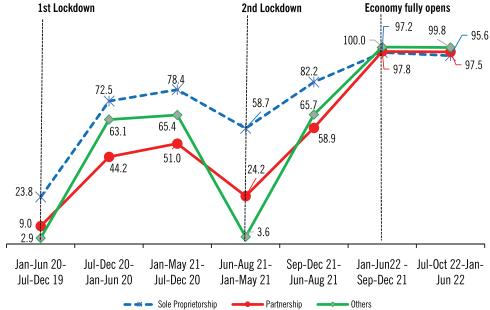
Sep-Dec 21

Education

Figure 11: Enterprises that never closed by ownership (%)

1st Lockdown

2nd Lockdown



proprietorships are mainly informal and micro; they can easily take advantage of their small size to operate even in conditions of restrictions, as was the case during COVID.

4.4 Effect of COVID-19 on access to inputs

The primary source of raw materials for the different MSMEs was predominantly local, accounting for an average of 75 percent source of raw materials (Figure 12). The second most important source of raw materials was the capital, Kampala; however, after the advent of the COVID-19 pandemic, the use of this channel to access raw materials was substantially reduced. For instance, during the January- June 2020 period, the firms using Kampala as the primary source of raw materials reduced by 5.4 percentage points compared to the pre-COVID-19 period. This suggests that COVID-19 forced businesses to opt for local sources of raw materials, .Additionally, a small share of enterprises reported obtaining raw materials from foreign sources (1.5 percent) before the onset of the COVID-19 pandemic. However, this nearly vanished during the pandemic due to international travel restrictions to contain the spread of the novel coronavirus. Firms could have discovered alternative local sources, which explains the high share of businesses sourcing inputs locally even after the reopening of the economy.

Based on size, medium enterprises were most likely to report sourcing their raw materials from Kampala compared to the small and micro enterprises before the COVID-19 pandemic and after the outbreak of the pandemic in Jan-June 2020 (Table 3). Their financial ability to cover the costs involved in purchasing and transporting the raw materials could explain this. However, the share of raw materials sourced from Kampala by medium enterprises significantly reduced from 79.7 percent in the period before the second lockdown (Jan-May 2021) to 42.0 percent in the second lockdown (June-Aug 2021) and 14.1 percent in the immediate period after the second lockdown (Sept-Dec 2021). Even after the reopening of the economy, the share of raw materials sourced by medium enterprises from Kampala remains low at 23.5 percent in Jan-June 2022 and 22.5 percent in July-Oct 2022 compared to 64.8 percent in 2019. This could be explained by the spike in fuel prices witnessed after the lifting of the second lockdown in 2021, which could have made it costly for businesses to transport raw materials from Kampala. Meanwhile, smaller businesses (micro and small) were obtaining the largest share of their raw materials from local sources before the pandemic in 2019, and this has not changed since the onset of the COVID-19 pandemic.

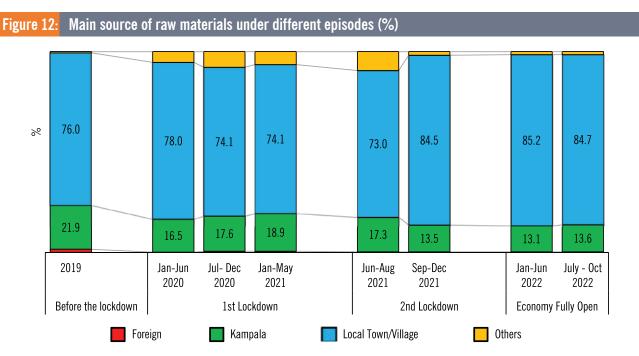


 Table 3:
 Source of raw materials by size and sector (%)

		Size			Sector		
	Micro	Small	Medium	Manufacturing	Tourism	Education	Total
2019							
Foreign	0.5	3.0	28.3	4.1	0.7	0.8	1.5
Kampala	17.3	28.8	64.8	27.0	17.4	23.2	21.9
Local Town/Village	81.4	67.9	6.9	67.5	81.3	75.8	76.0
Others	0.8	0.4	0.0	1.5	0.6	0.2	0.6
Jan-Jun 2020							
Foreign	0.0	0.1	12.5	0.2	0.0	0.0	0.1
Kampala	13.3	21.6	47.9	21.4	13.6	16.5	16.5
Local Town/Village	82.3	71.3	26.5	75.4	81.9	75.9	78.0
Others	4.4	7.0	13.2	3.1	4.4	7.6	5.4
Jul- Dec 2020							
Foreign	0.1	0.9	21.4	0.7	0.1	0.7	0.5
Kampala	14.1	23.1	64.3	24.1	14.2	17.2	17.6
Local Town/Village	79.9	64.9	12.3	73.5	82.9	66.0	74.1
Others	5.8	11.2	2.0	1.7	2.8	16.1	7.9
Jan-May 2021							
Foreign	0.1	0.9	13.2	0.6	0.1	0.7	0.5
Kampala	14.3	26.1	79.7	25.1	14.5	19.6	18.9
Local Town/Village	79.9	65.1	7.1	74.2	83.6	65.0	74.1
Others	5.7	7.9	0.0	0.0	1.8	14.6	6.5
Jun-Aug 2021							
Foreign	0.2	0.2	14.3	0.6	0.1	0.0	0.2
Kampala	13.4	23.8	42.0	23.7	15.3	15.6	17.3
Local Town/Village	81.0	60.0	28.6	75.3	83.0	61.2	73.0
Others	5.5	16.1	15.1	0.4	1.5	23.2	9.5
Sep-Dec 2021							
Foreign	0.0	0.5	21.7	0.5	0.0	0.2	0.2
Kampala	13.8	12.8	14.1	20.9	14.0	7.6	13.5
Local Town/Village	84.2	85.3	58.2	73.6	84.7	91.9	84.5
Others	2.0	1.5	6.0	5.0	1.2	0.4	1.8
Jan-Jun 2022							
Foreign	0.0	0.4	15.8	0.5	0.0	0.1	0.2
Kampala	12.3	14.3	23.5	18.8	14.2	9.2	13.1
Local Town/Village	85.9	84.2	56.4	75.8	84.7	90.4	85.2
Others	1.8	1.1	4.4	4.9	1.0	0.3	1.6
July - Oct 2022	1.0	1.1	1. 1	r. J	1.0	0.0	1.0
Foreign	0.0	0.4	15.8	0.6	0.0	0.1	0.2
Kampala	12.7	14.9	22.5	19.0	14.6	10.0	13.0
Local Town/Village	85.5	83.6	57.3	75.6	84.3	89.6	84.7
Others	1.8	1.0	4.4	4.8	1.1	0.3	1.
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

At a sector level, the proportion of raw materials from foreign sources has declined across all sectors since the outbreak of the COVID-19 pandemic, with the manufacturing sector being the most affected (Table 3). Tourism enterprises were more likely to source raw materials from local sources than manufacturing and education enterprises until January 2022, when the economy reopened. After reopening schools in January 2022, the education enterprises have sourced most of their resources locally (90.4 percent) compared to the period before the pandemic in 2019 (78.5 percent). In addition, the sourcing of raw materials from the capital, Kampala, for education enterprises has declined since the pandemic. The findings suggest travel difficulties caused by the pandemic forced enterprises across all sectors to opt for local sources of raw materials rather than going for Kampala and foreign sources.

4.4.1 Changes in access to inputs/supplies

Overall, as observed in Figure 13, MSMEs reported access to inputs that were most problematic during the first lockdown

(60.8 percent), with significant improvements reported in the two periods following the first lockdown. This trend was reversed in the second lockdown period, with slightly more MSMEs reporting problematic access to inputs (45.1 percent). This implies that businesses were slightly more prepared and had made some adjustments during the second lockdown.

Regarding size, 82.4 percent of the medium enterprises reported that access to inputs was problematic during the first lockdown compared to the six months before the outbreak. In comparison, 61.9 percent of the micro and 58.9 percent of the small enterprises reported problematic access to inputs. Even after the economy reopened, the medium enterprises were more affected than small and micro enterprises (Table 4). Regarding the sector, access to inputs has been problematic mainly for manufacturing enterprises since the outbreak of the pandemic (January -June 2020) compared to education and tourism businesses.

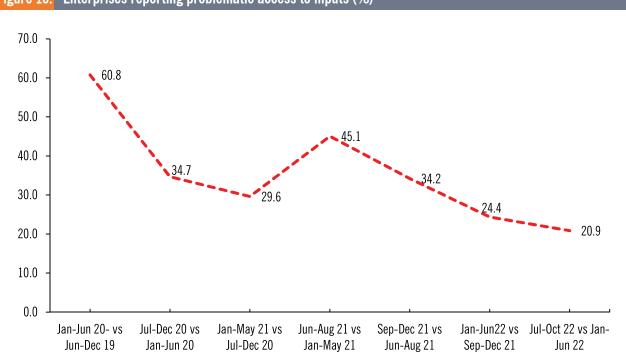


Figure 13: Enterprises reporting problematic access to inputs (%)

Table 4: Access to inputs by size and sector (%)

		Size		,	Sector		_
	Micro	Small	Medium	Manufacturing	Tourism	Education	Total
Jan-Jun 20- Jun-Dec 19							
Problematic	61.9	58.9	82.4	79.9	58.6	53.0	60.8
No change	34.3	40.0	17.6	19.6	36.6	45.0	36.5
Easier	3.8	1.1	0.0	0.5	4.8	2.1	2.7
Jul-Dec 20-Jan-Jun 20							
Problematic	33.7	36.2	49.4	40.9	35.7	30.6	34.7
No change	40.9	44.9	4.2	27.5	40.0	52.1	42.4
Easier	25.4	18.9	46.4	31.6	24.3	17.4	22.9
Jan-May 21- Jul-Dec 20							
Problematic	28.1	32.1	29.0	36.3	27.7	27.9	29.6
No change	51.6	53.7	18.6	39.3	49.2	61.7	52.3
Easier	20.3	14.2	52.4	24.4	23.0	10.4	18.0
Jun-Aug 21-Jan-May 21							
Problematic	46.9	42.3	15.6	58.0	44.6	38.9	45.1
No change	40.4	52.7	43.8	30.8	41.1	56.0	45.1
Easier	12.7	5.0	40.6	11.3	14.3	5.1	9.8
Sep-Dec 21- Jun-Aug 21							
Problematic	33.0	36.6	49.5	36.3	31.3	36.4	34.2
No change	32.5	31.8	49.6	31.7	30.0	35.4	32.3
Easier	34.5	31.6	0.9	32.0	38.7	28.2	33.5
Jan-Jun22 - Sep-Dec 21							
Problematic .	23.6	25.5	44.0	23.1	18.3	30.3	24.4
No change	38.3	43.5	10.5	42.2	41.8	37.9	40.3
Easier	38.1	30.9	45.4	34.6	39.8	31.8	35.4
Jul-Oct 22-Jan-Jun 22							
Problematic	19.0	23.8	25.5	25.4	14.8	23.9	20.9
No change	52.6	47.2	27.7	50.0	49.4	51.7	50.5
Easier	28.4	29.0	46.9	24.7	35.8	24.4	28.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: EPRC computations using the EPRC panel MSME survey data, 2022

4.4.2 Effect of COVID-19 on the cost of inputs

Table 5 depicts how the costs of inputs affected enterprises. Overall, enterprises reported an increase in the cost of inputs during the first lockdown (51.8 percent) compared to the 6 months preceding the lockdown, which significantly reduced until the end of the second lockdown in June-August 2021. Enterprises reported a significant increase in the cost of inputs following the easing of the second lockdown, with the highest increase registered in the period comparing January to June 2022 with September to December 2021 (68.3 percent). Medium-sized enterprises had the most striking increase in input costs compared to micro and small-sized businesses. This is most likely attributed to the outbreak of the Russia-Ukraine war that further disrupted global supply chains.

Compared to the 6 months before the lockdown, manufacturing businesses (68.1 percent) and tourism enterprises (57.4 percent) experienced the highest increase in the cost of inputs during the first lockdown (*Jan-June 2020*). Businesses across all sectors reported an increase in the cost of inputs after the second lockdown in June - August 2021 (Table 5). A female KII explained:

"During the COVID-19 pandemic, transporting raw materials and staff was our biggest challenge. Even after getting permission from the Resident District Commissioner (RDC) to drive on the road, the roadblocks were so many, and you couldn't pass without giving the officers some money. Yet, our company would get no customers at times as some of them were also struggling since they were making

Table 5: Changes in the cost of inputs by size and sector (%)

	Size			Sector			
	Micro	Small	Medium	Manufacturing	Tourism	Education	Total
Jan-Jun 20- Jun-Dec 19							
Costs increased	54.5	47.5	53.9	68.1	57.4	38.5	51.8
Costs remained the same	39.3	47.1	19.0	25.2	37.0	55.7	42.3
Costs reduced	6.2	5.4	27.1	6.7	5.6	5.8	5.9
Jul-Dec 20-Jan-Jun 20							
Costs increased	19.3	18.5	2.0	17.3	21.2	17.8	18.9
Costs remained the same	75.9	73.6	67.1	75.0	71.3	78.2	75.0
Costs reduced	4.9	7.9	30.9	7.6	7.5	4.0	6.1
Jan-May 21- Jul-Dec 20							
Costs increased	13.9	12.5	16.8	14.0	17.5	9.4	13.4
Costs remained the same	82.2	82.6	62.6	80.8	78.7	86.3	82.3
Costs reduced	3.8	5.0	20.6	5.1	3.8	4.3	4.3
Jun-Aug 21-Jan-May 21							
Costs increased	18.4	10.9	9.7	19.6	24.5	5.4	15.5
Costs remained the same	75.9	83.1	75.6	74.9	70.1	88.2	78.7
Costs reduced	5.7	5.9	14.8	5.5	5.4	6.4	5.8
Sep-Dec 21- Jun-Aug 21							
Costs increased	48.6	56.5	50.3	57.1	45.0	54.8	51.2
Costs remained the same	45.0	34.0	43.2	35.6	49.6	35.1	41.3
Costs reduced	6.4	9.6	6.6	7.3	5.4	10.1	7.4
Jan-Jun22 - Sep-Dec 21							
Costs increased	66.8	70.7	91.4	62.4	69.4	70.3	68.3
Costs remained the same	29.0	25.1	8.6	31.2	27.6	25.4	27.5
Costs reduced	4.3	4.2	0.0	6.4	3.0	4.2	4.2
Jul-Oct 22-Jan-Jun 22							
Costs increased	65.4	70.2	78.0	56.5	65.3	74.3	67.3
Costs remained the same	33.4	26.2	22.0	39.9	33.9	23.1	30.6
Costs reduced	1.2	3.6	0.0	3.6	0.7	2.5	2.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: EPRC computations using the EPRC panel MSME survey data, 2022

losses. The curfew enforcement officers would chase them or demand for bribes. Life was brutish and miserable..." (A female KII, Mbarara, 2023).

Therefore, businesses incurred unprecedented costs like transporting workers to their residences or keeping them at their workplaces in line with the lockdown regulations.

4.5 Effect of COVID-19 on firm performance (sales revenue and profitability)

The section profiles the impact of COVID-19 on MSMEs through changes in business performance as captured by

sales/revenue and profitability.

4.5.1 Effect of COVID-19 on business sales revenue

Overall, business sales revenue was worst hit during the first lockdown, with over 91 percent of the businesses reporting a reduction in Jan-June 2020 compared to the 6 months before the lockdown. The micro-enterprises were the most affected (91.3 percent), followed by small businesses (90.4 percent), and the least affected were medium-sized enterprises (80.8 percent). The trend was reversed during the second lockdown period (Jun-Aug 2021) compared to 6 months

before the lockdown, with medium-sized enterprises being the most affected (71.4 percent). Sales revenue increased across all business sizes after the second lockdown until the full reopening of the economy in Jan-June 2022, as shown in Table 6.

In terms of the sector, all enterprises suffered a considerable reduction in sales revenue in Jan-June 2020 compared to the 6 months before the lockdown (over 90 percent). During the second lockdown in June - August 2021, more businesses reported a slight reduction in sales revenue compared to the 6 months preceding the lockdown. After the reopening of the economy in January - June 2022, a larger share of education enterprises reported an increase in sales revenue (67.3 percent) compared to tourism (34.1 percent) and

manufacturing (39.2 percent). However, the increase in revenue in the education sector was not sustained in the period that followed 6 months of reopening the economy (Jul-Oct 22 compared to Jan-June 22).

The tourism sector, especially hotels, was still experiencing a unique challenge even after reopening the economy. A KII participant narrated that:

"...Even in the post-COVID-19 era, hotel business is still low. While some conference organisers have resumed coming to hotels to give us business, room occupancy rates are still below 40 percent. Many officials who used to give us business tend to hold their meetings online rather than physically

 Table 6:
 Changes in sales/revenue by size and sector

	Size			Sector			
	Micro	Small	Medium	Manufacturing	Tourism	Education	Total
Jan-Jun 20- Jun-Dec 19							
Reduced	91.3	90.9	80.8	91.7	92.0	90.1	91.1
Remained the same	6.3	8.3	19.2	4.5	7.4	8.1	7.1
Increased	2.4	0.8	0.0	3.9	0.5	1.9	1.8
Jun-Dec 20-Jan-Jun 20							
Reduced	23.5	33.8	35.5	16.7	18.7	40.7	27.4
Remained the same	48.4	45.4	43.7	53.3	46.1	45.1	47.2
Increased	28.2	20.8	20.7	29.9	35.2	14.2	25.3
Jan-May 21- Jun-Dec 20							
Reduced	10.8	14.7	16.7	9.9	8.4	17.0	12.3
Remained the same	69.7	68.7	32.7	69.8	67.7	70.4	69.2
Increased	19.5	16.6	50.6	20.4	23.9	12.7	18.5
Jun-Aug 21-Jan-May 21							
Reduced	34.6	37.4	71.4	30.1	32.8	41.3	35.8
Remained the same	57.5	58.9	23.3	63.1	54.7	58.3	58.0
Increased	7.9	3.7	5.3	6.8	12.5	0.4	6.3
Sep-Dec 21- Jun-Aug 21							
Reduced	39.2	36.1	38.0	36.3	36.4	40.3	38.0
Remained the same	27.7	33.1	40.4	23.9	21.7	40.0	29.8
Increased	33.1	30.8	21.6	39.7	41.9	19.7	32.2
Jan-Jun22 - Sep-Dec 21							
Reduced	25.5	22.6	26.4	26.1	30.6	18.0	24.4
Remained the same	30.8	19.8	0.7	34.7	35.3	14.7	26.6
Increased	43.7	57.6	72.9	39.2	34.1	67.3	49.0
Jul-Oct 22-Jan-Jun 22							
Reduced	40.4	30.4	19.5	47.4	44.4	24.0	36.5
Remained the same	41.5	47.0	61.8	38.8	40.1	49.3	43.6
Increased	18.1	22.6	18.7	13.8	15.5	26.7	19.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

in our hotels. They argue they are cutting costs, avoiding infection risks, or simply adjusting to the new normal. The problem is that the new normal is abnormal on our side. We are losing business" (A female KII, Kampala, 2023).

Similarly, a hotel manager in Kampala decried the challenges brought by online engagements. Re-echoing the challenge of virtual meetings that are replacing physical presence, he said that:

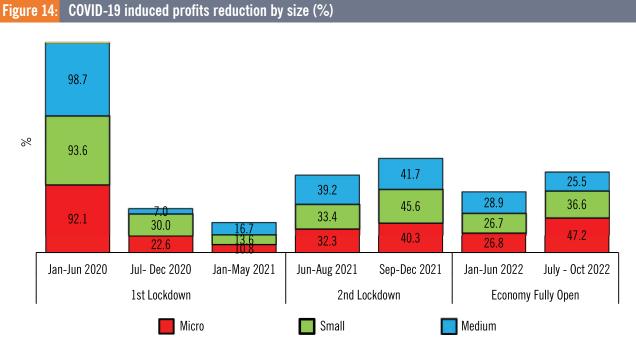
"...the meeting that would accommodate more than 200 guests can no longer happen...nowadays, under the new normal, two people will come here and reach thousands of people online. But for us as hotel operators, we miss revenue if we don't host guests physically...we are doing our best to fit in, but it's an uphill task ..." (A male KII, Kampala, 2023).

4.5.2 Effect of COVID-19 on profits of enterprises

Overall, enterprises registered the largest decline in profits

during the first lockdown compared to other COVID-19 episodes (Figure 14). This can be attributed to the massive closure of enterprises and the subdued demand, which reduced their sales and profits. In this period, medium-sized firms were the most affected (98.7 percent). However, this was not the case during the second lockdown and other periods because firms had already developed mechanisms to cushion themselves from losses. For instance, some firms laid off workers while others reduced stock based on the previous demand patterns. Following the reopening of the economy, firms were still grappling with reduced profits, which points to the long-term adverse effect of the pandemic on enterprise profitability. Noteworthy is that medium enterprises registered a larger profit reduction during lockdown periods compared to micro and small firms. This could be explained by the fact that medium enterprises tend to incur higher fixed costs, such as rent and electricity, compared to smaller firms, which ultimately reduces their profit.

All sectors registered a considerable reduction in profits (over 90 percent) during the first lockdown period because the



pandemic shocked all enterprises regardless of the sector (Figure 15). The education sector consistently recorded the highest reduction in profits up to January 2022 because most schools closed operations and had little or no revenue coming in. Yet, they were incurring some fixed costs like electricity and security. Following the reopening of the economy, the education sector registered the lowest reduction in profits compared to enterprises in the manufacturing and tourism sectors because schools resumed operations and were generating revenue. The first lockdown resulted in the lowest

profit reduction for the manufacturing enterprises, which can be attributed to their sourcing of raw materials locally, thus reducing costs. Unlike tourism and education enterprises, manufacturing was not much affected by movement restrictions. As such, they generated more revenue to keep them afloat after the first lockdown. For instance, during the qualitative survey, Lakeside Dairy Limited in Mbarara boasted of significant profits compared to the most common narrative that businesses made losses during the COVID-19 pandemic.

Figure 15: COVID-19 induced profits reduction by sector (%) 92.4 % 92.9 33.7 44.5 36.2 48.6 39.0 32.7 92.8 32.9 30.7 22.3 52.0 43.8 30.4 Jan-Jun 2020 Jul- Dec 2020 Jun-Aug 2021 Jan-Jun 2022 Jan-May 2021 Sep-Dec 2021 July - Oct 2022 1st Lockdown **Economy Fully Open** 2nd Lockdown Tourism Manufacturing Education

Source: EPRC computations using the EPRC panel MSME survey data, 2022

Box 1: Making Profits during COVID and Post-COVID-19 Interruptions

I am the production manager, and I want to tell you that COVID-19 did not disrupt our business that much, maybe because the food industry never stopped production because people never stopped eating during the pandemic. I got permission from the Resident District Commissioner to keep workers here at the factory. Unlike Kenya, where the sister factory employs Kenyans, here we have 10 Indians who run the factory because Ugandans have a different mentality that disrupts businesses. They think like kids, take a long to grasp business concepts, and have a negative attitude and limited capability. Again, we don't get loans from Uganda because the interest is too high. We get our loans from India, where the interest rate is low at about 2 percent. You can't get a loan from Uganda to start a business. You will fail. We also employ more women than men. Females are more dedicated, less aggressive, take care not to engage in criminality, and work with their families at heart. When you give a woman any coin, she will use it to benefit her family. We, therefore, prefer employing women to men. I have noted that men in Uganda have a different attitude to work- although not all of them, but the majority are not good workers. I have worked with Kenyans and Ugandans. So, I think the strategies we deployed contributed to our survival as a company during COVID-19.

Source: A male KII, Mbarara, 2023.

Nonetheless, most manufacturing enterprises reported having registered huge losses due to the pandemic, although some businesses seemed not to understand their exact losses due to a lack of records. A female KII in Mbale district shared her inability to keep business records:

"...in our business, we just try to survive. You can imagine that the employees who do packaging, sorting, etc., must be paid. If you involve so much counting, you will immediately close because you will discover that you are just making losses. So, we do not keep records. In production, we work without counting too much. Sometimes you can buy and benefit more and cover for the previous losses..." (A female KII, Mbale, 2023).

4.6 Effect of COVID-19 on Employment

The COVID-19 pandemic and its containment measures induced substantial job losses. Overall, small and micro enterprises employed most of the workers in the MSME sector before the pandemic. At a sector level, most workers were employed in the education and tourism enterprises as shown in Table 7. Following the COVID-19 pandemic, we estimate that, for the surveyed enterprises, jobs declined from 767,000 in 2019 to 592,000 during the first lockdown, representing 22.8 percent or 175,000 jobs lost. Jobs further

declined in the second lockdown (*June-August 2021*) to an estimated 402,000 jobs, representing 47.8 percent or 366,000 jobs lost from 2019 to the end of August 2021. Small enterprises were the most affected (an estimated 184,000 jobs lost), followed by micro businesses (178,000 jobs lost), and medium-sized enterprises were the least affected, with only 4,000 jobs lost. At a sector level, the education sector was the most affected (an estimated 282,000 jobs lost), followed by tourism (56,000 jobs lost) and manufacturing (28,000 jobs lost).

However, the full reopening of the economy starting in January 2022 saw jobs for the surveyed firms rise back to 756,000 jobs by October 2022, mainly driven by the rebound of the education and tourism sector. The slow recovery of jobs in the manufacturing sector can be attributed to the downsizing of several manufacturing firms during the pandemic. As a result, the retained employees had to perform multiple tasks, eliminating the need to recall those laid off due to COVID-19-induced financial constraints. In other words, the COVID-19 pandemic might have been an eye-opener to some manufacturing enterprises to recognise that they can successfully operate with a few employees, as narrated by a KII participant:

"...during the COVID-19 pandemic, several workers were laid off. Few of us were retained by the employer

 Table 7:
 Estimated total employment for different COVID-19 episodes (000' employed) by size and sector

			Size		;	Sector		
	Period	Micro	Small	Medium	Manufacturing	Tourism	Education	Total
Before the lockdown	July-Dec 2019	306	451	11	112	153	502	767
	Jan-June 2020	224	361	7	86	105	402	592
	July-Dec 2020	190	310	7	86	99	321	506
1st Lockdown	Jan-May 2021	177	314	7	85	99	314	498
0.1	June-Aug 2021	128	267	6	84	97	220	402
2nd Lockdown	Sept-Dec 2021	281	245	6	104	162	266	533
_	Jan-June 2022	337	423	9	101	179	489	769
Economy Fully Open	July-0ct 2022	322	425	9	96	166	495	756
	Dec 2019 -Jun 2020	82	90	4	26	48	103	175
Job loss	Dec 2019 -Aug 2021	178	184	4	28	56	282	366
	Dec 2019 -Oct 2022	-17	26	2	16	-13	8	11

and assigned tasks more tasks even though the pay wasn't raised. No one could complain because of fear of losing the job. So, the employer realised that the few retained staff could work at no extra cost and has not called back our colleagues after the pandemic..." (A male KII, Kampala, 202).

Table 7 also shows that an aggregate total of 11,000 jobs had not yet been recovered by October 2022. While the small-sized and medium-sized enterprises have not yet recovered 26,000 and 2,000 jobs, respectively, the microenterprises had created more than 17,000 jobs compared to the period before the COVID-19 pandemic in 2019. This was because some businesses that had become small-sized laid off some of the workers due to the pandemic and its associated effects and ended up becoming micro in size (employing 1-4 employees). The case (Box 2) is an example of how COVID-19 forced MSMEs to make 360-degree changes in business. The firm that had grown into a small-sized enterprise fell back into micro status.

Additionally, the tourism sector, which lost 56,000 jobs by the end of the second lockdown, had created at least 13,000 more jobs than before the outbreak of the pandemic by October 2022. This increase can be attributed to heightened efforts by the Uganda Tourism Board and the private sector to promote domestic and international tourism through campaigns like "Explore Uganda" — The Pearl of Africa brand launched in early 2022, which increased domestic tourism. More so, tourism was one of the fastest-growing sectors before the pandemic. Most tourism enterprises (bars,

restaurants, hotels, etc) bounced back their operations after the full reopening of the economy.

4.7 Resilience of MSMEs

Overall, businesses had weak resilience levels, estimated at 0.49 in 2021 with slight improvement to 0.51 in 2022. Most businesses demonstrated limited capacity to withstand and adapt to shocks, but resilience levels significantly varied for business characteristics showed in Table 8. The highest level of resilience was observed among mediumsized enterprises (0.69), followed by small-sized enterprises (0.56). These results showed a positive relationship between business size and resilience, suggesting that a business becomes more resilient as it grows in size. In terms of sector, the manufacturing enterprises demonstrated more resilience during and after COVID-19 lockdowns in 2021 (0.5), followed by education (0.49) and tourism (0.48). However, education enterprises were more resilient (0.54) after reopening the economy, followed by tourism enterprises (0.50). Additionally, the results showed that male-owned enterprises had stronger resilience (0.50) than female-owned businesses (0.45). Notably, there was a slight improvement in resilience of female-owned businesses from 0.43 in 2021 to 0.45 in 2022. Geographically, businesses in the Central region had the weakest resilience levels after reopening the economy in 2022 (0.49), followed by enteprises in Western region (0.53). Similarly, sole proprietorships had the weakest resilience levels (0.49) compared to other business types. This can be attributed to the micro nature of most sole proprietorships and their tendency to rely on an individual

Box 2: A Case Study of BISTEX Textiles that turned a micro-enterprise

I started my business ten years ago. It was flourishing, and we had a strong market producing uniforms and graduation gowns, but it just came to a standstill. The business employing ten full-time workers — 6 women and 4 men- is now under one person, myself alone. I employ only one part-time woman whom I call when I get some work, but this is rare. Before COVID, I had a few machines, but after COVID-19, I got more machines from a lady who had challenges and sold her machines. I bought them, hoping that in case the business recovers, I would make more money. I am surviving on hope. If I was to get a room that can accommodate all my machines, it would be very expensive, which is too high for me. Now I am afraid to engage in a business that requires high rent. As BISTEX, I am helplessly looking at my sewing machines, awaiting business opportunities. Bids are so competitive and hard to come by. I no longer have permanent contracts. My household and I are not sure of a stable future, as demand for our products is unpredictable. When I think of going for a loan, I am afraid that I might not get a contract to make uniforms and repay the loan. I have resorted to making samples and moving around with them to institutions. If I go to 10 institutions, I hope that maybe 2 or 3 might give me a contract. My few old customers are the ones following me, though some have lost contact since I shifted from my previous premises. Getting jobs is hard, but If I could get one as a side job, I would go for it and diversify.

Source: A male KII, Kampala, 2023.

Table 8: Resilience of MSMEs by size, sector, sex of business owner, region and business type

	2021	2022
Size		
Micro	0.42	0.42
Small	0.53	0.56
Medium	0.66	0.69
Sector		
Manufacturing	0.50	0.49
Tourism	0.48	0.50
Education	0.49	0.54
Sex of business owner		
Male	0.50	0.50
Female	0.43	0.45
Region		
Central	0.52	0.49
Eastern	0.42	0.53
Northern	0.42	0.58
Western	0.46	0.52
Business Type		
Proprietors	0.48	0.49
Partnership	0.55	0.60
Others	0.46	0.57
Overall	0.49	0.51

^{**}Score ranking 0-0.74 = Low and 0.75-1.0 = High

rather than business systems. As a result, any disruption in the business-owner's life directly affects the business.

Specifically, the key drivers of the weak business resilience included limited ability of businesses to diversify business portfolio/products, inability to create additional revenue sources, limited adaptive abilities/dynamic capacity to respond to changes, limited knowledge regarding existing government support, and weak capacity to produce or deal in new and sophisticated products as Table 9 in the appendix shows. These results indicated that most of the issues contributing to low enterprise resilience are internal to businesses.

4.8 Survival strategies and support to MSMEs

Businesses employed several coping mechanisms to remain afloat and survive through the pandemic. Most business owners tried to survive by laying off workers as well as cutting down the salaries of the few employees that were retained, as narrated:

- "...during Covid-19 lockdown, we reduced the number of staff and the salary of those retained was reduced to 50%...after the lockdown, the salary increased to 75%, and we have not been able to increase it to 100% "(A male KII, Mbale, 2023).
- "...there was no alternative at that time, we had to close the school and send teachers to their homes to try other survival means. Surprisingly, some ventured into some businesses that turned to be lucrative and they saw no reason to come back to class when the schools reopened... (A female KII, Gulu, 2023).

"...in the first months of the pandemic, we resolved to pay all staff 50 percent of their salary even when they were not coming to work. We expected the COVID-19 pandemic not to go beyond 6 months. After the 6 months, the decision was rescinded as paying workers became unsustainable. We had to only pay a few staff that were assigned a few tasks around... (A male KII, Kampala, 2023).

Changing the line of business was another copying strategy adopted by businesses, and this affected women and men differently, as detailed:

"... Women during Covid-19 and to date are well motivated to engage in all sorts of food vending. For example, while some men turned to heavy drinking to hide their frustrations, women resorted to marketing some other products because people at home have to eat. Some women even went ahead to supply customers in their homes because they realised that without moving from home to home, they would not be able to get customers. Men did not surrender because they wanted to, but it is because of traditional beliefs such as a belief that women are the ones to sell "malakwang"-(local vegetables and that this is not a man's job. ... men cannot sit on the roadside to sell something of 5,000/= at the end of the day. A good example is me; I went into growing tomatoes and made sales of 600,000/=" (A male, KII, Gulu, 2023).

Accordingly, cultural norms and beliefs have empowered women to persevere, even during pandemics. For instance, while it is widely accepted that women can sit on the roadside and sell vegetables, a man would be ridiculed for doing such a business. It is believed that women can sell anything that brings in even the slightest income whereas men pursue businesses that offer higher returns, which was impossible during the pandemic. Also, women have other supportive means compared to men, as a male KII in Mbarara district commented:

"...usually, a man has a hand in a woman's business. We don't have data about the differences between female and male-owned businesses, but usually, female-owned businesses are more resilient than men's businesses. This is so because

women are more faithful when it comes to financial management and are compliant compared to men. Also, men support their wives, but women usually have other men or even other sympathisers supporting their businesses. Men have a lot more to spend on than women, and women are always on the receiving end..." (A male KII, Mbarara, 2023).

Despite the global boom in e-commerce adoption, most MSMEs in Uganda especially micro and small businesses could not swiftly adapt and adopt e-commerce to reach many customers online. This was attributed to the limited financial capacity of these enterprises to acquire digital devices like smartphones and pay for the internet, in addition to limited digital skills to do business online. A female KII participant argued that e-commerce only works for larger enterprises, as she put it:

"... e-commerce is for businesswomen and men in the arcades [big shopping malls] that can afford smartphones and computers, not for us women here in Kawempe and Kalerwe markets. We don't even have smartphones; see my "Katoki"-feature phone. So, tell me, how can I get online without a smartphone? ..." (A female KII, Kawempe, Kampala, 2023).

In the education sector, the low level of e-commerce readiness was attributed to schools lacking tools for e-learning, limited capacity of teachers to conduct online classes, internet connectivity challenges in most parts of the country and the fact that most parents and pupils cannot afford digital learning requirements as evidenced after the closure of schools. E-commerce adoption was low among manufacturing firms because they prefer to deal with clients physically, which involves negotiations until an agreement is reached. In the tourism sector, e-commerce readiness was also low, and adoption was piecemeal, especially by enterprises in the food industry enrolled on digital apps like Jumia Food and Glovo, where they can receive orders online and deliver to clients. A KII participant from a tourism enterprise narrated that:

"... as a hotel, we make more money when the client is physically here. They may have come for a cup of tea but then ends up buying more stuff. That is why we prioritise customer care. If they meet their

friends, they can easily buy for them while here, which is not the case when ordering online..." (A male KII, Kampala, 2023).

The high cost of digital devices hindered MSME digitalisation. This was worsened by the high cost of data and the fast rate at which it gets used up, thus limiting many businesses from going online. KII participants narrated that:

- "...smartphones are expensive for us, and data bundles are expensive also. You have to spend like 5,000 every day to keep online. Where do you get that money from this business you see..." (A male KII, Gulu 2023).
- "... imagine you buy data and before you know, you see a message that you have used 100% of your data bundle and then when you don't go online, the data expires. Where does it go?" (A female KII, Kampala, 2023).

Some MSMEs also believed that going digital would expose them to the taxman, Uganda Revenue Authority (URA) and cyber-attacks. Most MSMEs seemed to be unaware of the opportunities presented by going online. Instead, they associate digitalisation to exposure to URA and fraudsters, as stated by the KII participants:

- "...imagine, the URA team comes here, and you show them everything, but they give you a high tax bill... You wonder where it is coming from; they don't want to listen and simply tell you to go to court. Imagine if we go online, it will be worse" (A male KII, Kampala, 2023).
- "...when you are online and they steal you, where do you report and how do you get back your money? I believe the "bafele"-fraudsters get our contacts from online sites like Facebook. They may steal us more after getting details of our businesses online" (A Male KII, Mbarara 2023).

Meanwhile, both businessmen and women felt let down by the Government. There was anticipation that the Government would rescue the business enterprises by hedging them against the financial institutions' high lending rates, offering some financial subsidies, and waiving some taxes, as an enabling factor that never happened. This led to frustrations that affected their businesses internally. Participants shared their frustration and disappointment that:

- "...we never got any support from the Government during and after the lockdown. We were supposed to get some money through GT Bank, but their policy was unfavourable because they wanted us to use the money only to pay employees, so we rejected it" (A male KII Mbale, 2023).
- "...we borrowed money from the bank because the Government had promised a covid relief fund for schools, but we never got anything. We actually do not trust the Government because of unfulfilled promises. We had already registered for this relief fund, but they are telling us to register again..." (A male KII, Kampala, 2023)

Borrowing against the promises made by the Government landed some businesses into insolvency. Unfulfilled pledges or promises to seem to be worse than no pledges at all. As one male KII in Mbarara put it:

"Unfulfilled promises excite people who end borrowing expecting to pay back when the promises are made good, and this worsens the situation." (A male KII, Mbarara, 2023).

Nonetheless, the Government's decision to allow businessmen and women dealing in food stuffs to keep operating was highly acknowledged by businesses. In Mbale, a rice business dealer remarked that:

"...there was no kind of support from the government. We only survived because the government allowed us to sell food, even though there was a bit of a reduction in our sales" (A male KII, Mbale, 2023).

Post-pandemic, men had greater ease in obtaining business loans than women, as they often possessed the collateral to secure the loans. This was reflected in the voice of a male CDO in Kampala district, who asserted that:

".... men have collateral to get loans; also, men do not fear loans. Women are more in the informal sector and save over a long time to be able to access credit" (A male KII, Kampala, 2023). While the Parish Development Model (PDM) is seen as one of the avenues to enhance the post-pandemic recovery of MSMEs, it was perceived differently by some businessmen and women. A businesswoman dealing in maize products said that PDM created more anxiety and frustrations from shattered hopes and has been politicised. It massively raised people's hopes but delivered tokenistic benefits to the ordinary citizens. The popular but apparently erroneous perception is that politicians are the ones benefitting from PDM at the expense of the local people. A female KII expressed her frustration that:

"...we have not even received any money from the PDM program. Our names are just used to get money for those leaders. An MP came here, registered us, and we even signed. They had a conference, and at the end of the day, she gave each one of us just 10,000/=, yet she filmed everything and showed Museveni how she gave us the money..." (A female KII, Mbale, 2023).

To the above female key informant, the MSMEs who are supposed to benefit from PDM have lost hope and only try to look elsewhere as she explained that "our Village Savings and Loans Associations (VSLAs)/ Self-help groups are the ones that saved us". Similarly, in Mbarara, a male KII in the manufacturing sector, commenting on the PDM's potential to contribute to business recovery, argued that:

"The problem with our country is not scarcity of money but misappropriation of funds. Money goes where it's not supposed to go. Read the newspapers... Even for the emyooga, Youth Livelihood Fund among others. There is just too much corruption and waste of taxpayers' money..." (A male KII, Mbarara, 2023)

5. CONCLUSION AND EMERGING POLICY IMPLICATIONS

5.1 Conclusion

This report focuses on a nationally representative panel of 1,111 businesses that were surveyed in both rounds of the survey conducted by EPRC in 2021 and 2022. The report

also utilises data from key informant interviews conducted in March and April 2023. The objective of this study was to present in-depth evidence on the short-, medium-, and long-term effects of the COVID-19 pandemic on MSMEs in Uganda, as well as the strategies implemented by businesses to manage the pandemic. The study findings will play a crucial role in informing strategies to promote the full recovery of businesses from the pandemic and enhance private-sector development in Uganda.

Findings revolved around six key issues (1) business operations (2) sources and costs of inputs (3) business performance (4) employment, (5) business resilience, and (6) survival strategies. Concerning business operations, the results show that most enterprises closed both premises and operations during lockdowns, but the closure rates differ across business sizes and sectors. Specifically, small enterprises were the most affected by the closure of both premises and operations, followed by micro-enterprises. After the full reopening of the economy, the share of micro and small enterprises with both premises and operations closed slightly increased. During lockdowns, the sector mostly affected was education enterprises, followed by tourism businesses. However, the manufacturing sector had a larger and increasing proportion of enterprises, with both operations and premises closed after the full reopening of the economy. Additionally, male-owned enterprises were more likely to close both premises and operations during lockdowns compared to female-owned businesses. Most micro, and small enterprises (over 90 percent) could not close premises but continue operations. Similarly, enterprises across all sectors (over 85 percent) were unable to keep their operations running while their premises are closed.

Regarding the source and cost of inputs, the results show that enterprises increasingly sourced raw materials locally after the COVID-19 pandemic, and this trend has not changed after full reopening of the economy. The mediumsized enterprises that were more likely to source raw materials from Kampala and foreign sources have shifted to local sources. The proportion of raw materials sourced from foreign sources has nearly vanished for businesses across all sectors, including manufacturing, after the advent of the COVID-19 pandemic. Overall, medium-sized and manufacturing enterprises faced more problematic access to inputs after the pandemic outbreak, and this situation

has not changed after the full reopening of the economy. The Medium-sized and educational enterprises had the most striking increase in input costs after the full reopening of the economy in January 2022.

Concerning business performance, the results show that all businesses suffered a reduction in sales revenue during lockdowns, especially the first one. During the period from the second lockdown through Jan-June 2022, when the economy was fully reopened, most businesses experienced a rise in sales revenue. However, more micro and smallsized enterprises reported a reduction in sales revenue in the subsequent period (July-Oct 2022) compared to Jan-June 2022. A similar experience was reported by manufacturing and tourism enterprises. In terms of profits, all businesses suffered a huge reduction in profits during the first lockdown compared to the second lockdown. More micro and smallsized businesses reported a reduction in profits in July-October 2022 compared to the period after the full reopening of the economy (Jan-June 2022). A similar scenario was reported by manufacturing and tourism enterprises.

An estimated 366,000 jobs were lost from 2019 to the end of the second lockdown in August 2021, primarily affecting small businesses followed by micro-enterprises. At a sector level, the education sector was the most affected, followed by the tourism sector. In terms of job recovery, a total of 11,000 jobs had not yet been recovered by October 2022. The small-sized and medium-sized enterprises had not yet recovered 26,000 and 2,000 jobs, respectively. In the same vein, the manufacturing and education sectors had not recovered 16,000 and 8,000 jobs, respectively.

Overall, businesses had weak resilience, but enterprise resilience improved with growth in business size. The common strategies adopted by businesses to survive the pandemic were laying off workers and changing the line of business. E-commerce was not widely adopted by businesses during the pandemic because of their lack of preparation, the high cost of gadgets and internet, and a fear of being discovered by the taxman and cyber-attacks. Businesses reported not having received the anticipated support from the Government.

5.2 Policy Implications

The key policy implications arising from the evidence are:

Provide patient financial support to small and micro enterprises. The Small Business Recovery Fund (SBRF) established in 2021 to provide loans to small businesses that suffered financial distress arising from the effects of the COVID-19 pandemic should be tailored to the characteristics of a typical small and micro business in Uganda. The eligibility criteria should be revised to make the fund attractive to businesses and the participating financial institutions should also be sufficiently incentivised to increase the fund uptake. Furthermore, the Bank of Uganda which is charged with marketing SBRF should conduct countrywide awareness campaigns about the fund and utilise various channels: radio, social media and TV adverts for marketing. These campaigns should provide clear information about the eligibility criteria, how businesses can access the fund, and the locations where it can be accessed.

Capacity building of businesses to improve their adaptive abilities and resilience to shocks. Businesses should be trained on key business management skills to build capacity to address their internal challenges. The businesses should also be supported to transition from micro to small and medium size for their increased resilience, in addition to supporting them to address challenges that hinder them from accessing government support when faced with shocks.

Support MSMEs to adopt e-commerce. This can be achieved through (i) Creating awareness about e-commerce opportunities for businesses to appreciate that there is a big market online that they can only reach by going, and the phobia that going online exposes them to URA and cyberattacks should be demystified; (ii) Strengthening MSMEs' capacity to use digital technologies for business by providing business-size ad sector tailored hands-on training on how to use different online platforms for business, for instance, creating an account, uploading pictures, viewing, and accepting orders, and making online transactions; and (iii) Making digital gadgets affordable for business operators through a particular smartphone' subsidy for MSMEs, and (iv) the Government should work with telecom companies to lower the cost of data.

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APPENDIX

Appendix 1: Participants for MSME KIIs and In-depth Interviews

MBA	LE DISTRICT		
#	Enterprise	Name of participant	Sex
1	RCC	Hon. John Rex Aachilla	M
2	Commercial Officer	Moses Nangalama	M
3	Senior Commercial Officer	Irene Buteme	F
4	DCD0	Meresi Mutonyi	F
5	Pretoria Hotel	Ronald	M
6	Maize Miller	Sarah Balayo	F
7	Lucia Villas Hotel		M
8	Child of Hope Junior School	Mrs. Ruth Opolot	F
9	Mt. Elgon Rice Millers		
10	Taata International School		
GUL	U DISTRICT	·	
11	DISO	David Onyaki	M
12	Director of Chamber of Commerce	Mr. Omoro	M
13	J & S Nursery & Primary School	Omodo Innocent	M
14	CCDO-City Community Development Officer	Geofrey Lakwonyero	M
15	Principal Commercial Officer	Komakech	M
16	Pridehill Nursery and Primary School	Ms. Anena	F
17	Shalom Guesthouse	Mr. Adam	M
KAM	PALA DISTRICT		
18	Mt Sinai Nursery & Primary School	Lubega Lawrence	M
19	Nican Resort Hotel	Denis Musinguzi	M
20	Katwe Fabricators	Ikiriza Kennedy	M
21	Bistex Garments	Besigye Brian	M
22	CDO-Makindye		
23	Commercial Officer, Kawempe Division	Manjeri Nabirye	F
24	Gender Officers, Kawempe Division	Nassali Shariffa	F
25	UNIK hotel	Luzinda Huzairu	M
26	Tropical Standard Best grain milling company	Rashid Kalungi	M
27	Jassani Food industries	Tony Bamuleta & Paul Abigaba	M
MBA	RARA DISTRICT		
28	CAO	Kasagula Edward	M
29	District Education Ofiicer	Gabriel Ahimbisibwe	M
30	District Commercial Officer		
31	Senior CDO	Mugizi Godfrey	M
	· ·	·	

32	Kazire Factory	Dickson Musasizi	M
33	Signature Bar- Former employer	Susan Nankawa	F
34	Carpentry workshop	Wamala Robert	M
35	Lakeside Top Dairy	Sri Hari Reddy	M
36	Shallom Keben Primary school	Mwesigwa Dennis	M
37	Rwampara suites	Byaruhanga Titus	M

Table 9: Domains for resilience index

Variable	Factor1	Factor2	Factor3	Factor4	Communality
Ability to diversify your business portfolio/products	0.70	0.22	0.46	-0.15	0.78
Ability to create additional revenue sources	0.35	0.08	0.77	0.00	0.72
Dynamic capacity to respond to changes	0.80	0.22	0.11	0.08	0.71
Knowledge regarding existing government support	0.00	0.15	0.10	0.82	0.71
Business capacity to produce or deal in new and sophisticated products	0.72	0.29	0.27	-0.13	0.70
Staff's core competence	0.10	0.77	0.27	-0.07	0.68
Access to external resources	0.06	0.17	0.74	0.25	0.64
Leadership & management capability	0.19	0.77	0.01	0.14	0.64
Capacity regarding the internal business environment	0.28	0.72	0.17	0.03	0.63
Knowledge of the external business environment	0.43	0.55	-0.02	0.38	0.63
Effective network of social capital	0.77	0.07	0.00	0.16	0.62
Conduct self-monitoring of performance for future decisions on business operation	0.45	0.54	0.05	0.34	0.60
Awareness and ability to access available aids such as government funding	0.07	-0.02	0.46	0.61	0.59
Level of compliance to COVID-19 SOPs	0.09	0.15	0.58	0.46	0.57
Capacity to use digital technologies	0.50	0.12	0.49	0.25	0.57
Capacity to settle financial obligations (e.g. loan repayment) in difficult times	0.57	0.17	0.21	0.31	0.49
Market sensitivity	0.10	0.66	-0.02	0.16	0.46
Effective network of physical capital	0.37	-0.02	0.41	0.30	0.40

^{**} Communality is a measure of the variable's value to the latent variable. The higher the communality the greater the contribution/attribution of the variable to the index.











Economic Policy Research Centre
Plot 51, Pool Road, Makerere University Campus
P.O. Box 7841, Kampala, Uganda
Tel: +256-414-541023/4, Fax: +256-414-541022
Email: eprc@eprcug.org, Web: www.eprcug.org