Impact of COVID-19 on Ugandan MSMEs: Informal sector

Summary

Ugandan micro, small and medium enterprises (MSME) account for approximately 90 percent of the entire private sector, over 80 percent of manufactured output and contribute about 75 percent to the gross domestic product (GDP). However, MSMEs, particularly micro and small enterprises represent a particularly vulnerable segment of Uganda's economy. The total rate of failure in businesses is estimated at more than 50 percent in three years; it is even higher for smaller businesses, one third of which do not see their first birthday. The MSME sector is dominated by informal micro and small enterprises (MSE) that contribute 85 percent to total employment and over 50 percent to the national GDP. These enterprises are even more fragile and vulnerable to economic and other shocks.

This research investigates the impact of COVID-19 on informal MSEs and estimates the sectoral and regional aspects of the pandemic and its containment measures in terms of business closure and loss of employment. It also provides estimates for the rate and time of recovery. The research uses three sets of data, Uganda National Manpower Survey (UNMS) 2016, Uganda Labour Force Survey (NLFS) 2016/17 and Uganda National Household Survey (UNHS) 2016. The research methodology is based on the supply and demand model that allows decomposition of the underlying event (COVID-19) into individual shocks, subsequently calibrated using principal component analysis and microsimulations based on historical and current data. The shocks are combined in a manner consistent with the event timeline and expectation formations, and at all stages, sensitivity analysis is carried to differing calibrations and expectations applied to sector and regional dimensions.

The research finds that COVID-19 will produce a particularly strong impact on MSEs in manufacturing, sending 46 percent of businesses below the poverty line or into closure as well as the hospitality industry (43 percent) followed by trading and services (41 percent). Agriculture is also getting seriously affected, with 15 percent of businesses slipping below the national poverty line and 19% discontinuing their operations altogether. This is explained by very low profit margins in this sector, which make it very vulnerable to an even relatively mild shock of COVID-19 estimated at below 10 percent for agriculture. An estimated 4.4 million informal sector workers will see their earning falling below the poverty line or totally drying up. Regionally, the Greater Kampala will account for about 50 percent of the total loss of income and closure of informal businesses nationally. The Karamoja Region will experience the strongest shock among other regions with about a third of its MSEs closing.

Although up to 60 percent of MSEs (in the worst-case scenario) are likely to go out of business during COVID-19, the impact on their structure and business potential will be limited. The main consideration for forecasting the recovery time is the period required for demand to pick up. It is expected that the situation will return to the pre-COVID-19 levels within 3 months, earlier for such sectors as forestry, agriculture, trading and services and somewhat later for manufacturing and hospitality.

The research offers policy recommendations and practical measures to reduce the impact of COVID-19 and accelerate recovery in three areas: (1) support informal business's critical needs, (2) protect current employment, and (3) improve liquidity/cash flow.

General analysis of COVID-19 economic shock on MSMEs

The future of MSMEs and their contribution to economic growth has become uncertain. As consumers stay home and the usual supply chains are disrupted, small businesses are losing revenue, unemployment levels and loan defaults are rising, putting significant pressure on the banking and financial system. Worldwide, the debate on the impact of COVID-19 on small business has shifted from the primary focus of growth to one of business continuity, and optimization of working capital to save resources[1].

According to the Uganda Investment Authority (UIA), micro enterprises are firms that employ at most four people, with an annual sales/revenue turnover or total assets not exceeding Uganda shillings 10 million while small enterprises employ between 5 and 49 persons and have total assets between UGX 10 million and 100 million. Enterprises that employ between 50 and 100 persons and with total assets that lie between UGX 100 million and 360 million are classified as medium enterprises.

This implies that a greater proportion of enterprises in Uganda falls in the MSMEs category. They are spread across all sectors with 49 percent in the service sector, 33 percent in the commerce and trade, 10 percent in manufacturing and 8 percent in other fields.[2] These enterprises account for approximately 90 percent of the entire private sector, over 80 percent of manufactured output and contribute about 75 percent to the gross domestic product (GDP). The sector employs more than 2.5 million people equivalent to 90 percent of total non-farm sector workers and comprises about 1,100,000 enterprises which makes the sector one of the largest employers in the country.[3]

The sector is dominated by micro enterprises (93.5 percent), the rest being small (4.1 percent) and medium (2.4 percent). This is true for both the formal and informal sector, the latter employing 84.9 percent of Uganda's labour force outside agriculture[4]. Consequently, any shock, which negatively affects the operation of SMEs in Uganda, can have far reaching knock-on effects in the economy. In the case of COVID-19, consequences of control measures such as lockdowns and social distancing, additional sanitization, etc. disrupt business operations from both supply and demand side.

The economic impact of COVID-19 on MSMEs has been decomposed supply shock, demand shock and financial shock[5]. On the **supply side**, operating MSMEs experience a reduction in the supply of raw materials and labor due to quarantines/lockdowns and restriction on movement. The supply of labour is decreasing as workers are unwell or need to look after children or other dependents while schools are closed and movements of people are restricted. Measures to contain the disease by lockdowns and quarantines lead to further and more severe drops in capacity utilization. Furthermore, supply chains are interrupted leading to shortages of parts and intermediate goods. On the **demand side**, COVID-19 control measures negatively impact the access of customers to goods and services whereas the drop in personal incomes suppresses

---

[1] KPMG (2020). Economic implications of COVID-19 on firms

[2] Uganda Investment Authority (2016). SMEs Driving the Economy.

[3] Ministry of Trade, Industry and Cooperatives (2015). Uganda Micro, Small and Medium Enterprise (MSME) Policy.

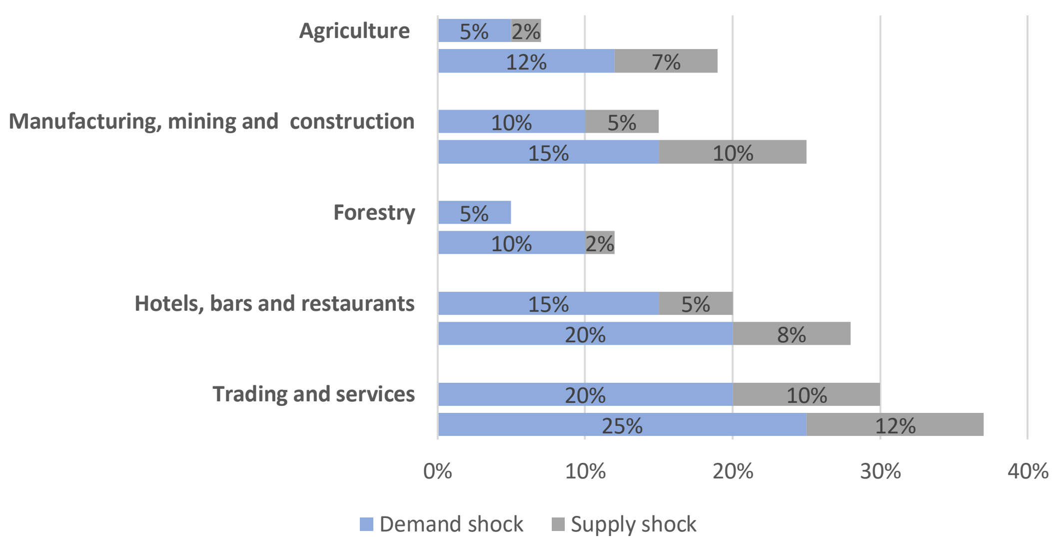
[4] Uganda Bureau of Statistics (2018). National Labour Force Survey 2016/17.

[5] Ogawa, K. and Tanaka T. (2012). The Global Financial Crisis and Small- and Medium-sized Enterprises in Japan: How did they cope with the crisis?

aggregate demand, particularly for non-food goods and other services. A dramatic and sudden loss of demand and revenue for SMEs severely affects their ability to function, and/or causes severe liquidity shortages. Furthermore, consumers experience loss of income, fear of contagion and heightened uncertainty, which in turn reduces spending and consumption. These effects are compounded because workers are laid off and firms are not able to pay salaries.

Historical data analysis based on the previous cases of health events and epidemics, such as SARS, Ebola and AIDS, was used to estimate the impact of COVID-19 on Ugandan SMEs, higher weighting assigned to health events that employed partial or total lockdowns to contain an epidemic. The estimates were triangulated using the latest reported impacts of the COVID-19 on SMEs in Europe, USA and China. Results of the calibrated risk analysis of the COVID-19 impact on the MSME average monthly revenue by sector are presented in Figure 1. It is assumed that the impact of the health shock as such due to the infection is marginal, and the supply and demand effects are caused by the restriction measures only.

Figure 1. Total economic shock (revenue loss) for MSMEs (base case and worst-case scenarios)



Source: Author's computations based on analysis of current and historical data

It is estimated that the COVID-19 combined economic shock (without the financial component) will be particularly pronounced in trading and services followed by the hospitality industry, which are likely to lose 20-30 percent of their total revenue assuming the current level of restriction measures is maintained over a period of three months. In the worst-case scenario, their losses may reach 28-37 percent. Agriculture and forestry are least affected. In the base case scenario, MSMEs in the two most affected sectors will lose about one full month of their revenues, implying up to a 10 percent annual loss. The economic shock presented in Figure 1 takes into account coping measures and compensation mechanisms that may be taken by MSMEs including higher production prices for goods with lower elasticity and fewer substitutes. However, a longer period of restriction at the same level (beyond the initial period of three months) will result in greater losses, primarily due to further decline in aggregate demand.

Impact on informal MSE income by sector

Estimation of impact of COVID-19 on MSMEs is complex due to the fact that almost all sectors of the economy are affected and the future trajectory of the pandemic remains uncertain. Understanding the impacts of COVID-19 on informal MSMEs is particularly important considering their large contribution to total employment (85 percent) and to the national GDP (over 50 percent). The sectoral structure of the informal businesses replicates the overall structure of the MSME category, with 77 percent of informal enterprises working in trading and services and hospitality, the two sectors estimated to be affected most by the restriction measures. However, the informal sector consists of only micro and small enterprises and does not have any medium-size enterprises. Micro enterprises with 4 or less workers make up 95.6% of all informal enterprises, the rest represented by small enterprises with a maximum number of 25 workers. Hence, it is fair to speak about the COVID-19 impact on micro and small enterprises as far as the informal sector is concerned.

According to the Uganda National Manpower Survey 2016, informal MSEs belong to six sectors analysed below. These sectors are (1) manufacturing; (2) trading and services; (3) hotels, bars and restaurants; (4) forestry; (5) agriculture; and (6) mining, quarrying and construction. Typical activities in each of these sectors are listed in Table 1 (this list is indicative and not exclusive).

Table 1. Informal economic sectors and typical activities

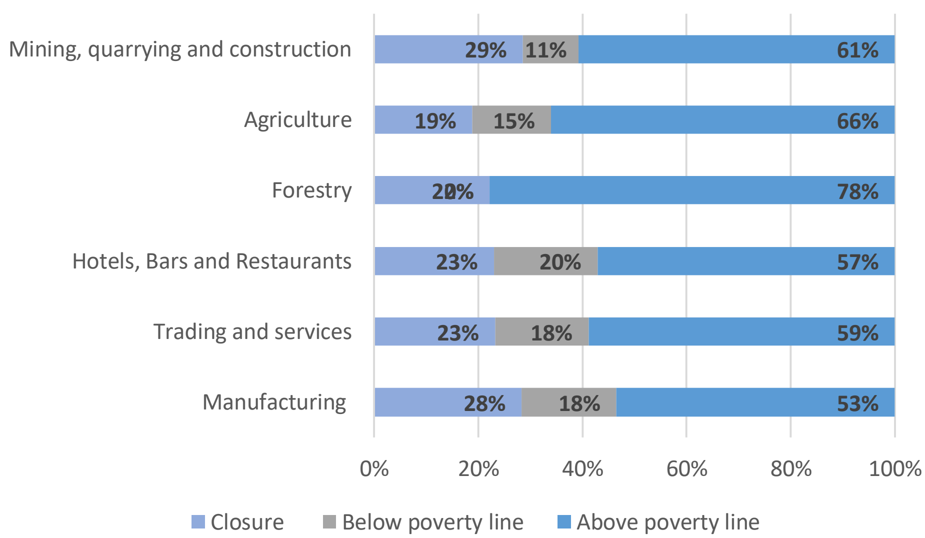
Sector	Typical activities
Manufacturing	• Manufacturing: production of construction bricks, furniture, metalworks, basketry, etc. • Food production: bakeries, breweries and distilleries, production of chapati, mandazi and sambusa • Production of clothes: tailoring and knitting
Trading and services	• Retail sale of general merchandise, household goods, clothes, food, pharmaceuticals, spare parts, construction materials, etc. • Maintenance and repair of motor vehicles • Repair of clothes, footwear and leather products • Nursing and other personal services • Hair dressing and plating, saloons • Transportation, boda boda services • Photography and videography services • Mobile money transfer services
Hotels, bars and restaurants	• Restaurants, eateries, food kiosks • Bars and joints • Cooking and serving cooked food • Retails sale of bears and spirits
Forestry	• Charcoal production • Seedling nurseries and farming
Agriculture	• Rearing pigs, goats, poultry

	• Dairy and dairy products • Flower growing
Mining, quarrying and construction	• Stone quarrying, clay/murram quarrying, sand mining

Source: Author's presentation based on UNMS 2016 data set

The UNMS 2016 data set was used to estimate the combined impact of COVID-19 on Ugandan MSEs under the base case scenario. Principal component analysis of the data returns a strong and statistically significant correlation between the average income per workers in informal MSEs and the total gross income, resulting in a loss of UGX 6,710 in personal incomes per every UGX10,000 lost by the business. The COVID-19 economic shock will therefore have a direct impact on the incomes of workers engaged in informal businesses with three possible outcomes: incomes falling below zero and hence resulting in discontinuation of business activities; incomes staying above zero but falling below the national poverty line of UGX 67,607; and lastly, incomes staying above the poverty line albeit at a reduced level of output. The results of this analysis are represented in Figure 2.

Figure 2. Impact of reduced income on the operation of informal MSEs



Source: Author's computations based on UNMS 2016 data set

Reduced incomes of informal MSEs due to the COVID-19 restriction measures are taking a particularly heavy toll on manufacturing sending 46 percent of businesses below the poverty line or into closure as well as the hospitality industry (43 percent) followed by trading and services (41 percent). Agriculture is also getting seriously affected, with 15 percent of businesses slipping below the national poverty line and 19% discontinuing their operations altogether. This is explained by very low profit margins in this sector, which make it very vulnerable to an even relatively mild shock of COVID-19 estimated at below 10 percent for agriculture.

Impact on MSE employment by sector

Assuming Uganda's working age population without those working in subsistence agriculture only at 13 million (NLFS 2016/17), an estimated 4.4 million informal sector workers will see their earning falling below the poverty line or totally drying up (Table 2).

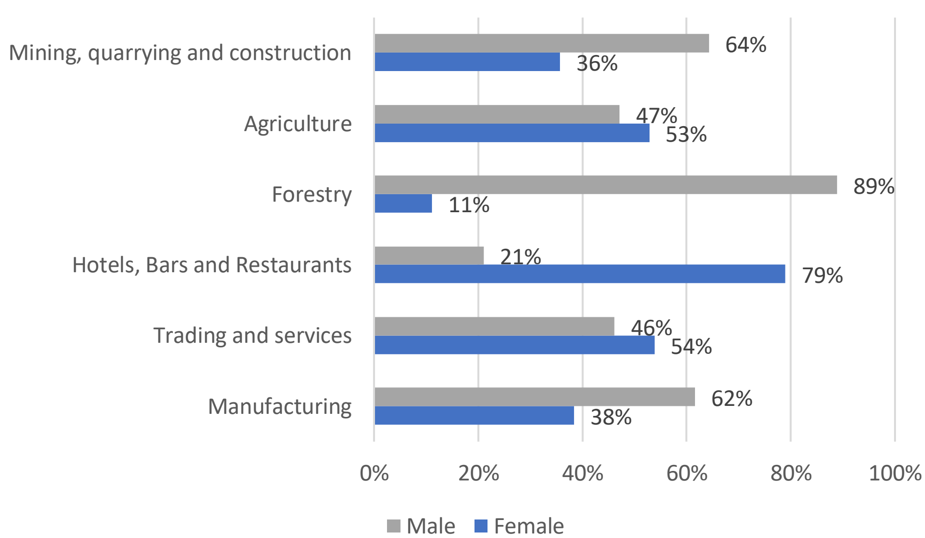
Table 2. COVID-19 impact on informal MSEs by sector (number of workers affected)

Sector	Workers without earnings	Workers with earnings below the poverty line
Manufacturing	582,239	373,836
Trading and services	1,510,384	1,168,775
Hotels, Bars and Restaurants	360,945	311,530
Forestry	4,297	-
Agriculture	64,454	51,564
Mining, quarrying and construction	17,188	6,445
Total for informal sector	**2,539,507**	**1,912,150**

Source: Author's computations based on UNMS 2016 and NLFS 2016/17 data sets

This does not imply that as many people will become poor overnight because many informal workers diversify their employment by engaging in more than one economic activity. There is however a clear gender dimension. First, there are more businesses owned or managed by women (54 percent against 46 percent owned or managed by men), second, women are more likely to be engaged in micro enterprises with very low profit margins (in women-led businesses income per worker is UGX4,113 less than in those led by men) and lastly, women are less likely to be engaged in several economic activities due to the amount of domestic unpaid work they perform. Hence, COVID-19 will affect women's businesses and their earnings to a larger extent than men's. In the total number of MSEs affected by COVID-19, there will be in total 11% more enterprises owned or managed by women.

Figure 3. Impact on MSEs by sex of the owner/manager



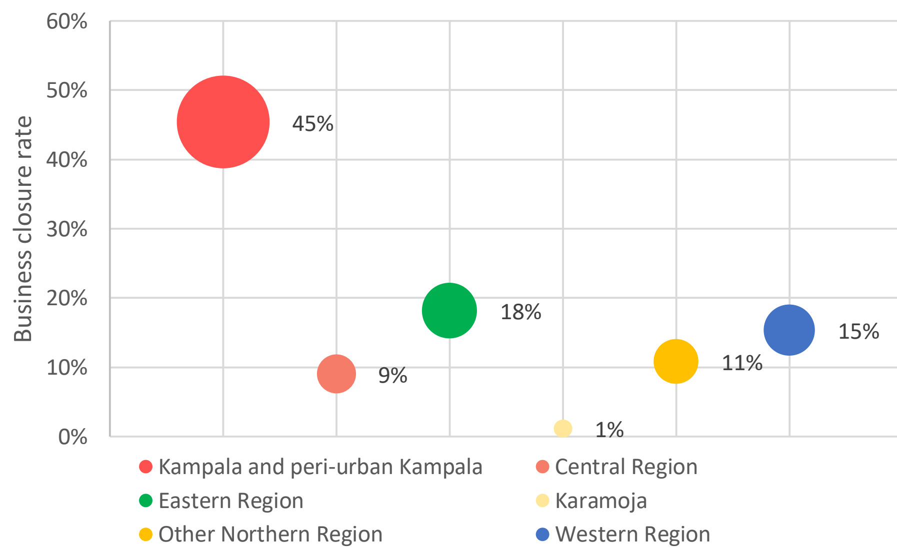
Source: Author's computations based on UNMS 2016 data set

Sector-wise (Figure 3), women-led enterprises will be particularly hit in trading and services and hospitality, the two sectors that will experience the brunt of COVID-19. women-led businesses will outnumber those led by men by 58% in hospitality (hotels, bars and restaurants) and by 8% in trading and services.

Impact on MSE by region

The regional shares of the total national impact on informal MSEs are closely correlated with the number of informal enterprises and their viability. Since the Greater Kampala has the largest number of informal MSEs, it will account for about 50 percent of the total loss of income and closure of informal businesses (Figure 4 shows the combined contribution by region).

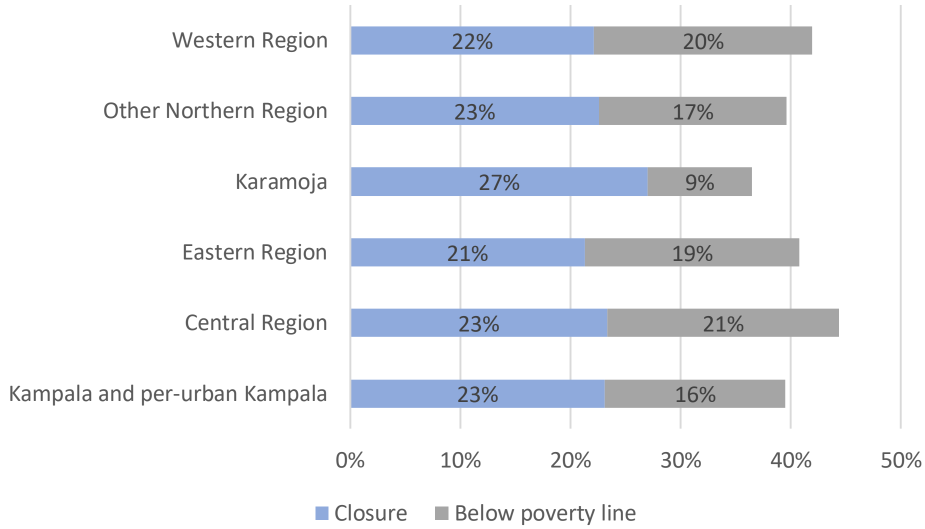
Figure 4. Regional shares in the total MSE impact



Source: Author's computations based on UNMS 2016 data set

The Eastern and Western Regions account for 33 percent of the total loss with the other regions contributing the remaining 20 percent. However, an analysis of the COVID impact within the regions provides a more nuanced picture (Figure 5). In particular, Karamoja that contributes just 2 percent to the total national loss of income will experience the strongest shock among other regions with about a third of its MSEs closing. This is an evidence of how fragile MSEs in that region are. The Central Region which follows Karamoja in terms of its share in the total loss of income will also be seriously affected (44 percent of its MSEs will be closed or move below the poverty level).

Figure 5. Impact of COVID-19 on MSEs by region (number of businesses affected)



Source: Author's computations based on UNMS 2016 data set

Recovery period

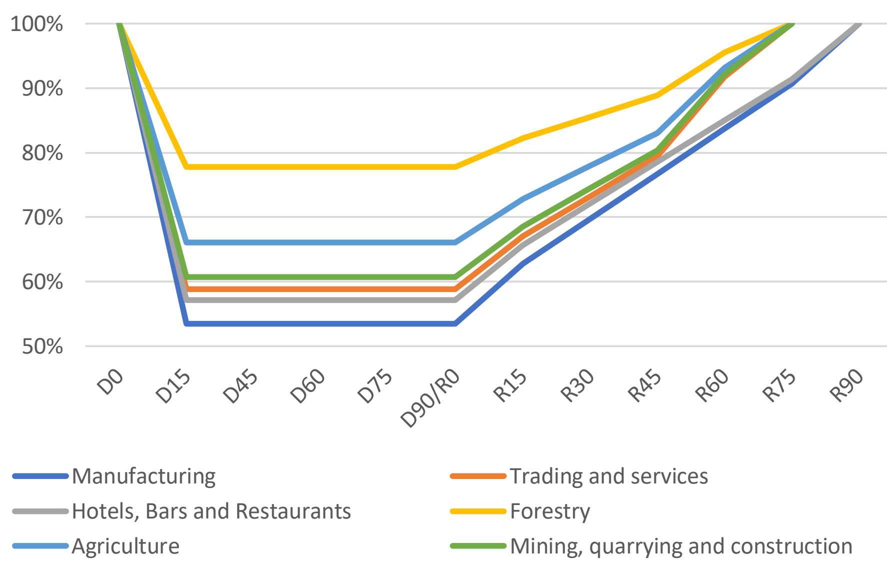
Although up to 60 percent of MSEs (in the worst-case scenario) are likely to go out of business during COVID-19, the impact on their structure and business potential will be limited. With very few assets, reliance on predominantly local raw materials and labour force, and informal and flexible working arrangements, many enterprises are likely to resume their operation within days after the COVID-19 restriction measures are lifted. This concerns MSEs in trading, services and hospitality that account for about 80 percent of all informal businesses.

The main consideration for forecasting the recovery time is the period required for demand to pick up since the supply shock is relatively mild and will take much less time to recover given reliance in many cases on easily obtainable local materials. The possibility of inadequate supply, particularly for consumable goods, immediately after the lockdown should not be entirely discounted. This may become an issue in cases of wholesalers hoarding goods and hiking prices beyond what is affordable to MSEs who in addition to that are likely to face lack of working capital to resume their operation. However, the suppressed demand will take a longer time to pick up, implying that many of these enterprises will not be able to operate at their full capacity for some time. Informal businesses that depend on imported goods and materials or involved in export operations (such as cross-border trade) are likely to take longer to recover in line with the time required for full resumption of cross-border movement and international trade flows.

A microsimulation based on a V-type recovery observed, for example, in China[6], shows the approximate recovery timing to pre-COVID-19 levels by sector as presented in Figure 6.

[6] Dai, R., Hu, J. and Zhang X. (2020). The Impact of Coronavirus on China's SMEs: Findings from the Enterprise Survey for Innovation and Entrepreneurship in China; Yu. J. (2020). Lessons from China: FMCG's recovery after COVID-19.

Figure 6. Post-COVID recovery by sector (pre-COVID level of activity = 100%)



It is expected that the situation will return to the pre-COVID-19 levels within 3 months, earlier for such sectors as forestry, agriculture, trading and services and somewhat later for manufacturing and hospitality. It does not mean that all enterprises operational before COVID-19 will come back to businesses as some of them may lose their business due to a combination of factors such as loss of assets and loss of market share to more viable businesses. In this case, the workers from such enterprises are likely to move to other businesses as owners or operators assuming that demand fully recovers in 3 months.

Policy recommendations

Informal businesses do not have access to the same relief measures and facilities as formal businesses (for example, debt restructuring, deferment of tax payments, access to banking credit facilities, etc.). In many respects, informal businesses are on the crossroads between a business and a household. Hence, they will benefit from a combination of relief measures targeting the formal sector and households. Due to this unique situation of the informal sector, local governments will play an important role in supporting informal businesses in the following areas in close coordination with the relevant MDAs. [7]

Support informal business's critical needs

- Some of the measures introduced by the government, such as eviction freezes due to non-payment of the rent, have a positive impact on the ability of informal businesses to continue their operation, particularly those experiencing a significant drop in revenues. Due to prevailing informal arrangements between businesses and property owners, such measures need to be vigorously enforced. Local governments have an important role in identifying vulnerable businesses and

[7] UN Capital Development Fund (2020). Local Government Finance for COVID-19 Immediate Response: Guidance Note.

preventing their closure due to the inability to pay the rent. Local governments should also waive or defer rental payments for the spaces they own leased for operation of informal businesses.

- Utility waivers for households are also an effective means of support for informal businesses, 84 percent of which operate from their homes or a workspace attached to the home. This measure will reduce the impact of the economic shock on businesses by allowing them continuous access to public utilities.
- Local governments are also instrumental in ensuring continued access to supply and customer base for informal business by enabling timely transportation arrangements, retrofitting public spaces to make them safe to continued functioning of informal workers, and providing safety and hygiene for informal businesses and their customers including required protective equipment.
- Where the business model allows it and the capacity exists, informal businesses should be helped to transition to e-commerce platforms and home delivery applications to retain their customer base.
- Setting up a fund for new businesses that would like to launch an innovative business idea as a consequence of Covid-19 or existing businesses that would like to pivot towards a digital solution that they have identified as an efficient way forward as a consequence of this crisis.

Protect current employment

- A one-off transfer to households composed entirely of informal workers will help offset inevitable economic hardship as a result of the global pandemic, especially for poor and vulnerable communities. UNICEF is proposing a one-off transfer of UGX 150,000 to every household engaged in informal business. In this case, an informal worker is defined as an individual undertaking own account work or being classified as a contributing family member. This transfer would amount to a direct subsidy to MSE.
- Offering free or subsided vocational and skill training for employees who may experience structural unemployment as a consequence of Covid-19 crisis with the intention to skill them for activities which enjoy higher demand.

Improve liquidity/cash flow

- It is recommended that local governments waive market fees, inspection fees and other charges of informal businesses to retain the liquidity required for continued operation and reduce the impact on their income.
- A "Liquidity Facility" targeting informal businesses may be considered based on a blended finance approach. This facility will open access to subsidize finance to capital providers, including digital finance institutions, with experience in supporting informal MSEs. The objective is to provide required working capital both during the COVID-19 stress period and especially after the restriction measures are lifted to accelerate the recovery. Recommended viable financial instruments may include bridging credit and increasing overdraft on current accounts.
- Access to microcredit: For individuals who would like to start a new business (especially those who have lost their jobs due to the Covid-19 crisis), the government may work with microfinance providers and SACCOs to ease microcredit loans. The government may make available funding for this purpose through Uganda Development Bank (UDB) or Microfinance Support Centre (MSC).

- Special Sectors Credit: If government has asked a specific industry to temporarily shut down, the government may opt to compensate a percentage of the lost revenue or offer a lump sum compensation to these businesses. Further allowances may be offered in the medium-term to specific sectors that are considered highly impacted. In case of informal MSEs, their associations rather than MSEs themselves may be eligible for such compensation.
- MSEs and individuals suffering from loss of income due to the COVID-19 crisis will rely significantly on cash transfers from friends and relatives to meet emergency and basic needs. The government may consider enacting policies that make it easier for affected groups (including refugees and host communities, rural farmers and small businesses) to access digital financial services (DFS) accounts like mobile money.
- With the mobile money tax currently in place, MSEs are bound to feel the impact, even more than before, of mobile money taxation on their revenues as customers will still be reluctant to use mobile money even when it offers a viable payment option when communities are practicing social distancing. As such, the government could consider a temporary or long-term relaxation of this tax for smaller transactions typical of MSEs.
- Support to the Digital Financial Services (DFS) providers: The government may consider subsidizing transaction fees that have been removed for MM transactions. This may affect the DFS providers' bottom line in the medium-term and may, in turn, impact efficient running of their agent networks. The government may consider leaning in and subsiding loss of revenue or commissions to agents or a combination of the two to ensure DFS networks continue functioning.