Economic Effects of COVID-19 on Micro and Small Enterprises in Addis Ababa Surrounding Towns of Oromia National Regional State,

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Abstract

Micro and small businesses contribute a lot to Ethiopia's transition from an agrarian to an industrial economy. But, now, the sector's economic operations are affected by COVID-19. Accordingly, this study aimed at examining the economic effect of the COVID-19 on micro and small enterprises in Addis Ababa surrounding towns of Oromia National Regional State. To achieve this objective, quantitative data were collected from 436 MSEs by questionnaire that represents the situation of the enterprises before and after the outbreak of the pandemic in December 2020. Data was analyzed by descriptive statistics method. The findings of the study showed that at the beginning of March 2020, before the outbreak of the pandemic, an enterprise had, on average 3.8 workers whereas, after the occurrence of the pandemic, an enterprise had, on average, 2.9 workers. This implies that due to COVID-19, enterprises decrease their workers on average by 0.83 and the mean difference of workers before and after the pandemic was statistically significant at less than 1% probability level. Furthermore, 32.3% of respondents reduced their workers because of the pandemic, 60.55% and 31.02% of enterprises stopped working temporarily and partially (half a day) respectively. On the other hand, the enterprise's annual income for the year 2019 on average was 170,174.4 Birr whereas it was Birr 127,433.8 for the year 2020 during the pandemic and the mean difference was 42,740.6 Birr which is statistically significant at less than 1% probability level. The main challenges enterprises faced during the pandemic were a fall in demand, decline of orders from customers, and lack of operating finance. Based on the findings of the study, training on a business recovery plan development and new line production, an extended debt repayment period, and provision of short-term credit are suggested to make enterprises recover faster from the adverse effect of COVID-19.

Keywords: COVID-19, Micro and small enterprise, Sululta, Burayou, Ethiopia

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Introduction

The pandemic COVID -19 was first identified in Wuhan, China, at the end of 2019 and declared as a pandemic by World Health Organization (WHO) on 11 March 2020 (WHO, 2020). The virus has touched almost all continents of our planet and spread to more than 216 countries and territories. The pandemic has caused global health and economic disruption. As of April, 2022, more than 510 million people were infected by the virus and 6.2 million people died all over the World (WHO, 2022). In Africa, in March 2020, where most countries reported the first case, the virus surged slowly. But, now (April 2022) it has been proliferating and resulted in 0.25million deaths and more than 11.8 million confirmed cases (Johns Hopkins University, 2022). In Ethiopia, the number of confirmed cases surpasses 470,937 and 7510 deaths (Johns Hopkins University, 2022). To reduce the number of daily confirmed cases and deaths by the Coronavirus, governments of many countries have been taking different measures like social distancing, border lockdown, use of face masks, full or partial lockdown, and testing. However, governments of many countries faced challenges in choosing whether to save the economy before saving the people or to save the people before saving the economy ahead of deciding which measure should be applied for the reason that "one size may not fit for all". Even if, many countries chose “save the people before saving the economy”, these countries noticed that their health crisis has been shifted to an economic crisis (Ozili & Arun, 2020).

Despite the Coronavirus's devastating effects on human health, it is wreaking havoc on the global economy. Falling oil prices, decreased export and import, weakened tourism and aviation sectors, increased poverty and unemployment, supply and demand shock as businesses reduced or stopped production, and consumption decreased, as seen in the United States, China, South Korea, Italy, France, Brazil, and the rest of the world (Paolo & Andrea, 2020; Baldwin & di Mauro, 2020). These economic effects of the virus may have resulted from viral-control measures implemented by firms, the government, and people. Businesses have closed, reduced production, and lay off staff as preventative measures. Governments prohibit certain sorts of economic activities, such as restaurants, taverns, cinemas, and stores, and people limit their trips to the market, cross-border travel, recreational activities, and other social activities (Baldwin, 2020; Baldwin & di Mauro, 2020). Despite the efforts of firms, governments, and individuals, the virus continues to spread from time to time.

The economic effect of the virus is more likely to be severe in developing countries, as they are less able to subsidize their fledgling businesses than wealthy countries. Various health precautions aimed at containing the virus and its transmission vectors harm micro and small enterprise (MSE) supply and demand. MSE fosters the growth of a nation's economy by creating job opportunities and capital accumulation and reducing the gap in income inequality. For instance, micro and small-scale enterprises contributed 6.2% in the US, 22.3% in China, 80% in India, 67% in Japan, and 70% in the European Union of employment opportunity (Tegegne & Meheret, 2011). In Ghana and South Africa, MSEs represent a vast portion of businesses. They represent about 92% of Ghanaian businesses and contribute about 70% to Ghana’s GDP and over 80% to employment. MSEs also account for about 91% of the formal business entities in South Africa, contributing between 52% and 57% of GDP and providing about 61% of employment (Peter, 2015).

The pandemic's economic disruption is severe on MSEs, resulting in lower demand for goods and services produced by MSEs as consumers reduce current consumption spending due to fear of the virus spreading locally and internationally, as well as the side effects of health measures such as staying at home, social distancing, and declaring a state of emergency. The fall in demand for goods and services will also cause a substantial decrease in the income of the MSEs. Consequently, MSEs will fail to pay salaries and wages for their employees and then lay off workers, unemployment increased particularly in the urban area, faced financial constraints to pay rent for working areas, and loan to banks or microfinance if the pandemic continues for six (6) months and above (Job Creation Commission, 2020).Now, the pandemic has stayed for greater than two years and the findings of this paper also showed MSEs reduced workers , their income and saving were also reduced.

Different researchers made an effort to examine the economic and social effects of the virus. In research conducted by Bartik et al. (2020) on 5800 small firms in the United States, 43 % of respondents have already temporarily shuttered their doors and cut their workforce by 40%. Another research conducted in similarly, a survey on MSEs in the Netherlands found that 85 % of MSEs are in financial problems, with micro-enterprises facing the most challenges, and a study in Belgium found that 31% of MSEs are at risk of going out of business.

In a survey conducted by the Society for Human Resource Management in the United States in April 2020, 42% of small business owners, particularly in the service sector, had to close their businesses, with 62% experiencing a revenue decrease, 12% of small businesses unable to stay open for more than a month, and 32% unable to stay open for more than three months.

Shafi et al. (2020) aimed to determine the impact of the COVID-19 outbreak on MSMEs of Pakistan. They applied an exploratory methodology. They collected data by an online questionnaire from 184 Pakistani MSMEs. According to the findings, the majority of the participating businesses have been significantly impacted by the virus, and they are dealing with a variety of challenges including financial, supply chain disruption, decreased demand, decreased sales, and profit, among others. Furthermore, over 83% of businesses were unprepared or had no plan in place to deal with such a circumstance. In addition, nearly two-thirds of participating businesses claimed that if the lockout extended longer than two months, they would be unable to survive.

Kassa (2021) gathered data from 276 respondents for a study on the determinants of micro and small business continuity during the COVID-19 pandemic. The information gathered was evaluated using descriptive, correlation, and regression analytic methods. People and administrative factors, regulatory factors, economic factors, partnerships, and owner leadership have a positive relationship to micro–small enterprise continuous operations during the COVID-19 pandemic with r = 0.457, 0.558, 0.572, 0.519, and 0.654, respectively. With a value of (p= 0.05), the study regression analysis revealed that partnership, economic considerations, and the owner's leadership have a positive statistical significant effect on the continuous operations of the micro and small firm during the COVID-19 pandemic.

The Japanese government has also made steps to mitigate the pandemic's negative impact on MSEs. The package includes special loans of JPN 1.6 trillion offered to MSEs with zero-interest loans and no collateral, a specific guarantee program for firms affected by the outbreak whose sales and other profits are declining, subsidies to support teleworking in MSEs (including encouraging firms to adopt IT solutions and develop e-commerce sales channels), and MSEs facing a 15% decrease in sales can claim interest compensation and can borrow with no collateral (Organization of Economic Cooperation and Development, 2020). In South Korea, a survey of 407 MSEs performed in March 2020 revealed that the pandemic has affected 61.1% of MSEs, 42.1% of which will be unable to continue operating for more than three months, and 70.1% for no more than six months. A survey of 6000 MSEs in Italy found that 72% of enterprises were directly affected by the pandemic due to a drop in demand and/or supply chain, with 1/3 of respondents estimating a revenue decrease of more than 15% and 18% estimating a revenue decrease of 5-15% (OECD, 2020).

The Chinese government has also taken various measures to ensure MSE sustainability, including encouraging large enterprises to collaborate with MSEs, such as increasing their support in supply chains, in terms of loan recovery, raw material supply, and project outsourcing, motivating MSEs to engage in technology innovation, fostering MSE participation in public procurement by central and local governments, and the Chinese central bank launched a CNY 500 billion re-lending program (OECD, 2020).

Oyewale et al. (2020) investigated the impact of COVID-19-related cases and lockdown measures on issues affecting Nigeria's Small and Medium Scale Enterprises. The data collected was analyzed using a linear probability model to estimate the impact of the pandemic on entrepreneurs and a multivariate probit model to predict the factors impacting coping techniques. The finding showed that the majority of entrepreneurs have been affected (both significantly and modestly) by the COVID-19 pandemics due to partial and total lockdown and movement limitations.

Partially restrictive restrictions increased the chance of low sales among businesses, particularly in the non-agricultural sector.

Ethiopian government has implemented a variety of measures to restrict the virus's spread and mitigate its economic impact, having recognized the pandemic's severe impact on health and the economy. The announcement of a five-month state of emergency, partial lockdown, the suspension of airline flights to more than 80 countries, the provision of 15 billion Birr to private banks by the National Bank of Ethiopia, and the imposition of 14-day quarantine are a few examples. Despite these efforts, Ethiopia's GDP grew by 6.1% in 2020 compared to 8.4% growth for the year 2019 before COVID-19.

MSEs, like those in many other developing countries, play a critical role in the Ethiopian economy by providing jobs, saving money, ensuring a fair income distribution, contributing to GDP growth, and so on. According to a report published by the Federal Job Creation and Food Security Agency in 2019, Ethiopia had more than 602,715 established MSEs between 2015/16 and 2018/19, employing over 3.04 million people, creating more than 5.02 million jobs, mostly for youth and women, and saving 34.4 billion Birr. (Ministry of Trade and Industry, 1997, Ministry of Urban Development and Housing, 2016).

In light of our country's unique circumstances and the peculiar nature of COVID-19, the effect of the virus on MSE has not yet been thoroughly investigated. Thus, the study areas were towns surrounding Addis Ababa, which is currently the pandemic's epicenter, with the virus's transmission increasing day by day (MoH, 2020). The virus's rapid spread in Addis Ababa has a spillover effect on towns that surround the city. And, in comparison to other towns in the Oromia National Regional State, these towns have been heavily struck by COVID-19, and the pandemic has put a strain on ordinary business operations and people movement on MSEs in these towns.

Consequently, we aimed to conduct this research to investigate the economic effect of COVID-19 on MSEs in Addis Ababa surrounding towns of Oromia National Regional State with specific objectives of estimating the effect of the COVID-19 pandemic on the income and employment of MSEs, identifying the challenges faced by MSE during COVID -19 and assessing measures taken to overcome the effect of the COVID -19 pandemic on MSEs. The results of this study could aid policymakers in identifying economic disruption caused by Coronavirus, develop appropriate policies and strategies to help MSE recover quickly from the COVID-19 pandemic's economic crisis, and determining possible short and long-term solutions for the adverse effect of the virus and the findings could also be used as a reference source for future research due to the virus's peculiar nature.

Materials and Methods

Study Design and Source of Data

It has been more than a year since the first case of the COVID-19 pandemic occurred in Ethiopia, and the pandemic's spread has not been stopped. In terms of confirmed cases and deaths, the pandemic is showing an upward trend. A descriptive research design and a quantitative research approach were used in this study.

Micro and small enterprises in the trade/ service and manufacturing sectors provided the primary data. Data were collected from the towns of Burayou and Sululta in Oromia National Regional State, Oromia Special Zone, which surrounds Addis Ababa. These towns were chosen because they have a higher number of established MSEs than other towns, have been impacted particularly severely by COVID-19, and have a high

level of pandemic spillover from Addis Ababa.

Sample Size Determination and Sampling Techniques

The number of MSE (population) from which the sample was drawn is finite and known; the formula provided by Yamane (1967) was used to determine the sample size. Here acceptable error "e" is considered to be 5% to have a representative sample to withdraw relevant response and to keep the heterogeneity among sample MSE (Kothari, 2004).

Therefore: $n = \frac{N}{1+N(e^2)}$ Where,

N = number of MSE's (population),

n = size of sample e = acceptable error (the precision).

Thus, for N=7200, e=0.05,

the sample size (n) was:

$$n = \frac{N}{1+N(e^2)} = \frac{7200}{1+7200(.05*.05)} \approx 379 \text{ plus } 15\% = 436.$$

There are 2149 MSE"s in Sululta town and 5051 MSE's in Burayou town which are actively working with work experience of two and more than two years. During the data collecting period, our target population is MSEs who are working and have work experience two years and above. The target population was stratified into trade/service and manufacturing sectors after obtaining a list of MSEs engaged in trade/ service and manufacturing from the Job Creation and Food Security Office of each town understudy.

The service/trade and manufacturing sectors consists of 5185 and 2015 MSE's respectively. Then, 314 MSE's from service/ trade and 122 MSE's from manufacturing sectors were selected by systematic random sampling technique using proportional sampling to size. Thus, a total of 169 and 267 samples were selected from Sululta and Burayou towns from both trade/service and manufacturing sectors respectively (Table 1). Quantitative primary data were collected using a structured questionnaire from 436 MSEs. The data were analyzed using descriptive methods and presented in terms of figures and tables.

Results and Discussion

Descriptive Results

General Characteristics of MSE

The following analysis was done using data acquired in December 2020 from micro and small businesses in the trade/service and manufacturing sectors. The result showed that 92.4% (403 respondents) of the total 436 respondents were responded properly, with males owned MSE accounting for 57.6% and females owned MSE accounting for 42.4% of the respondents. MSE had an average of 3.5 years of work experience.

Education is a variable which determine the profitability of MSE. It helps them to keep recordings of returns properly and compete in the market better than non-educated operators. The survey result also showed that 96.8% of MSE owners or managers were educated and the remaining 3.2% were not educated (Table 3.1). This showed that MSE has provided a career opportunity for educated operators.

Table 1: Details of Sample Size by Sector and Towns

Towns	No of firms by sector		Sample Selected		Total sample selected
	Trade/ service	Manufacturing	Trade/ service	Manufacturing	
Sululta	2073	706	126	43	169
Burayou	3112	1309	188	79	267
Total	5185	2015	314	122	436

Source: Sululta and Burayou town profile, 2020

In terms of MSE's owners/ managers marital status, the study revealed that 30.52% were single, 64.27 % were married, and the rest were divorced (4.47%) or widowed (0.74%). Because most business owners/managers are married, the pandemic may affect them financially more than other marital status groups. The descriptive result also depicted that the majority of MSEs (76.92%) were registered as microbusinesses, while the remaining 23.08 % were classified as small businesses. In the same way, 76.43% of MSEs worked in the trade/service sector, while 23.57% worked in manufacturing. According to the study results, 63.52 % of MSE work in the shade constructed by the government, while 13.4% and 23.08% work in their own and rented premises, respectively (Table 1).

MSE's were asked whether its workers get contacted with COVID-19 or not. The finding showed that 6.95% of MSE had been contacted with the virus, 88.09% said their workers did not get contact, and 4.96% said they do not know whether their workers or the owner or the managers themselves had been contacted with the virus or not. In line with this, respondents were asked whether they stopped their business operation or not because of fear of COVID-19. Consequently, 60.55% of MSE stopped their business activity temporarily. Out of those who stopped working temporarily, 43.5%, 16.8%, 22.9%, 13.5%, and 3.7% of MSEs stopped working for more than three months, three months, two months, one month, and less than one month respectively. Similarly, 31.02% of MSEs stopped working partially (half a day) while 8.44% did not stop their business operation despite their fear of the virus (Table 2).

Effects of COVID-19 on Employment

To analyze the effect of the pandemic on employment, MSE's employment data were collected at the beginning of March 2020 (before the outbreak of the pandemic) and during December 2020 (after the outbreak of the pandemic). Accordingly, the findings of the survey depicted that 32.3% of MSEs said that they reduced their workers because of the pandemic, while 67.7% did not reduce their workers. Likewise, the survey result revealed that at the beginning of March 2020, MSE had, on average 3.8 workers (both permanent and temporary), whereas MSE had, on average, 2.9 workers in December 2020 (Table 2).

Table 2: General Information of Micro and Small Enterprises

Variables	Frequency	Percent
Education Level of the owner/Manager		
Attended above grade 12	114	28.29
Attended grade 9-12	207	51. 36
Attended grade 1-8	69	17.12
Never Attended	13	3.23
Level of Enterprise		
Micro	310	76.92
Small	93	23.08
Types of Business		
Trade/service	308	76.43
Manufacturing	95	23.57
Working area		
Own premises	54	13.4
Government shade	256	63.52
Rented	93	23.1
Virus contacted		
Yes	28	6.95
No	355	88.09
Don't know	20	4.96
Stopped operation		
Do not stop operation	34	8.44
Yes, stopped partially(half a day)	125	31.02
Yes, stopped temporarily	244	60.55

Source: Computed from survey data, 2021

Out of those MSE who did reduce workers, were asked to state the criteria behind reducing workers. Hence, the finding of the study showed that workers were reduced with no specified criteria (61.5%), those their place can be easily covered by other workers (22.3%), and workers who are not engaged in the main activities of the business (16.2%).However, MSE do not simply reduce workers; they applied a certain set of actions. Thus, allowing paid leave (30.8%), reducing working hours (24.6%), giving unpaid leave (23.8%), and working for reduced pay (20.7%) are the main action taken by MSE to lay off workers (Figure.1).

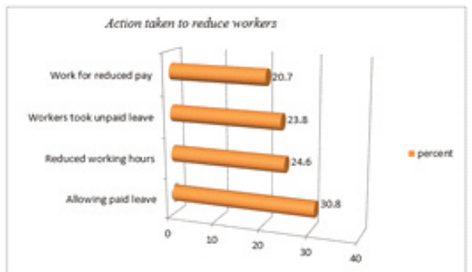


Figure 1: Action Taken by MSE To Reduce Workers

MSE's were also asked to justify why they did not reduce workers at the period of COVID-19. The survey result depicted that majority of MSEs (67.7%) did not decrease their employees because they had no employees employed and run their business themselves including their families (81.6%), demand for their product increases during the pandemic (5.2%) and the nature of their business did not directly affect by the pandemic (13.2%). But, this does not mean that these enterprises have not been affected by the virus.

Regarding the main reasons of fall in income 85.61%, 75.93%, 48.14% , 19.35% and 15.38% of respondents replied that their business was closed temporarily because of COVID -19, number of customers was reduced because of fear of the virus, demand dropped, workers stayed at home, and input problem were the main reasons, respectively.

Table 3: Descriptive Results of Employment

Description	Obs	Mean	Min	Max	t-value
Total workers at the beginning of March 2020	403	3.77	0	24	
Total workers at December 2020	403	2.93	0	24	
Worker laid off(Difference)	403	0.83	0	14	9.71
Workers reduced by enterprise					
Microenterprise	310	0.44	0	6	
Small Enterprise	93	2.12	0	14	
Workers reduced by sector					
Trade/service	308	0.51	0	8	
Manufacturing	95	1.85	0	14	

Obs=Observation. Source: Computed from survey data, 2021

Effects Of COVID -19 on Income and Savings of MSE

To compare the effect of COVID-19 on the income of MSEs, the annual income of the MSE's for the years 2019 (before the outbreak of the pandemic) and 2020 (after the outbreak of the pandemic, end of December 2020) were collected. Savings data were also gathered for the same years. As a result, 92.6% of MSEs said that their annual income for the year 2020 was reduced compared to the annual income of the year 2019 (Table 3).

Agreeably, 75.19% of MSEs said that they saved some amount of money from their annual income for the year 2019 and the rest 24.81% did not save. The main reasons for not saving are lack of market for goods and services (32%) and failure to compete with other similar businesses (26%). Similarly, 43.42% of respondents saved some portion of their annual income and 56.58% of respondents did not save for the year 2020.

Table 4: Summary of Income and Savings of MSE for the Years 2019 And 2020

Variable	Obs	Mean	Minimum	Maximum	t-value
Annual income_2019	403	170,174.4	8000	2,000,000	
Annual income 2020	403	127,433.8	2,000	1,800,000	
Difference	403	42,740.60			6.0657
Annual saving_2019	403	24,865.11	0	600,000	
Annual saving 2020	403	12,345.06	0	370,000	
Difference	403	12,520.05			5. 4948

Obs=Observation Source: Computed from survey data, 2021

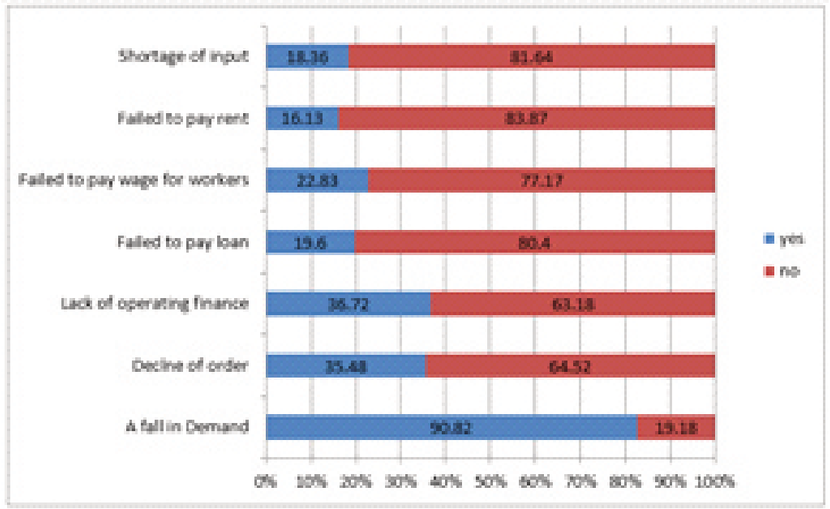
Table 5: Main Reasons for Fall in Income

Main reasons for fall in income	Percentage	
	Yes	No
The business closed temporarily because of COVID-19	85.61	6.45
Few customers because of COVID 19	75.93	15.88
Demand dropped	48.14	43.67
Can't get input	15.38	76.43
Workers stayed home because of fear of the virus	19.35	72.46

Source: Computed from the survey data, 2021

Challenges Faced by MSE During COVID-19

There are several challenges faced by MSE during COVID-19 which potentially hinders the growth of MSE. The survey result portrayed that 90.82%, 35.48%, 36.72%, 19.60%, 22.83%, 16.13%, and 18.36% of MSEs stated that main challenges of their business operation were a fall in demand, the decline of orders from customers, lack of operating finance to produce goods and services, failure to pay wage to workers, failure to pay loans to banks, microfinance, and individuals, and shortage of inputs to produce goods respectively (Figure 2).

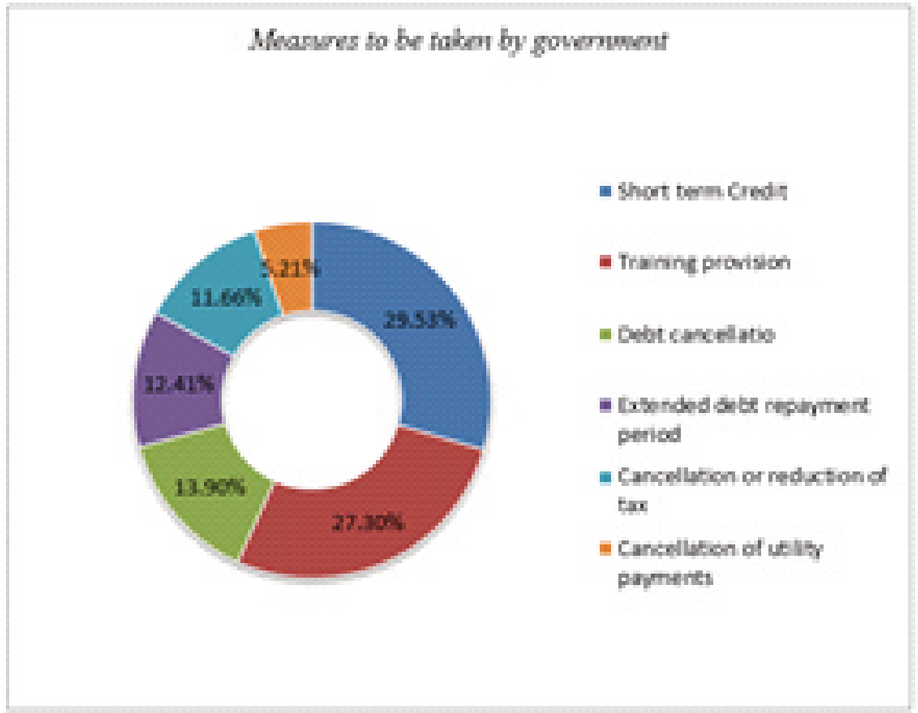


Source: Own computation, 2021

Figure 2: The Percentage Share of Challenges Faced by MSE

Measures to be Taken to Combat the Effect of the COVID -19 On MSEs

Different measures need to be taken by the government, owners of MSE, and other concerned bodies to make MSE resist and survive during this pandemic period. To this effect, MSEs specifically want the government to take a variety of steps to mitigate the coronavirus's negative effect on income and employment. Consequently, the survey result revealed that short term credit (29.53%), provision of training (27.30%), debt cancellation (13.9%), extended debt repayment period (12.41%), cancellation or reduction of tax (11.66%), and cancellation of utility payments (5.21%) are measures which need to be taken by government (Figure 3).



Source: Own computation from survey data, 2021

Figure 3: Measures to be Taken by Government

Discussion

The descriptive results revealed that the majority of MSE's were engaged in the trade/ service sector. Being engaged in the trade/ service sector makes business owners contact easily with their customers more frequently than the manufacturing sector, so that, the likelihood of contracting the virus is higher among the customers and owners of the business and could result in, decline of number of customers, decreased revenue and savings for business owners. From table 3.1, 60.55% and 31.02% of MSEs were stopped their business activities temporarily and partially (half a day) respectively and out of those that stopped their work temporarily, 60.3% of MSEs stopped their work for three and more than three months. This means that the majorities of business owners have ceased working as a result of the pandemic's spread and implies the degree of severity of the virus over business activities of MSEs. Decreasing workers from their permanent and temporary jobs do not only affect the workers and their family life but also affects the growth of the enterprise itself and ultimately affects the economic growth of a country. This also puts enormous economic pressure on MSE in particular, as well as Ethiopia's GDP in general. This finding is consistent with previous studies done by OECD (2020), Bartik (2020), and Senz (2020).

One of the primary goals of establishing micro and small enterprises is to create job opportunities for young people. Nonetheless, the pandemic could have an impact on the MSE supply side. It has an effect on the number of people a firm employs, as well as the workers' and business owners' income. From table 3.2, 32.3% of MSEs reduced their workers. During the beginning of the spread of the virus, enterprises have, on average, 3.8 employees while nearly after a year; enterprises have, on average, 2.9 employees.

This implies that as a result of the coronavirus, MSEs were forced to lay off employees, on average by 0.83 workers. The t-test statistics also showed that there is a significant mean workers difference between workers existed before the outbreak of the virus and after the outbreak of the virus at a probability level of less than 1% (p=0.000& t=9.71) which shows that coronavirus has put an adverse effect on the employment of the enterprises. This finding is compatible with the findings of ILO (2020), Oyewale et al. (2020), Fabeil et al. (2020), Zeidy (2020), and Kassa (2021).

In terms of enterprise types, small enterprises were hit- hardest compared to micro-enterprises. Small enterprises, on average, reduce 2.12 workers but micro-enterprises reduced, on average, 0.44 workers. This is because, at the beginning of March 2020, micro-enterprises have, on average, 2.8 employees while small enterprises have on average 7 employees, so that, number of workers of micro enterprises is so small and most micro-enterprise owners/mangers run their business by themselves.

Besides, MSE engaged in the manufacturing sector severely affected by the coronavirus compared to the trade/ service sector. Manufacturing enterprises reduced, on average, 1.85 workers, but trade/service enterprises reduced, on average, 0.51 workers (Table 2). The t-test statistics also show that the mean decrease in workers between the manufacturing and the service sector is statistically significant at less than 1% probability level (p=0.000 & t=-6.94). Since, small and micro enterprises make up 57% and 13.55% of the manufacturing sector, respectively; small enterprises reduced more labor than micro-enterprises in the manufacturing sector. This finding has important policy implications because the government wants to encourage young people to work in the manufacturing sector and the sector is the backbone of the transition from an agricultural-based economy to an industrial development economy. A similar finding was also reported by OECD (2020), Bartik (2020), and Amuda (2020).

Income is a variable that determine growth and continuity of enterprises. If the income of an enterprise reduced significantly, then MSE's could fail to pay wages for their employees and expand their business. MSE's were asked whether their income is affected by COVID-19 or not. Accordingly, based on the survey result presented in table 3.3, MSE's average annual income for the year 2019 was 170,174.4 Birr and 127,433.8 Birr for the year 2020, its mean difference is 42,740.6 Birr.

The t-test statistics showed that there is a significant mean annual income difference between the mean annual income of 2019 and the mean annual income of 2020 at a probability level less than 1%(p=0.000, t=6.0657). As the same time, MSEs were also requested to reason out for why the annual income of MSE for the year 2020 was declined compared to the year 2019.

Consequently, 85.61 % of respondents replied that their business was closed temporarily because of COVID -19, 75.93% of respondents said that number of customers were reduced because of fear of the virus and 48.14% said demand for their firms' product was dropped were the main reasons. This suggests that COVID -19 was the main

reason for the fall in income of micro and small enterprises for the year 2020 compared to the year 2019 (Table 3.4). These findings are consistent with previous studies done by Bartic et al. (2020), UNDP (202b), WB (2020a) and Shafi (2020).

In terms of enterprise types micro-enterprises annual income was reduced by 43, 586.97 Birr while small enterprises income was reduced by 39,919.35 Birr, but, the mean difference in income between micro and small enterprise is statistically insignificant (p=0.4134, t=0.2190). Besides, the annual income of enterprises involved in the manufacturing sector fell by 45,593.68 Birr whereas the income of enterprises engaged in the trade/service sector declined by 41, 860.58 Birr, however, the mean income difference between enterprises engaged in trade/service and manufacturing sector is statistically insignificant(p=0.4112 & t= -0.2246). This implies that being micro, small, manufacturing or trade/service COVID -19 adversely affect income of MSE. This finding was compatible with the findings of Kassa, (2021) and UNDP (2020).

Savings is the amount of money left over that has not been consumed or transferred for future use after direct tax payments are subtracted from current income (Cronje, 2009). The findings of the survey revealed that, in the year 2019, almost 25% of MSEs did not involve in saving due to a lack of market for their product resulted and failure to compete with other firms, however, in the year 2020, nearly 57% of MSEs did not save due to a drop in income caused by COVID-19 and shut down of business. Furthermore, the mean annual savings were 24,865.11 Birr for the year 2019 and it was 12,345.06 Birr for the year 2020 (Table 3).

The mean annual savings difference between the annual savings of 2019 and 2020 is also significant at a probability level of less than 1 %(p=0.000 & t=5.4948). This implies that COVID-19 has a negative impact on MSE savings. A nearly similar find is also reported by Beraha and Đuričin (2020), OECD (2020), and Shafi (2020).

Regarding challenges faced MSEs during the pandemic, the key challenges reported in figure 3.2 revealed that drop in demand for firms' goods and services, a loss in client orders, and a shortage of operating finance to create goods and services. Because their income plummeted, some businesses were unable to repay their loans to microfinance institutions and banks. Initiated by COVID-19, there are few businesses, particularly those in the trade/service and manufacturing sectors, have not yet resumed operations. These findings do not contradict with the findings of OECD (2020), UNDP (2020b), welter et al. (2020), and Oyewale et al. (2020).

To counteract COVID -19's negative impact on MSE economic activity, both the enterprise's owners and the government should devise and apply a variety of strategies. To solve financial problem faced by MSE during the pandemic, MSEs borrowed from individuals (50.9%) and microfinance (26.9%). Furthermore, MSEs biggest challenge during the pandemic was a lack of raw materials.

Thus, to deal with the shortage of raw materials, MSE reduced output (59.8%), outsourced orders (23.27%), and delayed goods delivery to consumers (17.15%). It is apparent that training will be critical in reducing the virus's impact and implementing preventative measures. As a result, experts from the ministry of health and MSE offices trained 64.02% of respondents on the topic of virus containment and techniques to reduce the virus's impact on MSEs commercial activities and 85.2% of those who were trained said that the training helped them save themselves, their colleagues, and their customers, as well as kept their firm afloat during the pandemic. MSE also wants a

longer debt repayment period, a tax break, and more credit to establish a new line of business, such as sanitizer manufacturing. MSEs owners also said that the nearby municipal authority needs to provide more training on how to contain the infection and keep their business lucrative during this difficult period. This finding is in accordant with the findings of Bartica (2020), WB (2020a), Paolo and Andrea (2020), and Fabeil et al. (2020).

Conclusion

The general objective of the study was to examine the economic effect of the COVID-19 on MSEs in Addis Ababa surrounding towns of Oromia National Regional State. The study used a descriptive research design and quantitative research approach. Quantitative data was collected from 436 MSEs which show conditions of MSE before and after the outbreak of the pandemic. Out of 436 questionnaires distributed to MSE's only 403 were valid with a response rate of 92.4%.

The findings of the descriptive result indicated that 76.92% of MSEs were registered in micro business enterprises and the remaining 23.08% were registered in small enterprises. Similarly, 76.43% of MSEs engaged in trade/ service, and 23.57% were engaged in the manufacturing sector. Due to the pandemic, 60.55% and 31.02 % of MSEs have stopped their activities temporarily and partially respectively. Among those entrepreneurs that stopped operation temporarily, 60.3% ceased their work for three and more than three months.

Regarding employments, 32.3% of MSE reduced their workers while 66.1% of them did not reduce workers. The survey result further revealed that before the outbreak of the pandemic, MSE had, on average 3.8 workers whereas after the pandemic MSE had, on average, 2.9 workers. This implies that as a result of the coronavirus, enterprises were laid off employees, on average by 0.83 workers and the difference is statistically significant at less than 1% probability level. Compared to micro-enterprise, small enterprises lay off more workers and in terms of sector, manufacturing hit hardest than trade/service sector.

Concerning to income and savings of MSE, 92.6% of MSEs said that their annual income for the year 2020 was reduced compared to the annual income of the year 2019. Similarly, the survey result showed that MSEs annual income for the year 2019 on average was 170,174.4 Birr while it was Birr 127,433.8 for the year 2020. The mean difference was 42,740.6 Birr which is significant at less than1% probability level.

The main reason/s that made income fall during the pandemic (Year 2020) was the closing of business temporarily because of COVID-19 (85.61%), reduction of customers because of fear of the virus (75.93%), and dropping of demand for their product (48.14%). Besides, the mean annual savings were 24,865.11 Birr for the year 2019 whereas it was 12,345.06 Birr for the year 2020, and the mean annual savings difference is statistically significant at a probability level of 1%.

MSE faced many challenges during COVID-19. The main challenges were a fall in demand, the decline of orders from customers, lack of operating finance to produce goods and services, failure to pay the wage to workers failure to pay loans to banks, microfinance, and individuals. Business owners demand specific measures to be undertaken by the government to make their business revive and sustain, so that, the study revealed that short term credit, provision of training, debt cancellation , extended debt repayment period, cancellation or reduction of tax, and cancellation of utility payments are measures which need to be taken by the government.

Finally, it is possible to conclude that COVID-19 has resulted in a decrease in MSE's employment, income, and savings. To mitigate the effect of COVID-19 on MSE, the government at all levels should provide technical assistance and training to business owners who are vulnerable to COVID-19 on how to develop a business recovery plan and new line production, extend the debt repayment period, and provide short-term credit to help MSE recover from the virus's negative effects.

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Authors' Contribution

Both authors developed the proposal, designed data collection tools, and conducted fieldwork; however, Meshesha Zewdie did the statistical analysis and write-up, while Dessalegn Shamebo reviewed the manuscript.

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