Analysis of All factors Against Food and Beverages (F&B) MSME's Business Turnover in Surabaya: during COVID-19

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A B S T R A C T

Surabaya and other cities in East Java played a significant role for economic development during the expansion of COVID-19 in 2020, most of MSME productivity in Indonesia was dramatically decreased. Nevertheless, Surabaya city had 30% increased MSME productivity from the end of 2020. This research aims to examine the factors of increased or decreased turnover of F&B (Food and Beverages) MSMEs during the COVID-19 pandemic, so that the results of this research can be a survival strategy for MSMEs, especially during the pandemic. The research data was collected through an interview process with 110 food and beverage MSME who are from Surabaya City (as scope as members of Surabaya Kriya Gallery). After that, MSMEs will be grouped into MSMEs according to how increased or decreased turnover they got. Based on this, firstly, we collect the survey of 110 owners as a sample, with Lemeshow sampling; Second, analyze data with binary logistic regression; Then, analyze the influence of the COVID-19 pandemic situation on the MSMEs turnover. It can be revealed that all independent variables (business training, gender, location, and marketing) both partially and simultaneously affect their turnover but. Business location has been supported by marketing. Strategies undertaken by the government to overcome the problems faced during the COVID-19 pandemic have been carried out such as providing webinars (e-commerce, workshops, such as baking class, packaging class) and providing cash assistance to those in need.

Keywords: COVID-19, MSME, turnover, gender, business location, logistic regression
JEL Classification Code: D24, R10, C31, D00

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INTRODUCTION

Corona Virus Diseasese2019 (CO-VID-19) is an infectious disease of the SARS-COV-19 virus that occurred in December 2019 in Wuhan City, China. This virus is a new virus from the Coronaviridae virus family which is like the SARS virus. Symptoms of this disease are characterized by fever, cough and shortness of breath and some people experience diarrhea, nausea, and runny nose (WHO: 2020). The rapid spread of COVID-19 cases has forced the government as a policy maker to take several quick steps to overcome this, starting with implementing the 3M movement (wearing masks, washing hands, and maintaining distance) to accelerating the vaccination program. The impact of COVID-19 was not only felt by the health sector but also affected the economic sector (Junaedi & Salistia, 2020), it was proven that Indonesia's economic growth in 2020 was at a minus number in the second quarter of 2020 it was -5.32, in the third quarter -3, 49 and fourth quarter -2.19 (BPS, 2022). In the previous year, economic growth was still at 5% (BPS, 2022). Regions in Indonesia are also affected the economic downturn, as happened in East Java Province. East Java's economic growth began to slow down in the first quarter, growing by 3.04%, in the third quarter of 2020 it worsened with a growth of -5.9% (BPS, 2022). During the COVID-19 pandemic, almost all businesses experienced contraction, however, there were several business fields that experienced growth, the information and communication business, health services and agriculture, forestry, and fisheries. This has changed the entire order and activities of the economic sectors including the Micro, Small and Medium Enterprises (MSMEs) sector in East Java, which are no longer running as usual, but MSMEs need to change their business strategy to survive during this pandemic (Soetjipto, 2020).

The current COVID-19 pandemic has had an impact on various sectors. Based on Figure 1 it shows that 41.57% of those affected were the manufacture, 23.35% were the provision of accommodation and food and drink, 18.60% were wholesale and retail trade, car, and motorcycle repair, 13.31% were other sectors and 2.94% for agriculture, forestry, and fisheries (aminy, 2020). Another sectors in figure 2 which include hotel, restaurant, media, healthcare, government services, advertisement, construction, water and electricity supply, finance, real estate, entertainment, education, communication and
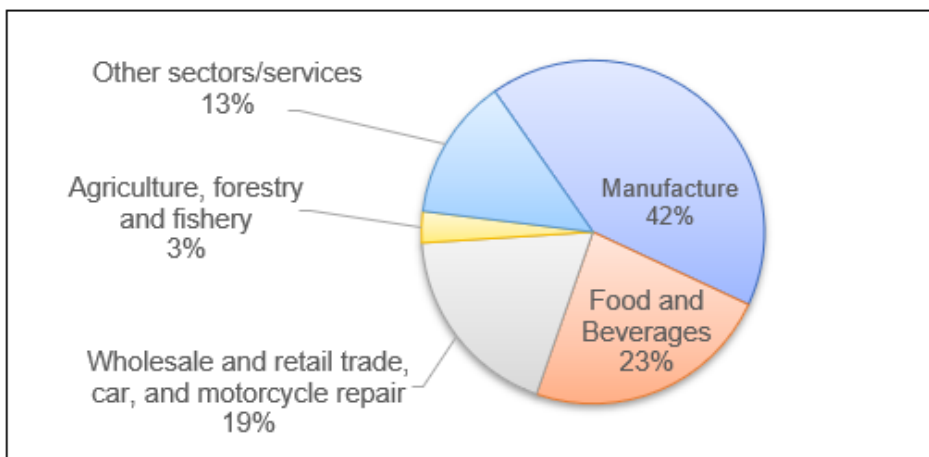

Figure 1.
Sector that affected by COVID-19

Source: Aminy (2020)

information, transportation and warehouse and last is corporate services however, other sectors/services excluded dating services, gambling, professional organizations, community organizations, social organizations, political organizations as listed in economic census 2016 (BPS,2018).

Furthermore, problem identification was carried out on the affected MSMEs, where the results obtained are shown in Figure 2 which explains the impact that faced by MSME's during COVID-19.

in the productivity of MSMEs in Indonesia (Aminy, 2020).

Surabaya City as the Capital City of East Java Province has an important role in driving the economy of East Java Province and is known as a center of industry and trade. The economy of East Java Province, especially the Surabaya Madya City, cannot be separated from the performance of MSMEs which make a large contribution to the economy of the Surabaya Madya City is 57.2% (BPS, 2022).
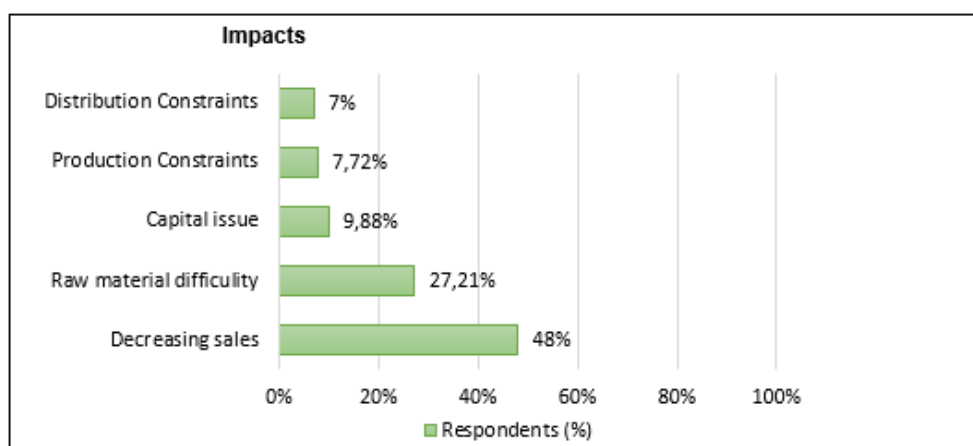

Figure 2.
The impact faced by MSMEs during COVID-19
Source: Aminy (2020)

MSMEs have endured the many impacts caused by the presence of COVID-19, this is explained in Figure 3. The first biggest impact is that there is a 48% decrease in sales/demand/customers. In addition, the impact on MSMEs was that 27.21% of MSMEs found it difficult to obtain raw materials, 9.88% of MSMEs experienced capital, and 7.72% of MSMEs experienced production constraints. COVID-19 has an impact on all economic sectors due to the existence of COVID-19 the mobility of people is restricted, this is evidenced by the PSBB (Large-Scale Social Restrictions), PPKM (Implementation of Restrictions on Community Activities) policies, independent isolation and work from home, school online and other programs. So that this restriction causes a decrease

The number of MSMEs in the Municipality of Surabaya continues to increase. From 2016 there were 25,353 units and continued to increase until in 2018 there were 26,854 business units (BPS, 2022).

The sector that dominates the sector-based figure 3 is wholesale and retail trade as well as car and motorcycle repair with a total of 330,737 units. Accommodation and food and beverage providers are the second and the processing industry is the third. Since the COVID19 pandemic, the productivity of MSMEs has begun to experience a drastic decline since the government imposed PSBB in April 2020, as well as PPKM on standby 4 which occurred from July 2021 to August 16, 2021, all access to Surabaya Madya City was closed (detiknews, 2021). Food and bever-

age SMEs are included in the manufacture because food and beverage SMEs include the processing of agricultural, forestry and fishery products into food and includes semi-finished products that do not directly become food products that are ready for consumption, but the value can be greater or less (OSS: 2022). Because the Food and Beverage MSMEs come from the processing industry sector, they will be affected by the COVID-19 pandemic.

Prior to the COVID-19 pandemic, food, and beverage MSME activities experienced fantastic developments, as evidenced by the handling of the Mayor of Surabaya Madya City in 2018 with various trainings on using online marketing and holding MSME bazaars and establishing MSME centers including food and beverages. However, since the COVID-19 pandemic occurred, all food and beverage MSME actors in the Municipality of Surabaya were unable to serve customers at the place (dine in) during the PSBB and PPKM policies, which caused food and beverage SMEs in the Municipality of Surabaya to suffer losses resulting in a decrease in people's purchasing power.

Some previous research has been conducted by Nainggolan (2016) to analyze gender with turnover in Surabaya city, believes that men's gender performance generates greater turnover than women above 2.7 million rupiah per month. The demand for the necessities of life encourages women to work and has a good impact on the family's economy. Men's gender has work better than women. Contrast to Nainggolan, Kassa (2021), Damoah & Obi Berko (2020), and Koloma (2022) believe gender didn't affect business turnover, so gender is not a barrier to increasing MSME's business turnover. Kassa (2021) Tundui and Tundui (2012) argue that business progress starts from the best business characteristics, especially the location of the business. Marcazzan et al (2022) said that geographic location has an effect to resilience against crisis. Sofiati and Murniawaty (2019) said business location may affect turnover and gives positive effect. With strategic Indrasmitha et al. (2022) has similar result that offline marketing especially buys products at its location may affect turnover, so did online marketing. As surveyed consumers on gro-
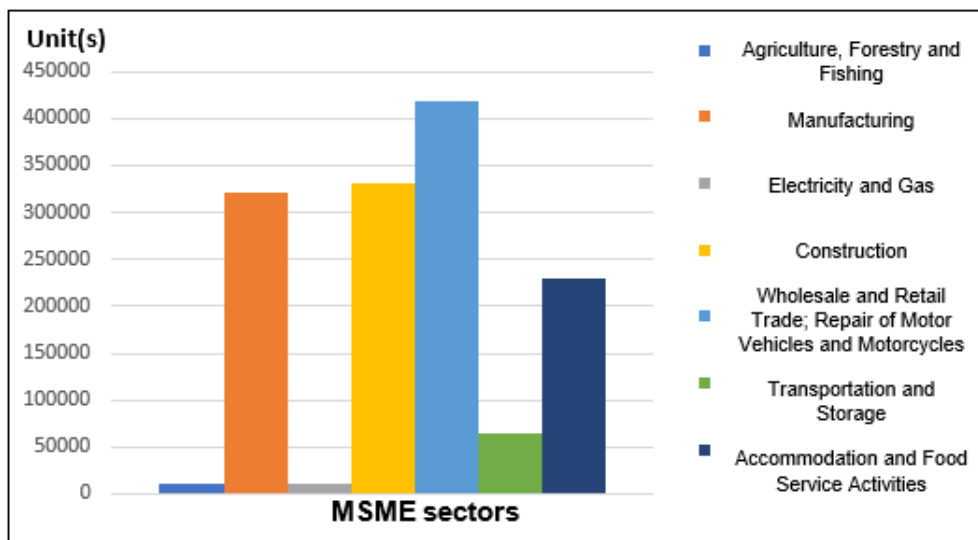

Figure 3.
The number of MSMEs in Surabaya City by field sector
Source: Office of Cooperatives and MSMEs of East Java Province, 2021.
Accessed via diskopukm.jatimprov.go.id

ceries, they had two opinions. One, they prefer online purchase for social distance and other one prefer offline for looking some good green products. These surveys use probit with two criteria in dependent variables. Rahman, Ampa & Rijal (2023) did their research about location business but more focused on feasibility location business, that may influence to increasing sales in culinary MSME. Rahman, Arifianto, Hapsari (2019) said that woman do business better if have technology access and experience from business training. Wahyudi et al (2014) said that location as well as having own home or choosing location business affects to business of a business. Choosing a location is strategic to gaining profit for small business. Khusaini et al (2017) believe social capital and location have an impact on MSME's performance hence both are crucial key for increasing its performance. Terrell and Nafziger (1996) believed people who born and grown up in certain city can increase their survivability but some firm who based caste more likely affect to survive (these research according in India). But these case only in India, not for Indonesia has no caste. Loscocco et al (2004) believe females who do home-business got more profit than outside of their home, are related to business location and marketing method they do. Agree that Nainggolan's statement that demand of necessities empowers women to do small businesses. Sana Ullah et al (2019) believe that human capital affects turnover for resistance against the economic crisis. Some survivability in small firm in Pakistan comes from network, marketing, and experience.

According to the research gaps, they use basic theory they used is simply markets. Some firms produce only one output, it is total revenues are given by the price the product and its total output, which is from capital and labor (Nicholson, 2010). Assume that business turnover is total revenue because they have same resources which from price the products and total output. Total output which from capital and labor in MSM especially in capital using a start-up capital and human capital and labor assumed excluded of output because focused on MSME that only one employee who are owner of their small business in Surabaya City. Based on the background and previous research, the purpose of this study is to analyze the factors that influence the turnover of food and beverage MSMEs in Surabaya during COVID-19. The object of this research is Surabaya Madya City because Surabaya Madya City is the center of industry and trade in East Java Province. This study uses variables: MSME turnover, MSME owner gender, start-up capital, business location, marketing methods and business training.

METHODOLOGY

This research approach is a quantitative approach, the quantitative approach is a research method that is based on concrete data, the research data is in the form of numbers that will be measured using statistics as a calculation test tool, related to the problem under study to produce a conclusion. carried out by carrying out statistical tests on the hypotheses that have been formulated (Sugiyono, 2018: 13). The analysis tool used is Logistic Regression (Logit) and processed using STATA 14. The data source used is primary data, that directly provides data to data collectors (Sugiyono, 2018: 456). The type of data used is cross-sectional data, which is data collected by observing multiple subjects at a single point in time. The data uses a questionnaire that has been prepared in advance. Respondents in this study were food and beverage MSME owners in Surabaya City. The location for conducting the survey at the Surabaya City Coordinating Ministry for Cooperatives and SME (kemenkopukm) is in the Siola Hall, Surabaya City. The criteria used, among others, are that the MSME actors are food and bev-

erage MSME, and the location of their business is in the city of Surabaya. This survey consists of the identity of the food and beverage MSME owner (gender) and business aspects (amount of turnover from 2020~2021, business location, frequency of business training, business capital). The years 2020 and 2021 for turnover are for comparing how their turnover condition, is decreased, or increased. Reason using logit regression is dependent variable, which is turnover, is dummy type (with two criterions: decreased or increased). Increase or decrease in F&B's MSME turnover depends on the difference between the 2021 turnover and the 2020 turnover of each respondent. To Establishing MSME needs start-up capital or would call capital (k) are numeric and transformed to natural logarithm for decreasing bias. Number of samples used based on Lemeshow formula and surveyed on certain event i.e. webinar in Siola Hall that attend most of entrepreneur (owner of) certain sector, esp. Food and Beverages (F&B).

Research Models and Methods

First determining the sample size in this study used the Lemeshow formula (1997), this is because the total population is unknown. There is the Lemeshow formula:

$$n = \frac{Z^2 p(1-p)}{d^2}$$

where n is minimum number of samples required, z is standard value of the distribution according to the value of $\alpha = 5\% = 1.96$, p is outcome prevalence, because data has not been obtained, then 50% is used, d is Accuracy level of 10%.

Based on the formula, it can be calculated:

$$n = \frac{1{,}96^2 \text{X} 0{,}5 \text{x}(1-0{,}5)}{0{,}1^2} = 96{,}04$$

The number of samples is rounded up to 96 food and beverage trading businesses. The logistic regression method is used to determine the effect of independent variables in the form of scale/interval and categorical data on the dependent variable in the form of categories or binary (Gujarati, 2009). Using logistic regression, the results will be obtained in the form of probabilities. In this study, binary logistic regression, because the dependent variable used is binary, that is, it has a value of 1 if an event occurs and 0 otherwise. Estimation of the logit equation according to Gujarati (2009):

$$L_i = \ln\left(\frac{P_i}{1-P_i}\right) = \beta_1 + \beta_2 X_i + U_i$$

Empirically, the logistic model used in this study has a value of 1 if the decreasing turnover and a value of 0 if the increasing turnover. When this is interpreted systematically, the possibility of increasing turnover is as follows:

$$P_i = \frac{1}{1 + e^{-(\beta_1 \text{Gender}_i + \beta_2 \text{Training}_i + \beta_3 Location_i + \cdots + \mu_i)}}$$

This equation above can be simplified as follows:

$$1 - P_i = \frac{1}{1 + e^{-(Y_i)}} \frac{e^{(Yn)}}{1 + e^{-(Y_i)}}$$

It becomes a logistic regression function. Pi describes the possibility of an event occurring (business turnover has increased). If viewed from the reverse side (decreased turnover) or if an event does not occur, this can be written as follows:

$$1 - Pi = \frac{1}{1 + e^{(Y_i)}}$$

$$\frac{P_i}{1 - P_i} = \frac{\dfrac{e^{(Omzet)}}{1 + e^{-(Y_i)}}}{\dfrac{1}{1 + e^{(Y_i)}}}$$

The ratio of the probability of an event occurring compared to the probability of the event not occurring is called the

odds ratio. So, the logarithmic value of the odds ratio is notated as follows:

$$L_i = \ln\left[\frac{P_i}{1 - P_i}\right] = Y = \beta_0 + \beta_1 K_i +$$

$$\cdot \beta_2 \text{Training}_i + \beta_3 Marketing_i + \cdots + \mu_i$$

This equation describes the logit equation model. In the logit equation, the logarithm of the odds ratio is linear in the variable and linear in the parameter. So, the research model is:

$$Turnover = \beta_0 + \beta_1 K_i + \beta_2 \text{Training}_i +$$

$$\beta_3 Marketing_i + \beta_4 Location_i + \beta_5 Gender_i \, \mu_i$$

Variables are used based on equation above are turnover, according to Nainggolan (2016) MSME's turnover is best dependent variable because it describes their productivity in F&B sector MSME. K which are capital are asset value excluding land, to describe how asset they have and measuring enterprise level, could do asset they have and turnover they gain (Soetjipto, 2020). Business training (variable training), some owners or employees at least do business training. Can be through webinar, workshop and courses and has benefit both knowledge, information, and relation. Marketing, online or offline, is essential. Indrasmitha (2020) and Rahman et al (2019) researched that marketing affects business turnover. Gender based owner on their MSME for measuring quality for productivity, as did Nainggolan (2016) that which gender most productive, but in 2016 was most of owner are male, unlike 2020 is more female owned their business than males. Business location, which is owner conduct economic activities, both producing and selling. Tundui and Tundui (2012) and Sofiati & Muriaty said strategic location and easy access will increase turnover. However variable business location is excluded as start-up asset (as capital).

RESULTS AND DISCUSSION

Before carrying out the results of the analysis test, first carry out the survey results to see the description of respondents. Table 1 shows the total turnover with two criteria: an increase in total turnover

Table 1.
Descriptive Statistic

Variable	Criteria	N	Marginal percentage
turnover	Turnovers are increased (0)	71	64.55%
	Turnovers are Decreased (1)	39	35.45%
Marketing	Online and Offline (0)	56	56%
	Offline (1)	54	44%
Business Location	Own House (1)	93	84.55%
	Parent's House (2)	5	4.55%
	Rent (3)	9	8.18%
	Public (4)	1	0.91%
	Other buildings (5)	2	1.82%
Gender	male (0)	10	9.09%
	female (1)	100	90.91%
Business Training	at least had once (0)	38	34.55%
	never (1)	72	65.45%

and a decrease in total turnover from 2020 and 2021.

From the results of the descriptive statistics above, it shows that the data analyzed was 110 and all were processed, and nothing was empty. This can be seen from the total, valid and missing. Of the 110 data, the turnover is where the turnover has increased by 71 and decreased are 39. As for the gender, there are 10 males, 100 for females. Meanwhile, there are 102 high school graduates and 8 are ungraduated. For start-up capital for establishing F&B MSME are showed on Figure 3.

After the data from a survey conducted at a seminar held by Kemenkopukm Surabaya, follows with two methods for analyze results:

1. Simultaneous logistic regression test results

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Number of obs =     110
LR chi2(6)    =   23.58
Prob > chi2   =  0.0006
Pseudo R2     =  0.1649
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The results above p-value are 0,0006 which is below the degree of freedom (5%). Hence the conclusion is all independent variables are simultaneously significant to dependent variables.

2. Binomial logistic regression test results (odd ratio and marginal effect)

From the results of statistical tests, the logistic regression equation is obtained:

$logitTurnover = -1.781 - 1.523gender_1 + 0.972businesslocation_2 + 0.973Training_3 - 0.9269marketing_4 - 0.1756KI_5$

The negative result on the gender variable means that if gender is 0 (male) then the log odds of p-value (acceptance is 1 or accepted) is 1.523 lower than
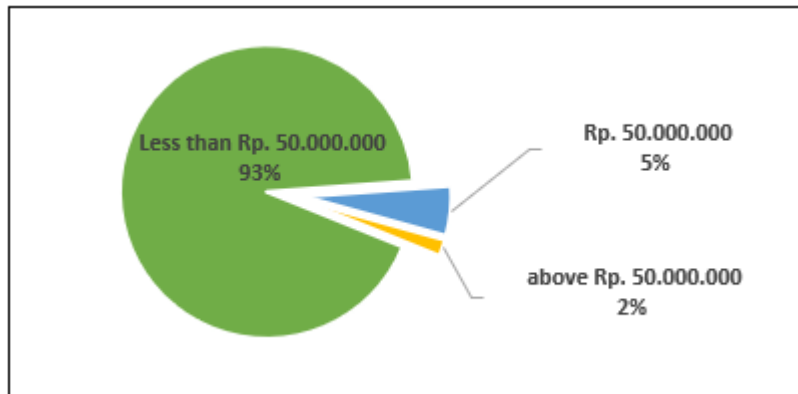

Figure 4.
Respondents' Start-up Capital in Surabaya City

Table 2.
Binomial Logistic Regression Results (Odd Ratio)

	Coefficient	Std. Error.	t	P>t	[95%conf.	Interval]
Marketing	-0.92686	0.479364	-1.93	0.053	-1.8664	0.012673
Training	0.973082	0.505896	1.92	0.054	-0.01846	1.964619
Business Location	0.972077	0.317787	3.06	0.002*	0.349226	1.594928
Gender	-1.52317	0.742099	-2.05	0.04**	-2.97766	-0.06868
K	-0.17557	0.080501	-2.18	0.029	-0.33335	-0.01779
constant	1.781268	1.427895	1.25	0.212	-1.01736	4.579891
Information:		*significant from the value of α=1%.				
		** significant from the value α=5%.				

gender is 0 (female). We compare gender with a value of 1 and 0 because gender is a dummy variable. The coefficient of the gender variable is negative, indicating that there are many female food and beverage MSME actors who carry out economic activities. The business training variable has a positive effect on turnover by 0.97%, as well as for the business location variable by 0.97%. Only the business location variable statistically has a significant effect on turnover (probability value less than 1%).

in table 4.1 where 92% of the owners are women (Based on surveys obtained in the field, MSME Food and Beverage business actors in the SKG, the business actors are more women than men). This is the same in research conducted by Nainggolan (2016) but different to Kassa (2021), Damoah & Obi Berko (2020), and Koloma (2022) that gender does not affect the increase in turnover. However, contrast Loscocco et al (2004) that females did home business especially MSME better. The results are

Table 3.
Binomial Logistic Regression Results (Marginal Effect)

	Dy/dx	Delta-method std. error.	t	P>t	[95%conf.	interval]
marketing	-0.17147	0.083764	-2.05	0.041**	-0.33565	-0.0073
training	0.180022	0.088415	2.04	0.042**	0.006732	0.353312
business location	0.179836	0.049281	3.65	0.000*	0.083247	0.276425
gender	-0.28179	0.127771	-2.21	0.027**	-0.53222	-0.03136
K	-0.03248	0.013787	-2.36	0.018**	-0.0595	-0.00546
Information:		*significant from the value of α=1%.				
		** significant from the value α=5%.				

From the results of statistical tests, the logistic regression equation is obtained:

$$logit Turnover = -0.2818 gender_1 + 0.1798 business\ location_2 + 0.1800 training_3 - 0.17147 marketing_4 - 0.03248 K_5$$

These two methods' results are different. Marginal effects methods result in smaller value of coefficient and probability. The result of marginal effects clearly all significant below degree of freedom (5%) hence all independent variables partially affect to business turnover. Marginal effects give an indication of the way dependent variable changes if certain variable independent changes.

The results of this study indicate that based on the value of the degrees of freedom, gender has a partially significant effect on the income earned. Based on the significance test with an independence value of 5%, gender significantly affect the amount of turnover both in conditions of increased turnover and decreased turnover during COVID-19 (2020~2021) even though the survey results table is shown

genuine where the Regional National Craft Council (Dekranasda) held a Women Expo exhibition containing MSME exhibitions. From there, this program has the benefit of female gender business owners and is also a place to introduce products and the great role of women in the economy (Pemerintah Kota Surabaya,2021). In addition, there is also a womenpreneur program in the form of online marketing training (this program is held by Dekranasda, SKG together with one of the e-commerce). It increases the female workforce in Surabaya City.

Business training influenced turnover statistically because the value is below 5%. The results of the logit regression results carried out by Kassa (2021). Based on the survey results, it was found that more did not take part in business training. However, those who attended the business training were influenced by increasing turnover. Respondents conducted business training during the pandemic in the form of cake and bread making workshops and marketing webinars. In addition, those who

attend training have the advantage of getting business relations to more business connection. In addition, respondents who took part in business training events, both institutions from the Surabaya City Ministry of Cooperatives and outside agencies, received benefits, knowledge, innovation, and relationships. Otherwise, respondents who did not take business training have problems with relation, essential information, and knowledge that don't find on the internet.

Marketing with turnover based on the results of the logistic regression test in table 1 shows that using online (and offline) marketing influences turnover rather than just offline marketing. The effect of marketing on turnover is the same as that done by Indrasmitha et al (2022) where online and offline marketing both influence the turnover of food and beverage MSMEs. So are Rahman, Arifianto, Hapsari (2019) where access to technology can increase women's gender independence in entrepreneurship. Marketing has a direct effect on turnover. The marketing variable in the survey results table, which is mostly carried out online and offline, is very supportive of the business location variable, which is more dominant in carrying out production activities in the respondent's residence. In the survey, which contained questions about their marketing methods, respondents conducted online sales to facilitate access to transactions and to avoid transmission of the COVID-19 virus. those who use online and offline or offline alone have turnover. However, according to analysis results both odd ratio and marginal effect have no influence against turnover partially even though most of all respondents use offline-oriented marketing. Other marketing is holding special exhibitions, in 2020 there were a few exhibitions including Jatim Fair which was carried out semi-virtually and social distance (Widarti, P & Sutarno, 2020). While 2021 there are additional exhibitions that can be participated

in by MSME businesses including food and beverages. The decreasing number of consumers in several sectors and industries requires MSME entrepreneurs to be able to market products optimally and think creatively and innovatively. The use of the internet during the covid-19 pandemic is like a necessity, including in running a business and one of the efforts in cooking products that can be adopted by MSME players is by doing digital marketing.

The business location referred to is not only for selling products but also for business locations for carrying out production activities, while also using a lease/rent as a place of sale. From the test results, the business location has a strong significant effect on the MSME Food and Beverage turnover. 84% of the respondents live in addition to minimizing rental costs, they control or other employees who control online marketing. This hypothesis is in accordance with Tundui and Tundui (2012), Sofiati dan Murniawaty that business location greatly influences the increase in turnover and is a strategic way to survive economic turmoil. Indrasmitha et al. (2022) also agree that besides online, the location of the business also affects turnover. The use of physical sales to know the appearance of the products being sold. Most residential houses have increased turnover. Loscocco et al (2004) also agree that business at home minimize rental costs and spend alot with their family. As for those offline sales methods, the purpose is to meet their own needs and the respondents' surroundings or distribute to other stores (including Surabaya Griya Gallery) and suppliers.

Start-up capital also significantly affects business turnover, that could conclude these results is consistent with Tundui and Tundui (2012), Marcazzan et al (2022), Mela Sofiaty and Murniawaty (2019), Indrasmitha et al. (2022), Rahman, Ampa & Rijal (2023), Kusaini et al (2022), Rahman, Arifianto, Hapsari (2019), Wahyudi et al (2014) Yudhi Astiti, Sudibia, & Djayas-

tra (2017), Renko and Bullough (2021), Terrell and Nafziger (1996), Sana Ullah et al (2019) , Charoenrat & Harvie (2017), and Loscocco et al (2004). However, capital gives negative impact (-0.03248 or -3%) to turnover. Based Figure 3 most of capital for establish their business are below of 50 million rupiahs. Owner produces food and beverages in conventional way with less budget they had. Also there's easy access for start-up in micro-small business with help of civil agencies, especially Minister of Cooperatives and MSMEs. The one strategic they did is online start-up permission for OSS.

CONCLUSIONS

The conclusion from the results of the discussion above states that gender and the business location affect their turnover. The location of the business as most product sales are in the homes of the micro-entrepreneurs themselves. Most business locations are in homes using technology and information in the form of using e-marketing and online food delivery services by 55%. 92% of the business owners are female, so they tend to be more active in carrying out business activities in homes, rented houses or the residence of the business owner's parents. Women has survivability in

In addition to other surveys besides the results of the analysis, there are several other questions. The first question is, the impact of COVID-19 experienced by food and beverage MSME actors, including 80% experiencing a decline in sales; 4.5% hampered distribution; 0.9% inhibited production; 2.27% difficulty obtaining raw materials; 5.45% restricted capital and 6.36% no constraints. So, the training aims to find solutions to the impact of COVID-19 on the economic activities of food and beverage MSMEs. The second question is the steps taken to increase the production value of food and beverage MSME actors. The steps taken are different, including al-

ways implementing the 3M program to reduce symptoms of COVID-19, conducting online marketing, expanding marketing, adding product variations, adding product innovation, until production continues as usual despite a decline in sales. For the government, it is optimal enough to handle food and beverage MSME actors to survive economic turmoil apart from the COVID-19 pandemic. The problem lies in each of the food and beverage MSME actors with their innovations and steps to be taken.

This study has several drawbacks, such as: these data using the Lemeshow sample because there was no fixed population of food and beverages MSMEs. In the attachment to the survey there are questions regarding labor/employee but after conducting the test, there is no significant test on the turnover of Food and Beverage MSMEs. This test does not include labor/employee (and most of the employees are entrepreneurs) because the results have no effect on turnover. In addition, low R-squared value that concludes many variables outside model can affect to business turnover hence need more research needed.

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