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Spatial Patterns, Opportunities and Determinants of MSMEs Employment in Township

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Abstract

Research is divided into three sections that contribute to analyse the optimization of employment on large productive population in Magelang, First, to identify the spatial pattern and concentration based on MSME's sector by considering comparative benefits. Secondly, to analyse the opportunity in its association with employments in MSMEs. Thirdly, the determinants of employment in MSMEs based on the field of industry, trading and service. This research employs quantitative approach by using Location Quotient and Economic Base Model as analysis for local and regional economic, as well as multiple linier regression analysis. The research indicates that each area demonstrates distinctive spatial pattern and concentration, in terms of industrial sector, trading and service. The opportunity for employment could be notified from basic employment and basic multiplier that exist in each area. There are certain areas that have high potential in new employments once the jobs are available in the sector of industry, trading and service. The determinants of employment of above three sectors have distinctive behaviour in responding the addition of new MSMEs and the addition of revenue. Hence, the appropriate stimulus could be formulated to optimize absorption of productive labour population based on the findings.

Key words : Labour, Revenue, MSMEs, Location Quotient, Economic Base Model, Regression

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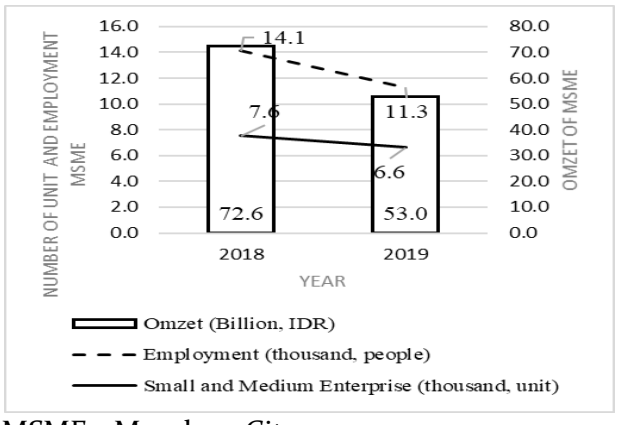
INTRODUCTION

Magelang City is the smallest area in Central Java Province (0.06 percent out of total area in Central Java). The width of Magelang area only reaches 18.12 km² out of total width of Central Java Province, which is 3.25 million of km². Its strategic location that situated between Semarang on the north side and Yogyakarta on the south, gives Magelang the potency for high traffic of economic activities. Strategic location and with small area provide Magelang with the opportunity for area development to enhance and align people's welfare and regional progress. One of the ongoing area developments is Kawasan Strategis Pariwisata Nasional (KSPN) of Borobudur Temple in Magelang Regency. It could open certain opportunity that can be utilized by Magelang Regency. By considering how strategic the program is, as many as 2 million of foreign tourists and 11 million domestic tourists are targeted to increase regional revenue (Sofianto, 2018).

The opportunity for area development should be seized properly by the actors of MSMEs in Magelang, particularly. The development for MSMEs has huge and strategic potency in improving economic activities that dominated by the sectors of industry, trading and service. It could also improve the employment in designated area, to become driving force for economy in Magelang. Aside of having strategic role towards economic development opportunity, in developing countries, MSMEs tends to be more appropriate to become community's economic mover. According Rohadin & Yanah (2019) on the research about the influence of small and medium industries towards economic development, suggested that MSMEs has more resilience towards economic crisis if compared to big industries. In line with previous research, Rusdarti & Kistanti (2018) in their research, indicated that MSMEs has better preparation towards global market competitions. As mentioned by Hafni & Rozali (2017), numbers of MSMEs keep increasing and absorbing more labours from the informal sector. The opportunity and the potency demonstrate that the ability of MSMEs as the economic mover could be employed as the medium of territorial development.

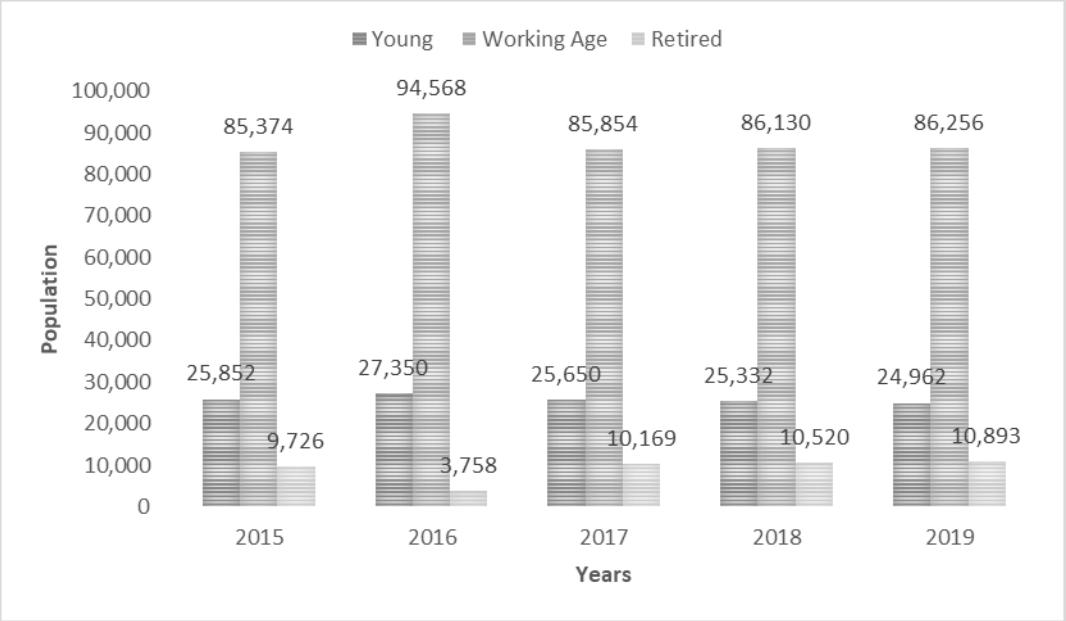
More opportunities could be employed, yet the potency of development for micro, small and medium enterprises still blocked by several issues and obstacles, among others the licensing process duration, unhealthy business practices and competition, lack of internal coordination between bureau of cooperative development and MSMEs, the weakness of MSMEs organization, the low productivity that leads to the existence of gap among MSME's actors, and the low quality of human resources. Several listed obstacles should be dealt also by the MSME's actors in Magelang. Based on the data derived from Department of Cooperatives and MSMEs Magelang, as shown in Figure 1, the condition of MSMEs are decreased in terms of number of businesses, employment and revenue in the period of 2018 – 2019. The decrease of employment is counted as 2,837, in which the record indicates that the businesses could absorb 14.118 in 2018 and decreases to 11,281 in 2019. Systematically, the decrease leads to the increase of unemployment rate in Magelang.



Source: Department of Cooperation and MSMEs, Magelang City 2019

Figure 1. Condition of MSMEs in Magelang City

The condition of population in Magelang City in 2019 is shown by Figure 2 below, illustrates that it occupies mostly by productive ages, in the five-year period. In 2019, the population with productive ages reach 86.256 persons or 70,64% out of total Magelang residents, that recorded as 122.111 persons. The large number of productive residents is considered as one of the potencies for improving economic productivity in an area that supports territorial development.



Source: Magelang in Numbers 2019 (BPS)

Figure 2. The Residents of Magelang City based on Age Categorization

The growth of productive residents leads to the economic prosperity in developing countries. At least, there are two mechanisms of the alteration process of productive ages towards prosperity. First, the change of productive residents' population will affect to revenue's growth and savings since there are a lot of working citizens. Secondly, the change of age structure on the level of household that could reduce the proportion of poor family (Lee, 2003). The anti-climax of the research is concluded when the productive residents are leaved with no jobs, hence the productive unemployment will turn to disaster for a territory. In a smaller scope than a country, regencies or cities including Magelang City should respond to the change of residents' productive age and secure the benefits of economic prosperity.

The problem faced by MSMEs in Magelang is the decline in the number of MSMEs as the driving force regional economy. On the other hand, the great potential of the city of Magelang in order to improve the regional economy is obtained from the potential for productive resources that dominate the composition of the population and Magelang is designated as a strategic national tourism area. The existence of a national tourist area in Magelang is an opportunity that must be obtained by its benefits for the regional economy. By mapping the types of MSMEs based on the types of businesses that support the regional economy, MSMEs are grouped into industrial, service and trade groups. Tourist areas are closely related to the potential of the productive age population. Especially the technology-literate young generation who are able to collaborate between the national

tourism area and the MSMEs support tourism area. Based on Nilsson, Petersen, & Wanhill, (2005), in peripheral areas, it is principally micro-businesses that dominate the operational aspects of the industry and they can act, in many ways, as barriers to sustainable improvements of the tourist product.

According to Cruz & Ahmed (2018), each 1 percent of escalation towards productive residents could be associated to the increase of 1,6 percent of GDP per capita. By referring to the result of the research, the efforts to enhance the productivity of productive residents in Magelang City should be supported and motivated for territorial economic improvement. One of the strategic moves in motivating the economic productivity by the empowerment of MSMEs. The role of MSMEs are considered as important since half of population of productive residents who work in the informal sector are the peoples who work in MSMEs (Ilegbinosa & Jumbo, 2015). It is expected, the increase of MSMEs productivity could lead to economic growth, through; 1) new job opportunity, 2) the reduction of gap in per capita income, and 3) the increase of the goods and service output, produced by the community (Beisengaliyev et al., 2018; Rohadin & Yanah, 2019). The productive residents could become a group that potentially moves the people's economy. Thus, it will become a challenge when the productive residents unable to be employed by the labour market.

Micro, Small and Medium Enterprises (MSMEs) have potential contribution to sustainable, broad-based and inclusive growth in the developed and developing economies. MSMEs contribute to employment (job creation), output, trade, poverty alleviation, economic empowerment and the wider distribution of wealth (Ajuwon, Ikhide, & Akotey, 2017; Harvie, 2009, 2015, 2019; Hu, 2010; Musa & Hasan, 2018; Noor Salim, Susilastuti, & Wildan Rafiqah, 2020). For many MSMEs, however, their potential is often not fully realized due to a number of factors relating to the small scale of their businesses: a lack of resources; a lack of economies of scale and scope; higher transaction costs; a lack of networks, know-how and experience of domestic and international markets. In addition, many small businesses find that their geographical isolation puts them at a competitive disadvantage (Harvie, 2015). It takes effort to economic treatment to grow the potential economic from MSMEs. One of which is the mapping on the MSMEs sectoral to identify characteristic of labour absorption. The mapping on sectoral labour absorption towards MSMEs is designated for the determination of suitability of potential MSMEs to absorb the labour.

A much debated question is whether MSMEs play key role in the development economic. Two paradigm of thought have emerged in the study of MSMEs. They are a pro MSMEs and anti MSMEs perspective (Agyapong, 2010). For example, study conducted by Saluja, (2012), Suhaili & Sugiharsono, (2019) tend to support pro MSMEs perspective. MSMEs has proven to increase the wellbeing all at once as an economic driver of a region and can be job creation. The growth of MSMEs increases employment more than the growth of large companies because MSMEs are more labour-intensive.

In contrast to Saluja, (2012), Suhaili & Sugiharsono, (2019), Agyapong, (2010) argued that anti-UMKM paradigm questions the effective role of MSMEs in tackling the problem of poverty and encouraging growth, this paradigm argues that large companies have the capability to exploit economies of scale, carry out research and development that lead to increased productivity.

The lack of employment indicated there is a gap between the number of labour force and employment. Efforts to overcome the problem of the gap between the number of jobs with the number of workforce can be done by encouraging the development of Micro, Small and Medium Enterprises (MSMEs). The role of MSMEs in Magelang City as an economics driving force should be actualized, by considering the strategic location and supportive economic traffic. This research is presented as a preliminary research by using decomposition of employment with MSMEs sector-based in municipality under economic-based model as analysis tool for local and regional economic, in addition to empirical data about pattern of employment and MSMEs. Therefore, the objectives of the research could be formulated, as follows: 1) concentration identification to determine the cluster of MSMEs to discover the comparative benefits; 2) the employment in MSMEs Magelang City by considering the high potencies of productive residents; and 3) determinants of employment in MSMEs in Magelang.

METHOD

This research employs the quantitative research approach by using analysis tool of local and regional economic (Dinc, 2002), as well as multiple linear regression analysis (Gujarati & Porter, 2009). Local and regional economic analysis, such as Location Quotient (LQ) and Economic Base Model. Type of data is cross section that covers the entire actors of MSMEs as many as 6,658 as units that registered in Department of Industry and Trade of Magelang City and scattered in 17 sub-districts.

Location Quotient (LQ) is the most frequent-used tool in economic geography as well as local and regional economic analysis. It is used to measure the industry concentration the relative area towards area of reference, that generally part of a country. Location Quotient (LQ) in this research is applied to compare the industry segment (sector) of local labour in Magelang City (relative area) with workforce segment of reference area. This tool is fast and useful in determining main sector of an area. Location Quotient (LQ) is formulated as follows:

$$LQ_i = \frac{E_{ir}/E_r}{E_{in}/E_n} \quad (1)$$

Where, Eir labour of sector i at the relative area; Eir = total labour in the area of relative; Ein = labour of sector i at the reference area; Ein = total labour in the area of reference; LQ > 1 is basis sector; LQ < 1 is a non-basis sector; LQ = 1, resident sector.

To support the analysis result of Location Quotient (LQ), it will later be combined with Symmetric Location Quotient (SLQ). Below is the formula for Symmetric Location Quotient:

$$SLQ_i = (LQ_{ij} - 1)/(LQ_{ij} + 1) \quad (2)$$

In which, the SLQ is varied from -1 to +1; SLQ > 0, shows that the sector i in area j has the comparative advantage; SLQ < 0, indicates sector i in area j for having comparative disadvantage.

Static values of LQ (>1) & Symmetric LQ (+) are considered as basic sectors that potentially to increase the comparative advantage. It means that designated sector has the ability to produce goods or services by exploiting certain amount of costs that are lower than the competitors' expenses (other sectors from same area or same sector in other areas). Besides, comparative advantage could

help the businessmen to recognize stronger selling margin.

In addition, Economic Base Model (EBM) technique is employed as one of the local and regional analysis to predict the effect of new economic activities in an area towards employment or income in local community. This is the oldest techniques, the simplest and the most-used technique to analyse the regional economy. It assumes that entire local economic activities could be identified as basic or non-basic. Basic sector consists of local businesses (companies) that entirely depend on external factors. On the contrary, Non-basic Sector consists of companies that highly depend on local business condition. Economic-base analysis technique is used in pair with Location Quotient technique. Below is the formula to estimate basic labours in sector i of an area:

$$BE_{ir} = \left[1 - \frac{1}{LQ_i}\right] * E_{ir} \quad (3)$$

In which, BEir is basic employment sector i in reference area r, LQ is LQ value in i sector of an area; Eir is labour of sector i in the reference area of r.

Later is discussed the method to predict the impact of basic sector towards local economy, which is Base Multiplier, defines the ratio of employment in the t year towards basic sector employment in the current year. It also could be defined as the employment multiplier that predicts the impact of local employment for basic sector and enables the analyst to project direct creation of non-basic employment by the existence of the enhancement on basic sector employment. Base Multiplier is formulated with ratio, as follows:

$$BM = \frac{E_r^t}{BE_r^t} \quad (4)$$

In which BM is the basic employment in t year in area of r. Base Multiplier provides illustration on how much non-basic jobs that could be created by one basic job.

Multiple linier regression is the selected approach to analyse the determinants of employment in MSMEs in Magelang that is decomposed based on main sector. Below is the equation of multiple linier regression:

$$L_i = \beta_0 + \beta_1 PU_i + \beta_2 O_i + \varepsilon_i \quad (5)$$

In which L represents labour, PU is the number of MSMEs, O is revenue/ omzet, transformed variable in log, β is parameter, i is sub-district that is decomposed based on main sector if MSMEs that cover production/non-agriculture, trading, service and total sector and ε is error term.

RESULTS AND DISCUSSION

This mapping is assigned to identify the spatial concentration of MSMEs in Magelang City based on employment by utilizing calculation results of Location Quotient (LQ). The employment for MSMEs is grouped based on sector; a) industry; b) trading, and c) service. These three sectors are defined as main sectors of MSMEs that scattered in the area of Magelang City. The spatial concentration pattern is illustrated in the form of mapping figure on MSMEs specialization. Spatial mapping uses the supporting tools, which is Geographic Information System (GIS) that delegated to identify the location, spatial, and component of industrial geographic (Arifin, 2006). Besides, by understanding the economic geography, the actors can access the market and raw material traffics for industrial purposes (Redding & Venables, 2004).

Figure 3 indicates the concentration of MSMEs activities based on employment of trading sector in Magelang. The industrial activities are centralized in the sub-district of South Kramat, South Rejowinangun and Magersari. The trading activities in those sub-districts turn to be basic sector or leading sector

in Magelang City for employment. While, sub-districts of Potrobangasan, Wates, Gelangan, Panjang, Cacaban, Kemirirejo, North Tidar and South Jurang Ombo have potential in the development of MSMEs in trading sector, in its correlation with the creation of job opportunities.

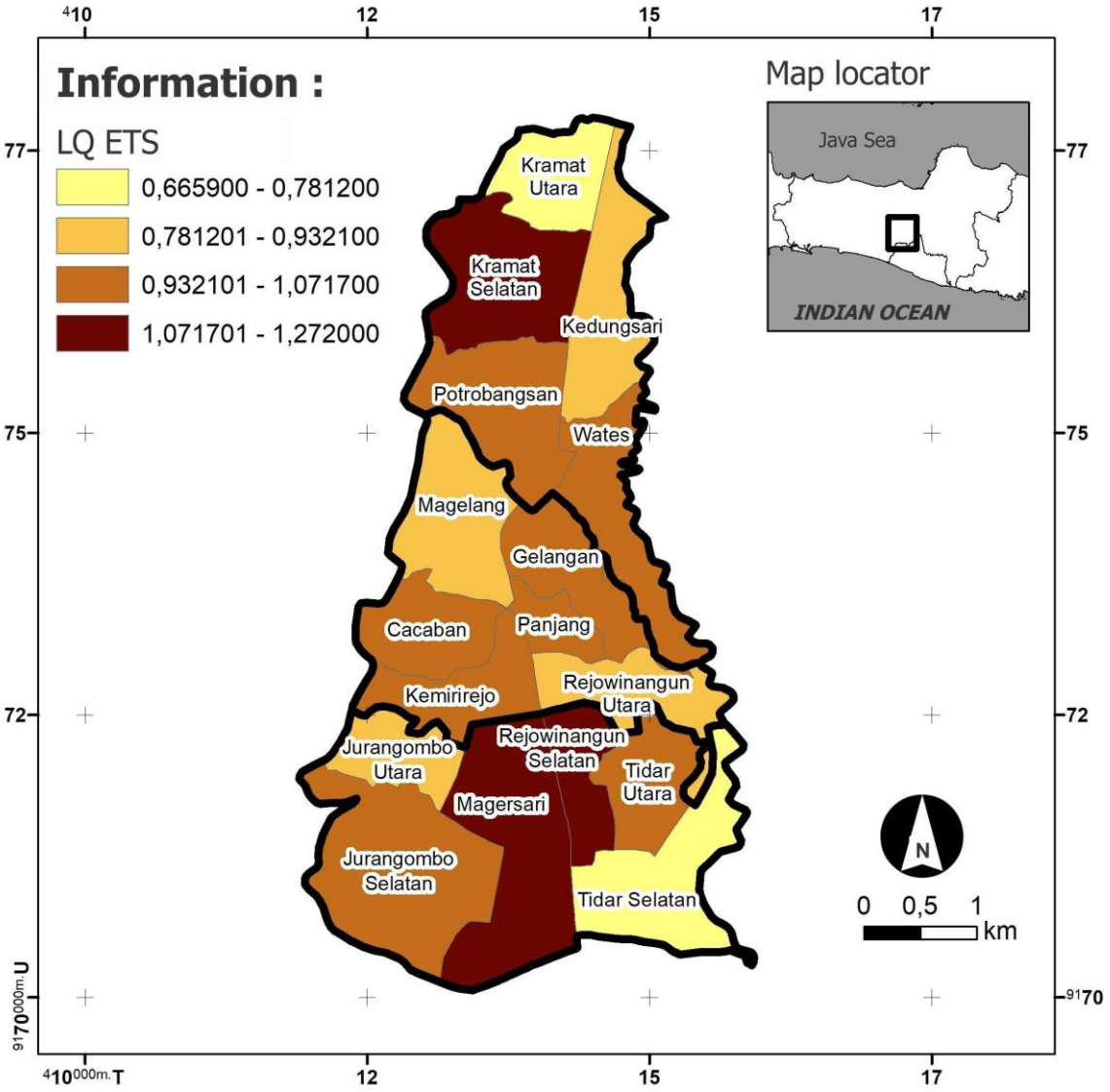


Figure 3. Activity Specialization for MSMEs in Magelang City Based on Employment for Trading Sector

Figure 4 illustrates MSMEs activities based on production sector/ non-agriculture in Magelang City that concentrated in sub-district of South Tidar. Production/ non-agriculture sector has become the basic sector or leading sector in Magelang for employment. While, sub districts of North Kramat, Kedungsari, Kemirirejo, North Rejowinangun, North Jurang Ombo, and South Jurang Ombo have potential in the development of MSMEs in production/non-agriculture sector, in its correlation with the creation of job opportunities.

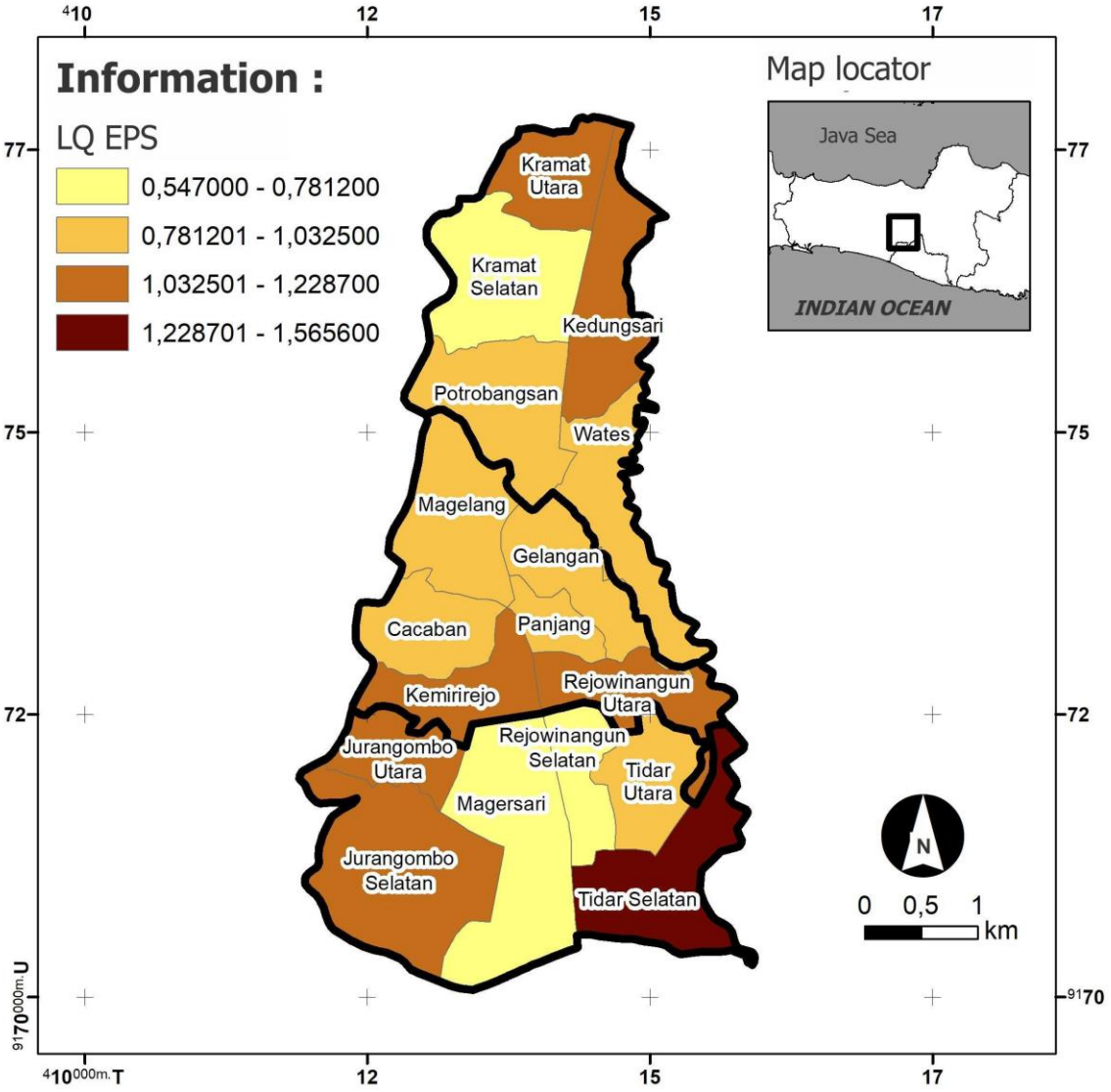


Figure 4. Activity Specialization for MSMEs in Magelang City Based on Employment for Production/Non-Agriculture Sector

Figure 5 below, represents the concentration of MSMEs activity based on the employment on service sector in Magelang City that concentrated in sub-district of South Kramat, Magelang, dan Magesari. Service sector has become the basic sector or leading sector in Magelang for employment. While, sub districts of South Kramat, Potrobangsan, North Rejowinangun, South Rejowinangun, North Tidar and North Jurang Ombo have potential in the development of MSMEs in service sector, in its correlation with the creation of job opportunities.

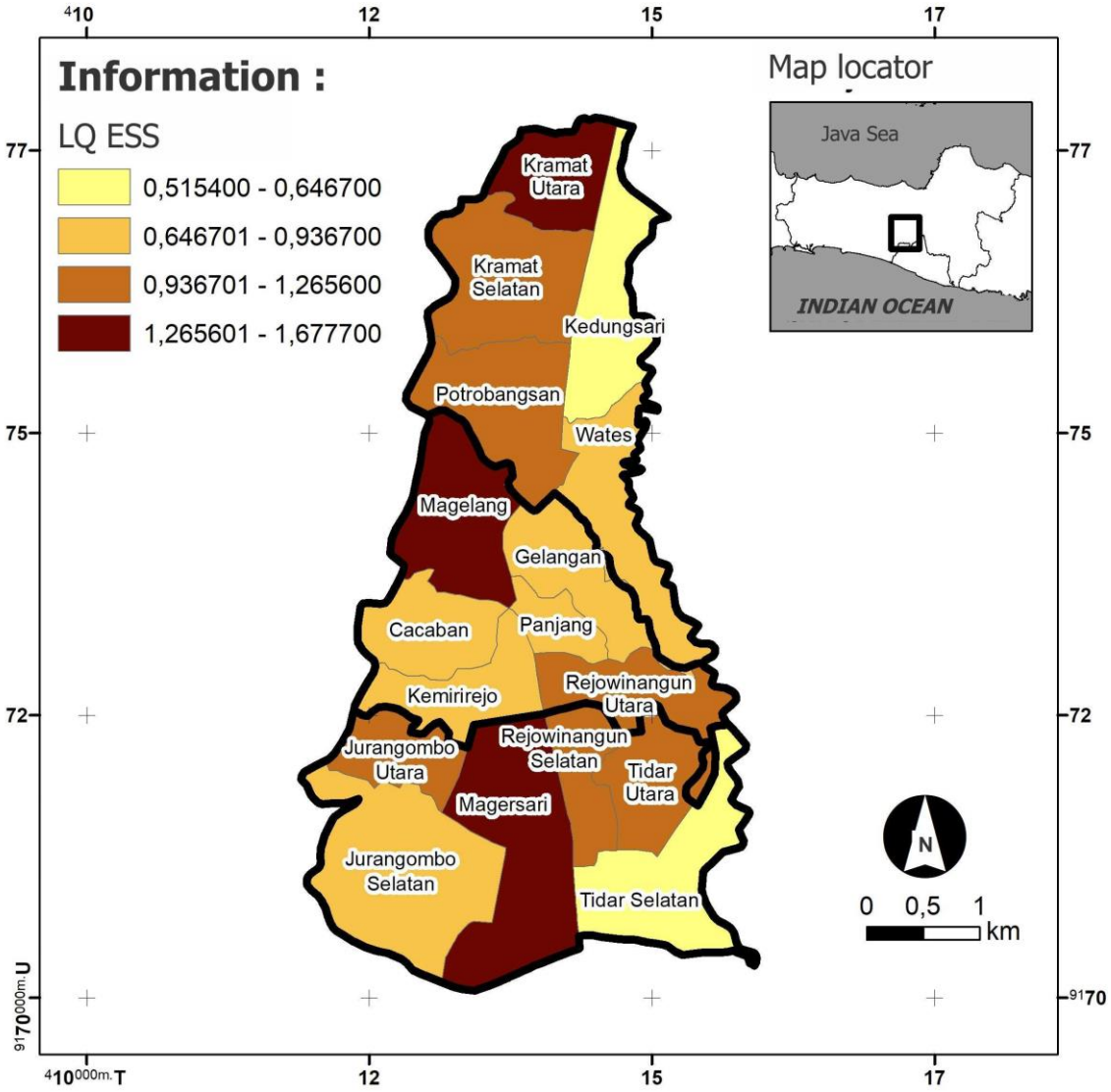


Figure 5. Activity Specialization for MSMEs in Magelang City Based on Employment for Service Sector

Economic Base Model (EBM) technique is applied to identify the employment in MSMEs in Magelang from the sector of industry, trading and service. As one of the local and regional analysis tools, Economic Base Model (EBM) is used to predict the impact of new economic activities in a region towards employment or revenue of local community. This model is capable to differentiate which basic area that provides economic benefits and surrounding non-basic area that obtains multiplier benefits (Mulligan, 2008).

Table 1. The result of Calculation for Economic Base Model (EBM) for MSMEs in Magelang City

Basic Employment (BE)			
Sector	Regency North Magelang	Regency Central Magelang	Regency South Magelang
Production/Non-Agriculture	83	-	141
Trading	-	223	-
Service	77	1	-
Total	160	224	141
Basic Multiplier (BM)			
Sector	Regency North Magelang	Regency Central Magelang	Regency South Magelang
Production/Non-Agriculture	13	-	12
Trading	-	12	-
Service	4	477	-
Total	17	489	12

Source: Department of Industry and Trading, Magelang City, 2019 (processed)

The result of EBM calculation for MSMEs in Magelang is indicated by Table 1 that divides it in three administrative areas (regencies), which are North Magelang, Central Magelang and South Magelang. Basic employment of MSMEs for industrial sector in North Magelang is measured as 83, which means there are 83 concentrations of basic sector employment in industry that capable to absorb labours in the North Magelang regency. While, Basic multiplier of MSMEs in that area is counted as 13, which means that each basic sector in industry could trigger the existence of 12 non-basic sector concentrations. Basic employment of MSMEs for industrial sector in South Magelang has quite large number, which is 141, which means there are 141 concentrations of basic sector employment in industry that capable to absorb labours in the South Magelang regency. Basic multiplier of MSMEs in that area is counted as 12, which means that each basic sector in industry could trigger the existence of 11 non-basic sector concentrations.

Basic employment of MSMEs for trading sector is concentrated in the Central Magelang with total of 223, which means there are 223 concentrations of basic sector employment in trading that capable to absorb labours in the Central Magelang regency. Basic multiplier of MSMEs in that area is counted as 12, which means that each basic sector in industry could trigger the existence of 12 non-basic sector concentrations.

Basic employment of MSMEs for service sector is concentrated in the North Magelang and Central Magelang regency. For North Magelang, it is calculated with total of 77, which means there are 77 concentrations of basic sector employment in service that capable to absorb labours in the North Magelang regency. Basic multiplier of MSMEs in that area is counted as 4, which means that each basic sector in industry could trigger the existence of 3 non-basic sector concentrations. For Central Magelang regency, it is calculated with total of 1, which means there is 1 concentrations of basic sector employment in service that capable to absorb labours in the Central Magelang regency. Basic multiplier of MSMEs in that area is counted as 477, which means that one basic sector in industry could trigger the existence of 476 non-basic sector concentrations.

The factors that influence the employment of MSMEs should be notified. The efforts to reveal the determinants of employment in MSMEs are objected as prediction and controlling or policy making. It could be seen that the dependent variable (L) is labour, the employment by MSMEs is influenced by two independent variables, which are MSMEs actors (PU) and Revenue/ Omzet (O). Based on the result of regression, it is obtained the equation that represents employment in Magelang, as follows:

$$\hat{L_i} = -0{,}2669 + 0{,}8011PU_i + 0{,}0917O_i \quad (6)$$

Furthermore, by identifying sectoral business opportunity and variables that influence workforce, according to research result, it is suggested for a policy to optimize the employment through MSME's role (Setiawan, 2015). The determinants of employment are decomposed based on business sectors, such as production/non-agriculture, trading and service. Those three sectors are considered as the main economic sectors that are utilized to recognize employment towards productive residents in Magelang, by using ordered regression equation for those three sectors.

Following is the regression equation for employment in production/ non-agriculture sector:

$$\hat{L_i} = -0{,}3253 + 0{,}5755PU_i + 0{,}1484O_i \quad (7)$$

Following is the regression equation for employment in trading sector:

$$\hat{L_i} = -3{,}8241 + 0{,}1055PU_i + 0{,}4329O_i \quad (8)$$

Following is the regression equation for employment in service sector:

$$\hat{L_i} = -3{,}1966 + 0{,}0238PU_i + 0{,}3794 \quad (9)$$

Based on Table 1, the model used in this research is considered as valid or robust. This is considered by the fulfilment or the passing status of diagnosis test that covers classical linear regression model test and goodness of fit. The result of classical linear regression model test shows no significant multicollinearity problems existed between independent variables. Residual is normal distributed, the absence of heteroscedasticity problems and model that is specified properly. Based on the result of Goodness of Fit test, the prediction is indicated as proper with the value of Rsquare more than 50% on each regression equation. Besides, based on F test, it is obtained that the model is existed.

Table 2. The Result of Regression for Employment of MSMEs in Magelang City

Variables	Dependent: Labour (L)			
	Model 1	Model 2	Model 3	Model 4
Constant	-0.3253	-3.8241	-3.1966	-0.2669
	(0.8309)	(0.0486)**	(0.1304)	(0.8247)
Number of MSMEs (PU)	0.5755	0.1055	0.0238	0.8011
	(0.0331)**	(0.4265)	(0.8517)	(0.0000)***
Omzet (O)	0.1484	0.4329	0.3794	0.0917
	(0.0886)*	(0.0005)***	(0.0054)***	(0.0948)*
Goodness of Fit				
R-square	0.5501	0.6999	0.5340	0.8419
F-Statistic	8.5585	16.3226	8.0226	37.2705
	(0.0037)***	(0.0002)***	(0.0048)***	(0.0000)***
Diagnosis Test				

Variables	Dependent: Labour (L)			
	Model 1	Model 2	Model 3	Model 4
Multicollinearity -VIF				
Log_Numbers of MSMEs	1.3052	1.3080	1.3926	1.0170
Log_Omzet	1.3052	1.3080	1.3926	1.0170
Normality-Jarque Bera	1.2494	0.1568	0.7092	4.6251
	(0.5354)	(0.9246)	0.7014	(0.0990)
Heteroscedasticity -White	10.4019	8.1305	4.8220	5.6634
	(0.0646)	(0.1492)	(0.4380)	(0.3404)
Model Specification -Ramsey	0.3309	1.1398	0.4439	1.1098
Reset	(0.7246)	(0.3522)	(0.6517)	(0.3612)

Description: model 1 production/non-agriculture sector; model 2 trading sector; model 3 service sector; model 4 total sector; variables are transformed to the form of Log; ***significant on α 0,01; **significant on α 0,05; *significant on α 0,10; ( ) p-value.

Source: Department of Industry and Trade, Magelang 2019 (processed)

Estimation for first model is resulted from regression for production/non-agriculture sector. Based on above table, for the first model, variable for actors of MSMEs is positively significant with α 0.05 towards numbers of labours. The increase of MSMEs numbers enhances the employment. The percentage of employment is calculated as 5.8% for each 10% of MSMEs numbers of elevation. The variable of revenue is positively significant with α 0,10 towards the labours. The raise of revenue leads to more employments. The percentage of employment is calculated as 1.5% for each 10% of revenue's elevation. The raise of numbers of MSMEs in the sector of production/non-agriculture absorbs more labour than enhancing the revenue. The estimation results in this model are in accordance with research conducted (Suhaili & Sugiharsono, 2019) which stated that the more the number of MSMEs, the more labours are absorbed and the greater their contribution to GDP.

Second model is designed to estimate the trading sector. Based on Table 1, for second model, numbers of MSMEs are insignificant towards numbers of labours. The variable of revenue is positively significant with α 0.01 towards the labours. The raise of revenue leads to more employments. The percentage of employment is calculated as 4.3% for each 10% of revenue's elevation. The raise of revenue in the trading sector absorbs more labours than enhancing the numbers of MSMEs. The increase in turnover of MSMEs will have a significant impact on the performance of MSMEs so that they are able to absorb more workers. This estimation is in accordance with the results of research (Marfo Agyeman & Ponniah, 2014) which stated that the turnover of MSMEs will increase along with the increase in quality workers.

Estimation of third model is resulted from regression for service sector. Based on Table 1, for the third model, variable of numbers of MSMEs is insignificant towards numbers of labours. The variable of revenue is positively significant with α 0,01 towards the labours. The raise of revenue leads to more employments. The percentage of employment is calculated as 3.8% for each 10% of revenue's elevation. The raise of revenue in the service sector absorbs more labours than enhancing the numbers of MSMEs. The strength of MSMEs funding will further increase business resilience, especially in the informal sector. This means that the need for an injection of funds for MSMEs players as

business capital needs to be considered. Research (Senjani, 2020) reveals that the strength of capital is a determining factor for the success of MSMEs in facing competition in the business world.

The ability of MSMEs to absorb labour becomes the main discussion in this study. The main focus of the absorption of MSMEs is in the industrial, service and trade sectors in Magelang City, which is the research area. The results of the analysis were carried out in three stages; 1) MSMEs spatial mapping, 2) Employment Based Model is used to determine labour absorption in the business sector, and 3) Simple regression to determine labour absorption in the three MSMEs business sectors in Magelang City. The distribution of the MSMEs business sector in Magelang City shows the diversity of community businesses.

The distribution that is not concentrated in one region shows that economic performance in the regions is not only focused on one region. However, the distribution of MSMEs business units is scattered throughout the region in the City of Magelang. The distribution of MSMEs businesses is a strategic potential that can be used to increase the economic capacity of the region. The spatial pattern that spreads for MSMEs business activities according to (Musa & Hasan, 2018) is one of the determinants of UMKM performance. This means that when MSMEs are spread across various regions, they will be more resistant to economic turmoil (Noor Salim et al., 2020)

The ability of MSMEs to create opportunities for the emergence of new businesses around the core business is the subject of study from the second analysis stage. The service sector is the largest contributor to the emergence of new businesses (multipliers) around core businesses. Service sector of MSMEs activities are able to have an impact on the emergence of types of derivative businesses from the core business. Weldeslassie et al., (2019) revealed that more types of MSMEs businesses will have an impact on the economic resilience of a region. Other studies that show the same results as the findings of this study are (Kumar, 2017), (Sahoo, 2020).

The last discussion related to the role of MSMEs in absorbing labour is shown by the results of simple regression analysis. The treatment of the three MSMEs must be done differently. MSMEs engage in the industrial sector tend to increase labour absorption when the number of MSMEs in the industrial sector is increased. Meanwhile, the stimulus for MSMEs in the service and trade sectors tends to respond to increased funding in order to absorb more workers in the region. This condition needs attention, especially by the government as the controller of the regional economy. Seeing the structure and type of treatment given to MSMEs will provide a positive stimulus to the strength of MSMEs (Singh, Narain, & Yadav, 2012) (Oseni & Oseni, 2015).

CONCLUSION

The opportunities for local and regional economic development should be optimized. The potency of population with large number of residents with productive age has become the factors to boost up economic productivity. The role of MSMEs as the economic driving force must be supported in dealing with opportunity regional economic development and productive human resources, particularly in Magelang City.

Spatial mapping for MSMEs indicates that sector of production/non-agriculture is concentrated in sub-district of South Kramat (North Magelang regency), South Rejowinangun and Magersari (South Magelang Regency). Sectors of trading is concentrated in the sub-

district of South Tidar (South Magelang Regency). While, service sector is concentrated in sub-district of North Kramat (North Magelang regency), Magelang (Central Magelang regency), and Magesari (South Magelang regency). Entire activities on the sector of production/ non-agriculture, trading and service that are concentrated on the above-mentioned sub-districts have become basic sector or leading sector in employment.

The opportunity of employment from each field of MSMEs could be notified from the result of Economic Base Model (EBM). The South and North Magelang Regencies record 141 and 83 basic employments of MSMEs for industry sector with consecutively 12 and 13 basic multipliers, in its opportunity to create concentration of new employments in both areas. The Central Magelang Regency record 223 basic employments of MSMEs for trading sector with 12 basic multipliers, in its opportunity to create concentration of new employments. The North and Central Magelang Regency record 77 and 1 basic employments of MSMEs for service sector with consecutively 4 and 477 basic multipliers, in its opportunity to create concentration of new employments in both areas.

By this research, it is expected for local authorities to predict accurate program in preparing MSMEs as economic driving force. Initially, it takes identification for spatial excellencies on MSMEs in each area. Secondly, to determine the opportunity of employment on each MSMEs by considering to their Basic Employment and Basic Multiplier, so that they could absorb productive residents' population that is relatively high in numbers. Thirdly, to reveal the determinants of employment from each sector, hence appropriate policies could be predicted, controlled and arranged through the enhancement of numbers of MSMEs or the enhancement of revenue.

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