



## Analysis of Factors that Influence Jamu Micro Business Income

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### Abstract

*The purpose of this study was to determine the factors that influence Semarang's jamu microbusiness income. This research used a quantitative method with a population of jamu microbusiness in Semarang City. The sampling technique used in this study was random sampling technique. Data analysis used multiple linear regression with SPSS Program version 21, where the variables used include capital ( $X_1$ ), labor ( $X_2$ ), marketing strategies ( $X_3$ ), technology ( $X_4$ ) on income ( $Y$ ). The results of the multiple linear regression analysis showed capital ( $X_1$ ), labor ( $X_2$ ), marketing strategy ( $X_3$ ) and technology had a positive and significant effect on the income ( $Y$ ) jamu microbusiness in Semarang City. The conclusion of this research is that the better capital, labor, marketing strategies and technology will affect the perception of an increase in the income of jamu microbusiness in Semarang City.*

**Keywords:** Study, microbusiness, analysis, Semarang

### Abstrak

Tujuan dari penelitian ini adalah untuk mengetahui pemilik yang mempengaruhi pendapatan usaha mikro jamu Semarang. Penelitian ini menggunakan metode kuantitatif dengan populasi usaha mikro jamu di Kota Semarang. Teknik pengambilan sampel yang digunakan dalam penelitian ini adalah teknik random sampling. Analisis data menggunakan regresi linier berganda dengan Program SPSS versi 21, di mana variabel yang digunakan meliputi modal ( $X_1$ ), tenaga kerja ( $X_2$ ), strategi pemasaran ( $X_3$ ), teknologi ( $X_4$ ) pada pendapatan ( $Y$ ). Hasil analisis regresi linier berganda menunjukkan modal ( $X_1$ ), tenaga kerja ( $X_2$ ), strategi pemasaran ( $X_3$ ) dan teknologi memiliki pengaruh positif dan signifikan terhadap pendapatan ( $Y$ ) usaha mikro jamu di Kota Semarang. Kesimpulan dari penelitian ini adalah bahwa modal, tenaga kerja, strategi pemasaran dan teknologi yang lebih baik akan mempengaruhi persepsi peningkatan pendapatan usaha mikro jamu di Kota Semarang.

**Kata Kunci:** Belajar, bisnis mikro, analisis, Semarang

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## INTRODUCTION

According to Todaro (2004) development in a country can be directed into three main things, namely improving people's welfare, increasing the availability and distribution of people's basic needs, increasing people's ability to access economic and social activities. Economic activities are regulated in Act Number 20 of 2008 concerning Micro, Small and Medium Enterprises (MSMEs) with the sound (1) Small Businesses are small-scale people's economic activities that meet the criteria of net worth or the results of annual sales and ownership as stipulated in the Act this law, (2) Medium Enterprises and Large Businesses are economic activities which have criteria of net worth or annual sales results greater than net worth and the results of annual sales of Small Businesses.

Micro, Small and Medium Enterprises (MSMEs) in Indonesia is one of the priorities as an effort in developing the national economy, this is because Micro, Small and Medium Enterprises (MSMEs) in Indonesia can be the backbone of the economic system to reduce income inequality, poverty alleviation and income distribution between business owners and the role of Micro, Small and Medium Enterprises (MSMEs) can absorb labor in Indonesia. The development of Micro and Small and Medium Enterprises can contribute in accelerating the economic structure, namely increasing national economic resilience and improving the regional economy (Kurniawan, 2011).

Micro, Small and Medium Enterprises (MSMEs) are a stable source of employment and income for the community, so they need to be supported with the help of access to capital and Micro, Small and Medium

Enterprises (MSMEs) can reduce the economic disparity of the Indonesian population. The role of Micro, Small and Medium Enterprises in national economic resilience has been actualized during the national crisis in 1998 until now.

Micro, Small and Medium Enterprises (MSMEs) are able to be the main driving factor of the national economy during the crisis to date. The role of Micro, Small and Medium Enterprises as a form of people's economy is very large, especially when government spending is very limited for the national economy and crisis in investment activities (Prasetyo, 2008). The role of Micro, Small and Medium Enterprises (MSMEs) both toughness, contribution and existence continues to increase in sustaining the national and regional economy from year to year.

In accelerating the process of industrial transformation, reducing unemployment and reducing poverty, the government considers Micro, Small and Medium Enterprises (MSMEs) as a strategic sector by recognizing that Micro, Small and Medium Enterprises (MSMEs) play an important role in boosting the economy, creating jobs and encouraging innovative is the basis for industrialization (Gebremichael, 2014). Central Java Province is one of the provinces in Indonesia that is successful in the development of Micro, Small and Medium Enterprises (MSMEs).

There are around 4.17 million recorded businesses or companies grouped into 15 categories of business fields in Central Java. Micro and small businesses are considered very prospective because they are immune from the economic crisis (Khoirunnisa, 2018). Semarang City in the context of the development of Central Java Province, is part of a series of

Kedungsapur national strategic areas together with Kendal Regency, Demak Regency, Semarang Regency, Salatiga City, and Grobogan Regency (Semarang Central Statistics Agency). As a strategic city and an increase in the number of businesses it will affect the Gross Regional Regional Income (GRDP) of the City of Semarang.

**Tabel 1.** Distribution of Gross Regional Domestic Product (GRDP) of Current Prices (percent)

Categories / Sub Categories	2015	2016	2017	2018
Agriculture, Forestry and Fisheries	0,98	0,94	0,88	0,84
Mining and excavation	0,19	0,18	0,18	0,17
Processing industry	27,48	27,81	27,65	27,88
Electricity, Gas Procurement	0,10	0,11	0,12	0,12
Water Supply	0,08	0,08	0,08	0,07
Construction	27,04	26,67	26,63	26,36
Wholesale and retail trade, repair and maintenance of cars and motorbikes	14,12	13,91	13,87	13,78
Transportation and Warehousing	3,84	3,88	3,79	3,85
Provision of Accommodation and Food and Drink	3,39	3,43	3,43	3,45
Information and Communication	7,07	7,02	7,15	7,22
Financial Services	4,39	4,48	4,48	4,43
Real Estate	2,80	2,82	2,89	2,94
Company Services	0,61	0,64	0,67	0,71
Government Administration, Security and Mandatory Guarantees	3,31	3,29	3,30	3,21
Educational Services	2,74	2,82	2,87	2,92
Health Services	0,76	0,78	0,83	0,82
Other services	1,09	1,14	1,19	1,23
GRDP	100,00	100,00	100,00	100,00

Source: Semarang Central Statistics Agency

In table 1. it is known that the manufacturing sector has the largest distribution compared to other sectors. This shows that if the industrial sector is the sector that contributes the largest income in the city of Semarang.

Micro, small and medium enterprises are one of the contributors in the manufacturing sector. Micro, small and medium enterprises in

the city of Semarang have developed rapidly and absorb a lot of employment. This can be addressed through table 2.

The number of micro, small and medium enterprises in the city of Semarang is increasing every year, due to the growth and climate of micro and small businesses which are improving and conducive, so that it shows the existence of productive economic growth.

Micro, Small and Medium Enterprises in the city of Semarang is very diverse and widespread throughout the city of Semarang. The Office of Cooperatives and SMEs in the City of Semarang grouped micro, small and medium enterprises into several pillars according to the type of product produced. The pillars which are categorized by the Department of Cooperatives and SMEs of the City of Semarang are the mainstay products or as superior products for micro, small and medium businesses in the City of Semarang.

**Table 2.** Growth in the Number of MSMEs and Semarang City Absorption of Labor Force 2015-2018 (July)

YEAR	TOTAL OF SMEs	LABOR
2015	996	2063
2016	4906	8510
2017	5152	8788
2018 (July)	2746	6358

Source: Department of Cooperatives and SMEs Semarang City

Based on Semarang City's MSMEs data through IUMK data collection which has been classified into several pillars, it is known that the growth of Semarang's MSMEs is relatively fluctuating. The MSMEs pillar with the highest total is on the food processing pillar and the MSMEs pillar with the least amount is the tourism pillar. In the pillars of SME Semarang City Jamu has decreased every year. In 2016 the total of MSMEs Jamu Semarang growth was 45, in the following year the total of MSMEs jamu decreased to 28 and in 2018 it also decreased to 18 MSMEs. From these data it can be illustrated if the establishment of the SME jamu is less desirable by the public. The existence of jamu businesses has declined due

to displacement of culture and technology. This can be considered by the community to build and develop a jamu business in the city of Semarang.

**Table 3.** Semarang City MSMEs Based on Pillars of 2016-July 2018

No.	Pillar	2016	2017	2018
1	BANDENG	76	40	47
2	BATIK	66	77	31
3	FURNITURE	36	31	28
4	LUNPIA	14	24	9
5	BAG	50	28	46
6	FOOD PROCESSED	1310	1451	717
7	JAMU	45	28	18
8	TOURISM	6	7	1
9	NN	183	128	150
10	OTHERS	3118	3338	1699
Total		4904	5152	2746

Source: Department of Cooperatives and SMEs Semarang City

Jamu is a traditional medicine derived from natural ingredients that is passed down from generation to generation through the cultural heritage of people. According to Permenkes No. 003/Menkes/Per/I/2010 jamu is a herb or material derived from plants, animal ingredients, natural mineral ingredients, serian preparations (generic), or a mixture of these ingredients for generations that have been used for treatment based on experience and has been used in accordance with the norms prevailing in the surrounding community.

Most Indonesian people believe that consuming jamu can provide great benefits to good health for the treatment and prevention of a disease or to maintain body fertility, increase body stamina and beauty (Biofarmaka IPB, 2013). In facing the era of globalization

and pharmaceutical competition, SME jamu needs to improve the quality of jamu business. SMEs that produce jamu products in Semarang City face many obstacles, especially in maintaining and developing their businesses. So that the obstacles faced by the jamu business can affect the welfare of the jamu business. Income is one of the goals for jamu businesses to maintain and develop jamu businesses. Income is also one of the goals of establishing a jamu business.

Potential demand for jamu in the city of Semarang is high but strategies are not balanced in developing products from the jamu business. In an effort to develop a jamu business, there are many obstacles from both internal and external environments. The constraints experienced by the jamu business include price fixing, marketing distribution, promotion carried out, the technology used is still relatively simple and the average workforce is already at a productive age. The internal environment can be a weakness that must be minimized by the company or vice versa the company's internal environment can be used as a force that can be maximized.

Another obstacle faced by jamu business owners in the city of Semarang is the inaccuracy in the implementation of strategies in accordance with current business conditions. Whereas the application of the right strategy can help business operations be more effective and efficient and help companies achieve their goals. Another problem faced by jamu business owner and at the same time becomes a weakness is the lack of access to market information. This becomes an obstacle in marketing their products and pricing according to the market environment,

because with limited access to market information can result in low market orientation and weak competitiveness in the environment of jamu business owners in the city of Semarang.

Lack of information about the market, making the jamu business unable to direct the development of its business clearly and focused, so that its development has stagnated. This is what makes micro-entrepreneurs of jamu about perceptions to increase income is still lacking. Perception about increasing the income of good micro-entrepreneurs will provide benefits to micro-entrepreneurs of Semarang City jamu. Perception of business owners about increasing income is one of the objectives of establishing a jamu business and developing a jamu business. With the income, a business can run and is worth to be maintained. Many fowners affect the micro jamu business in the city of Semarang.

Marketing strategy is one of the fowners in jamu business competition to meet sales targets. Other fowners such as capital, labor and technology are considered by business owners in the production process to obtain maximum income. From the formulation of the problem, the following research questions are obtained: 1) What is the effect of the perception factor of capital increase on the perception of business owners in increasing the income of jamu business in Semarang City? 2) What is the effect of labor factor on the perception of business owners in increasing business income of jamu in Semarang City? 3) What is the effect of marketing strategy fowners on the perception of business owners in increasing business income of jamu in the city of Semarang? 4) What is the effect of

technological fowners on the perception of business owners in increasing business income of jamu in Semarang City?

The objectives of this study are to find out the effect of the perception of additional capital on the perception of business owners in increasing the income of jamu services in Semarang City, to find out the effect of labor on business perceptions in increasing the business income of jamu in Semarang City, to find out the effect of marketing strategies on the perception of business owners in increasing the income of jamu businesses in the city of Semarang, and to find out the influence of technology on the perception of business owners in increasing the income of jamu businesses in the city of Semarang.

The understanding of MSMEs according to Law Number 20 of 2008 concerning Micro, Small and Medium Enterprises has the following criteria, such as : Micro Business or namely productive business owned by individuals or business entities owned by individuals who meet the criteria such as has a net asset of no more than Rp 50,000,000 excluding land and buildings and have annual sales results of at most Rp. 300,000,000. Small Business is a productive economic business that stands alone which is carried out by an individual or business entity that is not a subsidiary or not a branch of a company that is owned, controlled or becomes a part either directly or indirectly of a medium- sized business or large business that meets the criteria which has a net worth of more than Rp 50,000,000 up to a maximum of Rp 500,000,000 excluding land and buildings for business premises and have annual sales results of more than Rp. 300,000,000 up to a maximum of Rp. 2,500,000,000. Medium

Business is a productive economic business that stands alone, which is carried out by individuals or business entities that are not subsidiaries or branch companies that are owned, controlled, or become part either directly or indirectly with small businesses or large businesses that meet the criteria : a) Has a net worth of more than Rp. 500,000,000 up to a maximum of Rp. 10,000,000,000 excluding land and buildings where it operates. b) Have annual sales results of more than Rp. 2,500,000,000 up to a maximum of Rp 50,000,000,000.

In its development perspective, Micro, Small and Medium Enterprises (MSMEs) are the largest group of businesses. In addition, this group is proven to be resistant to various kinds of economic crisis shocks. It is therefore imperative for the strengthening of Micro, Small and Medium Enterprises that involve many groups. The following is the classification of Micro, Small and Medium Enterprises (MSMEs): a) Livelihood Activities, which are Micro and Small and Medium Enterprises (MSMEs) that are used as employment opportunities to earn a living, which is commonly called the informal sector. For example street vendors. b) Micro Enterprise, is a Micro and Small and Medium Enterprises (MSMEs) that have the nature of artisans but do not yet have entrepreneurial characteristics. c) Small Dynamic Enterprise, is a Micro and Small and Medium Enterprises (MSMEs) that have an entrepreneurial spirit and are able to accept subcontracting and export work. d) Fast Moving Enterprise, is a Micro and Small and Medium Enterprises (MSMEs) that already have an entrepreneurial spirit and will transform into big businesses (UB). Micro, Small and Medium Enterprises

(MSMEs) play an important role in development and economic growth, not only in developing countries (NSB), but also in developed countries (NM). In developed countries, MSMEs are very important, not only do these business groups absorb the most labor compared to large businesses (UB), as in developing countries, but also their contribution to the formation or growth of gross domestic product (GDP) is greater than the contribution of large businesses (Tambunan, 2002).

Production is an activity that is done to add value to an object or create new objects so that it is more useful in meeting needs. Production is not only limited to manufacturing but also storage, distribution, transportation, retailing, and repackaging or otherwise (Miller and Meiners, 2000). Every production process has a technical foundation, which in economic theory is called the production function. The production function is a function or equation that shows the relationship between the level of output and the level (combination) of input use. Each producer is in theory considered to have a production function for his "factory" (Boediono, 2008).

According to Soekartawi (2001), there are three main reasons why the Cobb-Douglas production function is widely used by researchers, namely: a) Completion of the Cobb-Douglas function is relatively easier compared to other functions, for example it is more easily transferred into linear form. b) The results of estimating the line through the Cobb-Douglas production function will produce a regression coefficient which also shows the amount of elasticity. c) The

elasticity at the same time shows the level of the magnitude of return to scale.

Income is one of the most important elements of forming an income statement in the business. Income is very influential for the whole life of the company, the greater the income obtained, the greater the company's ability to finance all expenses and activities to be carried out by the company. Besides income also affects the company's income and loss presented in the income statement, then, income is the life blood of a company. In the economic concept, according to Adam Smith income or income is the amount that can be consumed without having to cause a decrease in capital, including fixed capital and fixed capital (circulating capital).

Income is determined by the factor of sale of goods produced and the price per unit of each factor of production. These prices are determined by the strength of supply and demand between sellers and buyers in the market. Revenue in this study is also called Total Revenue (TR) which is the amount of income received by business owners as a result of total sales. Revenues are formulated as a product of the number of units sold and the price per unit (Mankiw, 2011).

One supporting factor in running a business is the capital factor. The existence of capital is a staple in running a business. Business capital is absolutely necessary to carry out business activities. According to Utari and Dewi (2014) capital is a factor that has an important role in the production process and income of a business. Capital is needed when entrepreneurs want to start a new business or expand and develop an existing business. Economists use the term capital to refer to the

stock of various equipment and structures used in the production process, that is to say, economic capital reflects the accumulation of goods produced in the past that are currently being used to produce new goods and services. This capital includes equipment, machinery, transportation, buildings and raw materials (Mankiw, 2011).

Every company in carrying out the production process cannot rely solely on facilities with modern technology, because to expedite the production process labor services are needed (Herawati, 2008). Besides capital, technology and natural resources, labor is one of the important factors in the production process to produce goods and services for businesses. One important factor in production is the labor factor. According to Suparmoko and Irawan (1992) One of the successes of economic development is influenced by production factors. The factors of production include the population (Human Resources), what is meant by the population in human resources is the population of working age.

Marketing Strategy is one way to win a sustainable competitive advantage for companies that produce or produce goods. The marketing strategy is the basis for developing a comprehensive business plan (Wibowo, Arifin and Sunarti, 2015). Marketing is one of the main activities carried out by entrepreneurs in their efforts to maintain the viability of the company and the development of its business and make a profit. The success or failure in achieving the goals depends on the ability and skill in the field of marketing. In achieving the objectives there needs to be a marketing strategy that is a plan owned by a company as a guide for marketing activities in order to

achieve the goals set by the company (Swastha and Irawan, 2005).

The more sophisticated the technology used by business owners, the more the production results will increase, so that the income of business owners will increase. Technology is a tool to be able to utilize nature and something around it to the fullest. Thus, technology simply aims to facilitate the fulfillment of human needs. According to Winarsih et al (2014) technology is knowledge using tools, and how these tools optimize existing resources. Technology can also be interpreted as objects that can help the production process such as machinery, but can also cover more broadly such as information systems. Technology has influenced society in daily life. Technology has helped develop more advanced economies including the current global economy.

## RESEARCH METHODS

The type of this research is explanatory research which is a research that aims to examine the causality between variables that explain a certain phenomenon (Zulganef, 2008). In this study explain or prove the relationship or influence between variables. This type of research is descriptive quantitative research. In this study the population used is the microenterprise businessman in Semarang City. The population of jamu businesses in the city of Semarang was obtained by 91 business units based on data from the Office of SMEs and Cooperatives of the City of Semarang. Sampling in this study used the probability sampling method, ie all members or research subjects have the same opportunity to be selected as a sample. In this case, the sample is considered to represent the population



because it has the same characteristics, characteristics, and certain characteristics in the form of a businessman of Semarang City jamu. The sampling technique used in this study was random sampling technique. The random sampling technique was carried out randomly without regard to strata in the population. One method used to determine the number of samples is to use the Slovin formula as follows:

$$n = \frac{N}{1+Nd^2} \dots\dots\dots(1)$$

Information :

n = Sampel

N = Populasi

d = Standar deviasi error

Thus the number of samples if taking d = 5% on the number of herbal medicine businesses in the city of Semarang obtained the following amount:

$$n = \frac{91}{1+91 \times 5\%^2}$$

$$n = \frac{91}{1+0,2275}$$

$$n = \frac{91}{1,2275}$$

$$n = 74.1344 \text{ rounded to } 74$$

The sample selection was then used randomly by analyzing 74 sample units of jamu business. By taking 74 jamu business units as a sample, they are considered to be representative. Data collection methods include interviews, questionnaires, observations. In this study the data used are primary data obtained from respondents who visited jamu businesses in the city of Semarang. To analyze a problem in this study,

the data to be used was obtained through questionnaires, interviews and documentation. The measurement method in this questionnaire uses a Likert scale, according to (Sugiyono, 2016) the Likert scale is used to measure the opinions or perceptions of a person or group of people about an existing social phenomenon. Then the social phenomenon is then determined as a research variable. Variables measured using a Likert scale will be explained as an indicator variable that becomes a gradation.

The research instrument was used to determine the level of understanding of the instrument so as not to find difficulties or intentions of researchers, the instruments used by researchers in this study were questionnaires or questionnaires that were submitted to microbial entrepreneurs of Semarang City so that the data collected was of good quality and in accordance with the research objectives, the questionnaire needed testing is done first.

In this study, it is divided into two variables, namely the dependent variable and the independent variable. The dependent variable in this study is the perception of microbusiness entrepreneurs in increasing their income. Jamu business income in this study is seen from the subjective or objective of various aspects, in this study business income is measured by indicators of the development of jamu sales.

While the independent variables used in this study are capital, labor, marketing strategies and other technologies as follows: 1) Perception of adding capital, Capital is the need for funds in building or developing a business. Indicators used in the capital variable

are sources and conditions of capital and business credit. 2) Labor, Labor is someone who is ready and able to carry out the production process. The indicators used in the workforce variables are education, skills, working hours and labor productivity. 3) Marketing strategy, marketing strategy is a way to compete with the same business owners. Indicators used in marketing strategy variables are promotion strategy and price strategy. 4) Technology, Technology is a tool used in the production process. Technology is very important in the implementation of the production process, the more advanced the technology used, it can simplify the production process. The indicators used in the technology variable are production technology and information technology.

The data analysis method used in this study is multiple linear regression. Gujarati (2006) defines regression analysis as a study of the relationship of one variable called the explained variable (the explained variable) with one or two explaining variables (the explanatory). The first variable is also called the dependent variable and the second variable is also called the independent variable. If the independent variable is more than one, the regression analysis is called multiple linear regression.

Meant by multiple regression analysis because the influence of some independent variables will be subject to the dependent variable. The objectives of using regression analysis are: 1) Make estimates of the average and value of dependent variables based on the value of the independent variable. 2) Test the dependency characteristic hypothesis. 3) To predict the average value of the independent variable based on the value of the

independent variable outside the sample range. The intended multiple regression method is formulated as follows (Gujarati, 2006):

$$C = f(X_1, X_2, X_3, X_4) \dots \dots \dots (2)$$

or can be explicitly stated in the following econometric models:

$$C = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu \dots (3)$$

Information :

C = business income perception

$\beta_0$  = constant

$\beta_1, \dots, \beta_3$  = variable regression coefficients  $X_1, X_2, X_3$

$X_1$  = capital

$X_2$  = labor

$X_3$  = marketing strategy

$X_4$  = technology

$\mu$  = standard Error

The data obtained in this study will be processed in the form of multiple linear regression equations as above, using SPSS 21 program assistance.

To draw conclusions based on the results of the regression, the equation model must be free from deviations from classical assumptions. In this study conducted several tests, including: 1) Normality test, aims to test whether in the regression model, the dependent variable and the independent variable both have normal distribution or not. In the linear regression model, this assumption is indicated by error values that are normally distributed or close to normal, so it is worth doing a statistical equivalent test. Testing the normality of data in this study using the Kolmogorov-Smirnov Normality Test in the

SPSS program. 2) Multicollinearity test, aims to test whether the regression model found a correlation between independent variables (independent). A good regression model should not occur correlation between independent variables. If the independent variables correlate with each other, then these variables are not orthogonal.

Orthogonal variable is an independent variable whose correlation value between fellow independent variables is equal to zero. One model to test the presence or absence of multicollinearity in this study is to look at the value of tolerance and Variance Inflation Factor (VIF). 3) Heterokedastisitas test, aims to test whether in a regression model there is an inequality of variance from one observation residual to another. If the variance from one observation residual to another observation is still called homokedastisitas, but if it is different it is called heterokedastisitas.

A good regression model is homokedastisitas or heteroscedasticity does not occur. To find out the presence or absence of heteroscedasticity symptoms. 4) Autocorrelation test, aims to test whether in the linear regression model there is a correlation between the error of the intruder in the period  $t$  with the error of the intruder in the period  $t-1$  (previous). In this study to test the presence or absence of autocorrelation symptoms using the Durbin-Watson test (DW test) (Ghozali, 2011). The accuracy of the sample regression function in estimating the actual value can be assessed by its Hypothesis / Goodness of Fit Test (Ghozali, 2011). Statistically, the hypothesis test can be measured from the value of the F test, t test, and the coefficient of determination.

## RESULTS AND DISCUSSION

Based on the results of processing in this study, the classical assumption test in this study includes a normality test, a multicollinearity test, a heterokedasticity test, and an autocorrelation test between them. Normality test, the Kolmogorov-Smirnov Z value  $> 0.05$ , amounting to 0.873. So it can be said that all data in this research variable are normally distributed. Multicollinearity test, all three variables passed the multicollinearity test because they have a tolerance value  $> 0.1$  and a VIF value of more than 1.0 and there is no relationship between the four independent variables. Heteroscedasticity test, all three variables passed the heteroscedasticity test. In the glacier test a variable is declared to pass if it has a level of significance value  $> 0.1$  in the Table above all variables have a level of significance value of more than 0.1 that is the capital variable ( $X_1$ ) of 0.642; labor variable ( $X_2$ ) of 0.755; the marketing strategy variable ( $X_3$ ) is 0.440 and the technology variable ( $X_4$ ) is 0.318. Autocorrelation test, the Durbin-Watson value on the results of the autocorrelation test that has used the Cochrane-Orcutt method is 1.954. Based on the Durbin-Watson table with a significance of 0.05 and  $n = 74$  and  $k = 4$  a dL value of 1.5071 was obtained and a dU value of 1.7375. because the Durbin-Watson value is 1.954 in the area between dU (1.7375) and  $4-dU$  (2.2625), it can be concluded that there is no autocorrelation in the data results.

Partially the first regression model can be tested using the t test, the results of the t test are as follows: 1) The capital variable ( $X_1$ ) has a significance level  $< 0.1$  or equal to 0.025

meaning that the capital variable has significant influence on business income with the assumption of other independent variables is constant, Based on the results of the t value of capital  $2,291 > t$  table  $1,994$  means that the variable perception of additional capital affects the perception of micro entrepreneurs in increasing income. 2) The variable Work Middle ( $X_2$ ) has a significance level  $< 0.1$  or equal to  $0.09$  meaning that the labor variable has an effect and significant effect on business income assuming the other independent variables are constant, based on the results of the t count value of  $2.686 \text{ labor} > t$  table  $1,994$  means that the workforce variable influences the perception of micro businesses in increasing income. 3) Variable Marketing Strategy  $X_3$  has a significance level  $< 0.1$  or equal to  $0.003$  meaning that the marketing strategy variable has significant influence on the perceptions of micro entrepreneurs in increasing income with the assumption that the other independent variables are constant, based on the results of the t value of the marketing strategy  $3.094 > t$  Table  $1,994$  means that the variable of marketing strategy influences the perception of micro businesses in increasing income. 4) Technology Variable  $X_4$  has a significance level  $< 0.1$  or equal to  $0.000$  meaning that the technology variable has an effect on and significant on income with the assumption that the other independent variables are constant. Based on the results of the value of t arithmetic technology  $4.634 > t$  table  $1,994$  means that the technology variables affect the perception of micro businesses in increasing income.

F test is done to test the hypothesis in the study whether the four independent variables jointly influence the dependent

variable. From the processed results show that the significance value of the F test is  $0,000$  or smaller than  $0.05$  (5%), the results of the F test obtained F count is greater than the F table at a probability of 5% or  $0.05$  is  $2.50$  means that the four independent variables together affect the dependent variable. It means "There is a positive and significant influence between the perception of increasing capital, labor, marketing strategies and technology on the perception of micro businesses in increasing the business income of Semarang city jamu".

The coefficient of determination used to find out how much influence the perception of the addition of capital, labor, marketing strategies and technology to the perception of micro entrepreneurs in increasing the business income of Semarang city jamu business income. Based on the results of the processing shows that the value of Adjusted  $R_2$  is known as  $0.884$ , which means that  $88.4\%$  of the income perception factor can be explained through the four fowners in the table, namely capital, labor, marketing strategies and technology. While the remaining  $11.6\%$  is influenced by other fowners outside the model.

Based on the results of the processing shows the regression results from the model, it is known that there is a relationship between the dependent variable income (Y) with the independent variables capital ( $X_1$ ), Labor ( $X_2$ ), Marketing Strategy ( $X_3$ ) and Technology. Then the regression results can be derived into the following equation model:

$$\text{Income} = -1.066 + 0.207X_1 + 0.213X_2 + 0.292X_3 + 0.395X_4 + \mu$$

The results of the regression coefficient  $X_1$  of  $0.207$  stated that the perception of an

increase in capital of 1 unit and other independent variables were considered constant, then the perception of micro business operators on the increase in microbusiness income of jamu increased by 0.207 units.

The results of the regression coefficient  $X_2$  of 0.213 state that the addition of labor by 1 unit and the other independent variables are considered constant, then the perception of micro entrepreneurs towards an increase in microbusiness income of jamu increases by 0.213 units.

The results of the regression coefficient  $X_3$  of 0.292 stated that the addition of a marketing strategy of 1 unit and the other independent variables were considered constant, then the perception of micro entrepreneurs to increase the income of herbal microbusiness business increased by 0.292 units.

The results of the regression coefficient  $X_4$  of 0.395 stated that the addition of technology by 1 unit and other independent variables were considered constant, then the perception of micro entrepreneurs to increase microbusiness income of jamu increased by 0.395 units.

Based on the results of the study, the variable perception of additional capital has a positive and significant effect on the perception of micro entrepreneurs in increasing the business income of Semarang City jamu. Partial test results (t test) indicate that the perception variable increase in capital ( $X_1$ ) has a significant level  $<0.1$  or equal to 0.025, which means the variable perception of additional capital is stated to have a positive and significant effect on the perception of

micro entrepreneurs in increasing the business income of Semarang city jamu by assuming the other independent variables are constant. The  $H_1$  hypothesis in this study was accepted. The results of this study are supported by previous studies of Utari and Dewi (2014) that capital influences MSME income in the Imam Bonjol area of West Denpasar. A similar study conducted by Zeng (2016) that suboptimal use of capital will affect business income. The greater the business capital spent, the greater the income earned by SMEs. This result is also in accordance with the theory of physical capital todaro (ie the real value of all capital goods produced) will allow an increase in output in the future so that it will increase operating income. As in this study, capital has a positive and significant effect on MSME earnings. The results of interviews with the Semarang city jamu business owners that the capital spent to build a jamu business is relatively small because the ingredients are easily available and affordable.

Labor variable has a positive and significant effect on the income of Semarang jamu business owners. Partial test results (t test) indicate that the variable of labor ( $X_2$ ) has a significant level  $<0.1$  or equal to 0.09 which means that the variable of labor is stated to have a positive and significant effect on the perception of micro entrepreneurs in increasing the business income of Semarang city jamu by assuming the other independent variables are constant. The  $H_2$  hypothesis in this study was accepted. The results of this study are supported by previous research Onkelinx, Manolova and Edelman (2016) that improving the quality of human resources or employees in business is

important to improve labor productivity. Similar research was conducted by Khan and Terziovski (2014) that there is a positive and significant effect between workforce towards the performance of Micro, Small and Medium Enterprises (MSMEs) in increasing business income.

This is also in accordance with the theory of Suparmoko if economic success is at the level of quality human resources (HR). According to the Cobb Douglas production theory, one of the fowners of production is labor that needs to be taken into account in sufficient numbers, the number of workers is still much influenced by the quality of labor. From the research data conducted on 74 respondents showed that respondents with a vulnerable age of 40-50 years with a percentage of 39% with a total of 29 people, then at the age of 50-60 years with a percentage of 38% with a total of 28 respondents, aged > 60 years with 12% percentage with 9 respondents, and at least 30-40 years with a percentage of 11% with 8 respondents.

It can be concluded that the majority of jamu entrepreneurs are in the elderly. The average business owner of Semarang city jamu is 54% of SMA / SMK / MA graduates with 40 respondents, 23% of SMP / MTs graduates with 27 respondents, 14% of SD / MI graduates with 14% respondents 10 people and at least are graduates, 9% graduates with 7 respondents.

The marketing strategy variable has a positive and significant effect on the perception of micro entrepreneurs in increasing the business income of Semarang jamu. Partial test results (t test) showed that the marketing strategy variable ( $X_3$ ) had a significant level  $< 0.1$  or equal to  $0.003$ , which means that the marketing strategy variable

was stated to have a positive and significant effect on the perception of micro entrepreneurs in increasing the business income of Semarang city jamu with the assumption of variables Other freedoms are constant. The  $H_3$  hypothesis in this study was accepted. The results of this study are supported by a previous study by Purwanti (2012) that marketing strategies affect business development in relation to MSME income in the villages of Dayaan and Kalilondo Salatiga. The better the marketing strategy, the more income the business owners receives is the marketing strategy is a fundamental tool to achieve business goals by developing excellence in market competition. In accordance with the research of Dzisi and Ofosu (2014) that there is an influence of marketing strategies on the performance of Usama Micro Small and Medium Enterprises (MSMEs) in terms of profitability or income. In accordance with the theory of Mulyadi (2010) one of the fowners that influences company income is marketing strategy.

The technology variable has a positive and significant effect on the perception of micro- entrepreneurs in increasing the business income of Semarang city jamu. Partial test results (t test) indicate that the technology variable ( $X_4$ ) has a significant level  $< 0.1$  or equal to  $0.003$ , which means the technology variable is stated to have a positive and significant effect on the perception of micro entrepreneurs in increasing the business income of Semarang city jamu with the assumption of other independent variables is constant. The  $H_4$  hypothesis in this study was accepted. The results of this study are supported by previous studies of Utari and Dewi (2014) that technology influences the

income of SMEs in the Imam Bonjol area of West Denpasar. The greater the technology used, the greater the income received by SMEs. A similar study was conducted by Winarsih (2014) that the use of technology influences the production process related to business income. Technology has an effect on increasing the production of jamu businesses in the city of Semarang to be more efficient in the use of costs and production time. The efficiency and effectiveness of jamu business production is influenced by the technology used by jamu businesses in the city of Semarang. In accordance with the opinion of Suparmoko and Irawan (1992) that in the production function if the technology used is more modern then the results of the production process are more effective and efficient so that production costs are lower and increase business incomes.

The hypothesis in this study is that there is a positive and significant influence between capital, labor, marketing strategies and technology on the perceptions of micro businesses in increasing the business income of Semarang jamu business. The coefficient of determination in this study obtained an adjusted  $R^2$  value of 0.890 or 89%, which means the four variables, namely capital, employment, marketing strategies and technology, explain the income variable of the Semarang city jamu business owners 89%. While the remaining 11% is influenced by other variables. In the multiple linear test, Sig. F is 0.000 or less than 0.05, it can be concluded that the variables of capital, labor, marketing strategy and technology together have a positive and significant effect on perceptions of micro entrepreneurs in increasing the income

of jamu businesses in the city of Semarang. Technological variables have the greatest influence among capital variables, labor variables and marketing strategy variables. Technology facilitates the production process to be more efficient and effective and saves production costs. From the interviews, it was found that the age of Semarang jamu microbusiness workers was dominated by ages ranging from 40-50 years in which this age was a less productive age and affected the sustainability of the microbial business in Semarang. The capital used by jamu business owners is relatively small because raw materials are easily obtained and relatively inexpensive so that they do not require substantial capital. From the results of the study, it is found that the greater the capital, the greater the income, the greater the workforce, the greater the level of income, the greater the application of marketing strategies, the greater the level of income, the more modern the level of technology, the greater the level of income received by the microbial business entrepreneurs. Semarang so that labor capital, marketing strategies and technology have a positive and significant effect jointly on the micro business income of Semarang city jamu.

## CONCLUSION

Based on the results of data analysis and discussion of this study, the conclusions of this study are as follows: Perception of additional capital has a positive and significant effect on perceptions of micro entrepreneurs in increasing income means that the higher the capital, it increases the perception of micro entrepreneurs micro business income of jamu.

Workers have a positive and significant influence on the perception of micro entrepreneurs in increasing income means that the higher the workforce, it increases the perception of micro entrepreneurs on increasing the income of herbal microbusiness. The marketing strategy has a positive and significant influence on the perception of micro entrepreneurs in increasing income, meaning that the higher the marketing strategy, it increases the perception of micro entrepreneurs on increasing the income of the micro jamu business.

Technology has a positive and significant effect on the perception of micro entrepreneurs in increasing income means that the higher the technology, it will increase the perception of micro entrepreneurs in increasing the income of micro-herbal business. Together the capital, labor, marketing strategy and technology variables explain the income variable of 88.4% and the rest are explained by other factors not included in this study.

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