

**The Factors that Influence Income Level in Small Medium  
Enterprise**

**(Case study in Tempe Chips Industry Sanan Malang)**

**Journal**

**By:  
Febby Satya Hattantyo  
115020107121003**

Presented in Partial Fulfillment of the Requirements  
for the Degree of Bachelor of Economics and Business



**INTERNATIONAL PROGRAM IN ECONOMICS**

**FACULTY OF ECONOMICS AND BUSINESS  
UNIVERSITY OF BRAWIJAYA  
2015**

# **The Factors that Influence Income Level in Small Medium Enterprise (case study in Tempe Chips Industry Sanan Malang)**

**FebbySatyaHattantyo**

Economics Development Major Faculty of Economics and Business Brawijaya Universities

Email: vbysatya@yahoo.com

## **Abstract**

Unique industry food in Malang city especially one of small industry was develop. This Industry can create job field and also absorb labor in massive, then can create income for society and region. From all various type of special food from Malang, Tempe chips industry is one of industry which has some potentials to be developed as souvenirs for all tourists that come to Malang city. From this phenomena the writer tries to do a research about the impact of capital, production, length of business, and labor variables to income level. Because the increase of income in business or industry is a main enforcement element for industry to keep surviving and developing. The purposes of this research are: (1) to know the impact of capital, production, long of business, and labor to income of the Tempe chips producers in Sanan area of Malang city; (2) to know which factor that have more influence in the income level of Tempe chips industry in Sanan area of Malang city.

The collection of the data comes from primary and secondary data sources. Primary data is in questioner form and secondary data is a data from Department of Industry and Trade. The respondents are the owner of each Tempe chips business which are 20 industry in number. The sampling technique that is used in this research is by saturation sampling method (census), by taking all members of sample.

Based on the result of multiple linear regression calculation by using statistic program SPSS, is gotten a multiple linear regression equation below:  $Y = -69,235 + 0,672X_1 + 0,085X_2 + 1,421X_3 + 7,130X_4 + e$ , the result of data analysis is there are 3 independent variables (capital, production, and labor) that have a positive and significant relationship with the income of Tempe chips producers in Sanan, Malang city. The variable which has no impact is length of business. The variable that has a dominant impact to the income of Tempe chips producers in Sanan, Malang city, is labor.

Key word: Small Medium Enterprise, Income, capital, Production, Labor, Length of Business

---

## **A. INTRODUCTION**

In this globalization era, industry sector have been one of the sectors. A special attention is necessarily given to small industry sector as one of the development policy advice that is including as new symptoms in this reformation era. Besides, the development of this business activity relatively does not require big capital, and, in this whole crisis period, SMSEs are hardy business activities. Small business, according to form letter of Bank Indonesia No. 26/1/UKK issued on May 29, 1993, the subjects of KUK (a program of loan for small business) are businesses whose total asset is less than Rp.600 million (six hundred million rupiahs) with net

income at less Rp 200 million rupiah, excluding the occupied land and building. Based on the data from the Ministry of Koperasi and Small Medium Enterprises in 2010, the number of small medium enterprises is more than 90 percent of the total business activity. The contribution of small medium enterprises on Gross Domestic Product in Indonesia is 58,05 percent. From the employment side, small medium enterprises absorb 101,722 million people (97,15 percent of 104,613 million workers). Small industry showed plays important roles and has the potential to develop further.

Development of small and medium enterprise in Indonesia is one of the priority in economic development. This is, in addition to the business, one of the important systems in economic democracy that is not only to reduce the problem of disparities among income groups and among businesses activity but also in poverty alleviation and employment generation. Moreover, development is able to expand the economic base and make a significant contribution in speeding up structural change, namely the rise in the regional economy and national economic security. It can be proved empirically that in the previous economic crisis, when many big companies fell and made large number of layoffs, Small medium enterprises are able to survive in the condition (Ni Putu, 2006:2)

The success of small businessperson will affect domestic production, which is expected to be able to compete with the other product, especially imported one. Therefore, it is not impossible that other markets outside the region or the intended targets will enhance the development of small industry. Roles of local governments will increase the production and labor absorption as well as welfare of society. With the increase of production and income level, new employment, which in turn can increase the family's welfare, will arise. It is indirectly help government in reducing the poverty. Given the importance of reaching the economic development in small Medium business sector.

## **B. LITERATURE REVIEW**

### **Income**

Income in economic science can be defined as result of money or anything that is achieved from the use of property or human services. According to BPS, household income is the income from the head of the household and the income of household members. Household income can be derived from the remuneration of production factors of labor (wages, incentive, bonus, and the other), and income from giving to other parties (transfer). The Company seeks to earn profits. Profit is spread between total revenue and total cost (Soeharno, 2006:157)

$$\pi = TR - TC$$

### **Capital**

According to Kamus Besar Bahasa Indonesia (Nugraha, 2011:9), working capital is money primarily used for trading (money, goods, etc.) that can be used to

produce something that increases richness. Capital is all assets that can be used directly and indirectly in the production process to increase output. In economic sense, capital is goods or money together with the production of land and labor producing goods and new services. The cost of capital is one of the very important factors for any business, small, medium or large (Tambunan, 2002; 55).

-Kinds of Capital:

1) Self-Capital

Equity capital is obtained from the owner of the business itself. Capital consists of savings, donations, grants, sibling's borrowings, and others.

2) Foreign Capital (loan)

Foreign capital or loan capital is the capital that is usually obtained from outside parties and is usually obtained from loan. Loan capital gains are unlimited in number, which means that the quantity is available in plenty. In addition, loan capital usually arises from the motivation of the management to do business in earnest way. (Mardiyatmo2008:57)

## **Production**

In general, the process of production of goods uses more than one input variable, and in the long run, all inputs are variables. If two types of input variables are used, labor (L) and capital (K), so the production process is:

$$Q = f(L, K)$$

Therefore, output change is the function from two input variables. Combination of both of input variables can be differentials and will result in differential of output level (Suryawati, 2004:63).

The Law of Diminishing Return is marginal product of labor where diminishing returns apply to most of the production process. This law argues that the use of input is rising while the other input use is considered fixed to a certain point, the additional output will decrease. This law usually applies for a short term where there is at least one input (Sasanko, 2003:31)

## **Labor**

Labor is population of working age who are ready to work, which is 15-65 years of age. According to Regulation No 13 year 2003, labor is every person capable of doing work to produce goods and services, either for their own needs or for the community. Generally, labor is divided into two, Physical Labor and Spiritual Labor.

### **a. Labor Supply**

The supply of labor can be analyzed at two levels: the microeconomic level and macroeconomic level. Microeconomic level concerns with individual and household labor supply, while macroeconomic is about aggregate economy level. Wages help to offset the negative aspect and enable the individual to generate income, which can be used to consume goods and services in future time. The main result of the microeconomic analysis of labor supply can be simply reproduced Based on

simplifying assumption that individuals are free to determine the hours they wish to work (Smith, 2003:7).

**a. Labor Demand**

Labor is one of production factors that firms combine and organize in order to generate output. Consumers demand goods and services that producers seek to supply profitably. Hence, they demand labor to help produce goods and service to meet the requirements of consumers. Yet, whatever the objective of the firm (profit maximization, growth, market share, etc.), the decision to employ workers will entail a comparison of the cost and benefit to the firm of doing so. Employing labor gives rise to costs, primarily wages. However, other costs also exist, for example national insurance, basic training, etc. The benefit to the firm is mainly the revenue generated by sales of goods or services produced by labor.

**Length of Business**

Length of business means the duration of seller’s works on the business that they managed. The length of business can bring out some work experiences, where the experience can influence the activity of each person. The length of business also can affect in profitability level. A businessman who is pursuing its business will be affected his/her productivity, so it will increase efficiency and able to reduce the cost of production to be less than the sales revenue. The longer a businessman pursues their business, the more knowledge they will get about the consumer behavior(Sukirno, 1994:80).

The business experience can affect income level that is already proved from Tjiptoroso research (1986). The entrepreneur that already focuses on their business in a long period will affect to their professional ability. The more time a person takes to focus on their business will bring out more knowledge about consumer behavior. (Asmie, 2008).

**C. RESEARCH METHOD**

The type of research used in this minor thesis is explanatory research with quantitative approach. Singarimbun and Effendi (2006:5) explained that, for the same research, researchers explain the causality relationship between variables through the hypothesis test, so the researches are no longer called as descriptive researches, but hypothesis test research or explanatory research.

|                          |                                   |
|--------------------------|-----------------------------------|
| Type of Research         | Quantitative                      |
| Scope                    | Sentra Industry Tempe Chips Sanan |
| Type and Source of Data  | Primary and Secondary             |
| Data Collection Method   | Questioners and Interview         |
| Data analysis Techniques | Multiple Linier Regressions       |

## D. RESULT OF DISCUSSION

### Resume of the Analyses Linier Regression that Factors Influence Level Income in Tempe Chips Industry in Sanan

| Dependent Variable                    | Independent Variable | Coefficient | $t_{hitung}$ | Significance | Descriptions    |
|---------------------------------------|----------------------|-------------|--------------|--------------|-----------------|
| Result                                | Constanta            | -69,235     | -4.931       | 0.000        |                 |
|                                       | Capital              | 0,672       | 2,412        | 0,029        | Significant     |
|                                       | Production           | 0,085       | 3,103        | 0,007        | Significant     |
|                                       | Long of business     | 1,421       | 1,786        | 0,094        | not Significant |
|                                       | Labor                | 7,130       | 3,448        | 0,004        | Significant     |
| $\alpha$                              |                      |             |              | = 0,050      |                 |
| $R^2$                                 |                      |             |              | = 0,950      |                 |
| Coefficient Determinacy (Adj. $R^2$ ) |                      |             |              | = 0,876      |                 |
| F-hitung                              |                      |             |              | = 34,411     |                 |
| F-table ( $F_{(0,05,4,19)}$ )         |                      |             |              | = 2,895      |                 |
| t-table ( $t_{(0,05,19)}$ )           |                      |             |              | = 2,093      |                 |
| Significance                          |                      |             |              | = 0,000      |                 |

the regression model related with capital, production, length of business, and labor to level income is as follow:

$$Y = -69,235 + 0,672X_1 + 0,085X_2 + 1,421X_3 + 7,130X_4 + e$$

**The interpretations of this regression model are:**

**Capital= 0,672**

In this coefficient regression, we got a positive coefficient. So, if  $X_1$  (capital) increases, Y tends to increase as well and otherwise if  $X_1$  (capital) decrease, so Y (income level) tends to decrease

**Production = 0,085**

In this coefficient regression, we got a positive coefficient. So, if  $X_2$  (production) increases, Y tends to increase as well and otherwise if  $X_2$  (production) decrease, so Y (income level) tends to decrease

**Long of Business = 1,421**

In this coefficient regression, we got a positive coefficient. So, if  $X_3$  (length of business) increases, Y tends to increase as well and otherwise if  $X_3$  (length of business) decrease, so Y (income level) tends to decrease

**Labor = 7,130**

In this coefficient regression, we got a positive coefficient. So, if  $X_4$  (labor) increases, Y tends to increase as well and otherwise if  $X_4$  (labor) decrease, so Y (income level) tends to decrease

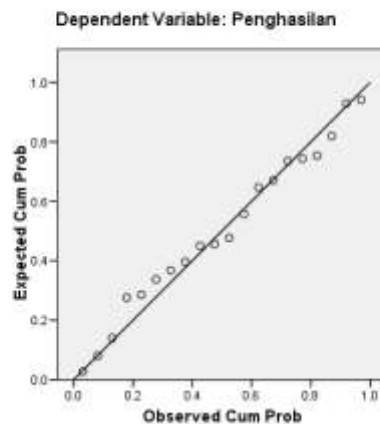
### Classical Assumptions Test

After we got result of multiple linier regression, so continue with classical assumption test model.

#### 1) UjiNormalitas

In Multiple linear regression, the data in use is the normally distributed data. The normality of data can be determined based on *p-p plot*. If residual plot is located around diagonal liner and follows diagonal line pattern, it can be concluded that the data is normally distributed. This is the result of *p-p plot* graph.

Normal P-P Plot of Regression Standardized Residual

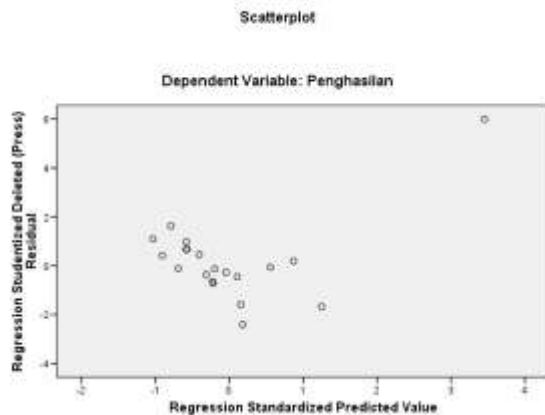


#### 2) UjiMultikolinearitas

In this multiple linear regression, it is expected that no indication of multicollinearity (linear relationship between independent variables) between capital, production, length of business and labor. To indicate multicollinearity, *Variance Inflation Factor (VIF)* value is used. If the value of  $VIF > 10$ , multicollinearity does exist. On the contrary, if the value of  $VIF < 10$ , multicollinearity does not exist.

### 3) Uji Heteroskedastisitas

The way to test homoscedasticity is by seeing the plot between prediction values of dependent variable (ZPRED) with residually (SDRESID). If there are stable clear patterns (wavy, widen and then tighten), heteroscedasticity is detected (it is not cover the assumption fully). While, if there is no clear patterns, and the dots spread above and in below 0 for line Y, so there is no heteroscedasticity.



Based on the *scatterplot* above, dots are spread very well above and below 0 for line Y, and there are no clear patterns. It can be concluded Heteroscedasticity does not exist in the data.

### Simultaneous (F-test)

The result of F-Test with the same time all of variable independent ( capital, production, long of business and labor ) influential to the variable dependent (income). The value of  $F_{\text{calculate}}$  is 34,411, and the significance value is 0,000. It can be seen that value  $F_{\text{calculate}} > F_{\text{table}}$  ( $34,411 > 2,895$ ). Therefore,  $H_0$  is rejected in  $\alpha = 5\%$ . It can be concluded that there is significant influence between variables  $X_1$ ,  $X_2$ ,  $X_3$  and  $X_4$  to Y or regression model that include  $X_1$ ,  $X_2$ ,  $X_3$  and  $X_4$  is good to use. Thus, the Determinant coefficient (Adj.  $R^2$ ) is of 0,876. That result explains the contribution from independent variables that is included in regression model in explaining varieties of dependent variable (Y) is 87,6% and the rest 12,4% is contributed from other variables outside the regression model, or it can be said that no correlation between the available independent variables



### **Partial (T-test)**

T-test is to know whether every independent variables for regression model have significant effect to Y. The independent variable that is formed in this regression model is concluded to have a significant influence if the significant is  $<0,05$ . The test to those variables in partial is shown below:

#### **a. Variable $X_1$ (Capital)**

To know how far the coefficient regression to variable  $X_1$ , T-test with these standards is used:

The hypotheses in use are:

$H_0 : \beta_1 = 0$  (variable  $X_1$  does not significantly affect Y)

$H_a : \beta_1 \neq 0$  (variable  $X_1$  significantly affects Y)

From table 4.7, we get  $t_{\text{calculate}}$  is of 2,412 with the significance level of 0,029.  $T_{\text{calculate}}$  is greater than  $t_{\text{table}}(2,412 > 2,093)$ . This shows that  $H_0$  is rejected, so  $X_1$  (Capital) significantly affects Y (income level).

#### **b. Variable $X_2$ (Production)**

To know how far the coefficient regression to variable  $X_2$  is, T-test with these standards is used:

The hypothesis in use are:

$H_0 : \beta_2 = 0$  (variable  $X_2$  does not significantly affect Y)

$H_a : \beta_2 \neq 0$  (variable  $X_2$  significantly affects Y)

From table 4.7 we got  $t_{\text{calculate}}$  3,103 and a significant level of 0,007.  $T_{\text{calculate}}$  is greater than  $t_{\text{table}}(3,103 > 2,093)$ . This shows that  $H_0$  is rejected, so  $X_2$  (production) significantly affects Y (income level).

#### **c. Variable $X_3$ (length of business)**

To know how far the coefficient regression to variable  $X_3$  is, T-test with these standards is used:

The hypothesis in use are:

$H_0 : \beta_3 = 0$  (variable  $X_3$  does not significantly affect Y)

$H_1 : \beta_3 \neq 0$  (variable  $X_3$  significantly affects Y)

From table 4.7 we got  $t_{\text{calculate}}$  1,786 and a significant level of 0,094.  $T_{\text{calculate}}$  is less than  $t_{\text{table}}(1,786 < 2,093)$ . This shows that  $H_0$  is rejected, so  $X_3$  (length of business) does not significantly affect Y (income level).

#### **d. Variable $X_4$ (Labor)**

To know how far the truth of coefficient regression to variable  $X_4$  is, T-test with these standards is used:

The hypothesis in use are:

$H_0 : \beta_4 = 0$  (variable  $X_4$  does not significantly affect Y)

$H_a : \beta_4 \neq 0$  (variable  $X_4$  significantly affects Y)

From table 4.7 we got  $t_{\text{calculate}}$  3,448 and a significant level of 0,004.  $T_{\text{calculate}}$  is greater than  $t_{\text{table}}(3,448 > 2,093)$ . This shows that  $H_0$  is rejected, so  $X_4$  (Labor) significantly affects Y (income level).

### **E. CONCLUSION AND SUGESSTION**

## Conclution

1. According to partial or individual test (T-Test), there are three variables that influence the income level of Tempe chips industry. They are capital, production, and labor. The variable that does not influence income level is length of business. It is possibly because there is no innovation factor in the production or selling process and the location is not strategies.
2. Variable that dominantly influences income level is labor. The number of labor is very important to increase output level, which in turn will increase the income of Tempe chips business. Based on the income level with its influencing variables, Tempe chips makers in Sanan area of Malang city have the potential develop more and continuously.

## Suggestions

1. This research result can be used as suggestions in the strategy and policy making for the government in term of developing the industry, such as in business license, tax holiday, raw materials availability, promotion and production of souvenir industry center that can help Tempe chips entrepreneurs market their products. Besides, government should train them in accounting and entrepreneurial skills, so the needs of qualified human resources in industry sector, especially small industry, can be fulfilled. Therefore, the right policy can make the Tempe chips industries in Sanan area develop more.
2. For the producers of Tempe chips in Malang city, especially for the ones who have been already producing in a long time located at the back area of Sanan industry center, it will be good if they can improve some elements to market their products, such as advertising their product via medias (online social media, newspaper, or magazine). The other ways that can be adopted by the tempe chips entrepreneur in Malang city is participation in culinary exhibitions (food expo).
3. For the parties who want to do further research about this matter, some new variables should be added, and some basic assumptions should be changed the so that the independent variable can explain the changes of dependent variables.

## BIBLIOGRAPHY

Smith, Stephen. 2003, *Labor Economic*. Second Edition. London and New York: Routledge Taylor and Francis group.

Soeharno. 2006, *Ekonomi Manajerial*. Yogyakarta: Andi

Suryawati. 2004. *Teori Ekonomi Mikro*. Yogyakarta : UPP AMP YKPN.

Tambuna, Thulus, 2002, *Usaha Kecil dan Menengah di Indonesia Beberapa Isu Penting*. Jakarta: Salemba Empat

Singarimbun and Effendy. 2006. *Metode Penelitian Survei*. Cetak kedelapan belas. Revision Edition. Jakarta: LP3ES

Sukirno, S. 1994, *Pengantar Teori Mikroekonomi*, Jakarta: Raja Grafindo Persada

Bambang, Sasongko. 2003. *Teori Ekonomi Mikro*. Malang, Publisher: Universitas Negeri Malang

Kamarudin, Ahmad. 1997. *Dasar-dasar Manajemen Modal Kerja*. Jakarta: Rineka Cipta