The Influence of Capital, Number of Working Hours, Works Force and Time to Run Business on Operating Income of Angkringan in Yogyakarta

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Abstract

Informal business sector is the largest economic activity unit in Indonesia. Most informal businesses have earned no more than five million rupiahs per year. One form of informal business sector is angkringan. Angkringan is one of informal business forms that sales foods and drink to lower-middle-class consumers. This type of business is mostly done in Jogjakarta. This business is the main source of income some communities in Jogjakarta.

This research is aimed to analyze the influence of capital, number of working hours, work force, and time to run the business on operating income of angkringan. The sample was collected by using purposive sampling method. The respondents are 70 angkringan owners in Jetis, Yogyakarta. Data collection was carried out by distributing questionnaire to respondents about their operating income, amount of their capital, working hours, and work force. Analysis instrument used in this research is multiple regression analysis, while the hypothesis is tested by using t test and F test.

Data on this research is cross sectional. To obtained better result better, the amount of business capital and operating income are transformed into a logarithm. Model of multiple regression is formulated as a log y = 4.113 + 0.283 Log x₁ + 0.006x₂ + 0.093x₃ + 0.012x₄.

The result of the study showed that income level of angkringan sellers in Jetis, Yogyakarta, is influenced by the amount of business capital, working hours, work force and time to run their business. Number of working hours is the greatest influencing factor on angkringan income. The result of testing the regression coefficient in partial and unison shows that all variables significantly impact the income level angkringan sellers in Jetis, Yogyakarta. The coefficients determination (r²) result reaches 32.5%. While the remaining 67.5% described by other variables is not included in the model research.

Key word: Influence of capital, number of working hours, works force and time to run business, operating income

Introduction

Informal sector is the largest part of business unit in Indonesia. Based on 1996 economy census, there are 16.4 million economic activity units in Indonesia and 95% of them are informal economic activities. Most of the economic activity units are business units that receive turnover less than five million rupiahs annually. Percentage of this particular business group is 59%, equal to 9.7 million business units. In contrast, there are only 5.400 economic activity units (equal to 0.03%) that receive more than 50 billion rupiahs annually (Republika,
Term of informal economic sector will be easier to recognize from its phenomenon and activities than from its limitations or definition because there is no obvious limitation on the definition of informal sector. Sethuraman (1987: 17) stated that informal sector is:

*It consist of small-scale units engaged in the production and distribution of goods and services with the primary objective of generating employment and incomes to their participants notwithstanding the constraints on capital, both physical and human, and know how.*

Sethuraman's formulation limit contains 3 main criteria for informal business sector: (1) Business scale (small-scale business unit), (2) Production orientation (generating income and job opportunity for themselves), and (3) Business atmosphere (several difficulties in generating capital and required skills).

Applying business scale criteria as a reference to define informal business sector is also conducted by other authors, such as Hans-Dieter Evers and Bryan Roberts. According to Fivers' perspective, "Informal sector is an activity of shadow economy. It works in service- and market-oriented small units, thus they offer service efficiency." However, "shadow economy is the entire economic activities which are not covered by government's official statistics, thus they are beyond the reach of state regulations and taxes" (Evers, 1991: 22). Meanwhile, Bryan Roberts defines informal sectors as “the set of economic activities often, but not exclusively, carried out in small firms or by the self-employed, which elude government requirements such as registration, tax and social security obligations, and health and safety rules” (Robert, 1989: 41)

In addition of using business scale criteria, Evers and Roberts use government regulation reachability as a criteria for informal business sector. As a matter of fact, there is a correlation between business scale and government regulation reachability. Informal business sector is not registered in official institution due to their small scale. In this way, they are not subject to government's positive regulation, permit, and policy on loan, protection, and other conveniences (Sumodiningrat: 1988). Therefore, government regulation reachability aspect is commonly used as a discriminating criteria between informal and formal sector by using certain terminologies, such as "protection" or "economic support". Another researcher defines that informal sector is "a business unit that receive no or minimum official economic protection of government" (Hidayat, 1978: 418).

In terms of protection or economic support, Hidayat (1988) considers that the main issue is not the presence of government's economic support, but the accessibility to the available support. In this context, Hidayat (1988) proposes additional definitions of informal sector in Indonesia that emphasize the accessibility and quality of support as follow:

1. Informal sector is a business sector that DOES NOT receive government's economic support or protection.
2. It is a business sector that HAS NOT BEEN ABLE to use the support provided by the government due inaccessibility.
3. It is a business sector that HAS received the support but the support does not sufficient enough to make the business unit independent (remain as a small-scale business).

Although the definition of informal business sector has not been clearly formulated, the main characteristics of informal economic activity has been identified. Soetjipto
Wirosardjono (1985: 5-6) suggests several characteristics of informal economic activity in Indonesia:

- Irregular activity pattern, in terms of time, capital, and revenue.
- Does not subject to government's rules and regulations.
- Its capital, instruments, equipment, and turnover are usually low and generated in daily basis.
- Does not have permanent business area and it is usually located separately from their residence.
- Does not have any linkage with large-scale business.
- Usually done by and serve people of low-income community.
- Does not require specific skill and expertise, so it can be done by anyone of any education level.
- Each business unit usually employs few employees and they are friends, come from the same hometown, or have family relationship.
- Does not use banking, accounting, loan systems, etc.

Hidayat also identify informal economic activities. Based on his research in several cities of Indonesia, he found 11 characteristics of informal economic activities (Hidayat, 1978: 426):

1. Its business activities are not well-organized because this business unit was started without using facilities available in formal sector.
2. They usually do not have business permit.
3. Their business activities are irregular, in terms of their workplace and working hour.
4. Government policies that help people of weak economy group do not reach this sector.
5. It is easy for the business unit to move from one subsector to another subsector.
6. They apply very basic technology.
7. Their capital and cash flow are relatively small and, thus, their operational scale is also relatively small.
8. They do not require formal educational background to run this business since they will learn from hands on experiences.
9. Informal business units are one-man enterprises and, if they have employees, they are recruited from their family members.
10. Sources of their capital are their own saving or from unofficial financial institutions.
11. Their products/services are mainly used by low- and medium-income people who life in urban/rural areas.

Informal trading business, as a matter of fact, includes various types of business unit. There are several useful perspectives to classify types of informal trading business, as follow:


Syahruddin (1987) propose more comprehensive classification of informal trading business. It is classified based on some aspects at once that include: (1) its relationship with their workplace, (2) types of products, and (3) linkage with formal sector.
Quantity of its business unit and high level of its dissemination are the competitive advantage of informal trading as a distributor. Informal trading also has access to their customers' place of activity, such as, house, school, or office (Hidayat, 1981: 13; Forbes, 1985: 372). Function and role of informal trading in urban distribution system can be considered from two perspectives. From horizontal perspective, informal trading business is a mediator between producers and consumers that belong to the same level of income. Meanwhile, from vertical perspective, informal trading business connects producers and consumers that belong to the different level of income. Informal trading businesses that work as distributors in vertical marketing are usually more advance than those businesses that work in horizontal marketing (Hidayat, 1981: 14). Distribution cost of informal trading business can be minimized since they work efficiently. This advantage allows informal trading network to be effectively utilized as a marketing channel for products of formal sector (Swasono, et al. 1986: 87; Nasuton, 1986). Result of LP3ES survey that was conducted in Jakarta found 213 items that were sold by informal trading business and 40.1% of them were manufactured products. In Surabaya, percentage of manufactured merchandises was 38.8% (Rachbini and Hamid, 1994: 102-103).

Meanwhile, percentage of formal sector products distributed in informal book trading business is even higher. Research that was conducted by Salamatun Asakdiyah et al (1995: 29) shows that more than 75% of books sold in informal book trade center of Yogyakarta Shopping Center were new books or books made by formal sector. In addition, by means of efficient operational management, merchants of informal market are allowed to sell books 5 - 40 % cheaper than price set by bookstores (Asakdiyah, 1992: 55).

Level of informal trading business income is influenced by many factors. Identification of these factors can be done by analyzing result of previous researches. Several factors that were studied in academic researches influence income level of informal trading business and they are described as follows:

a. Capital

Capital is a motive power of economic activity. It is directly correspond with level of income. Bigger capital allows an economic activity unit to increase their product varieties.

b. Working Hour

Operational duration of informal trading businesses is directly related to their level of income. Longer duration gives more opportunity to have relatively higher turnover. Moreover, higher turnover leads to higher income, and it is proven in previous researches conducted by Jafar (1994) and Tjiptoroso (1996).

c. Number of Manpower

Hidayat (1978: 426) propose that informal economic activity units are, in general, one-man enterprises and their employees, if any, are their family members. Previous studies conducted by Santayani (1996) and Syahruddin (1987) prove that manpower utilization by informal trading business influences their level of income.
d. Term of Business Establishment

Duration of the business establishment influences the business player's professionalism. The longer their business duration, the more knowledge of consumer behavior and preferences they gain. Result of a study conducted by Swasono, et. al. (1986) propose that term of business establishment influences income level of informal trading business.

Prominence of informal trading role is mainly supported by the contribution of retail trading business activities. Among other small-scale retail trading businesses, angkringan business is a type of business that plays an important position and function in providing daily meals and drinks for its surrounding communities. A study carried out by Soeratno (2000) proposed that angkringan is categorized as sidewalk vendors and most of the vendors are at productive age. In addition, Marfai (2005) showed that angkringan is a kind of business that develops well although it does not require large amount of capital. Thereby, it is possible for low-class people to start angkringan business (Santoso, 2006). Thus, it is important to analyze angkringan business further since it is a rational and reliable alternative source of income. The problem is finding a way for those informal business player, particularly angkringan vendors, to gain more revenue that support their social and economic life. For that reason, it is necessary to identify any factors that influence income level of informal economic business player, particularly angkringan vendors in Yogyakarta.

Hypotheses

H 1. Amount of capital, working hours, number of manpower, and term of business establishment partially influence angkringan vendor's income.
H 2. Amount of capital, working hours, number of manpower, and term of business establishment simultaneously influence angkringan vendor's income.

Methodology

1. Population and Sample

Population of this research was informal trading business, that is angkringan vendors, in Jetis District of Yogyakarta City. Respondents of this research were determined by means of purposive sampling. The sample were obtained using three criteria: (a) Sidewalk angkringan vendors, (b) Operating on a sedentary place, and (c) Selling food and drinks.

2. Data Collection Method

This research used both primary and secondary data. It’s primary data was collected by means of face-to-face interview with the business player and by distributing questionnaire. Meanwhile, the secondary data was obtained through literary studies on books, scientific journals, and research papers. This secondary data was used to formulate the research background, hypotheses, theoretic basis, and analysis instrument selection.
3. Analysis Method

Statistical analysis method was used to prove the research hypotheses. The test was conducted by using Multiple Regression model with ordinary least square method. Meanwhile, the hypotheses were tested using t-test and F-test methods.

Findings and Discussion

1. Population and Sampling Technique

Population of this research was informal trading business, that is angkringan vendors, in Jetis District of Yogyakarta City. The respondent of this research were 70 angkringan vendors which were selected by means of purposive sampling method.

2. Development of Instruments, Validity Test, and Reliability Test

There were one dependent variable in this study, that is level of income, and four independent variables, which are capital, working hours, number of manpower, and term of establishment. Each variable has several questions.

3. Execution of Research

The questionnaires were distributed from May 2015 until August 2015. By August 2015, 70 of 100 distributed questionnaires had been collected by the researchers. The researchers conducted descriptive analysis on the respondents, that is the angkringan vendors, to give a description about them.

4. Descriptive Analysis on the Respondents

A descriptive analysis was conducted as a preliminary analysis. Its result described the respondents in some criteria, such as: age group, sex, educational background, level of income, marital status, term of business establishment. The youngest respondent was 21 years old and the oldest was 68 years old. There were 2 respondents (3%) whose age under 25 years old, 38 respondents (54%) whose age between 25 and 40 years old, and 30 respondents (43%) whose age above 40 years old.

In terms of sexes, most of angkringan vendors in Jetis are male. There were 57 males (81%) and 13 females (19%) respondents. In terms of educational level, 18 respondents (26%) have elementary education or uneducated, 21 respondents (30%) have junior-high education, 29 respondents (41%) have senior-high education, while only 2 of them (3%) have graduated from university. From marital status perspective, 2 respondents (3%) are unmarried, 66 of them (94%) are married, while the remaining 2 respondents (3%) are divorced.

In terms of establishment duration, there was a respondent who has established his/her vendor for 2 months, while another person has been working as angkringan vendor for 54 years. There are 27 respondents (39%) who have been doing this business for 5 years, 21 respondents (30%) have been doing it for 6 - 10 years, and the other 22 respondents (31%) have been working in angkringan business for more than 10 years. The lowest daily income of those angkringan vendors was Rp 50,000 and the highest income was Rp 700,000. The
number of respondents who earned less than Rp 100,000 per day were 20 people (29%) and there were 49 respondents (70%) who earned between Rp 100,000 to Rp 500,000 per day. Meanwhile, only one person (3%) who earned more than Rp 500,000 on daily basis.

Some of the angkringan vendors also did other activities to earn for living. The questionnaire survey shows that 27% (19 people) of them had additional source of income beside angkringan. The remaining 73% of the respondents (51 people) had angkringan as their sole source of income. In running their business, 33 angkringan vendors are assisted by more than 1 employees, while the other 37 vendors are assisted by no more than 1 person.

5. Testing the Influence of Capital, Working Hours, Number of Manpower, and Term of Establishment on Income of Angkringan Vendors in Jetis District of Yogyakarta City

The influence of capital, working hours, number of manpower, and term of establishment on angkringan revenue in Jetis District of Yogyakarta City can be analyzed using double linear regression analysis. The respondent of this study were 70 angkringan vendors in Jetis District. Since this research used cross-sectional data, the researchers transformed the amount of capital and revenue into logarithms to obtain better result (Gujarat, 1995).

Logarithms used in this research were formulated as follows: Log y = β_0 + β_1 Log x_1 + β_2 x_2 + β_3 x_3 + β_4 x_4, whereas:

- Log y = Amount of angkringan vendors' income.
- Log x_1 = Amount of capital
- Log x_2 = Working hour
- Log x_3 = Number of manpower
- Log x_4 = Term of business establishment
- Log β_0 = Intercept (Constant)
- β_1, β_2, β_3, β_4 = Regression coefficient of x_1, x_2, x_3, and x_4.

To partially test the influence of independent variables on dependent variable, the researchers partially tested regression coefficient using t-test. However, the simultaneous influence of the independent variables on dependent variable is tested by simultaneously testing the regression coefficient using F-test.

Result of multiple linear regression analysis is shown in the following table:

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Value of t</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept (Constant)</td>
<td>4.113</td>
<td>4.692</td>
<td>0.000</td>
</tr>
<tr>
<td>Amount of Capital (Log x_1)</td>
<td>0.283</td>
<td>2.012</td>
<td>0.048</td>
</tr>
<tr>
<td>Working Hour (Log x_2)</td>
<td>0.006</td>
<td>3.355</td>
<td>0.001</td>
</tr>
<tr>
<td>Number of Manpower (Log x_3)</td>
<td>0.093</td>
<td>2.144</td>
<td>0.036</td>
</tr>
<tr>
<td>Term of Business Establishment (Log x_4)</td>
<td>0.012</td>
<td>2.624</td>
<td>0.011</td>
</tr>
</tbody>
</table>

R = 0.570;  R^2 = 32.5 %;  F Calculated = 7.817;  Sig. F = 0.000

Source: Processed Primary Data, 2015
Based on the table above, multiple regression model can be formulated as follows:

$$\log y = 4.113 + 0.283 \log x_1 + 0.006x_2 + 0.093x_3 + 0.012x_4$$

According to the multiple regression model above, it is stated that the intercept (constant) reached 4.113. It means that average income level of angkringan vendors will increase Rp 12,971.79 (anti log 4.113) if the amount of capital, working hour, number of manpower, and term of establishment variables are zero (if those variables were not included in this regression equation).

Regression coefficient of capital variable was 0.283 and it showed that, in case of increasing business capital as much as Rp 1.00 cateris paribus, income of angkringan vendors will increase as much as Rp 1.92. Regression coefficient of working hour variable was 0.005 and it showed that, in case of increasing working hour as much as 1 hour cateris paribus, income of angkringan vendors will increase as much as Rp 1.01. Regression coefficient of manpower variable was 0.093 and it showed that, in case of increasing number of manpower as much as 1 person cateris paribus, income of angkringan vendors will increase as much as Rp 1.03. The result of regression coefficient test with $\alpha = 5\%$ can be explained as follows:

6. Result of Partially Testing the Regression Coefficients

a. Influence of $x_1$ on $y$ with $p < 0.05$ showed that capital variable was significantly and partially influencing angkringan vendors' income.
b. Influence of $x_2$ on $y$ with $p < 0.05$ showed that working hour variable was significantly and partially influencing angkringan vendors' income.
c. Influence of $x_3$ on $y$ with $p < 0.05$ showed that manpower variable was significantly and partially influencing angkringan vendors' income.
d. Influence of $x_4$ on $y$ with $p < 0.05$ showed that establishment term variable was significantly and partially influencing angkringan vendors' income.

7. Result of Simultaneously Testing the Regression Coefficients

Result of F-test with $\alpha = 5\%$ showed the significance of $F = 0.0000$ with $P < 0.05$. It means that the independent variables simultaneously and significantly influenced the dependent variable. In such a way, variables of capital, working hour, number of manpower, and term of establishment all together significantly influenced angkringan vendors' income level. This result supports the hypotheses mentioned earlier.

8. Determination Coefficient ($R^2$)

$R^2$ value of 32.5 % showed that the variables of capital, working hour, number of manpower, and term of establishment accounted for angkringan vendors' income variable of 32.5 %. The remaining 67.5 % were accounted by other variables which were not included in this research model.
Conclusion and Suggestion

Conclusion

1. The result showed that the income level of angkringan vendors in Jetis District of Yogyakarta City was influenced by amount of their capital, working hour, manpower, and term of establishment. Working hour had the biggest influence on angkringan vendors’ income.

2. The result of partial regression coefficient test showed that variables of capital, working hour, number of manpower, and term of establishment had significant influence on income level of angkringan vendors in Jetis District of Yogyakarta City.

3. The result of simultaneous regression coefficient test showed that independent variables (capital, working hour, number of manpower, and term of establishment) had simultaneous and significant influence on income level of angkringan vendors in Jetis District of Yogyakarta City.

4. Meanwhile, the result of determination coefficient test ($R^2$) proposed that those four variables showed income level of angkringan vendors of 32.5 %. The remaining 67.5 % were accounted by other variables which were not included in this research model.

Suggestions

1. Angkringan vendors in Jetis District of Yogyakarta City should increase the amount of their capital, working hours, number of manpower, and term of their business establishment in order to improve their prosperity.

2. It is necessary that further researches are focused on deeper analysis of other factors that influence income of angkringan vendors in Jetis District of Yogyakarta City, such as: location of their establishment since it also influences their business income (Setyawan, 2007).

References


