

THE EFFECT OF ACCOUNTING INFORMATION USE AND INTERNAL CHARACTERISTICS OF ENTREPRENEURS TOWARD PRODUCTIVITY OF SMALL AND MEDIUM ENTERPRISES IN BANYUMAS REGENCY

ABSTRACT: *This study aims to examines the effect of the use of accounting information and internal characteristics of entrepreneurs including accounting training, business scale and educational level toward productivity of SME's. The use of accounting information and internal characteristics of entrepreneurs is measured by Likert scale and scale score. The sample of 94 respondents of SME entrepreneurs is selected from the population of all SME entrepreneurs in Banyumas Regency, using the quota sampling method. Analytical techniques use multiple regression to test the relationship between independent variables with dependent variables, after all all data has been valid and reliable through data quality test. The result of the test shows that business scale, educational level and accounting information use have significant influence to business productivity, while accountancy training variables have no significant influence to productivity of SME's.*

Icuk Rangga Bawono¹, Triani Arofah², Berlian Muhammad S. Ubay³^{1,2} Fakultas Ekonomi dan Bisnis, Universitas Jendral Soedirman

Keyword: accounting traning, business scale, level of education, accounting information use, productivity of SME's

ABSTRAK: Penelitian ini bertujuan untuk menguji pengaruh penggunaan informasi akuntansi dan karakteristik internal pengusaha termasuk pelatihan akuntansi, skala bisnis dan tingkat pendidikan terhadap produktivitas UKM. Penggunaan informasi akuntansi dan karakteristik internal pengusaha diukur dengan skala likert dan skor skala. Sampel dari 94 responden pengusaha UKM dipilih dari populasi semua pengusaha UKM di Kabupaten Banyumas, menggunakan metode kuota sampling. Teknik analitik menggunakan regresi berganda untuk menguji hubungan antara variabel independen dengan variabel dependen, setelah semua data telah valid dan andal melalui uji kualitas data. Hasil tes menunjukkan bahwa skala bisnis, tingkat pendidikan dan penggunaan informasi akuntansi memiliki pengaruh signifikan terhadap produktivitas bisnis, sedangkan variabel pelatihan akuntansi tidak memiliki pengaruh signifikan terhadap produktivitas UKM.

Kata Kunci: Pelatihan akuntansi, skala bisnis, tingkat pendidikan, penggunaan informasi akuntansi, produktivitas UKM

1. Introduction

The development of small and medium is assessed to be able to overcome these weaknesses which could absorb a large workforce. The contribution of Micro, Small and Medium Enterprises (MSMEs) on gross domestic product (GDP) has been increasing in the last five years. Ministry of Cooperatives and Small and Medium Enterprises (SMEs) noted the contribution of the SME sector increased from 57.84 percent to 60.34 percent. SME sector also helped the absorp huge scale workforce in Indonesia. The absorption of employee in the SME sector grew from 96.99 percent to 97.22 percent in the last five years are from 2012 to 2016. Creative economy industry reported grow 5.76 percent last year and its above the national economic growth average of 5.74 percent, with an added value of Rp641.8 trillion or seven percent of national GDP (Kemenperin, 2017).

The growth of MSMEs sector in the regency Banyumas is very rapidly. In 2009 the number of SMEs in Banyumas regency reached 580.536 units by the amount of labor force of 1,048,131 people, while in 2011 reached 581.918 business units with the number of workforce of 1,057,162 people (Handaru, 2014). The rapid development of SMEs in Banyumas is expected to offset increasing the quality of the SME's themselves primarily in terms of increasing the productivity of SME's for the survival and success of the business in the future.

Definitions, criterion, and policies of SMEs in Indonesia itself available on Law number 20 year 2008 concerning SMEs. In general, development of SMEs in Indonesia has same unsolvable problems from long ago. Financial management which not understood completely by the small and medium entrepreneurs. This caused by the internal character of the business owner which is still weak, such as a person's level of education, experience in leading business, the age of the business, the business scale faced as well as

experience in the training skills sought from outside education.

Factors that hinder the development of SMEs consist of lack of knowledge of the market, weak bargaining power, lack of capital, and low level of technology (Najib, 2006). In addition, SMEs also have to face external challenges such as the emergence of globalization makes increases in market competition, weak arrangements and law enforcement, lack of consumer confidence in the product quality of domestic SMEs, and inadequate infrastructure widespread support for production centers of SMEs.

SME's development delay is evidence of a phenomenon that often appear in society. Some food businesses or businesses in other areas often do not develop even closed because of not understanding financial planning and do not know the market competition. So the products of the business are less competitive with other business products. The phenomenon is happening as some business owners are still lack knowledge about business innovation, the use of accounting information, and low education level. The reason why the owners of the business have low education is that that person runs a business handed down from their parents. Practice of accounting, financial accounting, especially on SMEs in Indonesia is still low and has many weaknesses (Suhairi, 2004). The weakness is caused by lack of education, lack of understanding of Financial Accounting Standards (GAAP) of the manager or owner, and the absence of regulations requiring the preparation of financial statements for SMEs.

The concept of human capital basically assumes that people as any other form of capital, such as machinery, technology, land, money, and material (Schultz, 1961). Human as capital is reflected in the form of knowledge, ideas (ideas), creativity, skills, and work productivity. Human capital is a very important component of the organization. Man with all his abilities will produce outstanding performance. In the process, development

sector of education by positioning right people as a focus has a direct contribution to the economic growth of a country. This can be achieved through the improvement of skills/skills and the ability of the production of labor. Human Capital theory explains that education has an influence on economic growth where education plays a role in increasing work productivity (Desiderius, 2009).

Beside human capital concept, it's also important to make organization look well for external parties that have necessities on organization. Jama'an (2008) mentioned that signaling theory explains about how companies should signal to external parties or external users of financial statements to provide information about the company to realize the wishes of external parties such investors and creditors. Managers provide information through financial statements that implement by conservative accounting policy, that results in higher profits because this principle prevents corporations from exaggerating earnings. Entrepreneurs could disclose voluntary information to signal their profits and attract external resources (Michael, 2003).

Based on the phenomenon that the use of accounting information and background business owners on SMEs is still lack, the actual accounting information and background business owner can become the basis for making business decisions in order to achieve high productivity. This study aims to demonstrate empirically the influence of internal characteristic of business owners and use of accounting information on the productivity of SMEs. The object of this research is the small businesses listed on Department of Labor, Cooperatives and SME's

2. Literature Review

Human Capital Theory (the theory of human capital) is basically the development of human resources for an organization that essentially is an investment. Investment in human resource development is an expenditure

aimed at improving the productive capacity of human beings, through efforts to improve health, education and job training. The logical reason that can be put forward is that a healthy, educated, and skilled workforce will be a productive workforce, and then increased productivity means increased returns. Fine human resource management will make competitive strength and will become difficult to imitate the organization. That traditional competitive sources of success such as production process technology, market protection, access to financial resources and economies of scale should be more efficient. Financial accounting training is the focus of human resource training is preferred to every employee who has the role and tasks in the field of financial accounting. In addition, financial accounting training is also addressed to leaders and employees who need knowledge about financial accounting. The reason is financial accounting knowledge could be an additional knowledge for every element in the company. Financial accounting training must be held. Remember almost every business processes of a company require accurate and precise calculations. The company also required accurate financial analysis for the financial health of the company can be maintained properly.

Research from Dearden et al. (2005) found the impact of accounting training on productivity has a statistically significant impact in the UK. The researchers used training variables from a survey that asked respondents whether they had been involved in any type of work-related education or training for the previous 4 weeks. Although, an increase in training is only 1 percentage point it can increase production by about 0.7% - a rather large impact. Similar study held by Zwick (2006) found that German firms that trained most of their workers in the first half of 1997 had higher productivity in subsequent years. Based on the research of Dearden et al. (2005) and Zwick (2006) providing evidence that

accountancy training has an effect on the productivity of small and medium enterprises.

H1 : Accounting training has an influence to the productivity of small and medium enterprises

Business scale can be defined as the ability of the company in managing its business. It looks on count employees are employed and count revenue the company earns in one accounting period (Nicholls & S., 1998). The result earlier study suggests that firm size or business scale influence SME productivity (Vandenberg & Trinh, 2016). Small companies have the lowest productivity while large companies have the highest productivity. This is in line with many other studies that show that SMEs that have greater productivity tend not to be dynamic, flexible and innovative because they only pursue profit targets. While SMBs are often called dynamic, flexible, and innovative, they tend to achieve lower productivity levels than larger companies. The scale of business is also positively related to business productivity. This can be understood if the scale of the business increases then the productivity of the business will increase as well (Wahyudi, 2009). The amount of revenue or sales generated by the company can show the asset turnover or capital owned by the company, so that the greater the income or sales obtained by the company the greater the level of productivity in the business (Wahyudi, 2009).

A company will operate continuously in accordance with the objectives that have been formulated. The process is expected by the company's growing management that will produce the scale of the company, which can be seen from changes in assets owned, among others, the ever-increasing labor force. This is due to the progress of companies requiring larger workforce, along with the addition of company activities. Extra workforce in small and medium enterprises can't be avoided if there is a change in activity in different companies with companies that have capital

that has been using technology in all fields of activity. Same result shoe by Vandenberg & Trinh (2016) and Wahyudi (2009) which provides evidence that the scale of business affect the productivity of small and medium enterprises.

H2 : Business scale has an influence to the productivity of small and medium enterprises

The education stages determined based on the level of development of learners, goals to be achieved and the willingness developed. The level of education could affect changes of attitudes and behavior of someone life. A higher level of education will make easier someone to absorb information and implement it into behavior and lifestyle. Formal education forms value for a person especially in accepting new things (Suhardjo, 2007).

Education and knowledge stages of most owners of SMEs fairly high, they already receive basic education to upper secondary which has provided basic understanding of accounting (Sari & Setyawan, 2012). Level of Education obtained a percentage of 97% respondents who already have a fairly good education provision, most of them have received high school education. Accounting knowledge obtained by the percentage of 86% respondents who have understand what is accounting, understanding of property, receivables, recording simple transactions, and making simple financial statements such as income statement in managing their finances. From the results of Ismail's research in 2009 stated variables such as the level of education workers have a significant positive impact on output growth for companies in the manufacturing and service sectors. The presence of training and educational levels would contribute positively to increase labor productivity growth and also improve business productivity. Black & Lynch (1995) in Ismail (2009) study found a significant and positive impact of educational levels on productivity

both for manufacturing and non-manufacturing sectors, using data from the US. Based on research by Sari (2012), Ismail (2009) and Black and Lynch (1996) which provides evidence that the level of education affect the productivity of small and medium enterprises.

H3 : Level of Education has an influence to the productivity of small and medium enterprises

Signaling Theory basically explains how the company give a signals in form promotions or other information, stating that the company is better than its competitors. Therefore, SME owners should be able to provide positive signals to creditors by providing accounting information that has been included in the financial statements. When positive signals are received creditors will bring capital. So if there is an increase in capital it will also increase in productivity. Belkaoui (2000) defines accounting information as quantitative information about economic entities that are useful for economic decision making in determining choices between alternative actions. Haswel & Homes (1989) argue that the lack of accounting information in enterprise management can endanger small firms stability. The worsening financial condition and lack of accounting records will limit access to obtain the necessary information, which will lead to corporate failure.

In the study of Sari & Setyawan (2012), the perception and accounting knowledge of small and medium entrepreneurs (SMEs) ownership in Depok city area is good enough, most of business owners have perception and sufficient accounting knowledge about accounting information already applied to the business environment them. Based on the results of research conducted by the authors, most owners of small and medium enterprises have recorded a simple transaction in their daily business activities is the percentage of 87% with 39 SMEs. The most common form of financial statements used by SME owners is the income statement, as this report shows the

profit and loss results of a managed business in one period. In addition, the use of accounting information on SMEs can make it easier for the owner to see how much profit and expense in a given period. And make it easier for outsiders like banks if the business owner wants to get credit from the bank. Based on research Sari (2012) which provides evidence that the use of accounting information affect the productivity of small and medium enterprises.

H4 : Accounting Information Use has an influence to the productivity of small and medium enterprises

3. Research Methods

This study use quantitative descriptive research as type of research. Survey method use to collect primary data from respondents by using questionnaire. This research will be carried out by taking primary data with questionnaires to SMEs located in Banyumas, and the secondary data are drawn from the Department of Labor, Cooperatives and SMEs Banyumas and Bappeda Banyumas.

The population in this study are Small and Medium Enterprises registered and located in Banyumas Regency. The population of this study comes from Department of Labor, Cooperatives and SMEs Banyumas's data. Data from the Department of Labor, Cooperatives and SMEs used as a guidedance to spread the questionnaires that researchers will give to the owners/managers of SMEs. The number of registered SMEs in Banyumas Regency is 1576 business units. In this study, researchers used the technique of quota sampling. Quota sampling technique is a technique of sampling by specifying a certain amount as a target that must be met in sampling from the population (especially the infinite or unclear). Then, with the benchmark the number of researchers taking samples arbitrarily fulfilled the requirements as a sample of the population. One method used to determine the number of samples is to use the Slovin formula (Sevilla, 1960:182).

Definition of Variables Operational

Independent variable in this study consist of accounting information and internal characteristics of entrepreneurs including accounting training, business scale and educational level. Accounting training in question is an accounting training conducted by an educational institution outside the school as well as higher education institutions, training centers of departments or certain agencies. Handaru (2014) states that the more often the owner of the company attended the accounting training the easier the owner in making decisions and manage the finances in the company. Accounting training variables used 5 categories and scored.

Nicholls & Holmes (1988) define the scale of business as a company's ability to manage its business. That is by looking at the number of employees employed and how much revenue the company earns in one accounting period. The greater the amount of revenue or sales generated by the company can show the rotation of assets or capital owned by the company, the greater the level of productivity in the company. In the previous research, the research from Handaru (2014) measurement was done using the interval scale with the criteria of average monthly sales income. However, in this study, the business scale variable is measured from the assets owned by the SMEs. Business scale variables use 5 categories and scored.

Pratiwi (2008) states the higher the level of education in charge of the business the greater the willingness and ability to know and process accounting information existing in the company. So it can also impact on increasing productivity in the company. Education managers or owners will be measured based on formal education that has been followed so that the measurement is sustainable. Formal education is the education obtained in formal schools such as elementary school (SD), junior high school (SMP), high school (SMU) or equivalent, Diploma and Bachelor Degree. Measurement of background variables of

educational level using six statements that have been provided in the questionnaire is done by giving a score on each answer by using a Likert scale (5 statements) and the score scale (1 question) with 5 categories scored.

Belkaoui (2000) defines accounting information as quantitative information about economic entities that are useful for economic decision making in determining choices between alternative actions. Measurement of each variable accounting information using the six statements that have been provided on the questionnaire is done by giving a score on each answer by using the likert scale.

Meanwhile dependent variable in this study is the productivity of SMEs. Productivity is the amount of output generated divided by the number of inputs used in the ordinary business entrepreneur's business. Measurements are made by looking at inputs used (in rupiah) and outputs earned (in rupiah). Input indicators consist of total labor costs (in rupiah), raw material costs and other production overhead costs. The indicator for output is the total revenue that can be obtained within a period of one month (Mandala & Raharja, 2012).

Data Quality Test

Validity test is conducted to see the extent the data accommodated in a questionnaire will be measured. Umar (2001) said that for testing the validity, the instruments used in the research analysis technique is the Pearson Product-Moment Correlation coefficient. Reliability test is used to indicate the extent to which a relatively consistent measurement results when the measuring tool is used repeatedly. There are several techniques in measuring the reliability of the questionnaires. According to Umar (2001), to look for reliability, it uses an interval scale Cronbach's alpha technique.

Data Analysis Techniques

Before the classical assumption test, ordinal data is first converted into interval data with Successive Interval Method. After using MSI to converted into interval data, researcher

using Classic Assumption Test. Classic assumption test is conducted to avoid bias or spurious regression on the research results. The classical assumption used by the researchers consist of normality test, multicollinearity test and heteroscedasticity test. The hypothesis testing in this study will be conducted using Multiple Regression. Multiple regression is carried out to test the effect of two or more independent variables toward one dependent variable (Ghozali, 2009).

4. Result and Discussion

General Description of Respondents

Respondents in this research are SME actors belong to small and medium enterprises and have Trading Business License (SIUP) which has been registered in Department of Manpower, Cooperative and SME Banyumas. Respondent for each company is the owner or the person in charge of the business. Characteristics of respondents are differentiated into some of the gender, age and education level. The more detailed description can be seen through the table as follows:

Based on Gender, the distribution of respondents in this study can be grouped as male respondents were 72 people or 76.60% and female respondents in this study were 22 people or 23.40%. Based on age, the distribution of respondents in this study can be grouped as less than 30 years as many as 8 people or 8.51%. Respondents with age between 30-40 years is 35 people or 37.23%. Then, respondents with age between 40-50 years as many as 38 people or 40.43%. And respondents with age more than 50 years ie 13 people or 13.83%. Based on Level of education the distribution of respondents in this study can be grouped as mostly senior high school by the number of 50 people or 53.19%. Respondents with elementary school only as much as 1 person or 1.06%. Then, respondents with junior high school as many as 21 people or 22.34%. Respondents with Diploma graduates were 20 people or 21.28%. And respondents with Bachelor education is only 2 people or 2.13%.

Descriptive Analysis

Descriptive analysis of variables intended to know or describe in general the reality of respondents to research variables. The results of descriptive analysis are shown in Table 1 as follows:

Table 1. Descriptive Analysis

	N	Min	Max	Mean	Std. Deviation
Accounting	94	1.00	4.00	2.128	1.148
Training Business	94	1.00	4.00	2.489	1.034
Scale Level of Education	94	1.00	25.00	19.830	2.990
Use Accounting Information	94	1.00	27.00	21.319	3.480
Productivity SME's	94	1.08	2.25	1.558	0.296

Source: Research data is processed

Classical Assumption test

The normality test is performed to test whether the regression model, disruptive or residual variable is normally distributed. If the value of Asym. Sig > 0.05 then the residue is normally distributed, and if the value of Asym. Sig < 0,05 significance of normality test hence can be said is not normal distributed residue. Based on Table 2 on the normality test it explains that Asymp. Sig has a value of 0.155. Which means that the value of Asymp. Sig has a value greater than the residual value of 0.05. So the results of data in this research normal distribution.

Table 2. Normality Test with Kolmogrov-Smirnov

	Standardized Residual
N	94
Mean	0,000000
Std. Deviation	0,18345317
Absolute	0,117
Positive	0,117
Negative	-0,078
Kolmogrov-Smirnov Z	1,131
Asymp. Sig. (2-tailed)	0,155

Source: Research data is processed

Multicollinearity is a problem that arises in relation to the presence of linear among

independent variables. A good regression model should not occur correlation between independent variables multicollinearity test. Based on

Table 3 that each of the independent variables has a VIF value of less than 5. So it can be concluded that the independent variables in this study are free from symptoms of multicollinearity.

Table 3. Result Multicollinearity Test

Variable	Standardized Coefficients Beta	Tolerance	VIF
(X1)	0,137	0,558	1,792
(X2)	0,173	0,668	1,497
(X3)	0,390	0,543	1,842
(X4)	0,267	0,643	1,556

Source: Research data is processed

Heteroscedasticity is intended to find out whether in a regression a variant inequality occurs from the residual one observation to another observation. Heteroscedasticity will weaken the predictive ability of a regression model, so a good model must be free from heteroscedasticity or homocedasticity ie the variant of the residual one observation to another observed remains. Based on Table 4 that each of the independent variables has a significant value greater than 0.05. So it can be concluded that the independent variables in this study are free from symptoms of heteroscedasticity.

Table 4. Result Heteroscedasticity Test

Variable	Standardized Coefficients Beta	T _{statistic}	Significant
(X1)	-0,103	-0,749	0,456
(X2)	0,194	1,550	0,125
(X3)	-0,157	-1,130	0,261
(X4)	0,197	1,540	0,127

Source: Research data is processed

The classic assumption test result of normality test, multicollinearity test and heteroscedasticity test, there is no biased or spurious regression in this research result.

Result Hypothesis Test

Multiple Regression

Hypothesis test in this research using multiple regression test. Multiple regression is performed to test the effect of two or more independent variables on a single dependent variable. Based on the results of statistical calculations with the help of software SPSS 16.0 for windows

Table 5. Result Multiple Regression Test

Variable	Coefficient	t _{statistic}	Significant
(X1)	0,035	1,556	0,123
(X2)	0,049	2,149	0,034
(X3)	0,034	4,368	0,000
(X4)	0,023	3,260	0,002
Constanta	= 0,425		
Coef. Determination	= 0,598		
Fstatistic	= 35,535		

Source: Research data is processed

Based on the data in Table 5, multiple regression equations can be made as follows:

$$Y = 0,425 + 0,035X_1 + 0,049X_2 + 0,034X_3 + 0,023X_4 + e$$

Based on the multiple regression equation listed above, can be interpreted as follows:

1. The value of the constant is 0.425 which means that if the accounting training, business scale, education level and the use of accounting information is assumed to have a value of 0, then the business productivity will have a value of 0. 425 units of scores.
2. The regression coefficient on accounting training variables (X1) shows a positive value of 0.035. It can be interpreted that every increase of one unit of accounting training will increase business productivity by 0.035 and positive value coefficient means that between accounting training (X1) with business productivity (Y) has a positive relationship.
3. The regression coefficient on the business scale variable (X2) shows a positive value of 0.049. It can be interpreted that every increase of one unit of business scale will increase business productivity equal to 0.049 and

positive value coefficient mean that between business scale (X2) with business productivity (Y) have positive relation.

4. Regression coefficient on education level variables (X3) shows a positive value of 0.034. Can be interpreted that every increase of one unit of education level will increase business productivity equal to 0.034 and coefficient of positive value mean between educational level (X3) with productivity effort (Y) have positive relation.
5. The regression coefficient on accounting information usage variables (X4) shows a positive value of 0.023. It can be interpreted that every increase of one unit of accounting information usage will increase business productivity equal to 0.023 and positive value coefficient means that between use accounting information (X4) with business productivity (Y) have positive relation.

Table 6. Result R² (Coefficient Determination) Test

Model	R	R Square	Adjusted R Square
1	0,784	0,615	0,598

Source: Research data is processed

In this research that result of test of R² that show on

Table 6 have value R² equal to 0.598. The amount of coefficient is equal to 59.8% which means that the variables of accounting training, business scale, education level and the use of accounting information have an effect on business productivity of 62.3%.

Table 7. Test Result F Test

Model	Sum of Square	F	Significant
Regression	4,999	35,535	0,000
Residual	3,130		
Total	8,129		

Source: Research data is processed

Based on Table 7 that the value of Fstatistic is greater than Ftable that is equal to 35.535. That is, the value is greater than 0.05.

Then it can be concluded that the independent variables have influence simultaneously or together with the dependent variable.

Table 8. Result t Test

Variable	Coefficient	tstatistic	Significant
(X1)	0,035	1,556	0,123
(X2)	0,049	2,149	0,034
(X3)	0,034	4,368	0,000
(X4)	0,023	3,260	0,002

Source: Research data is processed

The t test is used to test the effect of independent variables on partially bound variable. Based on Table 11 that each variable has a different value. The following translation can be interpreted from the results of t test are:

1. Testing First Hypothesis

Based on the 95% confidence level with the two tailed test ($\alpha = 0.05$) and the degree of freedom (df) = n-k, it shows that the ttable value is 1.984. Then on the t test results in Table 20 shows that the value of tstatistic for the variable of accounting training amounted to 1.556. That tstatistic value is smaller than t_{table} value. Then H₀ is accepted and H_a is rejected. It can be interpreted that accounting achievement does not affect the productivity of small and medium enterprises. So it can be concluded that the first hypothesis that accounting training has an effect on business productivity is not supported.

2. Testing Second Hypothesis

Based on the 95% confidence level with the two tailed test ($\alpha = 0.05$) and the degree of freedom (df) n-k, it shows that the ttable value is 1.984. Then on the t test result in Table 20 shows that the value of tstatistic for business scale variable is 2.149. That the value of tstatistic is greater than t_{table} value. Then H₀ is rejected and H_a accepted. Can be interpreted that, the scale of business affect the productivity of small and medium enterprises. So it can be concluded that the second hypothesis that the scale of business

influence on business productivity is supported.

3. Testing Third Hypothesis

Based on the 95% confidence level with the two tailed test ($\alpha = 0.05$) and the degree of freedom ($df = n-k$), it shows that the ttable value is 1.984. Then on the t test results in Table 20 shows that the value of tstatistic for educational level variable is 4.368. That the value of tstatistic is greater than ttable value. Then H_0 is rejected and H_a accepted. Can be interpreted that, the level of education affect the productivity of small and medium enterprises. So it can be concluded that the third hypothesis that the level of education has an influence on business productivity is supported.

4. Testing Fourth Hypothesis

Based on the 95% confidence level with the two tailed test ($\alpha = 0.05$) and the degree of freedom ($df = n-k$), it shows that the ttable value is 1.984. Then in the t test results in Table 20 shows that the value of tstatistic for variable use of accounting information is 3.260. That the value of tstatistic is greater than ttable value. Then H_0 is rejected and H_a accepted. Can be interpreted that, the use of accounting information affect the productivity of small and medium enterprises. So it can be concluded that the fourth hypothesis that the use of accounting information has influence on business productivity is supported.

Discussion

1. Accounting Training Influence to Productivity of SME's

The results of hypothesis testing in this study mentions the variables of accounting training does not give effect to business productivity. That is, that accounting training has no effect in improving business productivity. This is because the accounting training followed by the respondents only directly impacts the use of accounting

information rather than business productivity. Then, accounting training held more often held by private agencies rather than from government agencies such as the Office of Labor, Cooperatives and SMEs. Respondents admitted that the training they often follow is training in entrepreneurship rather than accounting training and socialization of bookkeeping for small and medium enterprises. Theoretically, the results of this study are not in line with research from Dearden et al. (2005) found the impact of accounting training on productivity has statistically significant influence in the UK.

2. Business Scale Influence to Productivity of SME's

While the business scale variables give effect to business productivity. That is, that the scale of business to give effect in improving business productivity. Scale of business can be defined as the ability of the company in managing its business, namely by looking at how many employees are hired and how much revenue obtained by the company in one accounting period (Holmes & Nicholls, 1988). Theoretically, the result of this research is in line with research conducted by Wahyudi (2009) are the amount of income or sales generated by the company can show the rotation of assets or capital owned by the company, so the greater the income or sales obtained by the company the greater the level of productivity at the business. The results of this study are also in line with the results of research Vandenberg & Trinh (2016) that the size of business or business scale has an influence on business productivity.

3. Level of Education Influence to Productivity of SME's

Then the results of the hypothesis on the third variable states that the variable level of education owners have an effect on business productivity. That is, the higher the level of education the owner the higher the productivity of his business. The level of

education is the stages of education determined based on the level of development of learners, goals to be achieved and the willingness developed. The level of education affect the changes in attitudes and behavior of healthy living. A higher level of education will make it easier for a person or society to absorb information and implement it into everyday behavior and lifestyle, especially in terms of health. Based on signal theory, both owners and corporate managers will try to adjust their insights and skills to give positive signals to creditors and investors by increasing their business productivity. Theoretically, the results of this study supported by Ismail (2009) study stated that the level of education has a significant positive impact on output growth for companies in the manufacturing and service sectors. With the presence of educational levels contribute positively to increase labor productivity growth and also improve business productivity.

4. Accounting Information Use Influence to Productivity of SME's

In this study, the use of accounting information is measured by questionnaires using a likert scale of 6 statements. The results of this study indicate that the variable use of accounting information has an effect on business productivity. That is, that the use of accounting information give effect in improving business productivity. Belkaoui (2000) defines accounting information as quantitative information about economic entities that are useful for economic decision making in determining choices between alternative actions. Haswell and Holmes (1989) argue that the lack of accounting information in corporate management can harm small companies. The worsening financial condition and lack of accounting records will limit access to obtain the necessary information, which will lead to corporate failure. The results of this study are also in line with the research of Sari (2012)

which states that most small and medium business owners have recorded simple transactions in their daily business activities. The most common form of financial statements used by SME owners is the income statement, as this report shows the profit and loss results of a managed business in one period.

5. Conclusion

This study aims to examines the effect of the use of accounting information and internal characteristics of entrepreneurs including accounting training, business scale and educational level toward productivity of SME's. Based on the results and discussion, it can be concluded whereas Accounting Training calculated based on the frequency of business owner's participation in participating in accounting training does not have an influence on business productivity. Business scale determined by how much assets owned by entrepreneurs have an influence on business productivity. Education level for business owners as determined by 6 Likert-scale statements has an influence on business productivity. Then, the use of Accounting Information calculated by Likert scale has an influence on business productivity.

Theoretically, the contribution of this research is that the scale of business, the level of education and the use of accounting information can improve business productivity. In this study, the scale of business with large assets can affect business productivity determined by the ratio of productivity. The level of education with the last education of the owner and the role of the owner's education in making decisions has a significant influence in improving the productivity of his business. And the use of accounting information by the owner can affect the increase in business productivity. With the use of accounting information on SMEs, creditors are not difficult to lend capital to the business. That is, with the increase in

capital increases the productivity of the business.

Practically, it should be added in the implementation of accounting training held by government agencies. Due to the existence of the accounting applied by entrepreneurs will be in accordance with the expected by the government. Business owners are strongly encouraged in improving the use of accounting information so that with the data on business finance it will be easier in getting credit from the bank. It certainly can improve business productivity and business development.

Several limitations affect the results of research and need to be a material development in subsequent research. Limitations and suggestions of this study are as number of respondents who have the same answer in answering the statement. This is due to the ignorance of respondents or knowledge is almost the same so that in answering statements have the same answer specification. This resulted in difficulties researchers in processing the data. It is expected that future research can add other variables because in this study variables that have an effect on business productivity is not too big.

6. References

- Belkaoui, A. . (2000). *Accounting Theory* (fourth). Business Press, Thomson Learning.
- Black, S., & Lynch, L. (1995). Beyond the Incidence of Training: Evidence from a National Employers Survey (No. 5231).
- Dearden, L., Reed, H., & Reenen, J. Van. (2005). The Impact of Training on Productivity and Wages: Evidence from British Panel Data. *Oxford Bulletin of Economic and Statistics*, 68(4), 397–421.
- Desiderius. (2009). Pengaruh Pendidikan dan Pengalaman terhadap Pengembangan Kewirausahaan di Kota Medan. Universitas Sumatra Utara.
- Ghozali, I. (2009). *Aplikasi Analisis Multivariate Dengan Program SPSS* (4th ed.). Badan Penerbit Universitas Diponegoro.
- Handaru, F. D. (2014). Analisis Pengaruh Tingkat Pendidikan, Pelatihan Akuntansi, Lama Usaha, dan Skala Usaha Terhadap Penggunaan Informasi Akuntansi Pada UMKM di Banyumas. Jenderal Soedirman University.
- Haswel, S., & Homes, S. (1989). Estimating the Small Business Failure Rate: A Reappraisal. *Journal of Small Business Management*.
- Holmes, S., & Nicholls, D. (1988). An Analysis of the Use of Accounting By Australian Small Business An Analysis of the Use of Accounting By Australian Small Business. *Journal of Small Business Management*.
- Ismail, R. (2009). The Impact of Human Capital Attainment on Output and Labor Productivity of Malay Firms. *The Journal of International Management Studies*, 4(1).
- Jama'an. (2008). Pengaruh Mekanisme Corporate Governance, dan Kualitas Kantor Akuntan Publik Terhadap Integritas Informasi Laporan Keuangan (Studi Pada Perusahaan Publik di BEJ). Universitas Diponegoro.
- Kemenperin. (2017). Kontribusi UMKM Naik. <https://www.kemenperin.go.id/artike/1/14200/Kontribusi-UMKM-Naik> .
- Mandala, A., & Raharja, E. (2012). Peran Pendidikan, Pengalaman dan Inovasi Terhadap Produktivitas Usaha Kecil dan Menengah. *Diponegoro Journal of Management*, 1(2), 1–11.
- Michael, S. C. (2003). First Mover Advantage Through Franchising. *Journal of Business Venturing*, 18(1), 6–80.
- Muhidin, S. A. (2011). *Dasar-Dasar Metode Statistika Untuk Penelitian*. Pustaka Setia.
- Najib, M. (2006). Peningkatan Kinerja Usaha Kecil Menengah (UKM) dengan pengembangan Orientasi Pasar. *Jurnal Manajemen Publikasi Penelitian Dan Review*.
- Nicholls, D., & S., H. (1998). An Analysis of the Use of Accounting Information by Australian Small Business. *Journal of Small Business Management*, 26(2), 57–68.

- Pratiwi, U. (2008). Analisis Faktor-Faktor Yang Mempengaruhi Penggunaan Sistem Informasi Akuntansi pada Perusahaan Getuk Goreng di Kab. Banyumas. *Jurnal Kajian Dan Pengembangan Akuntansi*, 3(1).
- Putra, W. (2012). Menentukan Jumlah Sampel Dengan Rumus Solvin.
- Undang-Undang Republik Indonesia Nomor 20 Tahun 2003.
- Sari, R. N., & Setyawan, A. B. (2012). Persepsi Pemilik dan Pengetahuan Akuntansi Pelaku Usaha Kecil dan Menengah Atas Penggunaan Informasi Akuntansi. Universitas Gundarma.
- Schultz, T. W. (1961). Investment in Human Capital. *The American Economic Review*, 51(1).
- Sevilla, C. A. (1960). Pengantar Metode Penelitian. Universitas Indonesia Press.
- Suhairi. (2004). Persepsi Akuntan Terhadap Overload Standar Akuntansi Keuangan (SAK) Bagi Usaha Kecil dan Menengah. Simposium National Akuntansi IX.
- Suhardjo, D. (2007). Arti Penting Pendidikan Mitgasi Bencana Dalam Mengurangi Resiko Bencana. Universitas Islam Indonesia Yoyakarta Press.
- Theng, L. G., & Boon, J. L. W. (1996). An Explotory Study of Factors Affecting The Failure of Local Small and Medium Entrprises. *Asia Pasific Journal of Management*.
- Umar, H. (2001). *Strategic Management in Action (First)*. Gramedia Pustaka Utama.
- Vandenberg, P., & Trinh, L. Q. (2016). Small Firms, Human Capital, and Productivity in Asia. Asian Development Bank Institute.
- Wahyudi, M. (2009). Analisis Faktor-faktor yang Mempengaruhi Penggunaan Informasi Akuntansi Pada Usaha Kecil dan Menengah (UKM) di Yogyakarta. Universitas Diponegoro.
- Wibowo, A., & K, E. P. (2015). Pengaruh Penggunaan Informasi Akuntansi Terhadap Keberhasilan Usaha Kecil dan Menengah (Studi Pada Sentra Konveksi di Kecamatan Tingkir Kota Salatiga). *Universitas Kristen Satya Wacana*, 18(2).
- Zwick, T. (2006). The Impact of Training Intensity on Establishment Productivity. *Industrial Relations*, 45(1), 27–46