## The Effect of Accounting Information and Internal Characteristics of Entrepreneurs toward SMEs Productivity

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#### **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 effect of independent variables to dependent variable, 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.

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

#### INTRODUCTION

The development of Small and Medium Enterprises (SMEs) is assessed to be able to overcome large workforce absorbtion in development country such Indonesia. The contribution of Micro, Small and Medium Enterprises (MSMEs) on gross domestic product (GDP) has been increasing by years before pandemic Covid-19 occurs in year 2020. MSMEs association (Akumindo) declare during year 2019 MSMEs have contribute 60,34 percent from total GDP with amount total national export around 14 percent (Suryowati, 2020). The government even had targeted the contribution of MSMEs increasing into 61 percent of total GDP at this year (Nurhaliza, 2020). Definition and criterion of SMEs could be founded on Law of the Republic of Indonesia Number 20 of 2008 concerning SMEs. Cooperative and Small Medium Enterprise Ministry (Kemenkop UKM) declare from total 58.91 millions units micro scale, 59,260 units small scale, and 4,987 units medium scale enterprise in the Indonesia could absord 89.17 percent domestic workforces from micro scale only (Nurdin, 2019). It could be imagined how significant MSMEs position on Indonesia's economic growth and people welfare. Sector that lead MSME contribution on GDP is the creative economy industry.

It prove by performance of the creative economy industry reach by around Rp 1000 trillion in 2018 with the contribution of GDP higher than growth (Katriana & Satyagraha, 2019). It also push workforces absorbtion almost 18 million people in 2018. The rapid increase number of MSMEs case also occurred at Banyumas regency. In 2009 the number of MSMEs 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.

Even though MSMEs in Indonesia grow rapidly in number and contribute huge amount GDP almost every years to the state, they face same unsolvable problem in ages. The Complete understanding of financial management seldom to be encountered posses by its owners/managers and financial division in MSMEs Indonesia. The uncomplete undestanding of financial management by owners/managers or its financial division and systematic information could impact on business productivity and growth of business in several way such as false calculation of cost of goods sold, return on capital, and makes wrong management decision. In worse scenario, it could push into the edge of business. This can be seen from the structure number of the MSMEs in Indonesia 58.91 million micro scale units, very disproportionate. Imagine if how much GDP contribution given by MSMEs if 10 percent of it level up, it could makes economic growth in Indonesia reach seven percent even more (Deviyana, 2019). This makes important to learn and examine delay of MSMEs productivity development also find solutions of it.

The MSME's development delay is evidence of many owners/managers MSMEs in Indonesia lack strategies to their business. The case often meet on the field some businessesman often not develop even closed because of not understanding financial planning and do not know the market competition. It could makes wrong move to production process and wrong offered products that makes less competitive with another product of business rivals. This causes by some business owners/managers lack knowledge about business analysis, innovation, and strategies. Business analysis and strategies can be obtained by proper undestanding of financial management. By knowledge of financial analysis and report it ease manage business to make right move

to maintain their existense in business world. The main factor that makes almost every MSMEs hard to get complete undestanding of financial management is caused by weakness of the internal character of almost owners/managers and human resouces.

Internal character of business owners/managers such as their last education, experience in leading business, the age of the business, the business scale, and experience of skill training owned by each of them (Munaf, Faris, & Akbay, 2019). About education level, some of owners/managers runs a business handed down from their parents, this make strict selection for beter quality human resources igroned and lack of expecience on leading organization. Factors that hinder the development of SMEs cosist of lack of knowledge of the market, weak bargaining power, lack of capital, and low level of technology (Najib, 2006). Deposited capital certainly also affect the amount of growth, its not a secrets the greater the wider the expansion of the business being run. Practice of accounting, financial accounting, especially on MSMEs in Indonesia relative low and felt there were still many weaknesses (Suhairi, 2004). The weakness is caused by low education background makes them hard to understand Financial Accounting Standards (GAAP). The undestanding of standard by manager or owner and the absence of regulations requiring the preparation of financial statements for SMEs. This could be resolved by employee training. Training could help the people develop their skills and abilities for something (Srinivas & Rao, 2018).

The concept of human capital explain that people as any other form of capital, such as money, material, machinery, technology, even land (Schultz, 1961). Human as capital is can be seen through form of self knowledge, ideas (ideas), creativities, skills, then productivity of work. Human capital is a crucial component to build a organization. Man with all his abilities will produce outstanding performance. In the process, development can be gained by positioning right people as a focus could make direct contribution to the national economic growth. The improvement of skills and ability of the production of workforce is one way to achieve it. 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 by presenting information about the company to realize the wishes of external parties such investors and creditors. Managers would present summary business 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 of lackness MSMEs in use of accounting information and internal characteristic of owners/managers, it can become main problem of 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 (*Dinkerkop UKM*) Banyumas.

This study found whereas accounting training does not have an influence on business productivity. Business scale and Education level of SMEs owner/manager has an influence on business productivity. Then, the use of accounting information on organization has an influence on business productivity. Theoretically, this study can be prove that the scale of business, the level of education and the use of accounting information could improve business productivity. Practically, 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.

# LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT Accountacy Training and SMEs Productivity

Human Capital Theory is basically talk about developing human resources for an organization that essentially is an investment. The investment in human resource development by increasing their work perfomance through training session is obvious expenditure to improve the productivity capacity of human beings so company can increase profitability (Srinivas & Rao, 2018). The logical reason that can be put forward is that a attitudes, knowledge, and skills that employees have would lead improving their performace at workplace so trained employees productive. The trained employee

have to apply what learned while training session on the workplace so its not waste of time, resources and money of organization (Srinivas & Rao, 2018). Fine human resource management will make competitive strength and will become difficult to imitate the organization. Workforce training on financial accounting is the focus 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 essential additional knowledge almost in each corner in the company such in financial, production, marketing, even for human resources departement. Remember almost every business processes of a company require accurate and precise calculations. The company also required accurate financial analysis for health of financial so 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. 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 earlier researchs result show that employees training could make company productivity raise up (Dearden et al., 2005; Morikawa, 2018; Srinivas & Rao, 2018; Vandenberg & Trinh, 2016; Zwick, 2006).

 $H_1$ : Accounting training has an influence to the productivity of MSMEs

## **Bussiness Scale and SMEs Productivity**

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). 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 everincreasing 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.

Small companies have the lowest productivity while large companies have the highest productivity. If a company has huge total asset it must indicate that company has high operational process that imply as productivity (Ratnasari & Priantinah, 2018). The count of revenue generated by the company so company can exhibit turnover of assets or ammount capitals owned by the company. The greater incomes obtained by the company, it would make greater the productivity level in the business (Wahyudi, 2009). In public eyes, bussiness scale considered as company value assessment (Putra & Lestari, 2016). Business scale become one indicator of efficiency decision make by company (Tarigan, 2019). This can be understood if the scale of the business increases then the productivity of the business should be increased as well because more capital is deposited than a smaller size (Wahyudi, 2009). So, business scale has an effect on company productivity that showed through value of profitability gained (Akbar, 2013).

 $H_2$ : Business scale has an influence to the productivity of MSMEs

#### **Level of Education and SMEs Productivity**

The education stages determined as based on the learners development level, goals to be achieved, and the willingness to develop. The someone's education background could affect changes attitudes and behavior that person. 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). By hiring a educated employees, at least have secondary school level, it could raise up SMEs productivity (Vandenberg & Trinh, 2016). The presence of educational levels would contribute positively to increase labor productivity growth and also improve business productivity. The higher educational levels would impact on higher of productivity both for manufacturing and non-manufacturing sectors (Black & Lynch, 1995; Ismail, 2009; Sari & Setyawan, 2012; Vandenberg & Trinh, 2016).

 $H_3$ : Level of Education has an influence to the productivity of small and medium enterprises

## **Use of Accounting Information and SMEs Productivity**

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) explain about accounting information as quantitative economic information that useful for decision making in determine multiple alternative choices.

The use of accounting information on internal parties SMEs will make easier for the owner and managerial see and examine profitability and expense in a given period. The use of accounting information in business system proved could make efficiental cost production and improve operational performance (Ahmad, 2013). In the other side, it could be a parameter of external paties such as creditors to giving credit consideration from in specific value for business. Industries with informativeness tend to have high productivity and it be found on dependable company to outside parties (Hann, Kim, Wang, & Zheng, 2020). 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. The use of accounting information could affect the productivity of small and medium enterprises (Sari & Setyawan, 2012).

 $H_4$ : Accounting Information Use has an influence to the productivity of small and medium enterprises

#### 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 Workforces, 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 based on specifying a certain amount as a target that must be met in sampling from the population (especially the infinite or unclear). Then, benchmark number of researchers take samples arbitrarily fulfilled the requirements as a sample of the population. This sampling method use in this study because there's confusion of data because the data collection process was still incomplete by Department of Workforces, Cooperatives and SMEs when conducting the research and number of units could be more. One method used to determine the number of samples is to use the Slovin formula and found 99 samples (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. Nicholls & Holmes (1988) define the scale of business as an ability of entity to manage its business. The greater the count of revenue generated by the company show off assets turn back or capital owned by the company, the greater the level of productivity in the company. It determined by assets owned by entrepreneurs. Pratiwi (2008) states the higher the level of education in owned by owners/managers of the business the greater the willingness and ability to know and process accounting information existing 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 (SMA/SMK) or equivalent, Diploma and Bachelor Degree. It determined by 6 Likertscale statements. Belkaoui (2000) explain about accounting information as quantitative economic information that useful for decision making in determine multiple alternative choices. Measurement by statements that have been provided on the questionnaire is done by giving a score on each answer by use the likert scale (5 statements) and the score scale (1 question) with 5 categories scored.

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 this study use 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, test of classic assumption being used. Classic assumption test is conducted in order 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. This multiple regression carried out determine effect of independent variables toward dependent variable (Ghozali, 2009).

## RESEARCH 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.

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)

#### **Clasical Asumption 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)

Multicollinearity is a problem that arises in relation to the presence of linear among independent variables. A good result of regression model should not show 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 known that the independent variables in this study are free from symptoms of multicollinearity. (Table 3)

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)

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 Analysis**

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)

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

$$Y = 0.425 + 0.035X1 + 0.049X2 + 0.034X3 + 0.023X4 + e$$

Based on the multiple regression equation listed above and t<sub>statistic</sub> shows in Table 5, 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. Based on the 95% confidence level with the two tailed test (α = 0.05) and the degree of freedom (df) = n-k, it shows that the ttable value is 1.988. Then on the t<sub>statistic</sub> value shows the variable of accounting training amounted to 1.556. That t<sub>statistic</sub> value is smaller than t<sub>table</sub> value. Then H<sub>0</sub> is accepted and H<sub>1</sub> is

- rejected. It can be interprete 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.
- 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. Based on the 95% confidence level with the two tailed test (α = 0.05) and the degree of freedom (df) n-k, it shows that the ttable value is 1.988. 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<sub>table</sub> value. Then H<sub>0</sub> is rejected and H<sub>2</sub> 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.
- 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. Based on the 95% confidence level with the two tailed test (α = 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<sub>0</sub> is rejected and H<sub>3</sub> 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.
- 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. 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  $H_4$  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. (Table 6)

In this research that result of test of R<sup>2</sup> that show on Table 6 have value R<sup>2</sup> 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 influence 59.8% on business productivity, meanwhile 40.2% influence by other factors. (Table 7)

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.

#### 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 contrary with earlier researchs result show that employees training could make company productivity raise up (Dearden et al., 2005; Morikawa, 2018; Srinivas & Rao, 2018; Vandenberg & Trinh, 2016; Zwick, 2006).

#### 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 business by looking at numbers of hired employee and ammount revenue obtained by the company in one accounting period (Holmes & Nicholls, 1988). Theoretically, the result of this research consistent with Wahyudi (2009) that explain count of income generated by the company can show off assets turn back or capital owned by the company. The greater the income can be obtained by the company in a period, it could make greater productivity level business. The results of this study prove that huge of company would affect total asset it must indicate that company has high operational process that imply as productivity (Ratnasari & Priantinah, 2018). This can be understood from the scale of the business increases then the productivity of the business should be increased as well because more capital is deposited than a smaller size (Wahyudi, 2009). Business scale become one indicator of efficiency decision make by company (Tarigan, 2019). So, business scale has an effect on company productivity that showed through value of profitability gained (Akbar, 2013).

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

Then the hypothesis test results on the third variable states that variable education level of 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 education stages owned by SMEs owners/managers determined by looking at level of learners development, achieved goals, and willingness to develop. The education level 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 prove that the level of education has a significant positive impact on output growth for companies in the manufacturing and service sectors.

The higher educational levels would impact on higher of productivity both for manufacturing and non-manufacturing sectors (Black & Lynch, 1995; Ismail, 2009; Sari & Setyawan, 2012; Vandenberg & Trinh, 2016).

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

of accounting information is measured by the use questionnaires using a likert scale of 6 statements. The results of this study prove that the variable use of accounting information has an effect on improving business productivity. 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. The use of accounting information in business system proved could make efficientcy cost production and improve operational performance (Ahmad, 2013). In the other side, it could be a parameter of external paties such as creditors to giving credit consideration from in specific value for business. Industries with informativeness tend to have high productivity and it be found on dependable company to outside parties (Hann et al., 2020). 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. The results of this study support earlier research of Sari (2012) states that most small and medium business owners have recorded simple transactions in their daily business activities.

#### CONCLUSION, IMPLICATION AND LIMITATIONS

#### 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 does not have an influence on business productivity. Business scale have an influence on business productivity. Education level of business owners/managers have an influence on business productivity. Then, the use of accounting information 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.

#### Limitation and Future Reseach

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. In the future research it would be better if amount of distributing questionnaire over 20 percent or more to anticipate respond rates below minimum samples have to collect.

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**TABLE** 

**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	15.00	25.00	19.830	2.990
Use Accounting Information	94	16.00	27.00	21.319	3.480
Productivity SME's	94	1.08	2.25	1.558	0.296

Source: Research data is processed

**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

**Table 3. Result Multicollinearity Test** 

	Standardized		
Variable	<b>Coefficients Beta</b>	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

**Table 4. Result Heteroscedasticity Test** 

Standardized				
Variable	<b>Coefficients Beta</b>	T <sub>statistic</sub>	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

**Table 5. Result Multiple Regression Test** 

Variable	Coefficient	$\mathbf{t}_{\text{statistic}}$	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	
$\frac{\text{Constanta}}{\text{Constanta}} = 0,425$				
Coef. Determination $= 0.598$				
Fstatistic	= 35	,535		

Source: Research data is processed

Table 6. Result R<sup>2</sup> (Coefficient Determination) Test

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

Source: Research data is processed

**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