Factors affecting the use of accounting information in small and medium enterprises (SMEs): a study on SMEs in Tingkir, Salatiga

Maria Entina Puspita*, Joko Pramono

Sekolah Tinggi Ilmu Ekonomi AMA Salatiga, Salatiga, Central Java, Indonesia

ARTICLE INFO

Article history

Received 28 August 2019 Revised 24 October 2019 Accepted 29 October 2019

JEL Classification: G14

Key words:

Business turnover, Business' age, Educational level, Accounting knowledge, Accounting training.

DOI:

10.14414/tiar.v9i2.1818

ABSTRACT

This study aims to examine the effect of business turnover, business' age, educational level, accounting knowledge, accounting training and owner motivation on the use of accounting information in Small and Medium Enterprises (SMEs) in Tingkir, Salatiga City. The data were collected using accidental sampling where the respondents were SMEs who were willing as the respondents for this research. This study used primary data in the form of questionnaires for 30 respondents. This is an explanatory study with a quantitative approach to explain the relationship between variables by testing hypotheses and conducting statistical tests. Data were analyzed using multiple linear regression. The results showed that only accounting training was statistically proven to have a positive effect on the use of accounting information for SMEs in Tingkir Salatiga. Other variables such as business turnover, business' age, educational level, accounting knowledge and motivation were not statistically proven to have an effect on the use of accounting information in these SMEs.

ABSTRAK

Penelitian ini bertujuan untuk menguji pengaruh variabel omset usaha, umur usaha, tingkat pendidikan, pengetahuan akuntansi, pelatihan akuntansi dan motivasi terhadap penggunaan informasi akuntansi pada pelaku Usaha Kecil dan Menengah (UKM) di Kelurahan Tingkir Kota Salatiga. Data dikumpulkan dengan menggunakan accidental sampling di mana responden penelitian adalah pelaku UKM yang bersedia diteliti pada saat penelitian berlangsung. Penelitian menggunakan data primer berupa kuesioner sebanyak 30 responden. Penelitian ini merupakan penelitian explanatory dengan pendekatan kuantitatif untuk menjelaskan pengaruh antar variabel-variabel melalui pengujian hipotesis dan uji statistik. Data dianalisis menggunakan regresi linier berganda. Hasil penelitian menunjukkan hanya pelatihan akuntansi yang terbukti secara statistik berpengaruh positif signifikan terhadap penggunaan informasi akuntansi pelaku UKM di Kelurahan Tingkir Kota Salatiga. Variabel lain seperti omset usaha, umur usaha, tingkat pendidikan, pengetahuan akuntansi dan motivasi penggunaan tidak terbukti berpengaruh terhadap penggunaan informasi akuntansi pada pelaku UKM.

1. INTRODUCTION

Small and medium enterprises (SMEs) mostly consider that recording transaction is not too important to apply. The lack of knowledge of business is also often not accompanied by the fulfillment of resources to run a business (Sari, 2011). Many business actors, especially in

SMEs, have not understood the importance of recording transaction for business continuity. Sari (2011) explained that awareness of the importance of recording transaction often arises when business actors have to deal with institution or other parties that require business financial report for certain activities.

^{*} Corresponding author, email address: mariaentina@stieama.ac.id

Hermawan (2010), Setiawati (2010), and Kurniawati et al. (2011) explained that there was still a lack of awareness on the importance of recording transactions among SMEs. On the contrary, Krisdiartiwi (2008), Kurniawati et al. (2011), Kurniawati and Hermawan (2012), and Hartono (2013) showed that SMEs had implemented simple transaction records. Kurniawati et al. (2013) and Filadelfia (2015) also examined how SMEs obtained accounting information from transaction records and used that information in business decisionmaking process. Wahyudi (2009) showed that education and business scale influence the use of SME accounting information. But, the company age and accounting training actually had no effect on the use of SME accounting information. Mubarok (2011) also showed that education and business scale had no effect either partially or simultaneously on the use of accounting information.

Sari (2013) showed simultaneously that there was a significant effect between education, business scale, age of business and accounting training participated by SMEs owners toward the act of providing and using accounting information for SMEs. However, Novianti *et al.* (2018) showed that accounting education and training partially participated by business owners had a positive effect on the use of accounting information. Yet, the company's age and scale of business had no effect on the use of accounting information.

Considering the inconsistency of the results of previous studies, it is interesting to re-examine factors influencing the use of accounting information on SMEs. In practice, these SMEs already have accounting information in their business records although it is still simply done. Tingkir District is one of the four districts in Salatiga City that has the greatest economic potential in the SMEs sector which includes natural attractions (Tingkir Lor tourism village) as well as tourism related to economic development, where Central Tingkir and Northern Tingkir areas become the home industry center in Salatiga.

Formulation of the Problem

Based on the backgrounds above, the influencial factors are divided to two categories, namely external and internal factors. External factors include the business turnover and business' age, whereas the internal factors include level of education, accounting knowledge, accounting training and motivation. Therefore, the problem formulation in this research is whether the business turnover, business' age, level of education, accounting knowledge, accounting training, and motivation affect the use of accounting information on SMEs.

Research Objectives and Benefits

This study aims to determine the effect of business turnover, business' age, educational level, accounting knowledge, accounting training, and motivation on the use of accounting information among SMEs. The result of this study is expected to be able to: (1) provide knowledge for SMEs about the importance of recording transactions in business, (2) become an evaluation for the Cooperative and SMEs Office of Salatiga to provide further information regarding to coaching, mentoring and training of transactions recording and financial management for SMEs, and (3) contribute to literature development in the field of accounting in particular the SME transactions recording and the factors that affect the use of accounting information in SMEs.

2. THEORETICAL FRAMEWORK AND HY-POTHESIS

Small and Medium Enterprises (SMEs)

According to the Law of The Republic of Indonesia No. 20 of 2008 on SMEs, all enterprises can be categorized based on their assets and turnover. In this study, the determination of respondents was based on business criteria according to the acquisition of SMEs annual turnover. Table 1 shows the criteria for SMEs based on the acquisition of turnover and assets:

Accounting Information

Accounting information is a transaction raw

Table 1
Business Criteria based on Assets and Turnover

NI.	Description	Criteria			
No	Description Description	Asset	Turnover/Year		
1	Micro Business	Max. 50 million	Max. 300 million		
2	Small Business	>50 - 500 million	>300 million – 2,5 billion		
3	Medium Business	>500 million – 10 billion	>2,5 billion – 50 billion		

Source: Law of The Republic of Indonesia No. 20 of 2008

data that has been transformed into financial figures, used to make economic decision (Jones et al., 1996). For small businesses, accounting is often described as a very simple process of transaction recording and finance reporting, which is known as bookkeeping (Karyawati, 2008). The application of accounting in SMEs depends on the business actors' knowledge, which affecta the accounting process used in producing information (Lestanti, 2015). In this case, the accounting information used in the study comes from the transaction recording process.

Financial Accounting Standards for Micro, Small and Medium Entities (SAK EMKM)

Transaction recording is an activity to record every transaction related to business activities. Recording of transactions or financial events can be done in the book such as notes, agendas or even in the form of other records (Karyawati, 2008). Hartono (2013) revealed that recording every transaction is very important because it can be used as a basis for decision making process. From this records, SMEs get information about the continuity of their businesses and use the report in decision making process.

Small and Medium Business Accounting is regulated in the Financial Accounting Standards for Micro, Small and Medium Entities (SAK EMKM) issued by the Indonesian Institute of Accountants. SAK EMKM contains accounting rules that are simpler than Financial Accounting Standard for Non-Publicly Accountable Entities (SAK ETAP) that was previously used for SMEs. Under SAK EMKM rules, the basis for preparing financial statements is based on historical cost of assets which is the amount of cash or cash equivalents paid to obtain an asset, as well as the historical cost of a liability measured from the amount of cash or cash equivalents received or expected to be paid to meet liability in conducting business.

In addition, the EMKM financial statement component only consists of (1) financial position statements (balance sheets) which contain cash, receivables, inventories, fixed assets, trade payables, bank loans and equity, (2) income statements containing income and expenses, and (3) notes to the financial statements, which contain an overview of accounting policies and additional information to explain important transactions and hence, the users will better understand the financial statements.

Factors Affecting the Use of Accounting Information:

Business Turnover

Business turnover is the average of total gross revenue received per month by the business owner, calculated in units of rupiah (Arinta, 2014). In this case, the business turnover is in accordance with the Law of The Republic of Indonesia No. 20 of 2008 on SMEs.

Age of Business

The company's age is the age or the length of time a company operates (Handayani, 2011). According to Sitoresmi (2013), the company's age results in a change in mindset and the level of ability of the business owner in making decisions for each of his/her action. Business owners who have long operated their businesses have learned more from their experience than those who have just started operating their business. The age of the business in this study was measured based on the length of time of the business operation (in years) which is calculated from the beginning of the business establishment until this study was conducted.

Educational level

The education level was measured based on the formal education that has been taken so that the measurement is continuous. The formal education is the education obtained in formal school starting from elementary school to tertiary level diploma (D3) and bachelor degree (S1). Fauziah (2015) showed that the formal education level of the SME owners greatly affects the use of accounting information. The higher the level of formal education of business owners, the higher the use of accounting information in business management is.

Accounting Knowledge

Knowledge is information obtained by someone about something acquired through learning, understanding and experiencing (Bestianti, 2015). Knowledge consists of 3 domains, namely cognitive, affective, and psychomotor. First, from the cognitive perspective, accounting knowledge is a person's ability to recognize accounting as the process of recording, grouping, and summarizing economic events (Belkaoui, 2011). Second, the affective domain of accounting knowledge shows an attitude of awareness of the importance of the role of accounting for users (Djazari and Sagoro, 2011) and third, the psychomotor domain is seen from the ability to sort and record transaction

evidence, as well as to resolve problems that occur (Afiff, 2014).

Accounting Training

The accounting training referred in this study is the number or frequency of training in accounting held by a non-school or higher education institutions, training centres or government offices attended by the owners of SMEs (Novianti, Mustika and Eka, 2018). Accounting training attended by SMEs owners will be measured based on the frequency of accounting training attended.

Motivation of Use

Motivation of use was measured by looking at the tendency of SMEs to record transactions as whether a need in business management or condition for administrative fulfilment. Puspita (2018) showed that SME owners had two motivational tendencies in recording business transactions, namely as a necessity in business management and as certain administrative fulfilment requirements.

The Effect of Business Turnover on the Use of SME Accounting Information

Fauziah (2015) showed a difference in recording transactions for SMEs based on business turnover. The greater the turnover they had, the higher the frequency of recording of transactions carried out. Meanwhile, business actors with small turnover did not feel they need to record transactions because the transactions were still small or businesses were privately owned. Therefore, they did not require records (just relied on their memory alone). This is supported by Puspita (2018) which proved that the greater the amount of business turnover owned, the higher the tendency for SMEs to record transactions in business.

From the description above, the first hypothesis is as follows:

H1: Business turnover has a positive effect on the use of SME accounting information.

The Effect of Company Age on the Use of SME

Accounting Information

The company age results in a change of mindset and the level of ability of the business owners in making decision on each of their actions (Sitoresmi, 2013). Business owners who have long operated their businesses have learned more from their experience than those who have just started operating their businesses. Rahmawati (2012) stated that the company age showed that the business still existed and was able to compete. In addition, Rini (2016) also showed that company age had a positive effect on the use of accounting information in SMEs, meaning that the more mature the age of a business, the more frequent a business uses accounting informations.

Business' age is related to product life cycle theory (Kotler, 2002). The product life cycle consists of introduction, growth, maturity or stabilization stages, and decline. The higher the age of a business, the more mature the company will be. On the contrary, Wahyudi (2009), Sriwahyuni (2016), and Novianti *et al.*, (2018) actually showed that business age did not have a positive effect on the use of accounting information. Sari (2013) added that business life did not have a positive influence on the supply and use of accounting information for SMEs. This is because the company age is not a factor that supports the provision and use of accounting information in business.

Based on the description above and the results of previous studies, the second hypothesis is formulated as follows:

H2: Business' age has a positive effect on the use of SME accounting information.

The Effect of Educational Level on the Use of SME Accounting Information

The formal education of business owners greatly influences the use of accounting information. The higher the level of formal education of business owners is, the higher the use of accounting information in business management (Fauziah 2015).

Wahyudi (2009), Sari (2013), and Novianti *et al.* (2018) also showed that business owner education had a positive effect on the provision of accounting information. Sari (2013) added that with education, business owners had a very important role in business continuity, including in every decision taken for business development, meaning that the higher the education of business owners, the higher the tendency to provide and use accounting information for businesses. Sondang (2015) stated that a person with higher education had the opportunity to obtain some information and were more knowledgeable than those who had no higher education.

Sari (2013) found that SME owners with higher educational level were aware of the importance of accounting and transaction recording for their businesses. Although during their previous formal education business owners did not obtain accounting knowledge, they obtained information about accounting from informal education such as by reading books and attending accounting trainings.

Meanwhile, business owners with low educational level tended not to use accounting information on their business due to lack of knowledge about accounting and lack of information they got about accounting. In contrast, Mubarok (2011) concluded that the level of education had no positive effect on the application of accounting information to SMEs both partially or simultaneously. From the description above, the third hypothesis is as follows:

H3: The level of education has a positive effect on the use of SME accounting information.

The Effect of Accounting Knowledge of Business Actors on the Use of SME Accounting Information

Knowledge is information obtained by someone by means of learning, understanding, and experiencing something (Bestianti, 2015). Knowledge consists of cognitive, affective, and psychomotor domains (Belkaoui, 2011). In this case, accounting knowledge is someone's ability to recognize accounting as the process of recording, grouping and summarizing economic events (cognitive). In this cognitive domain, business actors recognize that there are transaction cycles in business activities, including revenue, expenditure, payroll, production and financial cycles. Second, the affective domain shows an attitude of awareness of the importance of the role of accounting for users. This affective measurement can be seen from the attitudes and behaviours of supporting (positive), rejecting (negative) or being neutral (Djazari and Sagoro, 2011). Third, the psychomotor domain of accounting knowledge will be seen in terms of physical and acting skills.

Sari (2013), stated that accounting information was unavailable because the owner did not understand the importance of recording transactions. If business owners wanted to apply transaction records in their business, they must employed special employees and incurred extra costs to pay their employees. In this case, although the business continued to run, the business owner did not have knowledge in the field of accounting nor the ability to hire employees. Even if the business had been operated for a long

time, the transaction records and accounting information provisions were not available in the business. From the description above, the fourth hypothesis is formulated as follows: H4: Business actors' accounting knowledge has a positive effect on the use of SME accounting information.

The Effect of Accounting Training Attended by Business Actors on the Use of SME Accounting Information

The accounting training referred in this study is the number or frequency of accounting training held by a non-school educational institution or institution of higher education, training centres or government offices, which is attended by owners of SMEs (Novianti, Mustika and Eka, 2018). Accounting training attended by SME owners was measured based on the frequency of accounting training attended.

Sari (2013), and Novianti *et al.* (2018) showed that accounting training that had been attended by SMEs had a positive effect on the use of accounting information. The use of accounting information was said to affect by accounting training if the frequency of accounting training attended led to the high use of accounting information in business management. This was because accounting training was considered to be able to change the views of SMEs actors about how to manage business finances well.

Novianti *et al.* (2018), stated that the more frequent SMEs attend accounting training, the more capable they are in applying and using accounting information in their business operations. On the contrary, Wahyudi (2009) actually showed that accounting training attended by SMEs did not have a positive effect on the use of accounting information in business.

From the description above, the fifth hypothesis is formulated as follows:

H5: Accounting training attended by business actors has a positive effect on the use of SME accounting information.

The Effect of Motivation on the Use of SME Accounting Information

According to Terry (2009), motivation is an impulse that causes someone to act to achieve a certain goal. Motivation in this study was measured by looking at the tendency of SMEs actors to record transactions and use accounting information as whether a necessity in managing a business or a condition for

administrative fulfilment.

Puspita (2018) showed that SME owners had 2 motivational tendencies in recording transactions, namely recording transactions as a business management requirement and as an administrative fulfilment requirement. These can be used as a condition for credit applications at banks and other non-bank financial institutions as well as business licensing administration requirements such as IUMK, SIUP, HO, TDI. SITU, HAT, PIRT, Halal Certificate, Trademark and tax reporting. From the description above, the sixth hypothesis is formulated as follows:

H6: *Motivation has a positive effect on the use of SME accounting information.*

Based on the aforementioned hypotheses, the research model in this study is shown on Figure 1.

3. RESEARCH METHODS Research Samples and Data

The research respondents were SMEs in Northern and Central Tingkir Villages, Salatiga City. The researchers used a nonprobability sampling method for taking the sample, with accidental sampling techniques, e.g. SMEs who were willing to be investigated at the time of the research took place. The primary data were analysed using questionnaires. The study used a Likert Scale from scale of 1 to 5. All answers from respondents, then given a score in accordance with its respective weights, processed and analysed on each question item.

Operational Definitions and Research Empirical Indicators

The operational definitions and empirical indicators of each research variable are explained on Appendix 1.

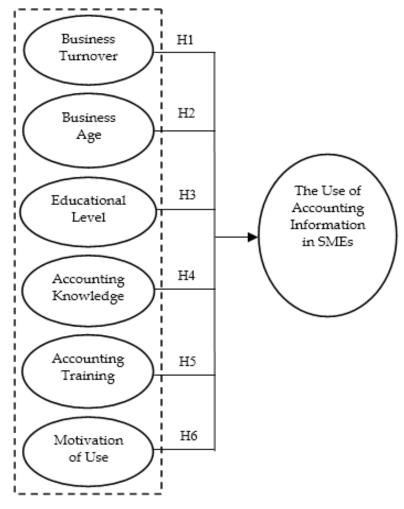


Figure 1 Research model

Technique and Analysis

This is an explanatory research with a quantitative approach. It used the multiple linear regression model for the data analysis as after testing the validity test, reliability test, normality test, classic assumption test (multicolinierity and heteroscedastisity test) as well as the Coefficient of Determination and Goodness of Fit Model test to find out how far the ability of the independent variable model in explaining the dependent variable and measuring the effectiveness of the model used. The regression equation model was done using the formula as follows:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + e$$

Information:

= Use of SME accounting information

= Constant

 β_0 = Constant $\beta_1 X_1$ = Business Turnover

 $\beta_2 X_2$ = Business' Age

 $\beta_3 X_3^-$ = Educational Level

 $\beta_4 X_4 =$ Accounting Knowledge

 $\beta_5 X_5 = Accounting Training$

 $\beta_6 X_6 = Motivation Users$

= Residual / error

4. DATA ANALYSIS AND DISCUSSIONS **Data Collection Results**

A total of 30 SMEs were willing to be respondents in this study. The characteristics of the respondents are presented on Appendix

Test Results

Validity and reliability tests

Appendix 3, shows that all of the questions in the research variables are valid with r-computed > r-table (0.312), meaning that the statement in the questionnaire is able to describe the factor, measured by the questionnaires. Reliability test results on Table 3 shows that the Cronbach's Alpha value of all testing variables is greater than 0.600 which means that all variables of this study are reliable.

Normality test

Table 6 shows the Asymp. Sig. value (2-tailed) is of 0.090 > 0.05 which means that research data are normally distributed.

Multicolinierity test and heteroscedastisity

Table 4 shows that all independent variables have VIF values less than 10 with a tolerance value above 0.100. This shows that the

Table 3 The Reliability Test Result

Variable	Cronbach's Alpha		Conclusion
Busines turnover	0,682	0,600	Reliable
Age of business	0,986	0,600	Reliable
Educational level	0,790	0,600	Reliable
Accounting knowledge	0,829	0,600	Reliable
Accounting training	0,772	0,600	Reliable
Motivation of use	0,614	0,600	Reliable
Use of accounting information	1,000	0,600	Reliable

Source: SPSS output, 2019

Table 4 **Multicollinearity Test**

	Collinearity S	tatistics	
Model	Tolerance	VIF	Conclusion
1 OU	,203	4,931	No Multicollinearity
UU	,209	4,780	No Multicollinearity
TP	,419	2,387	No Multicollinearity
PA	,291	3,438	No Multicollinearity
PLA	,839	1,192	No Multicollinearity
M	,602	1,661	No Multicollinearity

Source: SPSS output, 2019

Table 5 Heteroscedasticity – Glejser Test

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	В	Std. Error	Beta		
1	20,359	6,129		3,322	0,003
OU	,267	,362	,238	,738	,468
UU	,689	,456	,479	1,511	,144
TP	,561	,323	,389	1,735	,096
PA	,146	,463	,085	,316	,755
PLA	,473	,196	,382	2,410	,204
M	,204	,159	,240	1,283	,212

Source: SPSS output, 2019

Table 6 Goodness of Fit Model Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F	Sig.
1	,718ª	,516	,389	1,712	4.081	.006 ^b

Source: SPSS output, 2019

regression model is free from Multicollinearity assumptions. Table 5 shows that all research variables have a value of Sig > 0.05, so that the regression model does not result with heteroscedastisity.

Table 6, shows the Adjusted R Square value of 0.389. This means that the independent variables of business turnover, age of business, educational level, accounting knowledge, accounting training and motivation to use affect the use of accounting information for SMEs by 38.9%, while the remaining 61.1% is explained by other variables outside the model used. The calculation result also shows a sig value of 0.006 (<0.050). This value indicates that the research sample is fit (accepted) with the proposed regression model, meaning that all independent variables, namely business turnover, age of business, educational level, accounting knowledge, accounting training and motivation to use, influence the dependent variable, e.g. the use of accounting information.

Multiple Linear Regression Analysis

The data processing results of the research variables are presented in Table 7.

Based on the above results, this study could formulate the multiple linear regression equations, namely Y = $20,359 + 0,267X_1 + 0,689X_2 + 0,561X_3 + 0,146X_4 + 0,473X_5 + 0,204X_6$. The test results also show only accounting training variable which its hypothesis is accepted with a sig value of 0.024 smaller than 0.050.

Discussion

Business turnover does not have a positive effect on the use of SME accounting information

Variable of business turnover obtains Sig value of 0.468 (sig> 0.05). This shows that business turnover has no positive effect on the use of accounting information on SMEs. The result of this study contradicts the researches of Fauziah (2015) and Puspita (2018) which showed that the greater the number of business turnover, the higher the tendency of SMEs to record transactions in business.

This shows that the amount of the business turnover owned by Small and Medium Enterprises (SMEs) in Tingkir Salatiga is not able to encourage and effect of these SMEs on the record transactions and use accounting information. There is still an argument that (1) the business run is a privately owned or family-owned, (2) transactions carried out are small and even still rely on memory. All of these are the reasons why SMEs are reluctant to record transactions and use accounting information in their business.

Age of business does not have a positive effect on the use of SME accounting information

Variable of business' age obtains the Sig value of 0.144 (sig> 0.05). This shows that the age of business does not have a positive effect on the use of accounting information on SMEs. Rahmawati (2012) stated the age of a business can show whether the business still exists and

Table 7 Multiple Linear Regression Test

Variable	В	t Values	Sig.	Result
(Constant)	20,359	3,322	,003	
OU	,267	,738	,468	Hypothesis rejected
UU	,689	1,511	,144	Hypothesis rejected
TP	,561	1,735	,096	Hypothesis rejected
PA	,146	,316	,755	Hypothesis rejected
PLA	,473	2,410	,024	Hypothesis accepted*
M	,204	1,283	,212	Hypothesis rejected

Source: Data Procces

is able to compete. Rini (2016) added that the age of business has a significant effect on the use of accounting information in business. In other words, the more mature a business is, the more it is assumed to be able to use accounting information routinely or intensely.

The result of this study is in line with that by Wahyudi (2009), Sriwahyuni (2016), and Novianti et al. (2018) showing that the company age does not have a positive effect on the use of accounting information. Sari (2013) also partially showed that the company age did not have an effect on the supply and use of accounting information for SMEs. This is due to the company age that is a factor encouraging the supply and use of accounting information in business. In addition, the change of business managers as the successors was also presumed to be one of the reasons why the age of the business was not able to guarantee the availability of adequate business records in a business, including the use of accounting information in every business decisionmaking. The result of the study is contrary to that by Ratnasari (2014) which showed the length of time of business life could not affect the business owners in using accounting information in business.

The level of education has no positive effect on the use of SME accounting information

Educational level got the Sig value of 0.096 (sig> 0.05). This shows that the level of education has no positive effect on the use of accounting information on SMEs. This research is in line with that by Mubarok (2011) which concluded that both simultaneously and partially, the educational level of business owners did not have a positive effect on the application of accounting information to SMEs. The educational level could not encourage SMEs to record transactions and use

accounting information in carrying out their business operations.

Sari (2013) and Sondang (2015), in their study, showed that a person with higher education had the opportunity to obtain various kinds of information and had better knowledge than those who had no higher education. They also tended to be aware of the importance of accounting and recording transactions for his business. On the contrary, the research by Wahyudi (2009), Sari (2013), Fauziah (2015), and Novianti et al. (2018) showed the higher the education of business actors, the higher the use of accounting information in business management. Education is an important factor in determining one's work ability. In the management of a business, the level of education possessed by the business owner has a very important role in the sustainability of the business including in every decision taken for business development.

Accounting knowledge has no positive effect on the use of SME accounting information

Accounting knowledge obtained Sig value of 0.755 (sig> 0.05). This shows that accounting knowledge has no positive effect on the use of accounting information on SMEs. The result of this study contradicts Sari (2013) and Linawati and Restuti (2015) which stated that the unavailability of accounting information was caused by owners who did not understand the importance of recording transactions. In addition, if the business owner does not have knowledge in the field of accounting and does not have the ability to hire employees, the provision of accounting information and recording of transactions will not exist in the business, even though the business has been operated for a long time and continues to run. Accounting knowledge is not considered to be a driving factor in the use of accounting information.

SME owners may practically have sufficient accounting knowledge, both from formal education and from other learning businesses such as reading books and taking part in accounting training, but recording transactions and the availability of accounting information in the business depend greatly on: (1) the awareness of business actors (Djazari and Sagoro, 2011), (2) the willingness and interest of business actors to record and use accounting information in their business.

Accounting training has a positive effect on the use of SME accounting information

Accounting training got a Sig value of 0.024 (sig <0.05). This shows that accounting training has a positive effect on the use of accounting information on SMEs. The result of this study is in line with Sari (2013) and Novianti *et al.* (2018) which showed that accounting training attended by SMEs had a positive effect on the use of accounting information. Accounting training is able to influence the use of accounting information if the the frequency of accounting training participated by business actors shows the high use of accounting information in business management.

Such condition is due to an assumption that accounting training is considered capable to change the views of SMEs about how to manage business finances well. Besides, Novianti et al. (2018) also stated that the more frequent SMEs attended accounting training, the more they were considered able to apply accounting and use accounting information in their business operations through simple transaction recording. Most of the SME respondents have participated in trainings conducted by related parties such as by the Office of Cooperatives and SMEs, the Office of Trade, BAPPEDA (agency for regional development) and even from supplier companies such as PT. Boga Sari which provides training, including in the fields of production, marketing, management and financial management, and accounting especially in recording SME transactions. In the training, SMEs admit that they gain a lot of benefits and knowledge from the training attended. Most of the SMEs state that they are willing to follow the training again with the hope that the training would be able to improve the quality and quantity of production, the sales volume, and financial management strategies of their business management.

The result of the research is contrary to that by Wahyudi (2009) which showed that accounting training participated by SMEs did not affect the use of accounting information in their business. The lack of consistent willingness and interest of business actors, makes accounting training material that has been taught in training not applied in business. Not being discipline in managing time and high workload make the need for recording business transactions is ruled out.

The motivation to use does not have a positive effect on the use of SME accounting information

Motivation has a Sig value of 0.212 (sig> 0.05). This shows that the motivation to use does not have a positive effect on the use of accounting information on SMEs. According to Terry (2009), motivation is an impulse that causes someone to act to achieve certain goals. The results of this study indicated the motivation to use does not affect the use of SME accounting information. Motivation in this study observes the tendency of SMEs to record transactions as a necessity in business management or to record transactions only as a condition for administrative fulfilment. The results also show that SMEs record transactions as a form of need in business management, even though their records are still merely simple notes that could only be understood by them, not structured recording based on general rules or standards.

This research is in line with that by Puspita (2018) which showed the tendency of SMEs to record transactions as a need in business management in order to control costs and cash disbursements, to control all transactions, and to make decisions easily. However, the test results did not statistically indicate that the motivation to use business records influence the use of SME accounting information.

The results of the study are in contrast with those by Rovikasari (2011) and Darnawan (2013) which showed that the motivation of use could influence the use of accounting information for SMEs.

5. CONCLUSION, IMPLICATION, SUGGE-STION, AND LIMITATIONS

The results show that accounting training is proved to have a significant and positive effect on the use of accounting information for SMEs in Tingkir, Salatiga. The amount of business turnover, the company age, educational level, accounting knowledge, and motivation of use are not proved to have a positive effect on the

use of accounting information of SMEs.

The implication from the perspective of SMEs is that SMEs should not only rely on human memory, but also have a record of estimated costs such as the calculation of Cost of Goods Sold. This is because the information presented in the form of a budget is useful for business planning and decision making. Similarly, the existence of financial reports can help SMEs to meet administrative requirements when the SMEs face financial institutions that require the recording of structured business transactions. The availability of rules in the Financial Accounting Standards of Micro, Small and Medium Entities (SAK EMKM) issued by the Indonesian Institute of Accountants (IAI) is expected to help SMEs in preparing business financial statements in a simple way.

This study also shows that only accounting training is proved to have a significant and positive effect on the use of accounting information for SMEs in Tingkir, Salatiga. This also proves that the role of accounting training in the sustainability of SME businesses is still an important factor for developing and progressing the business. Accounting training is considered capable of changing the views of SMEs about how to manage businesses that are run and manage business financial management properly.

The limitation of this study is that the results cannot represent the answers of all SMEs in Tingkir, Salatiga. The research only focuses on analyzing the factors that affect the use of accounting information on SMEs in Tingkir Salatiga.

Future studies are expected to develop research by looking further at how SME actors record transactions and the extent to which SME actors utilize the records they have in developing their businesses. In addition, the provision of continuous business management training is expected to encourage SMEs to record transactions in their business operations, especially in terms of preparing financial statements in a simple way for SMEs.

REFERENCES

- Afiff, F. 2014. Pengetahuan Bisnis dan Keterampilan Manajemen.
- Arinta, D. Y. 2014. Pengaruhkarakteristik individu, karakteristik usaha, karakteristik kredit terhadap kemampuan membayar kredit. Universitas Brawijaya.

- Belkaoui, A. R. 2011. *Accounting Theory*. 5th edn. Jakarta: Salemba Empat.
- Bestianti, B. 2015. Analisis pengetahuan akuntansi dan penerapan pencatatan akuntansi pada wirausaha muda industri kreatif di Salatiga. Universitas Kristen Satya Wacana.
- Darnawan, N. 2013. Faktor-faktor yang dapat mempengaruhi pemahaman atas informasi akuntansi terhadap persepsi para pelaku pengrajin tahu di daerah Kecamatan Kartasura. Universitas Sebelas Maret.
- Djazari, M. and Sagoro, E. M. 2011. 'Evaluasi prestasi belajar mahasiswa program kelanjutan studi jurusan pendidikan akuntansi ditinjau dari IPK D3 dan asal perguruan tinggi', Jurnal Pendidikan Akuntansi Indonesia, 9(2), pp. 103–112.
- Fauziah, F. 2015. Karakteristik perusahaan, karakteristik pelaku usaha dan pencatatan transaksi pada UMKM di Kelurahan Tingkir Kota Salatiga. Universitas Kristen Satya Wacana.
- Filadelfia, A. 2015. Faktor-faktor yang mempengaruhi minat pelaku usaha mikro kecil menengah atas pengadaan pembukuan (Studi Pada UMKM di Kota Salatiga). Universitas Kristen Satya Wacana.
- Handayani, B. 2011. 'Affecting factors on the use of accounting information for small and medium enterprises (SMEs)', *Jurnal Akuntabilitas*, 11(1), pp. 50–67.
- Hartono, W. 2013. *UMKM: Pencatatan Transaksi*. Universitas Kristen Satya Wacana.
- Hermawan, F. 2010. Penerapan akuntansi pada usaha kecil (studi kasus perusahaan kecil di Magelang). Universitas Kristen Satya Wacana.
- Jones, K. H. et al. 1996. Introduction To Financial Accounting: A User Perspective. Upper Sadd. New Jersey: Prentice Hall.
- Karyawati, G. 2008. Akuntansi Usaha Kecil Untuk Berkembang. Jakarta: PT Raja Grafindo Persada.
- Kotler, P. 2002. *Manajemen Pemasaran*. Milenium. Jakarta: Prehallindo.
- Krisdiartiwi, M. 2008. *Pembukuan Sederhana Untuk UKM*. Yogyakarta: Media Pressindo.

- Kurniawati, E. P. and Hermawan, F. 2012. 'Accounting for small and medium enterprises (SMEs)', The Journal - Contemporary Management Research, Special Is, pp. 13–22.
- Kurniawati, E. P., Kurniawan, E. Y. and Kristiani, M. 2013. 'Accounting information for business decision making and performance assessment in small and medium enterprises (SMEs)', *The Journal of Social Science*, 76, pp. 67–95.
- Kurniawati, E. P., Nugroho, P. I. and Setiawati, D. 2011. 'Penerapan akuntansi usaha kecil menengah (UKM): studi kasus pada usaha dagang kota salatiga', in *Management The Next Opportunity and Challenge From Competition To Collaboration*. Bandung, pp. 23–136.
- Kurniawati, E. P., Nugroho, P. I. and Umiyarsih, F. 2011. 'Penerapan akuntansi untuk usaha kecil menengah (UKM)', in *Trend Penelitian Administrasi Bisnis Management*. Malang, pp. 177–183.
- Lestanti, D. 2015. 'Pengaruh pengetahuan akuntansi, pengalaman usaha dan motivasi kerja terhadap persepsi penggunaan informasi akuntansi pada pelaku UMKM di Boyolali', *Jurnal Profita: Kajian Ilmu Akuntansi*, 3(1).
- Linawati, E. and Restuti, M. I. 2015. 'Pengetahuan akuntansi pelaku usaha mikro, kecil dan menengah (UMKM) atas penggunaan informasi akuntansi', in 2nd Conference in Business, Accounting and Management (CBAM). Semarang: UNISSULA, pp. 145–149.
- Mubarok, A. 2011. 'Pengaruh faktor tingkat pendidikan, pengalaman memimpin dan skala usaha terhadap penerapan sistem informasi akuntansi (penelitian pada lembaga keuangan mikro syariah "BMT" di daerah Tegal)', *Jurnal SOSEKHUM*, 7(10), pp. 1–17.

- Novianti, D., Mustika, I. W. and Eka, L. H. 2018. 'Pengaruh tingkat pendidikan, pelatihan akuntansi, umur usaha dan skala usaha pelaku UMKM terhadap penggunaan informasi akuntansi di Kecamatan Purwokerto Utara', Jurnal Ekonomi, Bisnis dan Akuntansi (JEBA), 20(3), pp. 1–14.
- Puspita, M. E. 2018. Pembukuan: Kebutuhan Versus Pemenuhan Administrasi (studi usaha kecil dan menengah (UKM) di Kota Salatiga. Universitas Kristen Satya Wacana.
- Rahmawati. 2012. *Teori Akuntansi Keuangan*. 1st edn. Yogyakarta: Graha Ilmu.
- Ratnasari, A. R. 2014. Faktor-faktor yang mempengaruhi penggunaan informasi akuntansi bagi Usaha Mikro Kecil Menengah (UMKM) binaan Dinas Koperasi dan UMKM Kota Kediri. Widya Mandala Catholic University.
- Rini, A. D. 2016. 'Relevansi sikap dan pengalaman pelaku UKM muda dalam pemahaman akuntansi dan pengaruhnya terhadap keberhasilan bisnis', in *Prosiding seminar nasional multi disiplin ilmu*. Semarang.
- Rovikasari, R. 2011. Faktor-faktor yang mempengaruhi penggunaan informasi akuntansi berbasis teknologi pada usaha kecil dan menegah (UKM). Universitas Pembangunan Nasional Veteran Jawa Timur.
- Sari, D. P. 2013. Analisis faktor-faktor yang mempengaruhi penyediaan dan penggunaan informasi akuntansi pada UKM di Kecamatan Rumbai Pesisir. Universitas Riau.
- Sari, M. J. 2011. Penerapan pencatatan keuangan pada industri kecil rumahan (studi pada pengusaha laundry kiloan di Surabaya). Universitas Pembangunan Nasional Veteran.
- Setiawati, D. 2010. Penerapan akuntansi untuk Usaha Kecil Menengah (UKM): studi kasus di usaha dagang Kota Salatiga. Universitas Kristen Satya Wacana.

- Sitoresmi, D. 2013. 'Faktor-faktor yang mempengaruhi penggunaan informasi akuntansi pada usaha kecil dan menengah (studi pada KUB Sido Rukun Semarang)', Diponegoro Journal of Accounting, 2(3), pp. 2337–3806.
- Sondang, P. S. 2015. *Manajamen Sumber Daya Manusia*. Jakarta: Bumi Aksara.
- Sriwahyuni, D. R. 2016. Faktor-faktor yang mempengaruhi penggunaan informasi akuntansi pada Usaha Mikro, Kecil dan Menengah (UMKM) yang ada di Kota Tanjungpinang. Universitas Maritim Raja Ali Haji.
- Terry, G. R. 2009. *Prinsip-Prinsip Manajemen*. Jakarta: Bumi Aksara.
- Wahyudi, M. 2009. *Analisis faktor-faktor yang mempengaruhi penggunaan informasi akuntansi pada Usaha Kecil dan Menengah (UKM) di Yogyakarta*. Universitas Diponegoro.

Appendix 1. Variables, Operational Definitions and Research Empirical Indicators

Variable	Operational Defi- nition	Empirical Indicator	Question
Business Turnover	The average of total gross revenue received per month by business owners, in Rupiah (Arinta, 2014).	The business turnover used is the business turnover that is in accordance with the criteria of Small and Medium Enterprises (SMEs) stated in the Law No. 20 of 2008.	 Have monthly business income or turnover. Large turnover requires transactions records. Only a large enough turnover requires recording. Be aware that recording transactions is important. Be willing to record business transactions.
Age of Business	Age or length of time of the company opera- tion (Handayani, 2011).	The age of the business in this study is measured based on the length of time of the business operation (in years) which is calculated from the beginning of the establishment until the time when this study was conducted.	 The length of time in managing a business. Recording transaction is necessary because many transactions occur. Recording transaction is necessary because the owner is not able to remember all of the transactions. Recording transactions is important for business continuity and development. The longer the business is established, the more necessary transaction is recorded.
Level of Education	Formal education means the educa- tion obtained in formal schools, starting from elementary school to tertiary level like Diploma and Bachelor degree	Level of education is measured based on formal education that has been enrolled so that the measure- ment is continuous.	 Having level of formal education in schools. Education is an important factor in determining work ability. With education, accounting and transactions recording processes have been learnt. Having higher education, transaction records are used. Understanding the importance of recording transactions in business.
Accounting Knowledge	Information obtained by someone through learning, understanding and experiencing something (Bestianti, 2015). In general, accounting knowledge is the ability to recognize the process of recording transactions and apply the skills gained from education and experience by showing skills through the separation of accounting cycles that occur in business.	From the cognitive realm, accounting knowledge is a person's ability to recognize accounting as the process of recording, grouping and summarizing economic events (Belkaoui, 2011). In cognitive domain, business actors recognize that there are transaction cycles in business activities, including revenue, expenditure, payroll, production and financial cycles. In affective domain, accounting knowledge shows an attitude of awareness of the importance of the role of accounting for users. Measurement of this affective domain can be seen from attitudes and behaviors that are supporting (positive), rejecting (negative) or being neutral (Djazari and Sagoro, 2011). The psychomotor domain is seen in terms of physical and acting skills	 Having knowledge of accounting. Understanding the benefits and functions of accounting. Be able to classify business transactions that occur. Be aware that recording every transaction is important. Be willing to record business transactions.

Variable	Operational Defi- nition	Empirical Indicator	Question
Accounting Training	Frequency of accounting training conducted by a non-school educational / higher education institutions, training centers or government offices attended by owners of SMEs (Novianti, Mustika and Eka, 2018).	Accounting training attended by SME owners is measured based on the frequency of accounting training attended.	 Interested in accounting training. Be eager to attend every accounting training. Accounting training is essential for business development. Accounting training increases knowledge about the process of recording transactions. The material taught in accounting training is applied in business.
Motivation of Use	Motivation is an impulse that causes someone to do an action, to achieve a certain goal (Terry, 2009).	Measured by looking at the tendency of SMEs actors to record transactions as needs in business management or only as a condition for administrative fulfillment.	 Using accounting information in business records to determine the source of business income. Using accounting information in business records to control costs and cash out flow. Using accounting information in business records to make decisions easily (when to shop or wholesale) Using accounting information in business records in order to easily separate the business money and personal money. Using accounting information in business record as a condition to apply loan in the bank. Using accounting information in business record as the administrative requirements to establish a business license.

Variable	Operational Definition	Empirical Indicator	Question
Use of SME Accounting Informa- tion .	The process, method or act of using accounting information for economic decision making in determining choices among alternative actions (Puspita, 2018). Types of accounting information: 1. Operation Information (accounting information related to business operational activities) 2. Management Information (accounting information related to planned activities to run and control the business) 3. Financial Information (accounting information related to planned activities to run and control the business)	Use accounting information to estimate future cesh needs. Use accounting information to control the amount of costs incurred. Use accounting information to measure and increase productivity. Use accounting information to production process. Use accounting information to develop business strategies. Use accounting information to find out the amount of production everyday Use accounting information to find out the amount of raw material purchases. Use accounting information to find out the amount of raw material usage. Use accounting information to plan business activities. Use accounting information to run and control a busines. Use accounting information to find out financial position. Use accounting information to determine business performance.	 Using accounting information to predict the need of cash in the future. Using accounting information to control the costs incurred. Using accounting information to measure and improve productivity Using accounting information in the production process. Accounting information to develop business strategies. Using accounting information to determine the amount of production Using accounting information to determine the amount of raw material purchases. Using accounting information to determine the amount of raw material usage. Using accounting information to plan business activities. Using accounting information to run and control the business. Using accounting information to know financial position Using accounting information to determine business performance.

The Indonesian Accounting Review Vol. 9, No. 2, July - Desember 2019, pages 207 - 225

Appendix 2. Characteristics of Respondents

	Tot	(%)		Tot	(%)
A. Sex			H. Recording transactions		
Male	12	40,0	Yes	22	73,3
Female	18	60,0	No	8	26,7
Total	30	100,0	Total	30	100,0
B. Educational level			I. When to start recording transactions		
Primary	4	13,3	Since established	16	53,3
Junior high	4	13,3	In the middle of the business	6	20,0
Senior high	15	50,0	Not recording the transactions	8	26,7
Diploma	2	6,7	Total	30	100,0
Bachelor	5	16,7			
Total	30	100,0			
C. Business sector			J. Recording method		
Convection	24	80,0	Manual	19	63,3
Processed food	4	13,3	Computerized	3	10,0
Industry	2	6,7	Other	8	26,7
Total	30	100,0	Total	30	100,0
D. Age of business			K. Recording period		
2-10 years	10	33,3	At every daily transaction	21	70,0
11-20 years	15	50,0	Only when there is an order	1	3,3
>20 years	5	16,7	Other	8	26,7
Total	30	100,0	Total	30	100,0
E. Business turnover (in IDR)			L. Person doing the recording		
< 25 million	5	16,7	The owner	21	70,0
25 - 100 million	21	70,0	Family member	1	3,3
>100 million	4	13,3	Special staff	8	26,7
Total	30	100,0	Total	30	100,0
F. Manager			M. Recording media		
Owner	30	100,0	Book	19	63,3
Employee	0	0,0	Computer	3	10,0
			Other	8	26,7
Total	30	100,0	Total	30	100,0
G. Source of capital			N. Owned accounting information *)		
Owner's capital	18	60,0	Cash in flow notes	22	100,0
Loans from bank	9	30,0	Cash out flow notes	22	100,0
Loans from cooperative	3	10,0	Debt notes	2	9,0
Total	30	100,0	Receivable notes	2	9,0
			Inventory notes	2	9,0

Source: Primary data (*) Note: respondents might choose more than one alternative answer.

Appendix 3. Validity Test

Business turnover OU1 OU2 OU3 OU4 OU5 Age of business UU1 UU2 UU3 UU4	0,517 0,738 0,499 0,593 0,670 0,989 0,989 0,989 0,850 0,989 0,544 0,542	0,312 0,312 0,312 0,312 0,312 0,312 0,312 0,312 0,312 0,312 0,312	Valid
OU2 OU3 OU4 OU5 Age of business UU1 UU2 UU3	0,738 0,499 0,593 0,670 0,989 0,989 0,989 0,850 0,989	0,312 0,312 0,312 0,312 0,312 0,312 0,312 0,312 0,312	Valid
OU3 OU4 OU5 Age of business UU1 UU2 UU3	0,499 0,593 0,670 0,989 0,989 0,989 0,850 0,989	0,312 0,312 0,312 0,312 0,312 0,312 0,312 0,312	Valid Valid Valid Valid Valid Valid Valid Valid
OU4 OU5 Age of business UU1 UU2 UU3	0,593 0,670 0,989 0,989 0,989 0,850 0,989	0,312 0,312 0,312 0,312 0,312 0,312 0,312	Valid Valid Valid Valid Valid Valid Valid
OU5 Age of business UU1 UU2 UU3	0,670 0,989 0,989 0,989 0,850 0,989	0,312 0,312 0,312 0,312 0,312 0,312	Valid Valid Valid Valid Valid Valid
Age of business UU1 UU2 UU3	0,989 0,989 0,989 0,850 0,989	0,312 0,312 0,312 0,312 0,312	Valid Valid Valid Valid Valid
UU1 UU2 UU3	0,989 0,989 0,850 0,989	0,312 0,312 0,312 0,312	Valid Valid Valid Valid
UU2 UU3	0,989 0,989 0,850 0,989	0,312 0,312 0,312 0,312	Valid Valid Valid Valid
UU3	0,989 0,850 0,989 0,544	0,312 0,312 0,312	Valid Valid Valid
	0,850 0,989 0,544	0,312 0,312	Valid Valid
UU4	0,989 0,544	0,312	Valid
	0,544		
UU5		0,312	
Educational level		0,312	
TP1	0,542		Valid
TP2		0,312	Valid
TP3	0,875	0,312	Valid
TP4	0,679	0,312	Valid
TP5	0,610	0,312	Valid
Accounting knowledge			
PA1	0,600	0,312	Valid
PA2	0,824	0,312	Valid
PA3	0,824	0,312	Valid
PA4	0,639	0,312	Valid
PA5	0,585	0,312	Valid
Accounting training			
PA1	0,380	0,312	Valid
PA2	0,781	0,312	Valid
PA3	0,781	0,312	Valid
PA4	0,781	0,312	Valid
PA5	0,334	0,312	Valid
Motivation of use			
MP1	0,508	0,312	Valid
MP2	0,437	0,312	Valid
MP3	0,408	0,312	Valid
MP4	0,408	0,312	Valid
MP5	0,485	0,312	Valid
MP6	0,463	0,312	Valid
Use of accounting information PIA1-12	1,00	0,312	Valid

Source: SPSS output, 2019

The Indonesian Accounting Review Vol. 9, No. 2, July - Desember 2019, pages 207 - 225

Appendix 4. Test of coefficient of determination and goodness of Fit model

_ 1 1		0
		Unstandardized Residual
N		30
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	1,52475011
Most Extreme Differences	Absolute	,187
	Positive	,187
	Negative	-,187
Test Statistic		,187
Asymp. Sig. (2-tailed)		,090