#### Review Article

# The Effect of Bookkeeping Literacy, Budgeting Literacy, and Financial Inclusion of SME Financial Performance in Semarang

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Abstract - This study aims to examine the effect of bookkeeping literacy, budgeting literacy and financial inclusion on financial performance. The population in this study is SMEs in the city of Semarang. The sample size used was 105 SMEs, with the sampling technique used being accidental sampling. Data were analyzed with multiple linear regression. The results showed that bookkeeping literacy, budgeting literacy and financial inclusion had a positive and significant effect on the financial performance of SMEs. Of the three variables, the biggest influence is bookkeeping literacy

**Keywords** – Bookkeeping literacy, budgeting literacy, financial inclusion, financial performance.

## I. INTRODUCTION

Small and Medium Enterprises (SMEs) is one of the strategic sectors of the economy in both developed and developing countries. In Japan, SMEs represent 78% of companies, and 96% in India, the Netherlands, Spain, and Sweden (OECD, 2015). In Turkey, almost all companies are included in the category of UKM, which is 99% (Mazzarol, 2014). In Indonesia, the growth of SMEs from year to year is significant; based on the annual report of the Ministry of Cooperatives and Small and Medium Enterprises in 2015 and 2016, the number of SMEs in 2013 was 706,328 business units and continued to increase in 2015 to 740,785 business units, a growth of 4.8%.

Despite having a strategic role, the development of SMEs is still constrained by various problems. One of the classic problems faced is limited funding which is partly due to the difficulty of SMEs in accessing bank and non-bank financial institutions. Lee et al. (2019) stated that the main obstacle to the development of SMEs in developing countries is that financial services are inaccessible and cannot be used by companies. Barriers to SMEs in accessing capital from banks are due to ignorance about credit application procedures, complicated credit application procedures, and the existence of credit worries proposed that do not meet the standards (Tambunan 2012).

This shows that strategic efforts need to be made to improve the performance of SMEs, such as enriching the knowledge of SMEs to financial management, banking products and making it easier to get access to capital or credit with low interest so that the foundation of the Indonesian economy, especially in the Semarang area remains awake and strong. One way that can be done to enrich knowledge in managing finances is to use financial literacy. Financial literacy is an understanding of money and financial products that can be applied by someone to their financial choices to make decisions based on information about how to handle their finances (Amisi, 2012). There are several dimensions of financial literacy, such as bookkeeping literacy and budgeting literacy (Mutegi et al., 2015).

The importance of the role of financial literacy in improving financial performance was raised by several researchers (Mutegi et al., 2015; Chepngetich, 2016; Iramani et al., 2018; Ishtiaq et al., 2020). Mutegi et al. (2015) evaluated the financial literacy program developed by the Kenyan government that includes bookkeeping literacy, credit management literacy and budgeting literacy that affect the payment of small and medium business loans (SMEs) in Ngara, Nairobi. Chepngetich (2016) researched the effect of financial literacy on the performance of small and mediumsized businesses in UasinGishuDistrict, where financial literacy is seen from two dimensions, namely loan literacy and budgeting literacy. The results of his research show that loan literacy and budgeting literacy have positive and significant effects on SME performance. Ishtiaq et al. (2020) has proven that financial literacy has a significant effect on financial performance in SMEs in Pakistan. Iramani et al. (2018), in their study, has proven that bookkeeping literacy and budgeting, which is a dimension of financial literacy as a significant predictor of sales growth, profit growth and overall MSME business performance for MSMEs in Indonesia's East Java Province. Based on the results of the study, it can be explained that the higher the knowledge and ability about financial literacy that is owned by SMEs, the easier it is to improve the performance of SMEs.

Besides being influenced by financial literacy, SME performance is also influenced by financial inclusion. According to the Financial Services Authority Regulation No. 76 / POJK.07 / 2016, financial inclusion is the availability of access to various financial institutions, products and services in accordance with the needs and abilities of the community in order to improve welfare. Lee et al. (2019) state that financial inclusion is related to gaining access to financial services, especially access to credit and collateral for credit applications. With financial inclusion, significant added value will be obtained for companies with limited financial resources. Small companies need to maintain good relations with banks to obtain large amounts of credit (Gopalan et al., 2011). Brown et al. (2005) used panel data from Romanian companies and found that access to external credit would increase sales growth. Okello et al. (2017) results of his study indicate that financial inclusion affects the growth of SMEs. Financial inclusion can significantly predict SME performance (Sanistyasa et al., (2019). Based on this description, this study aims to analyze the effect of book literacy, budgetary literacy and financial inclusion on the financial performance of SMEs in Semarang

# A. Hypothesis Development

# a) Bookkeeping Literacy and Financial Performance

Bookkeeping is the process of recording data relating to accounting transactions in accounting books (Wood and Sangster 2005). Based on that, bookkeeping literacy is the ability to record all income and expenditure transactions as part of the financial statements. Bookkeeping literacy is very important for SMEs, and this is because having bookkeeping skills can improve their performance in doing business continuously (Iramani et al., 2018). Low financial literacy has contributed to the loss of opportunities for a number of small and medium-sized companies around the world; this was revealed at the Seoul G20 Summit in 2010 (Ezejiofor, Emmanuel and Olise, 2014). Emmanuel and Olise(2014) also said that the implementation of bookkeeping activities could accurately measure business performance. Previous research has proven that bookkeeping literacy affects financial performance. Iramani et al. (2018) conducted research in the East Java Province of Indonesia empirically proved that bookkeeping literacy can significantly explain performance of sales growth. Based on this explanation, the research hypothesis is formulated as follows:

H1: Bookkeeping literacy has a positive effect on financial performance.

#### b) Budgeting Literacy and Financial Performance

Large companies tend to carry detailed budget processes and achieve better performance. Therefore, the size and complexity of the company and its operations generally affect the nature of the budget process that must be adopted and ultimately affects the company's performance. The results of a study conducted by Joshi et al. (2003) in Bahrain revealed that the larger the size of the company, the more comprehensive the budget process was implemented; this was done to achieve better performance. Several empirical studies have proven budgeting literacy affects financial performance. Chepngetich (2016) conducted a study on the effect of financial literacy seen from the dimensions of budgeting literacy and the performance of SMEs in Kenya. The results of his study stated that budgeting literacy has a positive effect on SME performance. For that, SMEs must have expertise in determining the budget because they determine whether the budget will be implemented or not. Iramani et al. (2018) has empirically proven to SMEs in the East Java Province of Indonesia that budgeting literacy has an effect on sales growth and overall business performance. Based on the description above, the hypothesis is formulated as follows:

H2: Budgeting literacy has a positive effect on financial performance

#### c) Financial Inclusion and Financial Performance

Financial inclusion is the availability of access to various financial institutions, products and services in accordance with the needs and abilities of the community in order to improve welfare. Access to credit is very much needed by SMEs in running their businesses. This is because, for the sake of ongoing business, SME owners will seek additional capital from outside, in this case, debt. Access to credit enables businesses to develop economic systems and apply investments productively to develop business processes, obtain the latest technology that encourages business competitiveness and increase innovation (Beck and Demirgue, 2006). This statement is supported by Tiwari et al. (2013), where business organizations lacking access to credit to various sources of funding can lead to poverty conditions (Davidsson et al., 2010). Lee et al. (2020) state that financial inclusion allows SMEs to obtain credit to produce productivity and increase sales growth. Sales growth is an important representation of a company's financial performance. Beck et al. (2008) suggest that access to credit to SMEs helps them to realize growth in output, job creation, profitability, efficiency, exports, productivity, and return on assets. Several empirical studies have proven that financial inclusion has a positive effect on financial performance. Okello et al. (2017), based on the results of their research on SMEs in Jinja and Iganga Districts in eastern Uganda, stated that access to credit affected SME growth. The results of Sanistasya et al. (2019) show that financial inclusion has a significant influence on the performance of SMEs. Furthermore, Lee et al. (2019) results of his empirical study stated that financial inclusion affects the growth of SME sales. Based on the description above, the hypothesis is formulated as follows:

H3: Financial inclusion has a positive effect on financial performance.

#### II. RESEARCH METHOD

#### A. Population and Sample

The population in this study is UKM in Semarang, Central Java Province, whose exact number is unknown. According to Hair et al. (2010) which states that if the population is unknown, the number of samples used in the study is five times to ten times the amount indicator. The number of indicators is 22, so the number of samples is (22 x 8) 176 samples. The sampling technique in this study used convenience sampling. Of the 176 questionnaires that we distributed, 124 were returned, and 105 questionnaires could be processed.

#### B. Variable and Measurement

This study uses four variables consisting of bookkeeping literacy, budget literacy, financial inclusion, and financial performance. Bookkeeping literacy is measured by adapting indicators developed by Iramani et al. (2018), namely, the ability to prepare financial statements, the ability to calculate profits, knowledge of managing cash, accurate cash management, cash management increases business cash management increases competitive advantage.

Budgeting literacy is measured by adapting indicators developed by Iramani et al. (2018), namely employees specifically for handling budgets, preparing budget periodically, employee involvement in budgeting, budgeting based on past performance, budget evaluation at the end of each period. Financial inclusion is measured by adapting

indicators from Lee (2019), namely service products provided by financial institutions increase access to utilities, products/services provided by financial institutions increase access to facilities, savings products provided by financial institutions according to needs, savings products provided by secure financial institutions, loan products provided by financial institutions according to needs, repayment provisions of loans provided by profitable financial institutions. Financial performance is measured by adapting indicators developed by Chepngetich (2016), namely increasing sales, increasing sales growth, increasing profits, increasing profit growth. From all of these indicators, the results of the validity test show that each indicator in each variable has the lowest r count value of 0.398, greater than the r table of 0.166 with a significance level of 0.000 less than 0.05. For this reason, it can be concluded that the questionnaire in this study is feasible or valid to use. The reliability test results show the lowest Cronbach Alpha (α) value of 0.628 is greater than 0.6. Thus it can be concluded that a construct is said to be reliable. This is in accordance with Ghozali (2012), which states that a construct is said to be reliable if the Cronbach Alpha value is more than 0.60.

# C. Analysis of research results

The analysis in this study uses multiple linear regression analysis, which is an analysis that measures the strength of influence and shows the direction of the relationship between the dependent variable and the independent variable (Ghozali, 2012).

## III. RESULT AND DISCUSSION

#### A. Descriptive

This study involved 105 SMEs in the City of Semarang, Central Java, Indonesia. Table 1 below shows the descriptive statistics of the variables studied

Table 1. Descriptive Statistics of the Variables

Variable	N	Min	Max	Mean	Std. Deviation
Bookkeeping Literacy	105	2	7	5,787	0,582
Financial Literacy	105	3	7	5,741	0,542
Financial Inklusion	105	1	7	5,550	0,774
Financial Performance	105	1	7	4,971	0,786

Respondents' answers about bookkeeping literacy showed a minimum value of 2, a maximum value of 7, an average value of 5.787, and a standard deviation of 0.582. The statistical value illustrates that respondents have high bookkeeping literacy. This shows that respondents have the ability to record all income and expenditure transactions as part of the financial statements. The budgeting literacy variable shows a minimum value of 3, a maximum value of 7, an average value of 5.741, and a standard deviation of 0.542. This statistical result illustrates that respondents have high budgeting literacy, meaning that respondents have expertise in the budgeting process.

The financial inclusion variable shows a minimum value of 1, a maximum value of 7, an average value of 5.551, and a standard deviation of 0.775. These statistical results illustrate that respondents have high financial inclusion. Variations in financial performance show a minimum value of 1, a maximum value of 7, an average value of 4.971, and a standard deviation of 0.786. This statistical result illustrates that the respondent has a fairly high financial performance, meaning that the respondent's business shows sales and profits have increased.

# B. Inferential

By using regression analysis in which all variables meet classical assumptions, and based on the statistical F test results obtained an F value of 8,501 significance of 0,000,

where the value is less than 0.05, it can be concluded that the resulting regression model is fit. Table 2 below shows the results of hypothesis testing

Table 2. Results of Hypothesis Testing

Independent Variable	Dependent Variable	Reg. Coef	Sig.
Bookkeping Literacy	Financial Performance	0,349	0,000*
Budgeting Literacy	Financial Performance	0,230	0.005*
Financial Inclusion	Financial Performance	0,120	0.043*

Based on Table 2, the effect between bookkeeping literacy and financial performance has a correlation coefficient of 0.349, which means it has a direction of the positive influence between bookkeeping literacy and financial performance. This shows that the higher the bookkeeping literacy will increase financial performance. At 0,000, the significant value is below a 0.05, which means H1 is accepted or there is a significant positive effect between bookkeeping literacy and financial performance. The second hypothesis with a regression coefficient of 0.230 and a significance level of 0.005, then H2 is accepted. This shows that there is a positive and significant effect between budgeting literacy and financial performance. This means that the higher the budgetary literacy, the higher the financial performance. In line with the results of testing the second hypothesis, the third hypothesis also shows a significant effect between financial inclusion and financial performance, where the regression coefficient is 0.120, and the significance level is 0.043 or below  $\alpha 0.05$ , which indicates a positive direction of influence.

## C. Discussion

This research is able to prove that bookkeeping literacy has a positive influence on financial performance. This shows that SMEs that have high bookkeeping literacy will improve their financial performance of SMEs. This research is in line with the results of the study Mutegi et al. (2015); Iramani et al. (2018), who found that bookkeeping literacy significantly affected MSME performance related to sales growth and profit growth. SMEs who have the ability to prepare financial reports will be able to increase sales and profits. This is because, with these financial statements, SMEs can analyze the financial performance that was achieved the previous year as a basis for improving financial performance in the coming year.

Statistic and significant budgeting literacy is a predictor of the financial performance of SMEs. This research shows the importance of the previous year's financial performance to compile the budget for the following year. Based on this budget, SMEs can estimate the increase in sales and profits to be obtained during this period. In addition, by preparing and evaluating budgets on a regular basis, SMEs can control and predict sales and profit growth. This finding supports

previous research conducted by Chepngetich (2016) and Iramani et al. (2018), which states that budgeting literacy has a significant effect on SME performance.

Furthermore, financial inclusion statistically and significantly has a positive effect on the financial performance of SMEs. Financial inclusion is a way for businesses to access the availability of financial services in the form of savings and loans, which can later be used and utilized in the process of business activities to increase sales growth and profit growth. The results of this study are in line with research from Okello et al. (2017), which states that financial inclusion affects the growth of SMEs in the Jinja and Iganga Districts. It also supports research from Sanistasya et al. (2019) and Lee (2019), which states that financial inclusion has a positive effect on SME sales growth.

#### IV. CONCLUSION AND LIMITATIONS

Based on the results of the analysis and discussion described in the previous chapter, it can be concluded that bookkeeping literacy, budget literacy and financial inclusion have a positive and significant effect on SME performance. Of the three variables, the biggest influence is bookkeeping literacy.

This study has limitations, namely the three variables of bookkeeping literacy, budgeting literacy, and financial inclusion have a predictive power of financial literacy on financial performance is still low, 44.8%. Future research must add other variables that can increase the predictive power for financial performance, such as debt literacy.

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