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# ANTECEDENT AND CONSEQUENCE FOR ACCOUNTING INFORMATION QUALITY ON INDONESIAN SMEs

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## ABSTRACT

This research intended to observe the Accounting Information Quality during 2018, first year implementation of Indonesian Financial Accounting Standard for Micro Small and Medium Entity (*SAK EMKM*). This is a quantitative research using survey. The objects are Micro, Small and Medium Enterprises in Indonesia. Data is analyze using path analysis. Independent variables are financial literacy, Tax authority pressure, external consultant, Adoption of Marketing information technology. Dependent variables are Accounting Information Quality and Credit Access. The results show that Tax authority pressure and external consultant hiring has positive effect on Accounting Information Quality. Accounting Information Quality has effect on Credit Access. Therefore, further test reveal that Accounting Information Quality do not have mediating role between in the relations independent variables and Credit Access.

**Keyword:** *SAK EMKM*, SMEs, Theory Planned behavior

## INTRODUCTION

The year of 2018 is important for Indonesian Small and Medium Enterprises. This is the first-year implementation for Indonesian Financial Accounting Standard for Micro Small and Medium Entity (*SAK EMKM*/ Standar Akuntansi Keuangan Entitas Mikro, Kecil dan Menengah). This standard had been released by Indonesia Accountant Association (IAI),that give guidelines to SMEs to make simple but adequate accounting information (Indonesia 2016). Before SAK EMKM, SMEs should make financial reports under SAK ETAP (Standar Akuntansi Keuangan Entitas Tanpa Akuntabilitas Publik/ Financial Accounting Standard for Entity without Public Accountability), a complicated standard that is also used for bigger but not listed in stock exchange Indonesian Companies (Indonesia 2009). This standard is simpler than previous standard, research by (Sariningtyas and Diah 2011) also (Rudiantoro and Siregar 2012) documented the difficulties to implement SAK ETAP for SMEs.

SMEs in Indonesia having so many challenges as well as pressure to adopt this standard, due the conditions that accounting that usually perceived as supporting unit. The challenge is mostly due owner or manager ability, education and knowledge. (Masca and Finance 2012) stated that due to the accounting standard for SMEs origin is from International Financial Reporting Standard, the adoption from foreign countries needs to change the culture of accounting in whole country adopter. Even though the adoption process is difficult, the accounting standard of the SMEs will increase the quality of information quality in the entity. A good quality of accounting information actually will help SMEs maintain day to day operation and even got additional financial funding access especially from banking industry.

Previous research around the world examine factor antecedent and consequences of accounting information quality. First, research by (Nalukenge, Nkundabanyanga et al. 2012) in Uganda. This is survey research with OLS regression data analysis results are owner financial literacy and tax authority pressure have positive effect on quality of accounting information.

Second, study by (Korutaro Nkundabanyanga, Kasozi et al. 2014) also in Uganda. The results show that commercial lending terms and financial literacy of SMEs that reflected in Financial Reports can improve credit access through banking sector.

Third, (Azmi, Sapiei et al. 2016) study in Malaysia. This is a survey study and using partial least square as data analysis. The results show that technological factors and tax pressure have positive impact on adoption of value-added tax accounting system.

Fourth, (Kiliç, Uyar et al. 2016) research in Turkey. Using survey and logistic regression data analysis, the results give empirical evidence that firms characteristic (size, age, independent auditing, internationality, and the existence of accounting department) have significant impact on preparedness of SME to adopt IFRS for SMEs. This research also shows that it does not matter if an entity does not have accounting department, they still can adopt a new accounting standard to enhance their accounting quality by hiring external consultant such as independent auditor.

This research will use Theory of Planned Behavior to analyze the case. This theory is often use to explain the reality in SMEs, such as by (Awa, Ojiabo et al. 2015) and (Al Balushi, Locke et al. 2018). TPB is important framework to understand the behavioral of SMEs that usually as behavior reflection of the owner (that also usually also acts as manager). This theory have 3 main beliefs to change behavioral of SMEs owner: behavioral, normative, and control (Ajzen, 1991). As antecedent of Accounting Quality, this paper use accounting literacy as behavioral control and the usage of information technology IT is normative beliefs. Control beliefs is tested as antecedent and also consequences of accounting quality. Tax authority pressure and the external accountant hiring is control beliefs as antecedent of accounting quality information. Credit access is control beliefs as consequences of accounting quality information.

## LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Theory of Reasoned Action (TRA) is a theory on how to predicting and changing behavior. People behavioral intention are assumed to be reasonable, consistent, and automatic derived from their belief about performing or not performing some kind of b ehavior (Fishbein and Ajzen 2011). (Ajzen 1991) the makes extension of this theory into Theory of Planned Behavior (TPB) to predict and explain human behavior in specific context. In this theory, there are 3 types of beliefs as that is behavioral, normative and control. First, behavioral beliefs are a people attitudes and personal evaluation of a behavior. Second, normative belief how subjective norm or social expectation urges people to adopt the behavior. Third, control beliefs when person make behavior perceived power of control, and the trade-off between resources and opportunity.

The SME's owner or manager background will shape the finance and accounting condition in the organization. One of the most important background in making financial decision is financial literacy of SMEs' owner or manager (Korutaro Nkundabanyanga, Kasozi et al. 2014), and this is a part of behavioral beliefs according to TPB. The research by (Nalukenge, Nkundabanyanga et al. 2012) stated that financial literation have positive effect on quality of accounting information. According to theory and previous research, the first hypothesis of this research is:

Hypothesis 1: The higher SMEs manager's financial Literacy, the higher Accounting Information Quality.

Control belief is important factor in TPB to performing behavior. (Azmi, Sapiei et al. 2016) stated that regulatory pressure, such as tax authority regulation can increase adoption new knowledge among SMEs, because they believe will benefit more than government does. (Nalukenge, Nkundabanyanga et al. 2012) stated that tax authority as external user pressure is an important factor for SME to implemented high quality accounting information. Based on theory and previous research, the second hypothesis is:

Hypothesis 2: Tax Authority Pressure have positive effect on Accounting Information Quality

Nowadays is the era of internet technology adoption, especially internet of things. The technology expansion especially in marketing sector create disruption in business supply channel. As marketing information technology (IT) become popular, SMEs are having social pressure to adopt the technology. Even though the technology adoption is not easy (Smith, Li et al. 2015) and especially in Indonesia it gives additional risk exposure to the SME (Pratono, 2018). This is consistent with normative beliefs in TPB.

As the company adopt new marketing technology, they need much better accounting information regarding company's conditions for information is for internal management as well as external partner. It because adoption new technology means that company have to engage with third party as provider of technology beside their traditional vendor and customer. (Azmi, Sapiei et al. 2016) and (Kiliç, Uyar et al. 2016) stated that technological factor will increase the accounting quality. Based on theory and previous research, the third hypothesis is:

Hypothesis 3: The adoption of Marketing Information Technology has positive influence on Accounting Information Quality.

External pressure through tax authority and adoption marketing IT usually demand better financial report, but the SME do not have internal resource that have enough financial as well as accounting literacy. In this condition, SMEs will seek advice from external accountant to solve the problem. The external accountant can be just doing bookkeeping, making tax consulting, or even doing general audit to obtain opinion. This is consistent with control beliefs in TPB. (Bozkurt, Öz et al. 2013), (Husin, Ibrahim et al. 2014), also (Kiliç, Uyar et al. 2016) study revealed that external accountant service can improve accounting information quality in the enterprises. Based on theory and previous research, third hypothesis in this research is:

Hypothesis 4: External Consultant Hiring positively affect Accounting Information Quality

SMEs is part of Microfinance. It is for a country Important to give SMEs access to banking lending service to overcome income inequality and achieve stable growth for country's (Korutaro Nkundabanyanga, Kasozi et al. 2014). Therefor funding SMEs is considered as risky business for banks that can only be minimized by giving loans to the entities that pass credit analysis by having good financial reports (Fang, Fornaro et al. 2018) or good Accounting information technology (Dillard, Yuthas et al. 2016). (Korutaro Nkundabanyanga, Kasozi et al. 2014) stated that accounting quality is important factor to obtain credit access from banking sector. In this case, bank plays important role as control beliefs according to TPB. Based on that, the fifth hypothesis is as follows:

Hypothesis 5: Accounting Quality Information has positive effect on Credit Access

Previous research stated that financial literacy, tax authority pressure, Marketing IT adoption and external accountant have impact on Accounting Information Quality. The other research by (Korutaro Nkundabanyanga, Kasozi et al. 2014) results shows that Accounting Quality have effect on Credit Access. According (Baron, Kenny et al. 1986) logic, it needs to be tested whether accounting information quality also act as mediator variables between its variables antecedents and consequences. The sixth hypothesis is as follow:

Hypothesis 6a: Accounting Quality Information mediating the effect Financial Literacy on Credit Access

Hypothesis 6b: Accounting Quality Information mediating the effect Tax Authority Pressure on Credit Access

Hypothesis 6c: Accounting Quality Information mediating the effect Marketing Information Technology Adoption on Credit Access
Hypothesis 6d: Accounting Quality Information mediating the effect External Consultant Hiring on Credit Access

## RESEARCH METHODOLOGY

The population in this research is SME in Banyumas. Sample are 64 enterprises that listed in go-food (the largest application for order food in Banyumas) and listed as the traditional local product lists by Banyumas Government Trading, Industry, and Cooperation Office. The owner or manager of SME's then asked to fill the questionnaire to finish the survey.

There are 6 variables in this research, 4 independent variables and 2 dependent variables. This questionnaire are measures using 5-point Likert scale, with 1 is strongly disagree and 5 as strongly agree. Independent variables are Financial Literacy (X1), Tax Authority Pressure (X2), Usage of IT Marketing (X3), and Outside Consultant Usage (X4). The two dependent variables are Quality of Accounting Information (Y1) and Credit Access (Y2). The questionnaire is listed below.

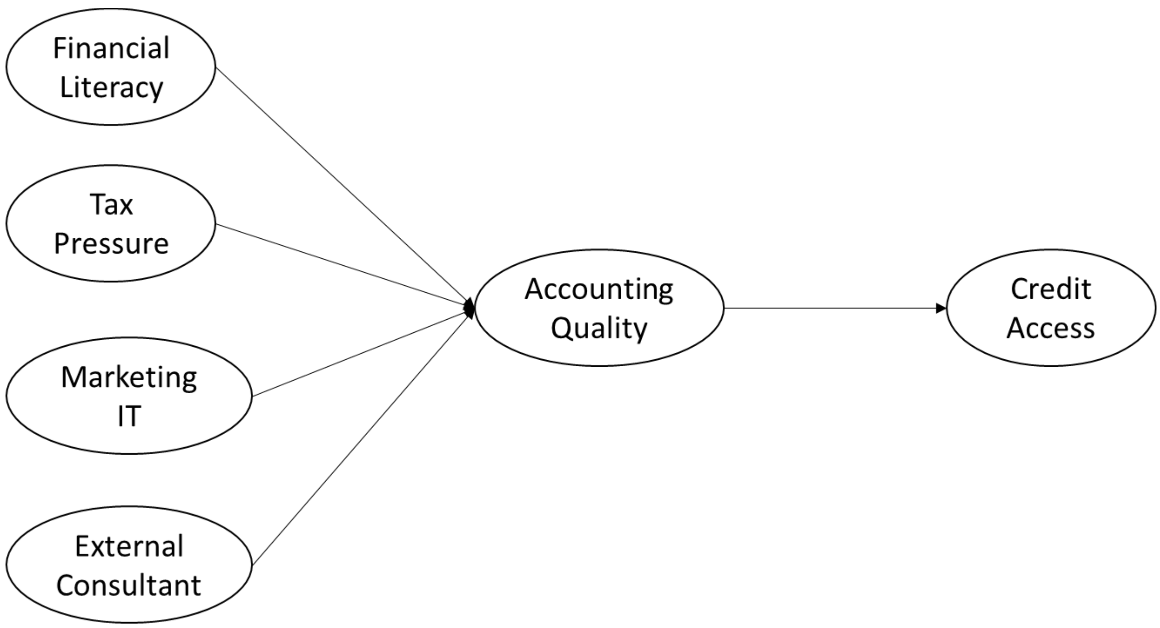
1) Financial Literacy (X1), adopted from (Nalukenge, Nkundabanyanga et al. 2012): (1) Owner/Manager ability to manage their own personal finance; (2) Owner/Manager understanding of banking products and services; (3) Owner/Manager knowledge about financial institutions; (4) Owner/Manager skill on financial management; (5) Company financial facility for employees (example: personal credit facility for buying vehicles and houses).
2) Tax Authority Pressure (X2), adopted from (Nalukenge, Nkundabanyanga et al. 2012): (1) Owner/Manager perception of Tax Office pressure for company to have a good Financial Report in order to get lower tax; (2) Owner/Manager perception the actual tax rate based on Gross Revenue are lower than the tax rate based on financial reports (which need additional cost bookkeeping staff salary or consultant fee to make financial report); (3) Owner/Manager perception about penalty by Tax office for late or miscalculating company's tax report.
3) Marketing Information Technology Usage (X3),adopted from (Azmi, Sapiei et al. 2016): (1) Enterprise have online store; (2) Company's product can be order using online stores / application.
4) External Consultant Hiring (X4), adopted from (Kiliç, Uyar et al. 2016): (1) Company hired tax consultant services; (2) Company using external bookkeeping services; (3) Company's financial reports is audited by Public Accountant; (4) Company using accounting software in making financial reports.

5) Accounting Information Quality (X5), Adopted from Indonesian Accounting Standard for Micro, Small, and Medium Entities (Indonesia 2016): (1) Company has Reports about Cash Inflow and Outflow; (2) Company has Statement of Financial Position / Balance Sheet; (3) Company has Income Statement; (4) Company has Notes to Financial Statement.
6) Credit Access (X6), Adopted from (Korutaro Nkundabanyanga, Kasozi et al. 2014): (1) Company has ever obtained credit from bank; (2) If company apply for credit to the bank, it will be granted amount money as much as it asked; (3) Company is easy to obtain credit from the banks.

The model then tested using path analysis. The path model can be shown in figure 1.

Figure 1.

Path Analysis Model




## RESULTS AND DISCUSSION

Total respondents in this research are 64 owner/manager from 64 companies, 70% are led by male and 30% are by female. 34 companies or more than half are having annual sales less than Rp50,000,000; 28 companies are between Rp50,000,000 up to Rp500,000,000; and the other 2 are more than Rp500,000,000. Average entity age are 12 years while average number of employees are 11 persons. The demographic numbers can be seen in Table 1.

***Table 1***. Respondent Demography

| | | |
|---|---|---|
| Gender | Male | 45 persons (70%) |
| | Female | 19 persons (30%) |
| Sales | < Rp50,000,000 | 34 companies |
| | Rp50,000,000 up to Rp500,000,000 | 28 companies |
| | >500,000,000 | 2 companies |
| Average | Company Age | 12 year |

| | |
|---|---|
| Number of Employees | 11 persons |

Source: Data Processed

Questionnaire's question then analyze using Confirmatory Factor Analysis. All variables are having KMO (Kaiser-Meyer-Ohlin) more than 0.500 with $X^2$ p value 0.000. The lowest KMO is for X3 (0.500), while the highest is X1 (0.768). This result can be seen in Table 2.

***Table 2***. Confirmatory Factor Analysis (CFA)

| Variables | KMO | $X^2$ | Sig | Loading factor |
|---|---|---|---|---|
| X1 | 0.768 | 90.996 | 0.000* | X11 = 0.867 |
| | | | | X12 = 0.734 |
| | | | | X13 = 0.717 |
| | | | | X14 = 0.724 |
| | | | | X15 = 0.641 |
| X2 | 0.684 | 53.221 | 0.000* | X21 = 0.831 |
| | | | | X22 = 0.798 |
| | | | | X23 = 0.872 |
| X3 | 0.500 | 45.253 | 0.000* | X31 = 0.928 |
| | | | | X32 = 0.928 |
| X4 | 0.728 | 50.690 | 0.000* | X41 = 0.827 |
| | | | | X42 = 0.674 |
| | | | | X43 = 0.715 |
| | | | | X44 = 0.753 |
| Y1 | 0.754 | 118.490 | 0.000* | Y11 = 0.859 |
| | | | | Y12 = 0.870 |
| | | | | Y13 = 0.806 |
| | | | | Y14 = 0.814 |
| Y2 | 0.755 | 132.906 | 0.000* | Y21 = 0.914 |
| | | | | Y22 = 0.926 |
| | | | | Y23 = 0.937 |

Significant p-value < 0.05; KMO > 0.5

Source: Data Processed

Variables means are between 2.29 up to 3.90. The lowest means are variable X4 having means 2.29 with standard deviation 0.73. The highest means are variable Y2 3.90 with standard deviation 1.05. The statistics descriptive of variables is in Table 3.

***Table 3***. Means, Standard deviation, and correlation between all variables

| | Variables | Means | SD | X1 | X2 | X3 | X4 | Y1 | Y2 |
|---|---|---|---|---|---|---|---|---|---|
| 1. | X1 | 3.50 | 0.56 | 1 | | | | | |
| 2. | X2 | 3.81 | 0.95 | 0.235 | 1 | | | | |
| 3. | X3 | 3.04 | 1.29 | -0.042 | -0.343* | 1 | | | |
| 4. | X4 | 2.29 | 0.73 | 0.592* | -0.029 | 0.254* | 1 | | |
| 5. | Y1 | 3.78 | 0.57 | 0.183 | 0.240 | 0.087 | 0.311* | 1 | |
| 6. | Y2 | 3.90 | 1.05 | 0.534* | 0.596* | -0.113 | 0.145 | -0.036 | 1 |

Significant p-value < 0.05

Source: Data Processed

Path analysis statistic are conduct by tested 2 model. First model is using Y1 as dependent variables and X1, X2, X3, and X4 as independent variables. The results show that model fit with F 2.937 (p value 0.028 < 0.05) with $R^2$ 0. 168.Varibles independent X2 and X4 have positive effect on Y2. It means that **hypothesis 2 and hypothesis 4 accepted**, and **hypothesis 1 and 3 are rejected**.

Model 2 that using Y2 as dependent variables and X1, X2, X3, X4, and Y1 as independent variables are fit with F 14.555 (p value 0.00 < 0.05) also $R^2$ 0.561. X1, X2, and Y1 are have effect on Y2. Even though Y1 are having significant effect toward Y2, but the sign is negative and contrary to the hypothesis 5. It means that **hypothesis 5 is rejected**. Hence while X2 have effect on Y1 and Y1 have effect on Y2, the mediation effect of Y1 should be checked further. The results of path analysis are in Table 4.

***Table 4***. Path Analysis

| Model | Dependent | Independent | B | t | Model F | $R^2$ |
|---|---|---|---|---|---|---|
| 1. | Y1 | X1 | -0.078 | -0.496 | 2.937* | 0.168 |
| | | X2 | 0.286 | 2.230* | | |
| | | X3 | 0.085 | 0.649 | | |
| | | X4 | 0.342 | 2.142* | | |
| 2. | Y2 | X1 | 0.524 | 4.534* | 14.555* | 0.561 |
| | | X2 | 0.557 | 5.684* | | |
| | | X3 | 0.157 | 1.625 | | |
| | | X4 | -0.111 | -0.916 | | |
| | | Y1 | -0.245 | -2.541* | | |
| Significant p-value < 0.05 | | | | | | |

Source: Data Processed

Mediation test is conduct to check whether Y1 is a mediating variable on relation between X2 and Y2. The results show that X2 partially do not have effect on Y1, Y1 partially do not have effect on Y2. Only after put together X2 and Y1 as independent variables and Y2 as dependent variables, the model fit with F 15.288 (p value 0.00 < 0.05) and $R^2$ 0.338, but only X2 that partially have positive and significant effect on Y2. **It means that all of hypothesis 6 are rejected**. The results of mediation test are in Table 5.

***Table 5***. **Mediation Test**

| Model | Dependent | Independent | B | t | Model F | $R^2$ |
|---|---|---|---|---|---|---|
| 1. | Y1 | X2 | 0.240 | 1.931 | 3.729 | 0.058 |
| 2. | Y2 | Y1 | -0.036 | -0.280 | 0.078 | 0.001 |
| 3. | Y2 | X2 | 0.597 | 5.519 | 15.288* | 0.338 |
| | | Y1 | -0.179 | -1.656 | | |
| Significant p-value < 0.05 | | | | | | |

Source: Data Processed

Hypothesis 2 that stated external pressure from tax regulator will increase accounting quality is accepted. This is consistent with (Nalukenge, Nkundabanyanga et al. 2012) and (Azmi, Sapiei et al. 2016). This also consistent with control belief in Theory of Planned Behavior.

Hypothesis 4 that stated that external accountant as consultant can increasing accounting quality. This is consistent with (Kiliç, Uyar et al. 2016) research and also with control beliefs in Theory of Planned behavior.

This result consistent with Theory of Planned Behavior, especially control belief. The SMEs tend only adopt SAK EMKM to improve quality of accounting information due to regulatory control. This regulatory control is playing important role, because SMEs afraid of having penalty by not obeying the authority. Therefore, if SMEs do not have enough internal resources to make a good financial report, they will pay external accountant to solve the problem.

Tax authority pressure is very important to force SMEs adopt a good quality accounting system such as SAK EMKM or even asked public accountant to give audit opinion. Hence, under Indonesian Tax Regulation the SMEs got simples way in calculating tax income by calculating percentage of approximate gross sales, if they do not have a good bookkeeping. It makes small SMEs feels that it better not to adopt the complex accounting system.

Contrary to the antecedent test, there is no prove of control belief empirical finding in consequences part. Accounting quality having impact in credit access, but in negative way. It seems like many SMEs in the sample still use to have capital structure with traditional way not from the bank. Hence, there is no incentives for SMEs to make a good financial report to impress the bank and obtain loans. Bank maybe also apply different credit analysis for micro finance. The banks believe more in prediction of annual turnover, age, and another going concern indicators of the SMEs rather than financial reports as in (Zeneli 2016).

## CONCLUSION

The results from this research can be concluded as follows. First, Financial Literacy have no impact on Accounting Information Quality. Second, Tax Authority Pressure have positive effect on Accounting Information Quality. Third, the usage of Marketing Information Technology has no influence on Accounting Information Quality. Fourth, External Consultant Hiring positively affect Accounting Information Quality. Fifth, Accounting Quality Information has negative effect on Credit Access. Sixth, Accounting Quality Information do not mediate the effect of Financial Literacy, Tax Authority Pressure, Marketing Information Technology Adoption, and External Accounting Consultant Hiring on Credit Access.

The results have limitation due to its development framework using Theory of Planned Behavior. Further research can develop further model in adoption of SMEs IFRS using Technological Organization Environment (TOE) as in (Azmi, Sapiei et al. 2016). Other research can also develop model in SMEs financial inclusion to the banking sector using Development Theory such as in (Awa, Ojiabo et al. 2015).

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