

# THE EFFECT OF FINANCIAL AND TAXATION LITERACY ON SUSTAINABLE COMPETITIVE ADVANTAGE THROUGH BUSINESS GROWTH: A STUDY OF CREATIVE MSMEs IN SPECIAL REGION OF YOGYAKARTA, INDONESIA

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## ABSTRACT

*This purpose of this study is to test and analyze the effect of financial and taxation literacy on sustainable competitive advantage through business growth. This study uses the source of primary data through questionnaire that is distributed to Creative MSMEs actors in Daerah Istimewa Yogyakarta (DIY). The respondent of this study is 269 Creative MSMEs actors with the population from all Creative MSMEs in DIY. The data analysis uses Structural Equation Modeling (SEM) with AMOS technique. The result of this study proves that financial and taxation literacy has an effect on business growth and competitive advantage. Business growth can mediate the effect of financial and taxation literacy toward the competitive advantage of Creative MSMEs in DIY.*

**Keywords:** Financial Literacy, Taxation, Business Growth, Competitive Advantage, Creative MSMEs.

## INTRODUCTION

The dynamics of MSMEs have provided significant contribution toward the economy in Indonesia. In Daerah Istimewa Yogyakarta (DIY), the MSMEs have provided economical contribution for 95% (<http://jogja.tribunnews.com>, accessed on Juli 21, 2018). Increasingly competitive market condition and limited natural resources make MSMEs require new breakthroughs by relying on creative and innovative human resources as basic capital in facing free market competition. DIY is rich in traditional culture and diverse characters of its people, so that the creative industry has a big potential to be developed. Creative MSMEs have very high resilience, tenacity, and innovation which make them become very competitive to penetrate global market (Fitriati, 2014). Creative MSMEs often experience delay in its development because there are many conventional problems that have not been resolved completely, such as HR capacity, financing, marketing, and others related to business management that makes it difficult for them to compete with large companies (Abor & Quartey, 2010). Strategic efforts are needed to improve the performance and sustainability of MSMEs. Some literatures prove that the capability of a company in recognizing and accessing financial resources will have an impact on the company's growth rate (Cole & Fernando, 2008; Bruhn & Zia, 2013). Several studies show positive finding about the importance of MSMEs in financial and taxation literacy. MSMEs that have good understanding of finance and taxation will generate business growth (Clark, 2014; Xu

Zia, 2012; Dunska & Kravinskis, 2016; Bayrakdaroğlua & Şanb, 2014) and competitive advantage (Bayrakdaroğlua & Şanb, 2014; Demirbag, et. al., 2013; Nunoo & Andoh, 2012). Financial literacy is very important for MSMEs, so financial training is required. Managers with higher level of financial literacy show bigger participation in financial market (Beck et al., 2005; Agyei, 2018; Nunoo & Andoh, 2012). Ponorică & Al-Saedi (2015) in their study found that the understanding of taxation literacy is closely related to the growth of the company.

On the other hand, there are several studies that are contradictive to those results and show that MSMEs experience many difficulties to improve business growth, especially the one that covers tax costs. Not all taxpayers, including MSMEs, can comply with tax regulation and the right implementation of tax reporting procedure due to lack of understanding of tax regulations (Simanjuntak & Mukhlis (2012). Other findings from Beck et al. (2005); Agney (2018) explained that financial literacy is the main resource of the organization which has not utilized enough although it can improve MSMEs performance through sustainable competitive advantage. Low level of financial literacy can reduce the ability to accumulate and manage assets, and also to ensure a promising financial future (Mottola, 2013; Atkinson & Messy, 2012; Agarwalla, et al., 2015). Potrich, et al. (2015) found that women generally have lower levels of financial literacy compared to men. The study conducted by Demirbag (2013) and Ponorică & Al-Saedi (2015) explained that it is difficult for MSMEs to comply with tax due to bad tax morale. This research is also used to fill research gap by testing and analyzing the effects of financial and taxation literacy on sustainable competitive advantage through business growth.

## LITERATURE REVIEW

### Financial Literacy and Business Growth

Some theoretical and research studies explain that maximum understanding of financial literacy tends to increase business growth of the MSMEs. Muraga (2015) in his research used the variable of debt management, budgeting, bank service, and accounting or recording as financial literacy found that all variables of financial literacy have positive relationship with business performance. Aribawa (2016) found that financial literacy has an effect on performance and business sustainability of Creative MSMEs. It is also added by Lusimbo (2016) that managers with low financial literacy recorded lower, even zero business growth. The finding from Bayrakdaroğlua & Şanb (2014) explained that MSMEs in developing countries, especially Turkey, show an improvement of financial literacy level of manager with financial training. Nunoo & Andoh (2012) found that better financial literacy can provide benefit for MSMEs in increasing demand for financial services, more savings, better risk management, increased intermediation, and accelerating financial development. Drexler et al. (2010) stated that simple training and practical rules can result in improvements that are economically meaningful for MSMEs. Training that is in accordance with basic financial needs is more appropriate and efficient for economic development and business growth of the MSMEs.

### Taxation Literacy and Business Growth

Simanjuntak & Mukhlis (2012) explained that not all taxpayers, including MSMEs, can understand the rules or the right implementation of tax reporting procedure due to lack of understanding of tax regulations. Most MSMEs feel that the taxation system is unfair since

MSMEs have to pay the same amount as large companies, so the government needs to simplify or create taxation system that is suitable for MSMEs (Ponorică & Al-Saedi, 2015). The high level of tax compliance affects the ease of MSMEs taxpayers to become government partners, so that it will not only increase sales (business growth), but also increase costs which will hinder business growth. Tax costs are one of the considerations in determining the type of financing, because when the taxation literacy is good, the company's growth will also increase.

### **Business Growth and Competitive Advantage**

Cantele & Zardini (2018) found that competitive advantage is affected by business growth. The result of the study from Bashor & Chamdan (2017) stated that manager's performance, entrepreneurial orientation factor, business growth, and creativity have direct effect on competitive advantage, while manager's performance positively affects competitive advantage. Aryana, et al. (2017) found that competitive advantage is also able to mediate information system performance and customer intimacy toward marketing performance. Sucuahi (2013) proved that the significant role of MSMEs can be shadowed and maintained through a good and appropriate financial management from the managers/owners themselves. A good financial foundation of entrepreneurs is the barometer of significant company success and growth. Agney (2018) added that financial literacy and cultural values of MSMEs owner are the main sources of the organization that have not been used maximally, while it is actually able to improve MSMEs performance (growth) through sustainable competitive advantage. According to resource-based view, there are many resources owned by a company that can improve its competitive advantage (Das & Teng, 2000). Conner & Prahalad (1996) stated that the level of maintaining competitive advantage by a company depends on their abilities to maintain the heterogeneity of their source of knowledge.

*H1: There is an effect of financial and taxation literacy on sustainable competitive advantage through business growth.*

## **METHODOLOGY**

This study uses primary data with questionnaire to strengthen the result of this study. The population of this research is all Creative MSMEs actors in DIY. Creative MSMEs in DIY are chosen because Yogyakarta is a region that is rich in traditional culture and diverse character of its inhabitants, so it encourages the development of the potential of Creative MSMEs. The sampling technique is done using purposive sampling. The method is conducted by taking samples from Creative MSMEs that take part in entrepreneurship training organized by the Office of Cooperative and MSMEs in each district/city in DIY, namely Sleman Regency, Kulonprogo Regency, Gunungkidul Regency, Bantul Regency, and Yogyakarta City. The training by the office is carried out in April 2019.

This study uses primary data by distributing questionnaire to Creative MSMEs in DIY. It is done by taking 20% of the total number of Creative MSMEs in every districts/city. DIY has four districts, namely Sleman Regency, Kulonprogo Regency, Gunungkidul Regency, Bantul Regency, and one city namely Yogyakarta City. The total number of questionnaires collected is 487, but there are only 269 questionnaires that are filled in completely and in accordance with the guidelines. Therefore, the reasonable sample of respondents in this study is 269 Creative

MSMEs actors in DIY. The statistic technique that is used to analyze the data is Structural Equation Modeling-AMOS.

## ANALYSIS AND FINDINGS

### Validity and Reliability Test

The validity and reliability test result based on the measurement can be seen on Table 1 below.

<b>Variable</b>	<b>Indicator</b>	<b><i>Pearson Correlation</i></b>	<b>Significance</b>	<b>Conclusion</b>	<b>Cronbach's Alpha</b>
<b>Financial Literacy</b>	Item 1	0.573	0.000	Valid	<b>0.838</b>
	Item 2	0.509	0.000	Valid	
	Item 3	0.501	0.000	Valid	
	Item 4	0.648	0.000	Valid	
	Item 5	0.642	0.000	Valid	
	Item 6	0.734	0.000	Valid	
	Item 7	0.753	0.000	Valid	
	Item 8	0.733	0.000	Valid	
	Item 9	0.655	0.000	Valid	
	Item 10	0.649	0.000	Valid	
<b>Taxation Literacy</b>	Item 1	0.511	0.000	Valid	<b>0.894</b>
	Item 2	0.547	0.000	Valid	
	Item 3	0.486	0.000	Valid	
	Item 4	0.552	0.000	Valid	
	Item 5	0.314	0.000	Valid	
	Item 6	0.637	0.000	Valid	
	Item 7	0.395	0.000	Valid	
	Item 8	0.598	0.000	Valid	
	Item 9	0.426	0.000	Valid	
<b>Business Growth</b>	Item 1	0.702	0.000	Valid	<b>0.926</b>
	Item 2	0.788	0.000	Valid	
	Item 3	0.831	0.000	Valid	
	Item 4	0.802	0.000	Valid	
	Item 5	0.788	0.000	Valid	
	Item 6	0.798	0.000	Valid	
	Item 7	0.840	0.000	Valid	
	Item 8	0.601	0.000	Valid	
	Item 9	0.821	0.000	Valid	
	Item 10	0.790	0.000	Valid	
<b>Competitive Advantage</b>	Item 1	0.311	0.000	Valid	<b>0.835</b>
	Item 2	0.756	0.000	Valid	
	Item 3	0.803	0.000	Valid	
	Item 4	0.804	0.000	Valid	
	Item 5	0.813	0.000	Valid	
	Item 6	0.821	0.000	Valid	
	Item 7	0.776	0.000	Valid	
	Item 8	0.741	0.000	Valid	
	Item 9	0.663	0.000	Valid	

	Item 10	0.558	0.000	Valid	
*Significance level is at 5%.					

Based on Table 1, it can be explained that the value calculated from all questionnaire items of the research variables namely financial literacy, taxation literacy, business growth, and competitive advantage show probability value (sig) < 0.05. Therefore, it can be concluded that all questionnaire items from the research variables are valid. The Cronbach's Alpha value is obtained from all results of research variables that show greater value than 0.6 m which means that it is reliable. The result of descriptive statistics of each variable can be seen on Table 2.

NO	VARIABLE	MEAN	CATEGORY
1	Financial Literacy	4.22	Very Good
2	Taxation Literacy	3.93	Good
3	Business Growth	4.25	Very Good
4	Competitive Advantage	4.19	Good

Table 2 explains that the variable of taxation literacy and competitive advantage have scores in the range of 3.41 to 4.20. This explains that the good understanding of taxation literacy and competitive advantage of Creative MSMEs in Yogyakarta. As for the understanding of financial literacy and business growth, the Creative MSMEs in Yogyakarta perceive good understanding. Furthermore, the model that has been presented in the form of path diagram is stated in structural equations and equation that stated the specification of measurement model. The model testing in the Structural Equation Modeling is carried out with two tests; the fit model test and causality significance test through the regression coefficient test. The fit model test is done with various criteria, namely Chi-square/degree of freedom (CMIN/DF), Adjusted Goodness-Of-Fit Index (AGFI), Goodness-Of-Fit Index (GFI), Comparative Fit Index (CFI), Tucker Lewis Index (TLI), and Root Mean Square Error Approximation (RMSEA).

Criteria	Cut of Value	Result	Information
Chi-Square	37.65	202.677	Good
Probability	$\geq 0.05$	0.082	Good
CMIN/DF	$\leq 2.00$	1.152	Good
GFI	$\geq 0.90$	0.891	Average
AGFI	$\geq 0.90$	0.856	Average
TLI	$\geq 0.95$	0.984	Good
CFI	$\geq 0.95$	0.986	Good
RMSEA	$\leq 0.08$	0.032	Good

The result of the fit model test (Table 3) shows that all criteria of the goodness of fit can be accepted although there is a marginal value in AGFI. This marginal value is because the value of GFI and AGFI is on the value range of 0.8-0.9 which means that the model is average. This also describes that almost all of the guidelines in the model have meet the recommended value. Thus, the final model that is developed is fit with the data. Overall, the model can be accepted, and the next step is to analyze the estimate parameter.

TABLE 4 HYPOTHESIS TEST RESULT					
		Standardized direct effect	C.R.	p-value	Test Result
<b>Equation-1: <math>ZY_1 = \gamma_{1.1}X_1 + \gamma_{1.2}X_2 + \epsilon_1</math></b>					
Financial Literacy	Business Growth	0.617	12.737	0.000	Significant
Taxation Literacy	Business Growth	0.150	3.106	0.002	Significant
<b>Equation-2 : <math>ZY_2 = \gamma_{2.1}Y_1 + \gamma_{2.2}X_1 + \gamma_{2.3}X_2 + \epsilon_2</math></b>					
Financial Literacy	Competitive Advantage	0.252	3.571	0.000	Significant
Taxation Literacy	Competitive Advantage	0.037	3.651	0.015	Significant
Business Growth	Competitive Advantage	0.337	4.802	0.000	Significant

Based on Table 4, the result of this study shows that the variables of financial and taxation literacy do not have direct effect on competitive advantage variable, but the through business growth variable. This also proves that the hypothesis that is proposed is accepted. Table 5 provides concise information about the coefficient price (effect) of the total effect of financial literacy and taxation literacy variables on competitive advantage through business growth variable.

TABLE 5 THE TOTAL EFFECT BETWEEN INDEPENDENT VARIABLE ON DEPENDENT VARIABLE	
Effect Direction	Total Effect
$X_1 \rightarrow Y_1 \rightarrow Y_2$	0.460
$X_2 \rightarrow Y_1 \rightarrow Y_2$	0.088

- X<sub>1</sub> : Financial Literacy
- X<sub>2</sub> : Taxation Literacy
- Y<sub>1</sub>: Business Growth
- Y<sub>2</sub> : Competitive Advantage

The total effect, direct effect, and indirect effect between Financial Literacy (X<sub>1</sub>), Taxation Literacy (X<sub>2</sub>), Business Growth (Y<sub>1</sub>), and Competitive Advantage (Y<sub>2</sub>) is presented in Table 6.

TABLE 6 TOTAL EFFECT, DIRECT EFFECT, AND INDIRECT EFFECT BETWEEN EXOGENOUS AND ENDOGENOUS VARIABLE				
	Direct Effect		Indirect Effect	Total Effect
	Business Growth (Y <sub>1</sub> )	Competitive Advantage (Y <sub>2</sub> )	Competitive Advantage (Y <sub>2</sub> )	Competitive Advantage (Y <sub>2</sub> )
Financial Literacy (X <sub>1</sub> )	0.617	0.252	0.204	0.460
Taxation Literacy (X <sub>2</sub> )	0.150	0.037	0.045	0.088
Business Growth (Y <sub>1</sub> )				

	-	0.337	-	0.337
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## DISCUSSION

Micro, Small, and Medium Enterprises in DIY is able to provide 95% economic contribution. Increasingly competitive market and limited natural resources make harder condition for the MSMEs, so they are required to make new breakthroughs to create creative and innovative product. DIY is rich in traditional culture and diverse character of its inhabitants, so that creative industry has great potential to be developed. Creative MSMEs often experience delays in their development due to various conventional problems that have not been resolved completely. Strategic efforts are required to improve the performance and sustainability of the Creative MSMEs, such as increasing financial and taxation literacy to increase business growth towards sustainable competitive advantage. The result of this study proves previous research findings that financial literacy and taxation literacy do not have direct effect on competitive advantage variable, but through the business growth variable.

MSMEs will have competitive advantage when they have good literacy in financial and taxation (Muraga, 2015; Aribawa, 2016). However, if MSMEs are reluctant to learn and add knowledge about financial and taxation, it could have significant impact on their business growth (Lusimbo, 2016). The government and universities, especially in developing countries, also need to provide support for MSMEs through various ways, such as training and mentoring (Potrich, et al., 2015). It is because it will give more encouragement to manage the business seriously, can provide satisfying service to stakeholders, and able to manage company risk (Nunoo & Andoh, 2012). It is emphasized that by giving training that is in accordance with the needs of the MSMEs, it will be able to improve economic development and business growth of the MSMEs (Agney, 2018).

## CONCLUSION

Based on the analysis in result and discussion, it can be concluded that both financial literacy and taxation literacy have an effect on business growth and competitive advantage. Business growth can mediate the effect of financial literacy and taxation literacy on competitive advantage of Creative MSMEs in DIY. If business actors in the MSME sectors (Creative MSMEs in this study) have the adequate ability of financial and taxation literacy, the financial and business decision that is determined will be directed to better development from time to time, will improve the company ability to survive in the midst of crisis, and make the business has long-term sustainability. MSMEs have unique characteristics to face the changes of business environment and stakeholders. This business sector tends to work together than compete in the relationship between its business actors. Knowledge sharing to MSMEs should be done not only from the government, academician, or bigger business, but also between the MSMEs themselves, because it can be the main factor of MSMEs success in developing in global market era. It is very important to understand that intra-MSME cooperation is necessary to achieve complementary capabilities.

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## REFERENCES

- Abor, J. & Quartey, P. (2010). Issues in SME development in Ghana and South Africa. *International Research Journal of Finance and Economics*, 39(6), 219-227.
- Agarwalla, S.K., Barua, S., Jacob, J., & Varma, J.R. (2015). Financial literacy among working young in urban India. *World Dev*, 67, 101-109.
- Agyei, S.K. (2018). Culture, financial literacy, and SME performance in Ghana. *Cogent Economics & Finance*, 6(1), 1-16.
- Aribawa, D. (2016). The Effect of Financial Literacy on the Performance and Sustainability of MSMEs in Central Java. *Journal of Business Strategy*, 20(1), 1-13.
- Aryana, I., Nengah, I., Made W., & Ni Nyoman K.Y. (2017). Building competitive advantage through information systems performance and customer intimacy in improving marketing performance (Studies in the Hospitality Industry in Bali). *Journal of Economics and Business*, 6(4).
- Atkinson, A., & Messy, F. (2012). Measuring financial literacy: Results of the OECD/international network on financial education (INFE) pilot study.
- Bashor., Choirul., & Cham dan P. (2017). Factors affecting performance manager and its impact on competitive advantage: Studies Small Medium Enterprises (SMEs) in the shoes industry Mojokerto East Java.
- Bayraktarođlu, A., & Şan F.B. (2014). Financial literacy training as a strategic management tool among small-medium sized businesses operating in Turkey. *Procedia –Social and Behavioral Sciences*, 150, 148-155.
- Beck, T.A., Demirguc-Kunt., & Maksimovic, V. (2005). Financial and legal constraints to growth: Does firm size matter? *The Journal of Finance*, 60(1), 137-177.
- Bruhn, M., & Zia, B. (2013). Stimulating managerial capital in emerging markets: The impact of business and financial literacy for young entrepreneurs. *Journal of Development Effectiveness*, 5(2), 232-266.
- Cantele, S., & Zardini A. (2018). Is sustainability a competitive advantage for small businesses? an empirical analysis of possible mediators in the sustainability-financial performance relationship. *Journal of Cleaner Production*, 182, 166-176.
- Clark, G.L. (2014). Roepke lecture in economic geography. *Financial Literacy in Development Bank*, 9(3), 1-8.
- Cole, S., & Fernando, S. (2008). Assessing the Importance of Financial Literacy. *Asian Context. Economic Geography*, 9(1), 1-23.
- Conner, K.R., & Prahalad, C.K. (1996). A resource-based theory of the firm: Knowledge versus Opportunism. *Organization Science*, 7(5), 477-501.
- Das, T.K., & Teng, B.S. (2000). A resource-based theory of strategic alliances. *Journal of Management*, 26(1), 31-61.
- Demirbag, M., Frecknall-Hughes, J., Glaister, K.W., & Tatoglu, E. (2013). Ethics and taxation: A cross-national comparison of UK and Turkish firms. *International Business Review*, 22(1), 100-111.
- Drexler, A., Greg Fischer., & Antoinette, S. (2010). Keeping It simple: Financial literacy and rules of thumb (September 2010). *CEPR Discussion Paper*, No. DP7994.
- Dunska, M., & Kravinskis, K. (2016). Impact of financial literacy on domestic economic activity in the Baltic states. *Contemporary Issues in Finance: Current Challenges from Across Europe (Contemporary Studies in Economic and Financial Analysis, Volume 98)*. Emerald Group Publishing Limited, 1-19.
- Fitriati, R. (2014). *Reveals the Competitiveness of Creative Industries MSMEs*. Indonesian Torch Library Foundation.
- Lusimbo, E.N., & Muturi, W. (2016). Financial literacy and the growth of small enterprises in Kenya: A case of Kakamega central sub-county, Kenya. *International Journal of Economics, Commerce, and Management*, 4(6).
- Mottola, G.R. (2013). In our best interest: Women, financial literacy, and credit card. *Behavior Numeracy*, 6(2), 4.
- Muraga, K.P., & John, N. (2015). Effects of financial literacy on performance of youth led enterprises: A case of

- equity group foundation training program in Kiambu county. *International Journal of Social Sciences Management and Entrepreneurship*.
- Nunoo, J., & Andoh, F.K. (2012). Sustaining small and medium enterprises through financial service utilization: Does financial literacy matter? *Agricultural & Applied Economics Association's 2012 Annual Meeting*, Washington.
- Ponorîcă, A.G. & Al-Saedi, A.H.J. (2015). The Importance of Taxation Systems for SME Tax Compliance. *Management and Innovation for Competitive Advantage*, accessed on May 23, 2018.
- Potrich, A.C.G., Vieira, K.M., Coronel, D.A., & Bender Filho, R. (2015). Financial literacy in southern Brazil: Modeling and invariance between genders. *Journal of Behavioral and Experimental Finance*, 6, 1-12.
- Simanjuntak, T.H., & Imam, M. (2012). The Economic Dimensions of Taxation in Economic Development. Jakarta: Achieve Successful Success.
- Sucuahi, W.T. (2013). Determinants of financial literacy of micro entrepreneurs in Davao city. *International Journal of Accounting Research*, 1(1), 44-51.
- Xu, L., & Zia, B. (2012). Financial literacy around the world: An overview of the evidence with practical suggestions for the way forward. *Policy Research Working Paper*, 1-58.