

Financial literacy, network competency, market orientation and financial performance: A study from Bandung SMEs

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Abstract

Indonesia SMEs have contributed 61.97% to GDP or Rp. 8,573.89 trillion, and they can absorb almost 97% of the workforce. However, several problems arise and become limitations for SMEs, such as limited capital and limited marketing ability and weak business management capabilities. For capital limitations, it can be solved by applying for credit to external parties such as banks and venture capital, but SMEs must meet the bank requirements. For marketing limitations, it can be pursued by maximizing the ability of SMES actors in network competence and market orientation. Therefore, this research was conducted to examine the financial literacy, network competence, and market orientation to the financial performance of SMEs. We collected data by an online questionnaire on 197 SMEs in Bandung. We use SEM PLS to analyze the data. Our results indicated that financial literacy, network competence, and market orientation had a positive and significant impact on the SMEs financial performance. That means that the ability to understand financial concepts, the ability to establish good relationships or networks with external parties, and the ability to sense markets and customer relations help SMEs to implement their business strategies properly. So that they will have an impact on increasing financial performance.

Keywords

financial literacy; network competency; market orientation; financial performance; SMEs

INTRODUCTION

SMEs in Indonesia has contributed 61.97% to GDP or Rp. 8,573.89 trillion and can absorb almost 97% of the workforce in 2020. This means that the number of SMEs, which amount to 64.2 million is directly proportional to the availability employment. So that SMEs also have a very large contribution to employment (Badan Koordinasi Penanaman Modal, 2021). Although the SMEs has a large contribution to economics and yet they still facing many problems. Those problems are financial problems and non-financial problems. The financial problems faced by SMEs actors are limited capital, while non-financial problems faced by SMEs actors are limited marketing, weak business management capabilities and low quality of human resources (Siahaan et al., 2020).

Limited capital can be resolved by applying for credit to external parties such as banks and venture capital, but previously SMEs must be able to meet the requirements of banking (bankable) and improve their financial literacy. If SMEs have access to financial institutions, it will encourage the level of capital turnover so

that it will encourage economic growth (Wardhono et al., 2018). Well-literate SMEs will have a tendency to be able to manage finances well so that their business's accountability can be properly accounted for. This is evidenced by previous studies which indicate that financial literacy is positively related to financial performance (Ali & Li, 2021; Hossain, 2020; Usama & Yusoff, 2019). Understanding the financial concept and financial management are important for them to increase their financial performance. Financial literacy will increase SMES income, regional and state economic development (Desiyanti & Hamirul, 2020). By understanding financial literacy, SMES can find sources of capital by utilizing the provided financial facilities such as Kredit Usaha Rakyat (KUR). The KUR program has succeeded in increasing SMEs access to financing facilities in banking. Bank Indonesia data shows that the use of bank loans has increased.

In carrying out their business activities, SMEs need to have the ability to plan, organize, lead and control business. SMEs must also have good human resource development, especially in terms of

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knowledge, expertise and ability in entrepreneurship to improve their performance (Purba et al., 2021). Key success factors of SMEs are influenced by various things such as individual background, business characteristics, government support, access to capital and etc. To achieve success, of course, SMES must have the ability to build a network. Building a network is a very crucial thing to do in business. For beginner SMEs, having extensive networking will help their business grow wider and be known in the market. That networking ability is called as network competency. When implementing business strategies, SMEs need to maintain a good relation with stakeholders such as financial institutions, investors, suppliers, distributors, and customers. A good business relationship can lead to better performance (Hakansson & Snehota, 1995). This is supported by previous studies which indicate that network competency positively related with financial performance (Anser et al., 2021; Mamun et al., 2019; Parida et al., 2017).

Market orientation has an important role for SMEs because a market-oriented business shows the extent of the company's commitment to collecting information related to the market. It is intended to know the needs and wants (demands) of consumers and what kind of strategies are used to defeat the competitor (Afsharghasemi et al., 2013). Implementing a market-oriented strategy means that SMEs must develop products and services that meet the customer needs and desires (Wijaya, 2020). This is supported by previous studies which indicate that market orientation positively related with financial performance (Oduro & Haylemariam, 2019; Slater & Narver, 2000; Zhang et al., 2017). Based on the above background, the purpose of this study is to examine the effect of financial literacy, network competency and market orientation on the financial performance of SMEs.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Financial performance

Financial performance is a way to see how the results and the extent to which the company has implemented financial rules. SMEs need to analyze their financial

performance so that they can evaluate their prior performance and improve their work in the coming year. The increase in performance is also the result of an analysis of financial performance and the standards set by the company (Hutabarat, 2020).

The resource-based view

The causal relationship between financial literacy, network competency and market orientation and the financial performance of SMEs is motivated by the theory of Resource-Based View (RBV). The RBV theory states that if a company has the ability to manage resources to become more valuable, scarce, inimitable and non-replaceable then it will achieve growing performance and gain a sustainable competitive advantage (Barney, 1991). With high financial literacy, SMEs will have the ability to access financial resources (as resources) and will be managed optimally to create company performance (Bongomin et al., 2017; Dahmen & Rodríguez, 2014; Esiebugie et al., 2018; Hossain, 2020; Usama & Yusoff, 2019; Andarsari & Ningtyas, 2019). SMEs that have the ability to networking well it will effect to their financial performance (Anser et al., 2021; Farida & Nuryakin, 2021; Mamun et al., 2019; Sulisty, 2020; Tehseen et al., 2019). And SMEs that always oriented in market it proven to have the good financial performance (Chen-Ho Chao & Spillan, 2010; Oduro & Haylemariam, 2019; Slater & Narver, 2000; Zhang et al., 2017).

Financial literacy

Financial literacy is the knowledge and ability to organize personal and business finances. Understanding and ability of financial management is an important factor for the financial performance of SMES businesses. Financial literacy will also increase SMES income, regional and state economic development (Desiyanti & Hamirul, 2020). Empirical evidence shows that financial literacy has a positive and significant effect to financial performance of SMEs in several countries (Bongomin et al., 2017; Dahmen & Rodríguez, 2014; Esiebugie et al., 2018; Hossain, 2020; Usama & Yusoff, 2019). Hence, this study proposed:

Table 1.
Characteristics of respondents

	Item	Frequency	%
Gender	Male	27	14
	Female	170	86
Type of Industry	Agriculture	2	1
	Fashion	32	16
	Service	17	9
	Health	6	3
	Food & Beverages	117	59
	Automotive	3	1,5
	Technology	3	1,5
	Others	17	9
Revenue	IDR < 300 million	174	88
	IDR 300 million – 2,5 billion	22	11
	IDR 2,5 billion – 50 billion	1	1

Sources: Processed Data (2022)

H1: Financial literacy is positively effect to financial performance.

Network competency

Building a network is a very crucial thing to do in business. For beginner SMEs, having extensive networking will help their business grow wider and be known in the market. Network competency is defined as the skill to build interactions that can result in the ability to execute tasks that involve people. Also, network competency is the skill to utilize business partners such as investors, partners in technology & marketing, as well as other stakeholders. The existence of such a relationship can facilitate social interactions that can lead to an exchange of resources and produce a benefit for both parties (Ratten et al., 2018). Empirical evidence shows that network competency has a positive and significant effect to financial performance of SMEs in several countries (Anser et al., 2021; Farida & Nuryakin, 2021; Mamun et al., 2019; Sulisty, 2020; Tehseen et al., 2019). Therefore, this study proposed:

H2: Network competency is positively effect to financial performance.

Market orientation

Market orientation refers to the way an organization implements the marketing concept. Market orientation can refer to higher goals: (a) customer satisfaction and

repeat business; (b) esprit de corps (cohesiveness of a group), job satisfaction, and employee commitment; and (c) business performance. (Marketing Science Institute, 1999). Market orientation has been proven positively related with the financial performance of SMEs in several countries (Chen & Ho Chao & Spillan, 2010; Oduro & Haylemariam, 2019; Slater & Narver, 2000; Zhang et al., 2017). In order that, this study proposed:

H3: Market orientation is positively effect to financial performance.

METHODS

We used SMEs in Bandung as a sample to test our hypotheses. Our survey is a purposive sampling of approximately 197 SMEs. The target respondents were contacted using social networks such as *Instagram*, *facebook* and so on. The study used a questionnaire with items adopted from previous studies. Items of Financial Literacy is based on Bongomin et al., (2017), network competency is based on Parida et al., (2017), market orientation is based on Oduro & Haylemariam (2019) and financial performance is based on Keh et al., (2007). The items included in the questionnaire were put into a five-point Likert scale with 1—strongly disagree, 2—disagree, 3—not sure, 4—agree, 5—strongly agree. We used a Structural Equation Model-Partial Least Square (SEM-PLS) with Smart-PLS software to examine our hypotheses.

Table 2.
Hypotheses testing – structural model

Hypotheses	p-values	Conclusion
Financial Literacy -> SMEs Financial Performance	0,014**	Supported
Network Competency -> SMEs Financial Performance	0,076*	Supported
Market Orientation -> SMEs Financial Performance	0,002***	Supported

Note: significance level *** 1%, **5%, *10%.
Sources: Processed Data (2022)

In SEM-PLS we need to examine the outer model and inner model. The outer model consisted of convergent validity, discriminant validity and reliability). The test result showed that all items are valid dan reliable as shown as in Appendix Table 2-4. Then, we examine the inner model. The inner model is a structural model that is used to predict the causality relationship (cause and effect relationship) between latent variables or variables that cannot be measured directly.

RESULTS AND DISCUSSION

Demographic characteristics

The result as depicted in Table 1 shows that majority (86 per cent) of the respondents were female, while 14 per cent were male. Besides, the findings indicated that the majority of SMEs is in Food & Beverages business (59 per cent) and Fashion business (16 per cent). In addition, the result also showed that 88 per cent of respondents had <300 million rupiah per year, 11 per cent respondents had 300 million – 2.5 billion per year.

Assessment of the inner model

All of our items are valid and reliable so we do examine the inner model. The result is shown in Table 2. All hypotheses above are supported at different level. Financial Literacy toward the SMEs Financial Performance showed the positive effect at 5% significance level. Network Competency toward the SMEs Financial Performance showed a positive effect at 10% significance level. Market Orientation toward the SMEs Financial Performance showed a positive effect at 1% significance level. The coefficient determination (R^2) was 0,495 and it should be considered as moderate. To

sum up, the financial literacy, network competency and market orientation explained 49,5 per cent of the variance in financial performance.

CONCLUSION

This study is entitled, analysis of factors that affect the profitability of Islamic commercial banks for the period 2015Q1 – 2019Q2 which explains the effect of CAR, LDR, NIM and FDR to ROA. This research uses SPSS 25 statistical tool for hypothesis testing with multiple regression analysis method. The sample in this study amounted to 18 conventional commercial banks that had the availability of quarterly financial data reports in the 2015-2016 period. The data used was 135 where the data were not exposed to outliers. The results of simultaneous hypothesis testing (F test) show that the F value is 671.885 with a significance level of 0.000. The result of testing the coefficient of determination (R^2) is 83,4%.

Capital Adequacy Ratio (CAR) has a significant positive effect on Return on Assets (ROA). This shows that the increase in CAR affects the rate of increase in profitability with a variable (ROA). LDR has a significant negative effect on ROA. It was found that the smaller the LDR level, the more efficient the company's level, the more efficient it is, the more it has an impact on increasing profitability (ROA).

NIM has a significant positive effect on ROA. It was found that the results of data processing affected by outliers resulted in a significant positive relationship between NIM and ROA. Financing to Deposit Ratio (FDR) has a significant positive effect on ROA. Each high level of FDR has an effect on increasing profitability (ROA).

Despite some contributions that this study may have, it also has some limitations. First, there are outliers in the study, which

causes a reduction in the data used, from a total of 220 data used to 147 data used. So that it has not been able to fully explain the analysis carried out on Conventional Commercial Banks in Indonesia.

Second, the period for the research was relatively short with data collected only 4 years, with quarterly data for the period 2015 to 2019. Third, there are several other factors that can be used such as NOM and inflation used by Sabir et al. (2012), Wibowo & Syaichu (2013), Said & Ali (2016) because there are still 5.9% of factors outside the study that affect profitability.

REFERENCES

- Afsharghasemi, A., Zain, M., Sambasivan, M., & Ng Siew Imm, S. (2013). Market orientation, government regulation, competitive advantage and internationalization of smes: a study in malaysia. *Journal of Business Administration Research*, 2(2). <https://doi.org/10.5430/jbar.v2n2p13>
- Ali, H., & Li, Y. (2021). Financial literacy, network competency, and smes financial performance: the moderating role of market orientation. *Journal of Asian Finance*, 8(10), 341–0352. <https://doi.org/10.13106/jafeb.2021.vol8.no10.0341>
- Anser, M. K., Yousaf, Z., Usman, M., Yousaf, S., Fatima, N., Hussain, H., & Waheed, J. (2021). Strategic business performance through network capability and structural flexibility. *Management Decision*, 59(2), 426–445. <https://doi.org/10.1108/MD-06-2019-0741>
- Andarsari, P. R., & Ningtyas, M. N. (2019). The Role of Financial Literacy on Financial Behavior. *Jabe (Journal of Accounting and Business Education)*, 4(1), 24. <https://doi.org/10.26675/jabe.v4i1.8524>
- Badan Koordinasi Penanaman Modal. (2021). *Upaya pemerintah untuk memajukan umkm indonesia*. <https://www.bkpm.go.id/id/publikasi/detail/berita/upaya-pemerintah-untuk-memajukan-umkm-indonesia>
- Bongomin, G. O. C., Ntayi, J. M., Munene, J. C., & Malinga, C. A. (2017). The relationship between access to finance and growth of SMEs in developing economies: Financial literacy as a moderator. *Review of International Business and Strategy*, 27(4), 520–538. <https://doi.org/10.1108/RIBS-04-2017-0037>
- Chen-Ho Chao, M., & Spillan, J. E. (2010). The journey from market orientation to firm performance: A comparative study of US and Taiwanese SMEs. *Management Research Review*, 33(5), 472–483. <https://doi.org/10.1108/01409171011041901>
- Dahmen, P., & Rodríguez, E. (2014). Financial literacy and the success of small businesses: an observation from a small business development center. *Numeracy*, 7(1), 1–12. <https://doi.org/10.5038/1936-4660.7.1.3>
- Desiyanti, R., & Hamirul. (2020). *COVID-19 merubah wajah indonesia, literasi dan inklusi keuangan umkm selama pandemi*. Pustaka Learning Center.
- Esiebugie, U., Richard, A. T., & Emmanuel, A. L. (2018). Financial literacy and performance of small and medium scale enterprises in benue state, nigeria. *International Journal of Economics, Business and Management Research*, 2(4), 65–79. www.ijebmr.com
- Farida, N., & Nuryakin. (2021). Network capability, relational capability and Indonesian manufacturing SME performance: An empirical analysis of the mediating role of product innovation. *Engineering Management in Production and Services*, 13(1), 41–52. <https://doi.org/10.2478/emj-2021-0003>
- Hakansson, H., & Snehota, I. (1995). *Developing relationships in business networks*. Routledge.
- Hidajat, T. (2015). *Literasi keuangan*. STIE Bank BPD Jateng.
- Hossain, M. (2020). Financial resources, financial literacy and small firm growth: Does private organizations support matter. *Journal of Small Business Strategy*, 30(2), 35–58.
- Hutabarat, F. (2020). *Analisis kinerja keuangan perusahaan*. Desanta Multiavisitama.
- Mamun, A. al, Fazal, S. A., & Muniady, R. (2019). Entrepreneurial knowledge, skills, competencies and performance. *Asia Pacific Journal of Innovation and Entrepreneurship*, 13(1), 29–48. <https://doi.org/10.1108/apjie-11-2018-0067>
- Marketing Science Institute. (1999). *Developing a market orientation*. SAGE Publications, Inc.
- Odoro, S., & Haylemariam, L. G. (2019). Market orientation, CSR and financial and marketing performance in manufacturing firms in Ghana and Ethiopia. *Sustainability Accounting, Management and Policy Journal*, 10(3), 398–426. <https://doi.org/10.1108/SAMPJ-11-2018-0309>
- Parida, V., Pesämaa, O., Wincent, J., & Westerberg, M. (2017). Network capability, innovativeness, and performance: a multidimensional

- extension for entrepreneurship. *Entrepreneurship and Regional Development*, 29(1–2), 94–115. <https://doi.org/10.1080/08985626.2016.1255434>
- Purba, D. S., Kurniullah, A. Z., Banjarnahor, A. R., Revida, E., Purba, S., Purba, P. B., Sari, A. P., Hasyim, Butarbutar, Y. M., Fuadi, Aznur, T. Z., Purba, B., & Rahmadana, M. F. (2021). *Manajemen usaha kecil dan menengah*. Yayasan Kita Menulis.
- Ratten, V., Braga, V., & Marques, C. S. (2018). *Knowledge, learning and innovation: research insights on cross-sector collaborations*. Springer International Publishing.
- Siahaan, A., Siahaan, R., & Siahaan, Y. E. (2020). Faktor pendukung dan penghambat kinerja umkm dalam meningkatkan daya saing. *Jurnal Stindo Profesional*, 6(6), 143–156.
- Slater, S. F., & Narver, J. C. (2000). The positive effect of a market orientation on business profitability: a balanced replication. *Journal of Business Research*, 48, 69–73.
- Sulistyo, H. (2020). The role of network capability and knowledge creation in improving smes business performance in indonesia. *ICIC*.
- Tehseen, S., Ahmed, F. U., Qureshi, Z. H., Uddin, M. J., & Ramayah, T. (2019). Entrepreneurial competencies and SMEs' growth: the mediating role of network competence. *Asia-Pacific Journal of Business Administration*, 11(1), 2–29. <https://doi.org/10.1108/APJBA-05-2018-0084>
- Torkkeli, L., Kuivalainen, O., Saarenketo, S., & Puumalainen, K. (2016). Network competence in Finnish SMEs: implications for growth. *Baltic Journal of Management*, 11(2), 207–230. <https://doi.org/10.1108/BJM-02-2015-0032>
- Usama, K. M., & Yusoff, W. F. W. (2019). The impact of financial literacy on business performance. *International Journal of Research and Innovation in Social Science (IJRISS)*, 3(10), 84–91. www.rsisinternational.org
- Wardhono, A., Indrawati, Y., & Qori'ah, C. G. (2018). *Inklusi keuangan dalam persimpangan kohesi sosial dan pembangunan ekonomi berkelanjutan*. Pustaka Abadi.
- Wijaya, O. (2020). *Strategi manajemen hubungan pelanggan dan orientasi pasar: upaya meningkatkan kinerja pemasaran industri furniture di jawa timur*. Penerbit Lakeisha.
- Zhang, L., Kara, A., Spillan, J. E., & Mintu-Wimsatt, A. (2017). Exploring market orientation among Chinese small and medium-sized enterprises. *Chinese Management Studies*, 11(4), 617–636. <https://doi.org/10.1108/CMS-08-2016-0158>