



**C.E.O FINANCIAL LITERACY AND CORPORATE FINANCIAL PERFORMANCE IN INDONESIA:
MEDIATING ROLE OF SOURCES OF INVESTMENT DECISIONS**

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Received 12 November 2019; accepted 18 March 2020; published 30 May 2020

Abstract. The present study attempts to examine the impact of C.E.O Financial Literacy on Corporate financial performance of SMEs through mediating role of sources of investment decisions comprising accounting information, advocate information and neutral information. The primary data has been collected from 301 executives of the SMEs in Indonesia. To examine the impact of incorporated variables on the corporate financial performance, Confirmatory factors analysis and Structural equation modeling approach are incorporated in the study, several tests were applied including descriptive analysis, KMO and Bartlett's test, rotated component matrix, convergent and discriminant validity. The direct effects indicated that the financial literacy of C.E.O is the significant and positive drivers of corporate financial performance. While the indirect effects show that all incorporated sources of investment decisions significantly mediated the relationship of C.E.O financial literacy and financial performances. It is indicated that accounting information, neutral information and advocate information acts as a significant mediator between financial literacy of C.E.O and corporate financial performance. Also, the study embraces several theoretical, practical and policy-making implications for the financial management practitioners and strategy developers to attain high levels of financial performance and implement informed financial decisions. In the last, various limitations have been given along with the recommendations for in-depth findings by future researchers.

Keywords: C.E.O Financial Literacy; Corporate Financial Performance; Sources of Investment Decisions; Indonesia

Reference to this paper should be made as follows: Hendrawaty, E., Widiyanti, M., Sadalia, I. 2020. C.E.O financial literacy and corporate financial performance in indonesia: mediating role of sources of investment decisions *Journal of Security and Sustainability Issues*, 9(M), 118-133. [http://doi.org/10.9770/jssi.2020.9.M\(10\)](http://doi.org/10.9770/jssi.2020.9.M(10))

Jel Codes: M1, M12

1. Introduction

The executives of a company are considered as the key source of human capital that determines the success of firms and their overall performance (Agyei, 2018; Gerasimov et al., 2019). According to (Hambrick 2016), the financial performance of firms can be predicted with managerial characteristics and literacy levels in the governing board. It is argued that executives analyze the situations through their personalized lenses in terms of strategic scenarios and events, these personalized interpretations are shaped through experiences and values (Volonté & Gantenbein, 2016) The financial performance of a firm is indicated with financial measures such as competitive position, profitability of the firm, return on assets, equity, investment and net margin as these indicators capture the performance and effectiveness of the implemented financial strategies and approaches for a firm or a specific brand (Friede, Busch, & Bassen, 2015). In the financial literature, the determinants of corporate financial performances is a widely researched concepts in the domain of financial management (Karadag, 2015). Among the other drivers like diversity in executives, their personality characteristics, the levels of financial literacy possessed by senior executives is one of the major significant drivers of a firm's financial performance (Chen & Gavius, 2016; Fitri et al., 2019). In

order to gain high profitability and preserve the financial performance, high levels of financial knowledge is mandatory among the executives for the strategic policy development as these policies determines the rules and regulations and operating procedures of a firm in view of financial positions and requirements which leads towards effective financial performance (Asaad, 2015).

As in the current era, corporations are facing the challenge of dynamic business environment associated with technological advancement, high competition, changing business practices and financial reporting standards, which requires the possession of expertise in financial knowledge to develop and implement approaches and strategies to survive in the business industry (Khan, Li, Safdar, & Khan, 2019; Nugraha & Hakimah, 2019). Also, the changing investment trends and availability of alternatives makes it difficult for the firms especially for the small medium enterprises to preserve their financial performance and identify the right and fruitful investment ventures that generates the high profitability for the firms, only the executives who holds sound financial knowledge are able to grasp the investment opportunities (Frydman & Camerer, 2016). For the response to this challenge, several studies explored the drivers of financial performance. It is claimed that financial knowledge affects the financial behaviors of a firm (Purnomo, 2019). Also, it was highlighted by (Steiner-Khamsi, Appleton, & Vellani, 2018) that financial background of the executives in terms of their financial knowledge determine the growth levels of the firms and their financial performance and in the long run the economic growth of a country. Similarly, an essential role is played by SMEs in the growth levels in Indonesia. It is reported that Indonesian SMEs are responsible for the 97% of the domestic employment as shown in figure 1. Moreover, SMEs contributed highly in GDP of Indonesia i.e. 59 % and holds 56% of the total business investment (Nasution & Sarkum, 2019).

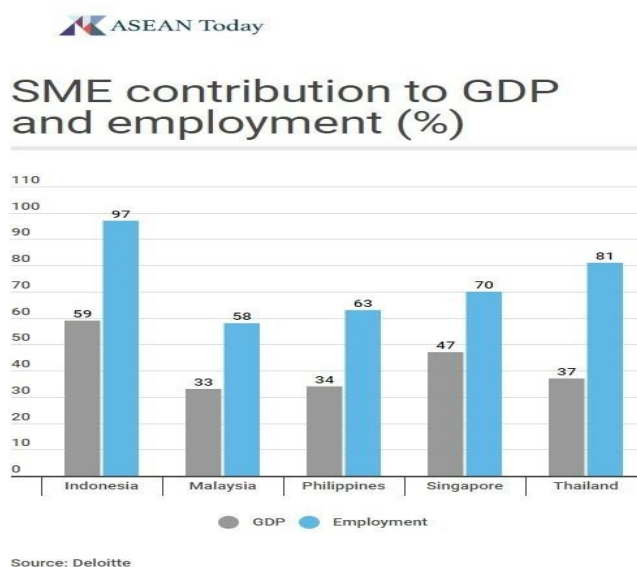


Figure 1. SME Contribution to GDP

Therefore, in view of the discussed importance of SMEs in Indonesia and the findings in the domain of financial performance drivers, it is observed that the researches have been focused on the impact of financial literacy of managers, board of directors on overall business performance, but no such study have been conducted to specifically analyze the role of C.E.O's financial literacy on firm's financial performance particularly. Also, the mediating role of investment decisions in the relationship between C.E.O financial literacy and corporate financial performance was not examined earlier. These observations highlighted the literature gap which needs to be fulfilled, therefore in order to fulfill the identified gap, by following the suggestions of previous studies of (Hamza & Arif, 2019; Rivera, Muñoz, & Moneva, 2017) the present study proposed the following research objectives:

1. To determine the impact of C.E.O's financial literacy on the corporate financial performance of SMEs in Indonesia.
2. To analyze the mediating role of accounting information in the relationship between C.E.O's financial literacy and corporate financial performance of SMEs in Indonesia.
3. To explore the mediating role of advocate information in the relationship between C.E.O's financial literacy and corporate financial performance of SMEs in Indonesia
4. To investigate the mediating role of neutral information in the relationship between C.E.O's financial literacy and corporate financial performance of SMEs in Indonesia

Similarly, the other contribution was the inclusion of Indonesia's SMEs to investigate the impact of C.E.O's financial literacy on corporate financial performance with the mediating role of investment decisions sources as no study has been analyzed the corporate performance of this sector earlier. Moreover, unlike previous studies, the current study incorporated advanced methodological techniques such as Structural equation modeling and confirmatory factor analysis. The explanation of the proposed mechanism is significant for practitioners of financial management to develop financial strategies with the alignment of business vision for the prominent growth and performance of a firm. Thus, the rest of the research covered the relevant literature and formulation of hypotheses, in section 3 the methodology of the study is discussed, whereas in section 4 data analysis and results are discussed while section 5 includes a conclusion and future policy implications.

2. Literature Review and Theoretical Background

In order to analyze the role of investment decisions and C.E.O on the corporate financial performance, the study incorporated the "Theory of Planned Behavior". The TPB is the managerial framework that considers behavior as the result derived from the attitude and behavioral controls of an individual (Ajzen, 1991). The TPB model focuses on the intention, beliefs and subjective norm of an individual as the sources of a behavior. Several scholars provide the support of positive statistical associations between TPB framework and underlying behavioral mechanisms (Ajzen, 2015). As in view of this, these elements are necessary for the determination of an individual behavior towards a particular situation or object (Yadav & Pathak, 2017). Several studies have incorporated this theory for an in-depth understanding of behavior drivers (Abraham & Sheeran, 2017; De Leeuw, Valois, Ajzen, & Schmidt, 2015). Thus, the present study proposed the following conceptual model presented in figure 3 by taking into consideration the C.E.O financial literacy level (independent variables) as the determining factor of corporate financial performance (dependent variable) (Haseeb et al., 2020). The study also assumed that sources of investment business decisions acts as a significant mediator in the relationship between C.E.O financial literacy and corporate financial performance.

3. C.E.O Financial Literacy and Corporate Financial performance

Financial performance is the key to success for every business which is why accelerated amount of research is being done on the topic (c.f., Galdeano, Ahmed, Fati, Rehan & Ahmed, 2019). Financial literacy is defined as "the possession of the set of skills and knowledge that allows an individual to make informed and effective decisions with all of their financial resources" (Sulaiman, 2016). These knowledge sets determines the financial rules and regulations and operating procedures of a firm by conforming to the laws and regulations implemented globally (Noordin & Kassim, 2017). Basically, the level of financial knowledge of an executive results in fruitful investment decisions as this knowledge enables the critical evaluation and understanding of alternative investment ventures, their associated potential benefits and risks, thus the calculated benefit and risk approach leads towards high profitability of the firm (N. Khan, Latif, Sohail, & Zahid, 2019). Moreover, the financial knowledge and expertise assist in maintaining and monitoring the financial controls for the detection of compliance levels followed by firm and whether the enforced reporting standards are followed or not (Ripain, Amirul, & Mail, 2017; Fitri et al., 2019). As the firms are required to meet audit requirements for financial reporting through financial policy making with

the alignment of regulative regulations to maintain the profitability levels and overall financial performance (Chiu, Fischer, & Friedman, 2019).

The skills and financial expertise and knowledge possessed by executive's plays a prominent role in determining the financial strategies of a business and aims to find solutions in order to achieve the high financial performance (Hussain et al., 2020). A well-literate executive in term of accounting knowledge and knowledge about financial laws and regulations develops the business strategy aligned with market policies and rules which results in the effective insights to cope up with the dynamic environment and leads towards effective financial performance (Scafarto & Dimitropoulos, 2018). Many studies have emphasized the importance of possession of financial knowledge by the senior management for the success and profitability of a firm as it fosters effective earnings management (Kouaib, Jarboui, & Mouakhar, 2018). While studying the major determinants of financial performance and effective investment decisions with high market shares, the findings of (Adams, Debrah, Williams, & Mmieh, 2015) highlighted that for the favorable investment avenues and for high returns, the utilization of financial knowledge is mandatory and creates a high momentum for financial growth of a firm. Therefore, based on the reviewed literature and the recognition of importance of financial literacy in the determination corporate financial performance, the current study hypothesized that:

H1: C.E.O Financial Literacy has a significant impact on corporate financial performance.

a. Mediating role of Accounting information

The possession of accounting information refers to the knowledge about past performance of the firm, the number of expected bonus shares, the expected corporate earnings and the marketability of the stock (Alfrah, Alanezi, & Alanzi, 2015). It includes the understanding of current financial needs and detection of potential areas that need to be targeted for the effective growth of the company. It is based on the existing financial knowledge and financial experiences, which allows the firm to work on its profitability practices and potential profitable avenues (Roslan et al., 2018). It facilitates in on improving current financial business practices and ultimately effective financial performance. Moreover, the accounting information allows the understanding of economic behaviors and expected stock returns in view of the economic conditions, as the possession of financial literacy enables an individual to examine its business environment for determining the effectiveness of any decision, as the knowledge and expertise about the current financial trends and information gives a competitive strength in maximizing the corporate earnings (Ahmed, Ramakrishnan, & Noreen, 2017). Also, accounting information generates solutions to the underlying financial problems faced by the firm (Asif, Arif, & Akbar, 2016). Without the possession of this knowledge, the companies are unable to resolve immediate problems and fulfill its profitability needs and it has a significant impact on financial performance of the firm (Hussain, Salia, & Karim, 2018; Masnita et al., 2019). With the utilization of the financial knowledge, and individual analyzed the expected market condition and performances of the stock and determines the investment decisions accordingly after the critical evaluation of potential consequences of a financial decision before its implementation, so that the firms are able to integrate effective financial policies and fulfill the needs of investors and shareholders (Estelami, 2016). Therefore, based on the reviewed literature and the recognition of interrelated role of financial literacy, and accounting information in the determination of financial performance, the current study hypothesized that:

H2: Accounting Information has a significant mediating role in the relationship between C.E.O financial literacy and Corporate Financial Performance.

b. Mediating role of Advocate information

The capacity to analyze the recommendations of brokers and the opinions of financial analysts or members in order to respond to investment and financial alternatives lies in the category of advocate information (Xiao & Porto, 2017). The capability of analyzing the market and given opinion is associated with identifying present and future financial needs of the company and dispersion of these learning over the financial operations and designing

responsiveness strategies as per the market dynamics (Arthur, 2016). The examination of financial alternatives is possible with the inclusion of financial knowledge as these decision have a significant influence on financial performance of the firms (Eniola & Entebang, 2016). Moreover, the findings of (Mindra & Moya, 2017) stated that the possession of financial information and ability to select the most suitable alternative is crucial for the informed financial decision as it affects the overall performance indicators of the firm and determines the competitive position in the industry. Therefore, in view of the reviewed literature and the interrelationships of financial literacy, advocate information and corporate financial performance, the current study hypothesized that:

H3: Advocate Information has a significant mediating role in the relationship between C.E.O financial literacy and Corporate Financial Performance.

c. Mediating role of Neutral Information

In the context of investment decisions, neutral information is considers the possession of knowledge of routine coverage's in the media, current economic indicators, the holdings by the government and the fluctuation levels of stock index (Jonsson, Söderberg, & Wilhelmsson, 2017). The possession of financial knowledge enables an executive to understand the investment environment with the analysis of the business environment in the firm is operating. Also, this financial expertise assisted in critical evaluation of the investment options available for the firm, the effective evaluation results in high profitable investment decisions and ultimately facilitates the financial growth of the firm (Arif, 2015). Moreover, the financial literacy allows the understanding of economic behaviors of various indicators like GDP, inflation, interest rates to determine the effectiveness of any decision, as the scrutiny of any implemented or upcoming decision is possible when the executive itself have the knowledge and expertise about the current financial trends and information (Jariwala, 2015). According to (Friede et al. 2015) the most effective way of attaining investment knowledge that aid in decision making is the ability to sense present market financial situations as it boosts the tendency of a firm to identify opportunities and improve their financial decisions for high levels of financial performance.

In addition, it is argued by the authors that financial knowledge and the possession of investment related information are interrelated for determining the financial performance (Masnita et al., 2019). With the utilization of the knowledge, and individual analyzed the specifications and potential consequences of a financial decision before its implementation, so that the firms are able to integrate effective financial policies and fulfill the needs of investors and shareholders as these decisions has a significant influence on profitability of the firm (Mazieres & Boespflug, 2017). Also, a well-researched investment decision results in the effective recognition of opportunities and provides ways for the successful financial strategy according to market insights to cope up with the dynamic environment and leads towards high corporate financial performance (Deepak, Singh, & Kumar, 2015) Thus in view of the existing relationship between possession of financial literacy, possession of neutral information and corporate financial performance, the present study hypothesized that:

H4: Neutral Information has a significant mediating role in the relationship between C.E.O financial literacy and Corporate Financial Performance (See figure 2)

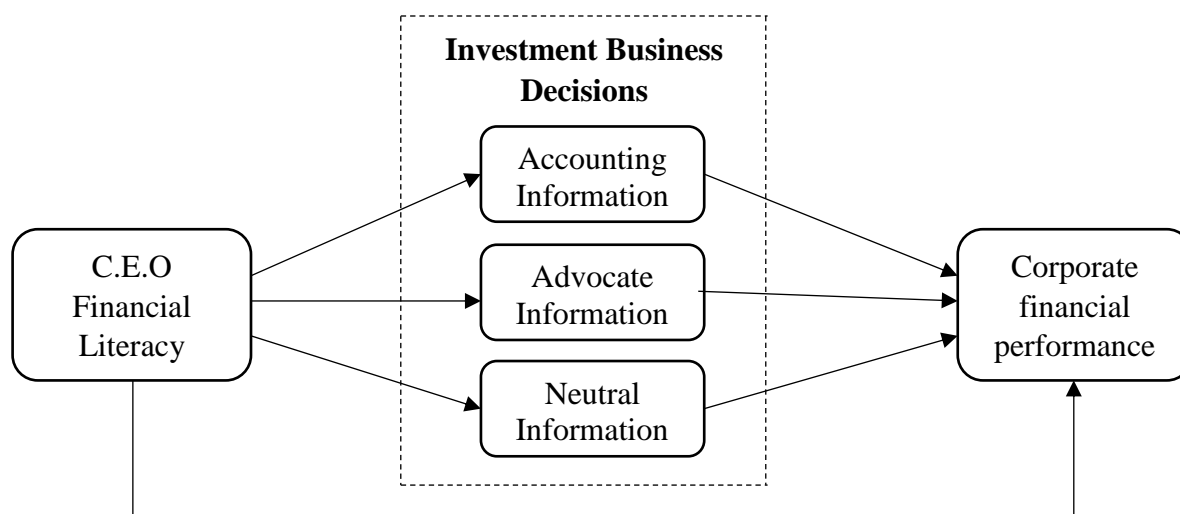


Figure 2. Conceptual model

4. Research Methodology

Population and Sampling

For observing the impact of C.E.O financial literacy on corporate financial performance, in mediating role of investment decisions sources such as accounting, advocate and neutral information, researcher carried out this specific research study. Researcher takes into account manufacturing sector of Indonesia as population of study, as industrial sector of Indonesia consists of two sub-sectors mining and manufacturing. Manufacturing industry get disturb due to the Asian crisis and it lag behind mining industry, Indonesian government efforts a lot to enhance productivity of manufacturing sector and its result positive as many manufactured products exported and contribute a lot in GDP of Indonesia. In current scenario, manufacturing sector productivity is average, not outclass or extraordinary that's why researcher proposed that whether contribution of C.E.O financial literacy and effective investment decision sources increased financial performance of manufacturing sector of Indonesia or not. Researcher considered the agriculture industry and textile industry as sampling frame of this study because these industries overtook Asian crisis and increased their productivity and contributes a lot in economy of Indonesia. Further, researcher selects the managers, C.E.O and owners of firm as sample respondents through purposive sampling technique as only top management and owners can fulfill the objective of study and this study tailored to improve their productivity. Survey questionnaire has been distributed among 400 respondents but out of which only 376 agreed to responded, after data collection researcher performed data cleaning process and discarded invalid and incomplete responses, at the end only 301 valid responses received.

Data Collection Procedure

Questionnaire has been considered most appropriate data collection procedure, as it helps in collecting primary, quantitative and numeric data from respondents. It has been categorized into two closed ended questions such as demographic items and variable scale items. Researcher performed the pilot study on 33 respondents for verifying that whether items wording, structure of questionnaire is understandable by respondents or not understandable. Afterward, researcher minimize the errors and rectified mistakes in questionnaire on the bases of collected feedback. Further, researcher checked the content validity of measures through industrial professional and verified that language of questionnaire must be understandable by native Indonesian people. Finalized form of questionnaire

then administered through self-administering and online-administering technique, as it allows respondents to respond appropriately and conveniently to survey items asked in questionnaire.

Measures

Researcher measured role of dependent, independent and mediating variable through those survey items, which have already been used for the measurement of such variables in the previous literature. As researcher considered them more authentic and reliable for measurement of variables such as C.E.O financial literacy has been measured through 14 survey items, which have been adapted from research work of (Bongomin, Munene, Ntayi, & Malinga, 2018) and for the measurement of corporate financial performance, 6 survey items have been adapted from research work of (Li & Zhang, 2007), (Luk et al., 2008) & (Venkatraman & Ramanujam, 1986). Further, investment decisions sources dimensions have been measured through different survey items such as for accounting information researcher adapts 4 survey items, for advocate information 4 survey items have been adapted and for neutral information 4 survey items have been adapted, from research work of (Al-Tamimi, 2009). To measure the responses of all these measurement items, researcher takes into account 5-point Likert scale, in which response ranges from 1 (strongly disagree) to 5 (strongly agree).

Measurement Model

In the measurement model, reliability of measures has been assessed through SPSS, by examining two criteria (1) Composite reliability and (2) Cronbach’s α , both of them must have the values greater than threshold limit 0.70, as it ensured internal consistency and items reliability respectively. Further, AMOS has been accompanied to assess convergent and discriminant, by examining different criteria such as for convergent validity two criteria have been examined such as (1) items loading, its values have to be greater than cutoff value 0.70 and (2) average variance extracted, its values have to exceed threshold limit 0.50. For discriminant validity assessment, criterion examined states that square root of AVE has to exceed, when compared with all other correlated constructs. Researcher has also been accompanied AMOS for running structure equation modeling, which assessed that which hypothesis get accepted or which get rejected through path analysis of structure model.

5. Results and Analysis

The description here indicates that there have been 124 male participants and 177 female participants. The total number of participants were 301. The education chart shows the education levels of the participants. The table 1 shows that most of the participants had post-graduate education level. The above table shows that most of the participants were in the age between 31 and 40.

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	SD	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
FinanPerf	301	1.00	5.00	3.5914	1.07946	-.891	.140
AccInfo	301	1.00	5.00	3.5548	1.13170	-.756	.140
AdvInfo	301	1.00	5.00	3.5872	1.10796	-.831	.140
NeuInfo	301	1.00	5.00	3.5814	1.07414	-.864	.140
CEOFinLit	301	1.00	5.00	3.4516	1.10458	-.614	.140
Valid N (listwise)	301						

The first output of the analysis shows the descriptive statistics including all the variables of the study. This table above explains the description of the respondents that participated for this research purpose. The table above implies that there had been no outliers in detection. The results indicate that the distribution of this sample has been normal (table 2).

Table 2. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.937
Bartlett's Test of Sphericity	Approx. Chi-Square	11672.739
	df	496
	Sig.	.000

The KMO is conducted to check the sampling competence and for that the threshold is above 0.7 and below 1 and is 0.937 here depicting adequacy of sample. The Bartlett's test measures how strong is the relationship between the variables chosen for the study. The value for this test in our analysis comes out to be significant (table 3).

Table 3. Rotated Component Matrix

	Component				
	1	2	3	4	5
FP1		.723			
FP2		.771			
FP3		.843			
FP4		.837			
FP5		.826			
FP6		.806			
AC1				.778	
AC2				.821	
AC3				.820	
AC4				.813	
AD1			.803		
AD2			.835		
AD3			.872		
AD4			.796		
NE1					.770
NE2					.812
NE3					.801
NE4					.787
FL1	.843				
FL2	.850				
FL3	.861				
FL4	.890				
FL5	.883				
FL6	.875				
FL7	.853				
FL8	.841				
FL9	.866				
FL10	.853				
FL11	.811				
FL12	.837				
FL13	.867				
FL14	.876				

Here all the variables have loading higher than the threshold which is 0.7 in this case, therefore, there has been no overlapping of the factors and there has been no cross-loading as well (table 4).

Table 4. Convergent and Discriminant Validity

	CR	AVE	MSV	MaxR(H)	FL	AC	FP	AD	NI
FL	0.920	0.779	0.244	0.981	0.883				
AC	0.938	0.791	0.373	0.985	0.387	0.889			
FP	0.945	0.743	0.366	0.988	0.494	0.605	0.862		
AD	0.937	0.787	0.354	0.990	0.442	0.595	0.529	0.887	
NI	0.919	0.740	0.373	0.991	0.494	0.611	0.567	0.533	0.860

Looking at the values of the composite reliability, we can comprehend that the variables are related with one another in reality. Furthermore, the average variance extracted value are also greater than the critical value which is 0.5. Also, the results for the discriminant validity imply that the variables hold divergent rationality.

Table 5. Confirmatory Factors Analysis

Indicators	Threshold range	Current values
CMIN/DF	Less or equal 3	2.338
GFI	Equal or greater .80	.830
CFI	Equal or greater .90	.946
IFI	Equal or greater .90	.947
RMSEA	Less or equal .08	.068

This table 5 above implies that the model fit is really good. The value for CMIN/DF value is 2.3 which indicates the good model fit. The other indicators also have the values in accordance with the threshold values of the determinants.

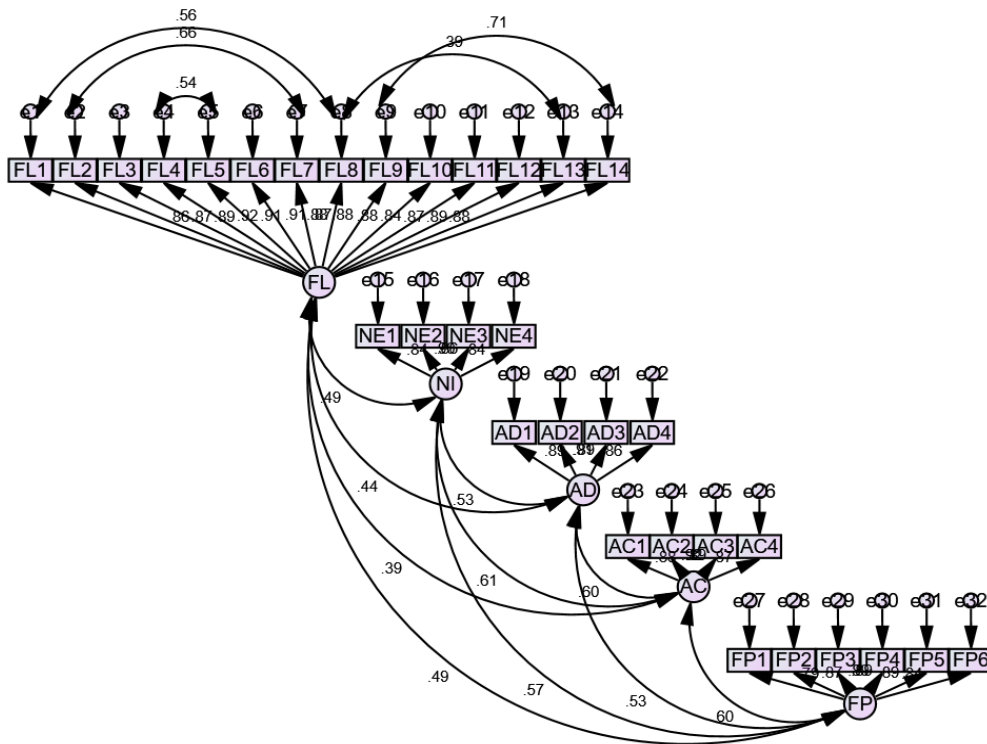


Figure 3. CFA

Table 6. Structural Equation Modeling

Total effect	CEOFinLit	NeuInfo	AdvInfo	AccInfo
NeuInfo	.470***	.000	.000	.000
AdvInfo	.424***	.000	.000	.000
AccInfo	.371***	.000	.000	.000
FinanPerf	.500***	.189**	.152*	.338***
Direct effect	CEOFinLit	NeuInfo	AdvInfo	AccInfo
NeuInfo	.470***	.000	.000	.000
AdvInfo	.424***	.000	.000	.000
AccInfo	.371***	.000	.000	.000
FinanPerf	.221**	.189**	.152*	.338***
Indirect effect	CEOFinLit	NeuInfo	AdvInfo	AccInfo
NeuInfo	.000	.000	.000	.000
AdvInfo	.000	.000	.000	.000
AccInfo	.000	.000	.000	.000
FinanPerf	.278**	.000	.000	.000

The CEO financial literacy has a significant direct effect on the financial performance of an organization. The table 6 and figure 3 and figure 4 b show that one unit increase in the CEO financial literacy can cause an increase of 22% on his financial performance. Therefore, literacy rate has been seen to be impacting the performance level of the CEO. Furthermore, the mediators accounting information, advocate information, and neutral information have been significantly mediating the relationship between the CEO literacy level and his financial performance.

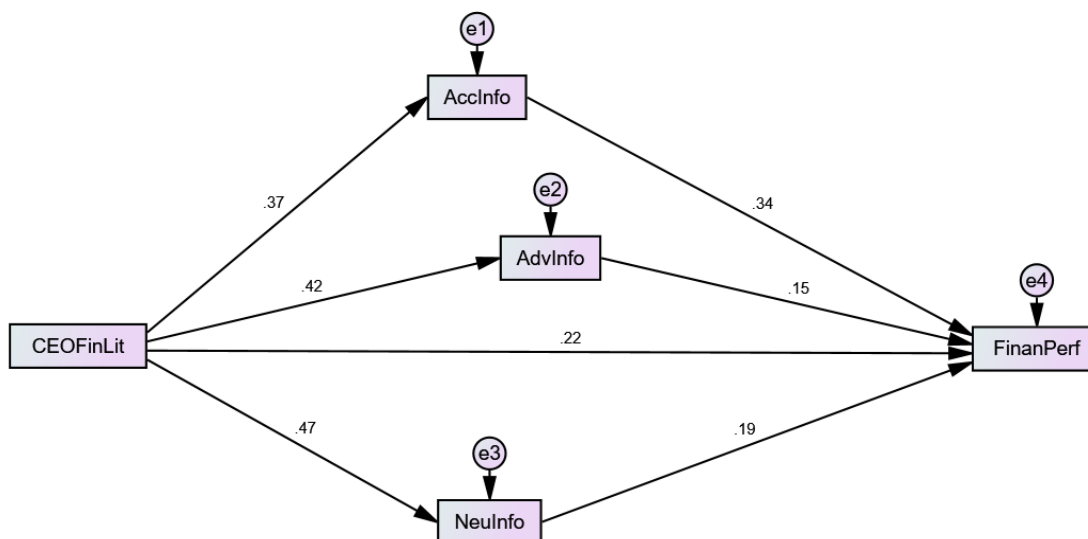


Figure 4. SEM

6. Discussion and Conclusion

Discussion

The primary purpose of the paper is to analyze the impact of financial literacy on the corporate financial performance of the companies through the mediating role of investment decisions. The results and discussion section shows that the data has been collected through 301 individuals. Furthermore, the results show that the first hypothesis such as financial literacy has a significant impact on the financial performance of the companies. The significance value shows that the first hypothesis was accepted. A related study has also concluded that financial literacy has a significant impact on financial performance. The study further found out that financial literacy and the size of the firm had a significant positive influence on the financial performance while the influence of the amount of capital invested had insignificant influence (Hazudin et al., 2018).

The study has also analyzed the mediating effect of neutral information on financial performance. The results also prove that neutral information has a significant mediating role in the relationship between financial literacy and financial performance. Therefore, the second hypothesis of the paper accepted. Another, the hypothesis of the study also accepted. It illustrates that the advocate information at the same time has a significant mediating and positive role in the relationship between CFO financial literacy and financial performance. A related study explained that financial literacy advocacy campaigns successfully raise mainstream awareness, recognize financial education advocates, and promote financial literacy (Kamanga, 2018). Finally, the last hypothesis of the study also accepted. It is shown that besides all other factors, the accounting information has also a significant mediating role in the relationship between CFO financial literacy and financial performance. Another related study illustrates that Financial literacy is important because it equips us with the knowledge and skills we need to manage money effectively (Crawford, 2018). This shows that the role of financial literacy has a great role in the financial performance of the companies through the mediating role of other variables.

Implication

The financial literacy produces various outcomes and benefits in the Indonesian sector. The paper revealed that the benefits of financial literacy on personal financial performance includes Financial satisfaction, better management of personal finances, substantial returns, money management, budgeting and record-keeping, retirement planning

and debt management. The implications of the study illustrate that financial literacy helps in enhancing the financial performance of the companies in a positive way. Financial literacy enhances knowledge, accounting information, advocate information, neutral information (Kanojia, Singh, & Goswami, 2018). This information affects the financial performance of companies in a significant way.

Limitation/Recommendations

This research was designed to determine the role of financial literacy on the financial performance of the companies in Indonesia through the mediating role of accounting information, advocate information and neutral information. After reviewing the varied responses, gaps that were outside the scope of this research have emerged. The very first limitation of the research is the sample size. The sample size is very small. The research may be more effective and significant if the sample size is great. The sample size should be 400-500. Moreover, the research does not illustrate the effect of financial literacy on financial performance. Future research must be conducted in a particular sector, industry, and sector. The research can be conducted in a financial sector that will significantly help to analyze the impact of financial literacy on performance.

Conclusion

The research study consists of identifying the role of financial literacy and financial knowledge on the performance value of the companies in Indonesia. The primary objective of the paper is to identify the impact of financial literacy on financial performance through a mediating role of three variables. The total sample size of the study was 301 from 177 females and 124 males. The data analysis through applied different tests such as KMO and Bartlett's Test and other related tests. The results of the tests show that all hypotheses accepted. The financial literacy has a significant impact on the financial performance of the companies.

References

- Abraham, C., & Sheeran, P. (2017). Implications of goal theories for the theories of reasoned action and planned behavior. In *Planned Behavior* (pp. 101-122): Routledge.
- Adams, K., Debrah, Y. A., Williams, K., & Mmieh, F. (2015). Why on earth should foreign banks invest in Africa's financial services sector? Evidence from financial multinationals in Ghana. *Thunderbird International Business Review*, 57(6), 445-462. <https://doi.org/10.1002/tie.21691>
- Agyei, S. K. (2018). Culture, financial literacy, and SME performance in Ghana. *Cogent Economics & Finance*, 6(1), 1463813. <https://doi.org/10.1080/23322039.2018.1463813>
- Ahmed, Z., Ramakrishnan, S., & Noreen, U. (2017). Financial Literacy as Competitive Advantage for Individual Investors' Decision Making. *Advanced Science Letters*, 23(9), 8988-8993. <https://doi.org/10.1166/asl.2017.10009>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Ajzen, I. (2015). Consumer attitudes and behavior: The theory of planned behavior applied to food consumption decisions. *Rivista di Economia Agraria*, 70(2), 121-138. <https://doi.org/10.13128/REA-18003>

- Alfraih, M. M., Alanezi, F. S., & Alanzi, K. A. (2015). Do the characteristics of the board of directors affect the value relevance of accounting information? *International Journal of Accounting and Finance*, 5(2), 172-187. <https://doi.org/10.1504/IJAF.2015.071843>
- Arif, K. (2015). Financial Literacy and other Factors Influencing Individuals' Investment Decision: Evidence from a Developing Economy (Pakistan). *Journal of Poverty, Investment and Development: An International Peerreviewed Journal*, 12, 74-84.
- Arthur, C. (2016). Financial literacy education as a public pedagogy: Consumerizing economic insecurity, ethics and democracy. In *International Handbook of Financial Literacy* (pp. 113-125): Springer.
- Asaad, C. T. (2015). Financial Literacy and Financial Behavior: Assessing Knowledge and Confidence. *Financial Services Review*, 24(2), 101-117.
- Asif, M., Arif, K., & Akbar, W. (2016). Impact of accounting information on share price: Empirical evidence from Pakistan stock exchange. *International Finance and Banking*, 3(1), 124-135. <https://doi.org/10.5296/ibf.v3i1.9323>
- Chen, E., & Gavius, I. (2016). Complementary relationship between female directors and financial literacy in deterring earnings management: The case of high-technology firms. *Advances in accounting*, 35, 114-124. <https://doi.org/10.1016/j.adiac.2016.06.001>
- Chiu, H., Fischer, D., & Friedman, H. (2019). Board Diversity in Audit and Finance Committees: A Case Study of Coca-Cola, Diversity within Diversity Management: Types of Diversity in Organizations (pp. 95-113): Emerald Publishing Limited. <https://doi.org/10.1108/S1877-636120190000022006>
- Crawford, S. (2018). The Factors Influencing Interest, Processing, and Application of Financial Literacy Education as Perceived by Students in an Urban College Setting. *Educational Doctoral*, Paper 367.
- De Leeuw, A., Valois, P., Ajzen, I., & Schmidt, P. (2015). Using the theory of planned behavior to identify key beliefs underlying pro-environmental behavior in high-school students: Implications for educational interventions. *Journal of Environmental Psychology*, 42, 128-138. <https://doi.org/10.1016/j.jenvp.2015.03.005>
- Deepak, C., Singh, P., & Kumar, A. (2015). Financial literacy among investors: theory and critical review of literature. *International Journal of Research in Commerce, Economics & Management*, 5, 99-103.
- Eniola, A. A., & Entebang, H. (2016). Financial literacy and SME firm performance. *International Journal of Research Studies in Management*, 5(1), 31-43. <https://doi.org/10.5861/ijrsm.2015.1304>
- Estelami, H. (2016). Cognitive drivers of suboptimal financial decisions: Implications for financial literacy campaigns. In *Financial Literacy and the Limits of Financial Decision-Making* (pp. 10-25): Springer. https://doi.org/10.1007/978-3-319-30886-9_2
- Fitri, H., Elmanizar, Nugraha, A. T., Yakub, A., & Cahyono, B. P. (2019). The Application of Agency Theory in Supply Chain Finance: A Case of Indonesian Manufacturing Firms. *International Journal of Supply Chain Management*, 8(3), 23-32.
- Friede, G., Busch, T., & Bassen, A. (2015). ESG and financial performance: aggregated evidence from more than 2000 empirical studies. *Journal of Sustainable Finance & Investment*, 5(4), 210-233. <https://doi.org/10.1080/20430795.2015.1118917>
- Frydman, C., & Camerer, C. F. (2016). The psychology and neuroscience of financial decision making. *Trends in cognitive sciences*, 20(9), 661-675. <https://doi.org/10.1016/j.tics.2016.07.003>
- Galdeano, D., Ahmed, U., Fati, M., Rehan, R., & Ahmed, A. (2019). Financial performance and corporate social responsibility in the banking sector of Bahrain: Can engagement moderate?. *Management Science Letters*, 9(10), 1529-1542. <http://dx.doi.org/10.5267/j.msl.2019.5.032>
- Gerasimov, V., Sharafutdinov, R., Kolmakov, V., Erzinkyan, E., Adamenko, A., Vasilyeva, A. (2019). Control in the human capital management system in the strategy of innovative development of a region, *Entrepreneurship and Sustainability Issues*, 7(2), 1074-1088. [http://doi.org/10.9770/jesi.2019.7.2\(20\)](http://doi.org/10.9770/jesi.2019.7.2(20))

- Hambrick, D. C. (2016). Upper echelons theory. *The Palgrave encyclopedia of strategic management*, 1-5.
- Hamza, N., & Arif, I. (2019). Impact of Financial Literacy on Investment Decisions: The Mediating Effect of Big-Five Personality Traits Model. *Market Forces*, 14(1), 43-60.
- Hazudin, S. F., Tarmuji, N. H., Kader, M. A. R. A., Majid, A. A., Aziz, N. N. A., & Ishak, M. (2018). The relationship between previous mathematics performance, and level of financial literacy and financial well-being of university students. In *AIP Conference Proceedings* (Vol. 1974, No.1, p. 05001). AIP Publishing LLC. <https://doi.org/10.1063/1.5041701>
- Haseeb, M., Haouas, I., Nasih, M., Mihardjo, L. W., & Jermittiparsert, K. (2020). Asymmetric impact of textile and clothing manufacturing on carbon-dioxide emissions: Evidence from top Asian economies. *Energy*, 196, 117094. <https://doi.org/10.1016/j.energy.2020.117094>
- Hussain, H.I., Slusarczyk, B., Kamarudin, F., Thaker, H.M.T., Szczepańska-Woszczyna, K. (2020) An Investigation of an Adaptive Neuro-Fuzzy Inference System to Predict the Relationship among Energy Intensity, Globalization, and Financial Development in Major ASEAN Economies. *Energies*, 13, 850. <https://doi.org/10.3390/en13040850>
- Hussain, J., Salia, S., & Karim, A. (2018). Is knowledge that powerful? Financial literacy and access to finance: An analysis of enterprises in the UK. *Journal of Small Business and Enterprise Development*, 25(6), 985-1003. <https://doi.org/10.1108/JSBED-01-2018-0021>
- Jariwala, H. V. (2015). Analysis of financial literacy level of retail individual investors of Gujarat State and its effect on investment decision. *Journal of Business & Finance Librarianship*, 20(1-2), 133-158. <https://doi.org/10.1080/08963568.2015.977727>
- Jonsson, S., Söderberg, I.-L., & Wilhelmsson, M. (2017). An investigation of the impact of financial literacy, risk attitude, and saving motives on the attenuation of mutual fund investors' disposition bias. *Managerial Finance*, 43(3), 282-298. <https://doi.org/10.1108/MF-10-2015-0269>
- Kamanga, T. (2018). *The role of financial literacy in financial inclusion in emerging markets: evidence from South Africa*. Doctoral dissertation, University of Cape Town.
- Kanojia, S., Singh, D., & Goswami, A. (2018). An empirical analysis of the factors influencing individual investors in the Indian Stock market. *Journal of Business and Management*, 20(3), 30, 37. <https://doi.org/10.9790/487X-2003123037>
- Karadag, H. (2015). Financial management challenges in small and medium-sized enterprises: A strategic management approach. *EMAJ: Emerging Markets Journal*, 5(1), 26-40. <https://doi.org/10.5195/emaj.2015.67>
- Khan, N., Latif, K., Sohail, N., & Zahid, Z. (2019). Web Disclosure as Mediating Role in the Relationship Between Paradox of Choice, Investor Experience, Financial Literacy and Investment Decision Making: Evidence From China. *Journal of Accounting and Finance in Emerging Economies*, 5(1), 83-92. <https://doi.org/10.26710/jafee.v5i1.719>
- Khan, N. U., Li, S., Safdar, M. N., & Khan, Z. U. (2019). The Role of Entrepreneurial Strategy, Network Ties, Human and Financial Capital in New Venture Performance. *Journal of Risk and Financial Management*, 12(1), 41 <https://doi.org/10.3390/jrfm12010041>
- Kouaib, A., Jarboui, A., & Mouakhar, K. (2018). CEOs' accounting-based attributes and earnings management strategies under mandatory IFRS adoption. *Journal of Applied Accounting Research*, 19(4), 608-625. <https://doi.org/10.1108/JAAR-04-2017-0051>
- Masnita, Y., Yakub, A., Nugraha, A. T., & Riorini, S. V. (2019). Influence of Government Support, Technology Support and Islamic Banking awareness on Islamic Banking Choice in Indonesia with Moderating Role of Religiosity. *International Journal of Innovation, Creativity and Change*, 6(8), 46-66.
- Mazieres, B., & Boespflug, M. (2017). A Consumer Cooperative between Market and Stakeholder Orientations: The Case of Coop Atlantique, 1912-2016. *Explorations in Globalization and Glocalization: Marketing History through the Ages*.
- Mindra, R., & Moya, M. (2017). Financial self-efficacy: a mediator in advancing financial inclusion. *Equality, Diversity and Inclusion: An International Journal*, 36(2), 128-149. <https://doi.org/10.1108/EDI-05-2016-0040>

- Nasution, A. P., & Sarkum, S. (2019). Strategy for Developing the Local Foundation for Small Business Enterprise in Indonesia: A Review of the Industrial Revolution 4.0. Available at SSRN 3409383. <https://dx.doi.org/10.2139/ssrn.3409383>
- Noordin, N. H., & Kassim, S. (2017). Corporate governance and financial performance: empirical evidence from public listed construction companies in Malaysia. *International Journal of Applied Management Science*, 9(4), 313-334.
- Nugraha, A. T., & Hakimah, Y. (2019). Role of Relational Capabilities on the Supply Chain Performance of Indonesian Textile Sector with Moderating Effect of Technology Adoption. *International Journal of Supply Chain Management*, 8(5), 509–522
- Purnomo, B. R. (2019). Artistic orientation, financial literacy and entrepreneurial performance. *Journal of Enterprising Communities: People and Places in the Global Economy*, 13(1/2), 105-128. <https://doi.org/10.1108/JEC-09-2018-0065>
- Ripain, N., Amirul, S. M., & Mail, R. (2017). Financial literacy and SMEs' potential entrepreneurs: The case of Malaysia. *Journal of Administrative and Business Studies*, 3(2), 60-68. <https://doi.org/10.20474/jabs-3.2.1>
- Rivera, J. M., Muñoz, M. J., & Moneva, J. M. (2017). Revisiting the relationship between corporate stakeholder commitment and social and financial performance. *Sustainable Development*, 25(6), 482-494. <https://doi.org/10.1002/sd.1664>
- Roslan, N., Pauzi, N. F. M., Ahmad, K., Shamsudin, A., Karim, M. S., & Ibrahim, S. N. S. (2018). Preliminary Investigation: Accounting Literacy Among Small Business Owners. *International Journal of Academic Research in Business and Social Sciences*, 8(10), 32-47. <http://dx.doi.org/10.6007/IJARBS/v8-i10/4709>
- Scafarto, V., & Dimitropoulos, P. (2018). Human capital and financial performance in professional football: the role of governance mechanisms. *Corporate Governance: The International Journal of Business in Society*, 18(2), 289-316. <https://doi.org/10.1108/CG-05-2017-0096>
- Steiner-Khamsi, G., Appleton, M., & Vellani, S. (2018). Understanding business interests in international large-scale student assessments: a media analysis of The Economist, Financial Times, and Wall Street Journal. *Oxford Review of Education*, 44(2), 190-203. <https://doi.org/10.1080/03054985.2017.1379383>
- Sulaiman, N. (2016). The impact of financial knowledge and capabilities on SME firm performance in Australia. Doctoral Thesis, RMIT University.
- Volonté, C., & Gantenbein, P. (2016). Directors' human capital, firm strategy, and firm performance. *Journal of Management & Governance*, 20(1), 115-145. <https://doi.org/10.1007/s10997-014-9304-y>
- Xiao, J. J., & Porto, N. (2017). Financial education and financial satisfaction: Financial literacy, behavior, and capability as mediators. *International Journal of Bank Marketing*, 35(5), 805-817. <https://doi.org/10.1108/IJBM-01-2016-0009>
- Yadav, R., & Pathak, G. S. (2017). Determinants of consumers' green purchase behavior in a developing nation: Applying and extending the theory of planned behavior. *Ecological Economics*, 134, 114-122. <https://doi.org/10.1016/j.ecolecon.2016.12.019>

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