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# The Mediating Effect of Access to Capital in the Impact of Financial Literacy and Financial Inclusion on SME Sustainability

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### **Abstract**

This study aims to examine the mediating role of access to capital in the impact of financial literacy and financial inclusion on SME sustainability. The object of the study is SMEs in Bali operating in the fashion sector. The total sample consisted of 277 SME leaders. Data was collected using a questionnaire tested with PLS-SEM. The results showed a significant and direct influence of financial literacy and financial inclusion on access to capital. Meanwhile, neither financial literacy nor financial inclusion by itself has a significant effect on SME sustainability. Only access to capital has a significant impact on SME sustainability. However, our findings show that access to capital can play a significant role in mediating the impact of financial literacy and financial inclusion on SME sustainability. In the context of SMEs, the results of the current study will be of particular interest to businesses focusing on fashion, showing that access to capital is an essential pillar in addition to financial literacy and inclusion. Access to capital is used as a mediating variable in the model for SME sustainability, whereas previous papers only focused on the influence of financial inclusion and financial literacy on SME sustainability. Including access to capital provides greater research insight. Our results show that, to develop, SMEs must foster financial management and instill technological knowledge to facilitate access to information on financial institution services.

Keywords: access to capital, financial literacy, financial inclusion, SME sustainability

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# Introduction

The rapidly developing economies and high profitability of emerging markets provide opportunities for small and medium enterprises (SMEs) to become more competitive in domestic and global markets [1; 2]. Strong SMEs can support holistic national industrial development [3]. SMEs are able to drive the inclusive growth of the gross domestic product (GDP) [4], as well as contributing to wealth distribution, job creation, value-added productivity, technological progress, poverty reduction, innovation, and the social safety net [5-7]. The development of SMEs in Indonesia initially experienced stagnation yet became more successful after weathering various obstacles, including a monetary crisis [8]. However, SMEs in developing markets still face many difficulties such as inadequate banking financial facilities, limited capital, suboptimal financial knowledge, and insufficient capacity to explore new financial products [9]. In particular, weak financial literacy is a problem for SMEs in more developed financial markets, making it necessary for regulators to elaborate and evaluate financial literacy policies. Financial literacy refers to the ability of SMEs to apply financial products available in the market for making appropriate financial decisions [10]. Financial literacy should be seen as a fundamental aspect and universal need rather than a privilege of a small number of consumers with access to financial knowledge [11]. To overcome this problem, many institutions are working to provide maximum financial facilities to help SMEs improve and develop [12].

So far, SMEs in emerging markets have lacked financial management skills, which has had a serious impact on SME sustainability. Cowling et al. [13], Fraser et al. [14], and Lusardi [15] reveal that the financial crisis experienced by some countries in the past decade has increasingly disrupted the flow of debt and equity to SMEs. Sahibzada & Mumtaz [16] explain that there is a growing interest in the knowledge-based view (KBV) of organizational performance. KBV is a company strategy for achieving competitive advantage [17]. KBV can improve organizational performance by pooling collective knowledge resources [18]. The KBV concept also emphasizes the need for a company to integrate individual intellectual and organizational knowledge into its products and services. Organizations with large resources tend to obtain knowledge by observing their competitors. From the sustainability perspective, knowledge is a vital resource that is difficult to transmit socially [19; 20]. In particular, there is still little discussion about the use of knowledge resources to stimulate SME performance.

The manufacturing industry is a key sector of economic development. One of the commodities in demand by generations of consumers is fashion. In the past, fashion was seen as a luxury item intended only for select groups. In fact, fashion is not only a necessity but also part of the individual lifestyle, which allows people to choose a clothing style according to the latest fashion. The majority of Indonesian SMEs in the fashion sector manufacture cre-

ative and innovative products [21]. The fashion industry, especially accessories, dominates the Indonesian market, becoming a new domestic economic force that is driving the creative economy. In 2023, the Cooperatives, Small and Medium Enterprises Service of Bali Province [22] reported that there was a total of 439,382 SMEs in Bali Province, divided into the following four groups: 258,896 sales enterprises (58.9%), 73,641 agricultural industrial enterprises (16.8%), 67,102 non-agricultural industrial enterprises (15.3%), and 39,743 service enterprises (9%). In this classification, fashion SMEs are ranked as sales and service enterprises. Bali Province has 154,227 fashion SMEs, which represent 51.6% of the total number of sales and service SMEs. Fashion SMEs, which are mostly in the clothing sales cluster, offer products that are not only functional but also decorative, indicating the individual's social rank or status. Developments in the fashion sector are often presented in fashion shows at festivals and competitions. The fashion trend in Bali is influenced by modernization, the culture of other countries, and new technologies providing rapid access to information. In general, fashion SMEs are highly dependent on the available resources, including raw materials [23].

Financial literacy allows entrepreneurs to manage risk through different strategies such as maintaining financial reserves, diversifying the investment portfolio, and purchasing insurance. Financial literacy is rightly considered as one of the main factors of SME sustainability [24]. Mabhanda [25] identifies the lack of financial literacy as a common difficulty for SMEs. Poor financial literacy impacts budding enterprises as well as being one of the primary causes of SME failure [26]. Although the importance of financial literacy has been proven empirically, few studies have treated the impact of financial literacy and financial inclusion on SME sustainability. According to the dual process theory (DPT) in financial decisions, individuals with high financial literacy are influenced by intuition and cognitive processes. Nohong et al. [27] shows that financial literacy helps individuals (in this case, entrepreneurs) to take advantage of competitive financial markets by applying risk management skills they understand. Lusardi & Mitchell [28] and Reich & Berman [29] explain that financial literacy allows managers to address the root of the problems they are facing, enabling their SMEs to respond to uncertainty in business and financial markets. Generally speaking, financial literacy has both a direct and an indirect effect on the sustainability of SMEs [30]. In many developed countries, the SME sector views financial literacy as a foundation for fostering sustainability [31].

The research goal of the present study is to investigate the interaction between financial literacy, financial inclusion, and access to capital in the fashion SME sector. Both financial literacy and financial inclusion are predicted to have a direct influence on both access to capital and SME sustainability, as well as influencing SME sustainability indirectly through access to capital. Our results provide new insights into the mechanisms of access to capital as a driving force of SME sustainability alongside financial literacy and fi-

nancial inclusion. Good financial literacy and financial inclusion make it easier for fashion SMEs to gain access to capital.

# **Literature Review and Hypothesis Development**

In the literature, financial literacy is articulated as cognitive abilities and knowledge in managing finances and making decisions for resolving financial problems [32]. Financial literacy represents the individual's ability to make effective assessments and funding decisions [33]. For entrepreneurs, financial literacy is a key skill. SMEs draw upon financial literacy for evaluating financial affairs and making financial decisions. Financial literacy helps them to address challenges and benefit from opportunities in the credit market. Johan et al. [34], Mitchell & Lusardi [35] and Nahar et al. [36] highlight that individuals with poor education or knowledge are unable to design sound financial policies or obtain access to credit services. Although there are questions regarding the effectiveness of financial education in increasing financial literacy, a positive relationship exists between financial knowledge and access to credit [37]. Financial knowledge can increase the chances of success in obtaining capital loans [38]. This leads to our first hypothesis:

**Hypothesis 1:** Financial literacy affects access to capital.

One measure of organizational skill is the ability to manage resources [39]. The availability of strategic resources such as access to financing influences the decisions made by managers. Financial inclusion provides opportunities for SMEs to improve their standing [40] and for financial service providers to offer services, gain profits, and attract new customers. Financial inclusion does not mean that companies must utilize the available resources or that providers should ignore risks and other costs when offering services but only refers to conditions where financial services are available to those who need them through affordable fee schemes [41]. The level of financial literacy of SME owners and its influence on demand for financial services, where although the literacy of SME owners has a relatively simple financial management structure, financial literacy plays a role in supporting the use of financial services [42]. In line with these findings, financial literacy can help SMEs to gain access to capital [43; 44]. Thus, we formulate our second hypothesis as follows:

**Hypothesis 2:** Financial inclusion affects access to capital.

The resource-based view (RBV) emphasizes that organizational value and competitive advantage depend on physical and non-physical resources [45]. Companies need a variety of complex knowledge resources to maintain competitive advantage [46]. Intellectual capital is positively related to organizational sustainability [47]. According to the KBV approach, financial literacy is a source of knowledge that determines SME sustainability. Technically, financial literacy is key in the value creation process for SMEs, ensuring their sustainable performance [48].

Some studies conclude that the relation between financial literacy and organizational value is positive [49–52]. Companies with a good level of financial understanding are able to adapt to strategic problems in the financial sector to maintain their performance [53]. Financial literacy is a vital instrument for the survival of SMEs [54]. Low financial literacy leads to mistakes in financial management [28]. Financial literacy is also needed to face economic challenges [53]. Ouachani et al. [55] reveal that individuals with good financial knowledge are better able to plan investments effectively. Basically, financial literacy is positively correlated with company performance [56], including wealth accumulation [57]. Talking about financial literacy capacity, its role as a consideration in organizational decision making and determining long-term planning is very essential [58; 59]. Companies with good financial literacy have sound financial management. Furthermore, financial literacy has a positive effect on SME sustainability [60]. This leads to our third hypothesis:

**Hypothesis 3:** *Financial literacy affects SME sustainability.* 

According to the RBV approach, a company can achieve competitive advantage if it is supported by valuable and unique resources that are applicable in the work environment [61]. The SME network has a broad impact on prosperity because people have the opportunity to do business even with limited capital. One way to overcome capital shortage is to implement financial inclusion. Chen & Yuan [62] and Dienillah et al. [63] define financial inclusion as equality and availability of opportunities in accessing financial services, including: (1) credits, (2) savings, (3) insurance, (4) payments, and (5) equity. This provides customers with comfort, affordability, suitability, and guarantee of protection. SME sustainability is influenced by financial inclusion [64; 65]. We thus advance our fourth hypothesis:

**Hypothesis 4:** Financial inclusion affects SME sustainability.

One of the main obstacles to SME sustainability is access to capital. Emerging markets with weak financial systems are marked by a poor allocation of financial resources among business organizations [66-68]. Access to capital refers to the availability of financial services, including (1) savings, (2) loans, (3) instalments, and (4) insurance [69]. Companies that are adept at obtaining financial services can receive strong access to capital to meet organizational needs [70]. Overall, SMEs often start from personal financial resources, with family members and relatives providing capital loans in return for a share in the business. As SMEs develop, they need ever greater financial resources to expand, make a profit, and ensure the survival of the company [24]. The use of different methods for creating multicomponent financial literacy has been discussed in recent years. Bajaj & Kaur [71] identify three clusters in the concept of financial literacy: financial behaviour, financial knowledge, and financial attitudes. In the Indian context, these three clusters serve as multidimensional insights that have a significant correlation with each other and combine to form a con-

struct for validating financial literacy based on confirmatory factor analysis (CFA). To promote financial literacy for the younger generation, Folke et al. [72] developed a system called Assessment of Economic and Financial Literacy (ASSET). This measurement has better predictive power and flexibility than other current measurements. With the implementation of ASSET, the ability of the younger generation from across socio-economic statuses and gender will increase in making financial literacy decision. To measure financial literacy, it is necessary to consider multidimensional poverty, including gender, marital status, type of work, and educational background [73]. A fuzzy approach was adopted to raise the level of financial sophistication among employees at the Israeli Central Bureau of Statistics. Rieger [74] studied financial literacy extensively and mapped financial decision measurement instruments, especially stock investments. So far, empirical issues in financial literacy have had little relevance, so they are often overlooked. Financial literacy is crucial for analysing stock investment decisions. Item Response Theory (IRT) and the Graded Response Model (GRM) have been introduced to build sustainable financial literacy. These two scenarios contribute to a complex measure of financial literacy [75]. In turn, IRT and GRM can improve the three dimensions proposed by the Organization for Economic Co-operation and Development (OECD) - financial behaviour, financial attitudes, and financial education - to raise the level of financial literacy of individuals in Brazil.

Some publications document the importance of financial access for SME sustainability. For example, Shepherd et al. [76] find that access to capital is key to building sustainable SME performance. A resilient organization is an organization that has good access to capital. Such organizations are better able to enter the market, expand entrepreneurial activities, increase all-around innovation, and improve risk

management skills [77]. Through credit facility policies with low interest rates, SMEs have the opportunity to get stable access to finance and work better [78]. Financial resources balanced with quality circular economy initiatives can generate business independence [79]. This leads to the following hypotheses:

**Hypothesis 5:** *Access to capital affects SME sustainability.* 

**Hypothesis 6:** Financial literacy mediated by access to capital affects SME sustainability.

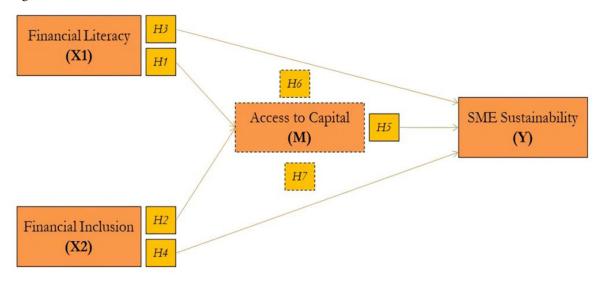
**Hypothesis 7:** Financial inclusion mediated by access to capital affects SME sustainability.

## **Research Methods**

### **Variables**

We observed four variables: 1) financial literacy; 2) financial inclusion; 3) access to capital; and 4) SME sustainability. There are two channels of direct influence: a) financial literacy and financial inclusion on access to capital; and b) financial literacy, financial inclusion and access to capital on SME sustainability. On the other hand, there is an indirect influence of financial literacy and financial inclusion on SME sustainability through access to capital. In the first path, financial literacy and financial inclusion are exogenous variables, while access to capital is an endogenous variable. In the second path, financial literacy, financial inclusion and access to capital are exogenous variables with SME sustainability as the endogenous variable. In the third path, access to capital is a mediating variable that links the exogenous variables (financial literacy and financial inclusion) with the endogenous variable (SME sustainability). Figure 1 shows the exogenous variables (X1 and X2), the endogenous variable (Y), and the mediating variable (M).

Figure 1. Model framework



Source: Compiled by the authors.

Table 1 summarizes the variables and measurements. The four variables have a total of 34 dimensions. Financial literacy includes the following 14 dimensions: 1) knowledge; 2) budget preparation; 3) credit decision behaviour; 4) attitude towards risk; 5) prudence; 6) confidence; 7) experience; 8) effectiveness of financial management; 9) understanding; 10) adaptiveness; 11) financial performance; 12) cash flow; 13) coaching; and 14) skills. Financial inclusion consists of nine dimensions: 1) strategic location; 2) awareness; 3)

accessibility; 4) excellence; 5) online services; 6) commitment; 7) priority; 8) account maintenance affordability; and 9) service performance. Access to capital is measured through four dimensions: 1) convenience; 2) flexibility; 3) suitability of capital; and 4) regulations and credit guarantees. Finally, there are seven dimensions of SME sustainability: 1) organizational growth; 2) increased turnover; 3) profit prospects; 4) marketing methods; 5) emotional ties; 6) employee competence; and 7) work environment.

Table 1. Study variables

X1.1: Have basic accounting knowledge X1.2: Preparation of monthly shopping budget X1.3: Be careful when deciding on credit X1.4: Courage to take risks X1.5: Able to reduce financial risks X1.6: Confidence in achieving targets  Financial literacy X1.7: Experience in managing finances  [80–83]
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X1.9: Understand the flow and requirements as a creditor
X1.10: Adaptive in using financial services
X1.11: Continuous financial performance analysis
X1.12: Compile cash flow per day
X1.13: Regular employee coaching
X1.14: Skills in managing savings, credit and investments
X2.1: Strategic location of financial institutions
X2.2: Awareness of banking product services
X2.3: Financial services are easy to access
X2.4: Superior financial institution services
Financial inclusion (X2) X2.5: Online-based financial services [84; 85]
X2.6: Commitment to providing financial services
X2.7: The priority of the bank's financial services is to help SMEs
X2.8: Affordable account maintenance fees
X2.9: Optimal banking service performance
M.1: Ease of accessing financial service information
M.2: Flexibility for SMEs to access credit according to business size
Access to capital M.3: Suitability of capital requirements from the provider institution [86–88] with the required capacity
M.4: Credit regulations and guarantees regarding credit application limits according to procedures
Y.1: Efforts to accelerate organizational growth
Y.2: Increase in turnover over time
Y.3: Promising business profit prospects SME Sustainability  Y.4. M. A. M. M. A. M. M. A. M. M. A. M. M. A. M. M. A. M. A. M. M. M. A. M.
' Y 4. Marketing methods affract consumers
(Y) Y.5: Strong emotional bond with customers
Y.6: Have competent employees
Y.7: Conducive work environment

## **Materials and Data Analysis**

This study focuses on fashion SMEs in Bali. Data was collected by surveying companies using questionnaire techniques. The interview process was held offline. The informants were categorized as SME owners. The data population was 154,227 units, of which 277 were confirmed as SME leaders. Convenience sampling was designed to take non-probability samples according to appropriate criteria, with a total of 277 samples involved in data collection. Convenience sampling is part of inferential statistics, which determines samples from the closest population. Through convenience sampling, studies can select sample characteristics based on ease of access, involving such practical considerations as saving time and costs. Factors that influence the use of convenience sampling include geographic proximity, availability at a particular time, and willingness to participate. This helps to select respondents from the database (in this case, fashion SMEs) to be contacted and interviewed directly. The informants' perceptions or statements were expressed on a Likert scale with the following four values: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. Sampling locations covered eight districts (Badung, Bangli, Buleleng, Gianyar, Jembrana, Karangasem, Klungkung, and Tabanan) and one city (Denpasar). Data tabulation used partial least squares structural equation modeling (PLS-SEM). The PLS-SEM approach was visualized with two software packages: SmartPLS and SPSS. Before testing the hypotheses, the data was first analysed using the following five procedures: (1) CFA, (2) validity, (3) reliability, (4) multicollinearity, and (5) structural model evaluation.

Following Ariani et al. [94], the partial least squares approach (in this case PLS-SEM) was chosen over principal component analysis (PCA) for six reasons: 1) Focuses on observing small samples and optimizing comprehensive statistical output; 2) Can handle many independent variables, even when multicollinearity occurs; 3) More flexible and robust in dealing with different data; 4) Produces models that are analysed in a complex manner; 5) Appropriate for use when prediction is the focus of the study; and 6) Allows data which does not meet the normal distribution to be estimated. Specifically, the main difference between PLS and PCA is that PLS can handle many independent variables, whereas PCA is unsupervised [95; 96]. PLS is applied based on correlation, while PCA does not consider the correlation between the dependent and independent

variables. In other words, PLS creates a composite variable by also taking the dependent variable into account and so has a greater correlation with the response than PCA. Furthermore, this study opts for PLS over OLS, because PLS can process models with many factors, while OLS is used to find minimal deviations or errors. The PLS method provides more stable results than OLS in the case of small samples, missing data values, or multicollinearity. PLS is able to handle many independent variables even in the presence of multicollinearity [97]. In general, PLS is a technique that combines the advantages of principal component analysis and multiple regression.

Although PCA is different from PLS, this study involves a component of PCA called the variance inflation factor (VIF). VIF is a modification of the PCA method that is used to overcome multicollinearity problems. VIF also aims to reduce data dimensions that are correlated with each other into data dimensions that are not correlated with certain variables. VIF shows whether there exists a correlation problem between the main component variables. Multicollinearity testing was operated with the Statistical Package for the Social Sciences (SPSS)...

# **Findings and Discussion**

## Demographics

Our sample comprised 277 owners or leaders of fashion SMEs (Table 2). The informants had the following age makeup in the order of descending percentage: 36-45 years old (40.1%), 25-35 years old (27.1%), 46-55 years old (21.3%), >55 years old (10.1%), and <25 years (1.4%). In terms of gender, 62.8% of the informants were women and 37.2% were men. The informants' educational background is directly related to the ability of SME managers to operate their business. More than half of the informants (51.3%) had a university diploma or bachelor's degree, while the rest had finished high school (21.7%), a master's programme (13%), junior high school (10.1%), or a doctoral programme (4%). In terms of geography, the majority of SMEs were located in Denpasar (20.6%). The locations of other fashion SMEs included Badung (16.2%), Jembrana (13%), Gianyar (11.9%), Bangli (10.5%), Tabanan (9%), Buleleng (7.2%), Karangasem (6.5%), and Klungkung (5.1%). Denpasar is the predominant location of fashion SMEs, because it is the capital of Bali Province and the centre of Bali's historical civilization with an international reputation.

**Table 2.** Profile of informants, N = 277

Demographics	Qualification	Frequency	Percent
	Less than 25 years old	4	1.4
Age	25 to 35 years old	75	27.1
	36 to 45 years old	111	40.1
	46 to 55 years old	59	21.3

Demographics	Qualification	Frequency	Percent 10.1	
Age	Over 55 years old	28		
Condon	Male	103	37.2	
Gender	Female	174	62.8	
	Junior high school	28	10.1	
	Senior high school	60	21.7	
Educational background	University or bachelor's degree	142	51.3	
	Master's degree	36	13	
	Doctoral	11	4	
	Badung	45	16.2	
	Bangli	29	10.5	
	Buleleng	20	7.2	
	Gianyar	33	11.9	
SME location	Jembrana	36	13	
	Karangasem	18	6.5	
	Klungkung	14	5.1	
	Tabanan	25	9	
	Denpasar	57	20.6	
	Men's and women's clothing	66	23.8	
	Traditional costume rental	25	9	
	Accessories and jewellery	94	33.9	
Product	Bags	19	6.9	
	Shoes	25	9	
	Fashion designer services	41	14.8	
	Hair and make-up stylist	7	2.5	
	Less than 3 years	54	19.5	
Operational experience	3 to 6 years	123	44.4	
	Over 6 years	100	36.1	
I ah ayun famaa	6 to 19 employees	185	66.8	
Labour force	20 to 99 employees	92	33.2	
	Working capital credit	206	74.4	
Loan type	Investment credit	71	25.6	
	Government bank	87	31.4	
Credit granting institutions	Private bank	51	18.4	
	Village unit cooperative (KUD)	139	50.2	

Source: Field interview.

Well-known Balinese fashion SMEs work in the following areas: accessories and jewellery (33.9%), men's and women's clothing (23.8%), fashion design services (14.8%), shoes and traditional costume rentals (9%), bags (6.9%), and hair and make-up stylists (2.5%). Generally, fashion SME owners have relatively long business experience: 3-6 years (44.4%), > 6 years (36.1%), and < 3 years (19.5%). Like other regions, Bali has special legislation governing SMEs (Law No. 20 of 2008). Survey data shows that the number of employees at fashion SMEs ranges from 6-19 (66.8%) to 20-99 (33.2%). The most common type of loan is working capital (74.4%), followed by investment credit (25.6%). Half of the credits come from KUD (50.2%). The other two lending institutions are government banks (31.4%) and private banks (18.4%). This signals that the success of fashion SMEs in Bali is inseparable from the role of cooperatives as a trusted credit distribution facility that emphasizes convenience.

# **Results**

Table 3 describes the validity scores of each variable dimension. Wijayanti et al. [98] states that the criteria in the validity test use a loading factor with a minimum limit of 60% (> 0.6). If the loading factor score is above 0.6, it can be assumed that the reflective construct is formed by valid dimensions. CFA showed that three dimensions had factor loading scores below the limit (< 0.6): two dimensions of the financial inclusion variable – X2.1 (OL = 0.583) and X2.5 (OL = 0.542) – and one dimension of the SME sustainability variable – Y.7 (OL = 0.471). A total of thirty-one dimensions have loading factor scores above the limit (> 0.6). The dimension with the highest loading score is M.2 (OL = 0.909).

**Table 3.** CFA of dimensions

Variables	Dimensions	Outer loading
	X1.1: Have basic accounting knowledge	.863
	X1.2: Preparation of monthly shopping budget	.793
	X1.3: Be careful when deciding on credit	.877
	X1.4: Courage to take risks	.807
	X1.5: Able to reduce financial risks	.884
	X1.6: Confidence in achieving targets	.767
Financial literacy	X1.7: Experience in managing finances	.844
(X1)	X1.8: Have effective financial management	.630
	X1.9: Understand the flow and requirements as a creditor	.888
	X1.10: Adaptive in using financial services	.820
	X1.11: Continuous financial performance analysis	.815
	X1.12: Compile cash flow per day	.806
	X1.13: Regular employee coaching	.762
	X1.14: Skills in managing savings, credit and investments	.859
	X2.1: Strategic location of financial institutions	.583
	X2.2: Awareness of banking product services	.668
	X2.3: Financial services are easy to access	.654
	X2.4: Superior financial institution services	.609
Financial inclusion (X2)	X2.5: Online-based financial services	.542
iliciusioii (A2)	X2.6: Commitment to providing financial services	.634
	X2.7: The priority of the bank's financial services is to help SMEs	.779
	X2.8: Affordable account maintenance fees	.633
	X2.9: Optimal banking service performance	.742
Access to capital (M)	M.1: Ease of accessing financial service information	.904
	M.2: Flexibility for SMEs to access credit according to business size	.909
	M.3: Suitability of capital requirements from the provider institution with the required capacity	.905
	M.4: Credit regulations and guarantees regarding credit application limits according to procedures	.865

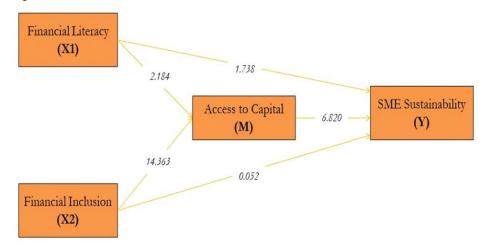
Variables	Dimensions	<b>Outer loading</b>
	Y.1: Efforts to accelerate organizational growth	.770
	Y.2: Increase in turnover over time	.819
	Y.3: Promising business profit prospects	.795
SME Sustainability (Y)	Y.4: Marketing methods attract consumers	.660
, , ,	Y.5: Strong emotional bond with customers	.685
	Y.6: Have competent employees	.630
	Y.7: Conducive work environment	.471

Source: Data computing via SmartPLS.

Next, we calculate the standardized factor loading (SFL), which describes the strength of exogenous variables in forming the model. In this case, the model analyses access to capital and SME sustainability (Figure 2). Ideally, the SFL coefficient should be above 70% (> 0.7). Of the five impacts, four give strong results: financial literacy on

access to capital (SFL = 2.184), financial inclusion on access to capital (SFL = 14.363), financial literacy on SME sustainability (SFL = 1.738), and access to capital on SME sustainability (SFL = 6.820). At the same time, the impact of financial inclusion on SME sustainability has an SFL coefficient below the limit (SFL = 0.052).

Figure 2. CFA of variables



Source: Data computing via SmartPLS.

In PLS, three methods are used for reliability testing: 1) Cronbach's Alpha/CA; 2) Composite Reliability/CR; and 3) Average Variance Extracted/AVE. CA measures the lower limit of the reliability score, CR calculates the actual value of reliability, while AVE checks whether the model has good reliability [99]. To prove the accuracy of the model, both CA and CR must be above 70% (>0.7). In criteria-based reliability, the AVE score must be greater than 50% (>0.5). Low AVE indicates that the model needs improvement. Table 4 displays reliability

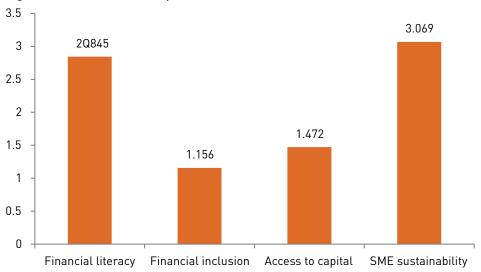
testing results using the three methods. All three tests (CA, CR, and AVE) show that all variables in the model are reliable. The largest CA score was found for financial literacy (CA = 0.962), and the lowest for SME sustainability (CA = 0.875). For the CR method, financial literacy had the highest score (CR = 0.967), while financial inclusion had the lowest (CR = 0.877). Finally, for the AVE method, access to capital received the highest score (AVE = 0.803), and financial literacy the lowest (AVE = 0.690).

**Table 4.** Reliability test

Variables	Cronbach's alpha	Composite reliability	Average variance extracted
Financial literacy	.962	.967	.690
Financial inclusion	.729	.877	.781
Access to capital	.918	.942	.803
SME sustainability	.875	.922	.799

Source: Data computing via SmartPLS.

Figure 3. Statistical collinearity test



Source: Data computing via SPSS.

We use VIF to test for multicollinearity in this study. If this problem is detected, one would have to develop an alternative to overcome multicollinearity in PLS-SEM. VIF is a measure of how correlated a predictor variable is with other variables in the designed model. The value of VIF indicates the degree of multicollinearity as follows: (1) VIF  $\geq$ 10 indicates serious multicollinearity that requires further investigation, (2) VIF ≥ 5 indicates potentially problematic multicollinearity, (3) 1 < VIF < 5 represents moderate correlation and generally acceptable results, and (4) VIF = = 1 indicates there is no correlation between the predictor variable and other variables. From Figure 3, we see that the VIF scores of financial literacy (2.845), financial inclusion (1.156), access to capital (1.472), and SME sustainability (3.069) are all below the threshold (1 < VIF < 5). Thus, the constructed variables may be considered accurate predictors of the model.

We evaluate the model structure by using the R-Square (R2) and Adjusted R-Square coefficients (Table 5). According to Christian et al. [100], these coefficients show whether a model is weak or strong as follows: a model is strong if  $R^2 > 0.67$ , moderate if  $0.66 \ge R^2 \ge 0.33$ , and weak if 0.32 $\geq R^2 \geq 0.19$ . In our case, we find that the models for the impact of financial literacy and financial inclusion on access to capital ( $R^2 = 0.803$ ) and for the impact of financial literacy, financial inclusion and access to capital on SME sustainability ( $R^2 = 0.728$ ) are both strong. The Adjusted  $R^2$ coefficient shows that both models have high determination: Adjusted  $R^2 = 0.800$  for the impact of financial literacy and financial inclusion on access to capital and Adjusted  $R^2 = 0.721$  for the impact of financial literacy, financial inclusion, and access to capital on SME sustainability. Thus, the R<sup>2</sup> scores show that the models for access to capital and SME sustainability are both strong, while the Adjusted R<sup>2</sup> value indicates that the results are influence by 20% other components in the access to capital model and 27.9% in the SME sustainability model.

Table 5. Evaluation of the structural model

Variables	R-square	Adjusted R-square
Access to capital	.803	.800
SME sustainability	.728	.721

Source: Data computing via SmartPLS.

Next, we run empirical hypothesis testing to check whether the proposed model is acceptable or not. Using two PLS-SEMs, we find that six hypotheses are acceptable, while two are not. There is a significant relationship if the T-statistic is above 1.96 (> 1.96) with a probability value below 5% (<0.05). This confirms the first hypothesis that financial literacy has a significant effect on access to capital (T-statistic = 2.184 > 1.96; Prob. = 0.029 < 0.05), as well as the second hypothesis that financial inclusion has a significant effect on access to capital (*T-statistic* = 14.363 > 1.96; *Prob*. = 0.000 < 0.01). However, the third hypothesis is rejected: financial literacy does not have a significant effect on SME sustainability (T-statistic = 1.738 < 1.96; Prob. = 0.083 > 0.05). So is the fourth hypothesis: financial inclusion has an insignificant effect on SME sustainability (T-statistic = 14.363 > 1.96; *Prob.* = 0.000 < 0.01). The remaining three hypotheses are confirmed: for the fifth hypothesis, access to capital has a significant effect on SME sustainability (T-statistic = 6.820 > 1.96; Prob. = 0.000 < 0.01). For the sixth hypothesis, financial literacy has a significant effect on SME sustainability through access to capital (T-statistic = 2.205 > 1.96; *Prob.* = 0.028 < 0.05). For the seventh hypothesis, financial inclusion has a significant effect on SME sustainability through access to capital (*T-statistic* = 5.714 > 1.96; Prob. = 0.000 < 0.01).

Table 6. Summary of hypothesis testing

Hypothesis and linkages	Original sample	Sample mean	Standard deviation	T-statistic	P-value
H1. Financial literacy → Access to capital	.140	.151	.064	2.184	.029*
H2. Financial inclusion → Access to capital	.801	.791	.056	14.363	.000**
H3. Financial literacy → SME sustainability	.158	.164	.091	1.738	.083
H4. Financial inclusion → SME sustainability	.005	009	.089	.052	.959
H5. Access to capital → SME sustainability	.738	.747	.108	6.820	.000**
H6. Financial literacy → Access to capital → SME sustainability	.103	.111	.047	2.205	.028*
H7. Financial inclusion → Access to capital → SME sustainability	.591	.592	.103	5.714	.000**

*Note*: \*\*p < 1% and \*p < 5%.

Source: Data computing via SmartPLS.

As Table 6 shows, access to capital carries out its function as a mediating variable. Financial literacy and financial inclusion cannot ensure SME sustainability without access to capital. By including access to capital in the study model, we show that both financial literacy and financial inclusion can influence the sustainability of fashion SMEs.

The lack of influence of financial literacy on sustainability is due to the high level of finance management skills among fashion SME leaders. Meanwhile, the impact of financial inclusion on sustainability is not significant due to accessibility, such as minimal financial institution unit and weak online financial service systems. In the RBV land-scape, knowledge is seen as a tool for improving organizational performance [14; 19]. KBV also emphasizes the importance of furthering the integration of individual abilities and company knowledge for developing services and products [17]. As shown by Eniola and Entebang [101], Kotzé & Smit [102], and Ye & Kulathunga [24], companies need to implement good communication and partnerships to gain access to capital.

Quantitatively, our results show that an improvement in financial literacy and financial inclusion increases access to capital. Support for adequate access to capital promotes the sustainability of fashion SMEs. Additionally, the positive synergy between financial literacy and financial inclusion in encouraging fashion sustainability through the mediation of access to capital shows that capital access programmes offered by financial institutions are well organized. Their financial services are useful to SMEs, increasing their income. Mutamimah & Indriastuti [103], Bongomin et al. [104], Purwanti & Fatmawati [105], Tubastuvi & Purwidianti [106], and Yakob & Hafizuddin-Syah [107] exam-

ined the relationship between access to capital, financial inclusion, financial literacy and SME performance, leading to five mixed findings: 1) financial inclusion moderated by financial literacy can improve business performance; 2) financial literacy moderates the relationship between access to capital and SME growth; 3) financial inclusion and literacy can improve SME performance; 4) the mediating effect of financial inclusion in the relationship between financial literacy and SME performance is positive; and 5) financial literacy, as measured by financial administration skills, has a positive influence on SME performance.

## **Conclusion**

This study investigated the impact of financial literacy and financial inclusion on access to capital and sustainability of fashion SMEs in Bali. By testing hypotheses with PLS-SEM, we showed that financial literacy and financial inclusion significantly influence access to capital. Furthermore, neither financial literacy nor financial inclusion influences SME sustainability in a significant way. Only access to capital has a direct and significant effect on SME sustainability. Only financial literacy and financial inclusion mediated by access to capital can significantly influence SME sustainability.

Financial literacy and financial inclusion play a role in encouraging the sustainability of fashion SMEs when supported by access to capital. As the statistical results show, access to capital plays a positive role in increasing the sustainability of fashion SMEs and moderates the impact of financial literacy and financial inclusion on the sustainability of fashion SMEs. This suggests that access to capital not

only plays a role in the distribution of working capital loans but is also experiencing a shift in the form of investment credit services. Loans such as investment credits have several benefits for SMEs: 1) increasing income and expanding markets; 2) encouraging efficiency and productivity; 3) maintaining market position; 4) obtaining financial support; (5) improving service quality and products; and (6) strengthening competitiveness.

This study has several practical implications. SME leaders should develop employees through information technology training in the financial sector. Transformations in the field of financial service information can accelerate the transfer of knowledge about inclusion and financial literacy. Good financial literacy and inclusion help financial institutions to gain access to capital. The weakness of this study is that it focuses on one type of SME. For further research, one can consider a larger sample size that would permit comparisons between SMEs working in different areas.

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