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Examining the Interplay of Access to Finance, Financial Literacy, and SMEs Growth: A Comprehensive Analysis

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ABSTRACT

Purpose - In the dynamic and ever-changing global economy, the significance of financial literacy cannot be emphasized enough. As both individuals and businesses maneuver through the intricate financial landscape, the ability to comprehend essential financial concepts and make well-informed decisions becomes paramount for sustained success, particularly for small and medium-sized enterprises (SMEs). In a recent study, the objective was to examine the role of financial literacy as a moderator in the relationship between access to finance and the growth of SMEs.

Design/methodology/approach—The study used primary data taken from Lahore, Pakistan through a well-structured questionnaire. The study took the data from 206 SMEs and employed moderating regression.

Findings—The results showed that financial access has a straight and positive influence on financial growth. Additionally, the findings showed that financial literacy moderates the association between financial access and SME growth.

Limitations/Implications—Policymakers can use insight from this research to design targeted programs and initiatives that enhance financial literacy among entrepreneurs. Findings might be context-specific and not easily generalizable across different industries, regions, or economic conditions. Establishing a direct causal relationship between financial literacy and firm growth can be complex. Other external facts might also affect growth outcomes.

Originality/value —By using the resource-based view, this study highlights the importance of financial literacy for the growth of Pakistani SMEs. It draws SME owners' attention toward financial literacy.

Keywords: Financial literacy, SMEs' growth, Financial Access, Pakistan

1. INTRODUCTION

Small to medium-sized enterprises create employment opportunities and are also important for economic growth and development (Gherghina et al., 2020). Yet in

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developing countries, SMEs have been facing several difficulties, for example, inadequate and delayed banking finance, partial capital resources, lack of financial knowledge, and incompetence of SME owners to ascertain financial products (Samuel Adomako et al., 2016). Financial management is at the heart of organizing a prosperous business. It distresses every single phase, from handling cash flow and chasing firm performance to making investment plans. Skillful financial management is dire for placing plans into practice.

The lack of financial management capabilities of SME owners significantly constrains their growth. It has been cited that SMEs lean towards attracting capable managers, but then again, it's hard for them to contend with bigger firms (O'Donnell et al., 2002). Lack of financial literacy, prevailing mostly in evolving nations, has a significant influence on the growth and evolution of SMEs. Certainly, the aftereffects of different crises related to financial activities in the firms led to a crucial drop in debt and equity finance access to SMEs (Fraser et al., 2015). In literature, various studies have termed the financial enclosure of businesspersons (Lusardi, 2012). Therefore, interest in SME funding and development is important for developing economies (Wehinger, 2014).

Certainly, the investigations relating to SMEs' progression are not limited (Coad, 2007; Mansikkamäki, 2023). Many recent studies are conducted to investigate and identify the level of growth of SMEs (Fabrizio et al., 2021; Lorincová et al., 2021; Batrancea et al., 2022; Nguyen et al., 2022; Park & Byun, 2022). According to (Jasra et al., 2011), the association between access to finance (AF) and firm growth (FG) is very significant. Undoubtedly, financing is the lifeblood of firms' smooth working. Adequate access to finance is needed for the good health of a firm; otherwise, the firm's potential growth will be restricted. Consistent with this orthodox insight, investigators have settled that access to finance and firm growth relationship might be reflected as encouraging (Mushtaq et al., 2022). Like all other decisions, the administrators (managers) are challenged with difficult financing decisions to bump up the wealth of their firms (Cooper et al., 1994). Managers of any firm are consistently engaged in various financial decisions encompassing saving and planning decisions (Ma et al., 2022).

Firms carry out some important responsibilities frequently for getting resources and

then to improve further these resources. Thus, to execute these activities more effectively, firms often have faith in vigorous proficiencies. For instance, financial literacy support organizations to convert resources into a multiplicity of tenacities such as expansion, extension, and adjustment of the resources (Ma et al., 2022). Conferring to Lusardi (n.d). financial literacy incorporates awareness and rational proficiencies with various anticipated attitudes and behaviors. In this investigation, financial literacy theorizes by means of the execution of knowledge and skills to cope with efficient utilization of financial services and plot the consumer market well for the attainment of a firm's objectives. This comprises skills like costing, debt acquirement, bill disbursement, and managing consumer troubles (Reich & Berman, 2014). In developing countries, acquiring such skills is precious for SMEs. For instance, the World Bank's Global Development Report (world bank 2013) focused on financial inclusion and showed that SMEs in emergent regions are affected by many constraints regarding financial management that destabilize employment, growth, production, and invention. Therefore, Pakistan has no exception.

To bridge this gap, the study employed a resource-based view (Barney, 1991) to examine how financial literacy (FL) affects the relationship between access to finance (AF) and firm growth (FG) among SEMs in Pakistan. This study addresses the very prime question: How is the relationship between access to finance (AF) and firm growth (FG) influenced by the financial literacy (FL) of SME owners? This study makes notable contributions to the current body of literature, Firstly, it distinguishes itself as initial research to incorporate financial literacy (FL) as moderating variable in discerning this connection within the Pakistani context. Secondly, it enhances the literature on financial attainment for SMEs. The further parts of this study are arranged as follows, the first part contains a literature review, second, contained the development of the research hypothesis. Section three presents the data and methodology followed by results. The last section concludes the discussion along with the recommendations and suggestions.

1.1. Research Questions

- Does Access to finance has a direct and positive relationship with the firm growth?

- Is there a moderation effect of financial literacy between the AF and FG relationship?

1.2. Research Objectives

- To identify the relationship between assets to finance and firm growth.
- To identify the moderation effect of financial literacy between assess to finance and firm growth.

2. LITERATURE REVIEW

To strengthen our research question, the study used RBV to know how firms utilize all their resources. The Resource-based View (RBV) (Barney, 1991) put forward that organizations have plenty of resources but a firm can only gain a viable competitive advantage, and certainly sustainable growth if it finds and controls the valuable, unique, and exclusive resources and competencies, providing that if it can captivate and apply them (Barney, 1991). Such as resources that can create viable advantages comprising assets, competencies, legislative procedures, evidence, and knowledge (Slater et al., 2006; Song et al., 2007; Teece, 2012).

The RBV put forward that a dearth of human, financial, and organizational resources and competencies lessens the firm's innovative undertakings (Sinha et al., 2023), which leads to a reduction in firm growth. According to RBV, firms possess an uneven distribution of abundant resources (Teece, 2012; Mac & Bhaird, 2010), generating resource heterogeneousness that continues over the period and give the sources for firm development (Barney, 1991).

Some studies claim that the identification of this relationship required plenty of resources that are needed for the competitive advantage of organizations. (Song et al., 2007). And further, they can be utilized to commence several actions for attaining growth. Entrepreneurs' FL is a core firm competency that provides the lifeblood for achieving higher growth outcomes. By using the resource-based view, we analyze the growth associations of SME managers' FL on AF and FG associations concerning Pakistan.

In the literature, the consensus is that AF is the main issue for entrepreneurs and

firms (Hassanein et al., 2008). Devoid of appropriate AF decreases the operational power of the firm and its likelihood for FG would be at risk. The operational activities and performance of SMEs are also contingent on the nature and the number of resources organized or presented to them (Wiklund & Shepherd, 2003). Adequate AF is especially significant in achieving firms' goals. For example, performance and growth (Sexton & Bowman Upton, 1991). Many studies propose that the obtainability of monetary capital is important to commence, improve and expedite growth in a business (Bygrave & Zacharakis, 2008). However, the AF is probably designated unequally circulated amongst firms (Grande et al., 2011). Thus, for SMEs, AF is probably a very essential resource and certainly the basis for the viable advantage for the firms which consume more accessibility than their rivals (Grande et al., 2011).

In entrepreneurial finance and small business literature, the dearth of finance accessibility has been associated with the entrepreneur's incompetence to accomplish their goals (Beck et al., 2005; Hutchinson & Xavier, 2006; Malo & Norus, 2009; Coad & Tamvada, 2012; BIS, 2013; Akhtar & Liu, 2018) and confine owner- manager's prospects to take action (Wiklund & Shepherd, 2003). Previous studies theorize that the accessibility of finance develops a firm's growth strategies (Cooper et al., 1994). The available slack resources can be transformed into innovative tactics and strategies, ultimately enabling the firm to pursue new growth opportunities. Certainly, literature put forward that A2F amplifies the FG (Cooper et al., 1994). Thus, AF has a double role for the firm, providing that the internal financial capacity of the firm and signal regarding future growth prospects.

Considering the RBV and the conceptualization of AF and FL notion, it proceeded with the theoretical argumentation regarding why SMEs' success upsurges as the financial literacy (FL) of entrepreneurs increases. Certainly, scholars have raised their energies in observing the financial literacy and financial decision-making relationship (Lusardi & Mitchel, 2011; Van Rooij et al., 2011; Carraher & Auken, 2013). The outcomes of these investigations recommend and showed a strong positive relationship between FL and other financial consequences. Additionally, some latest empirical indications acclaim a positive correlation between FL and behavior (Cole et al., 2009)

and there is a significant determining factor of stock market contribution in FL (Van Rooij et al., 2011).

The proprietors of mostly SMEs have poor knowledge, information, and skills in formulating and interpreting financial reports for making effective and important decisions related to their businesses (Carraher & Auken, 2013). The literature submits that the proprietors have more financial acquaintance and information and are more probable to participate in wide-ranging financial practices (Hilgert et al., 2003).

In the context of less developed economies, financial accessibility has been debated as the main limitation to SME growth (Coad & Tamvada, 2012). The worse financial management proficiencies of SME's proprietors result in poor financial imagination which limits the FG in emerging economies. While in developing nations, entrepreneurs depend on different kinds of financial activities to back their businesses (Bygrave, 2003). Undoubtedly, the two crucial means of financing from the supply side are credit and retained earnings, yet both are created through the sequence of business processes and are contingent on financial and credit management. Trade credit typically offers SMEs twofold as plentiful liquidity as banks (Salima, Y. Paul & Boden, 2012), though the core budget of firms is frequently restrained on business inventiveness than the stream of outer financing.

A higher level of an entrepreneur's financial literacy can provide them with continuous firsthand information and statistics regarding how to cope with their funds, which is sequentially helpful to beat competitors (Barney, 1991). The extensive financial knowledge and capability to evaluate and interpret new financial information regarding evolving financial prospects empower organizations to choose and pursue different opportunities effectively at a lower cost. The concern of building financial management competence for the owners of small businesses within emerging countries has gained more attention now (Bruhn & Zia, 2013). FL inclines to train SME owners with the knowledge required to generate funds, start saving strategies, and make investment decisions (Greenspan, 2002). Moreover, FL mends the financial actions of firms and increases quality and sales proceeds (Drexler et al., 2014). Literature showed that FL positively associates with self-favorable behavior (Hilgert et al., 2003). A higher FL is

important to overcome problems in handling the financial capital of firms (Berglund et al., 2007), and financial literacy can assist decision making regarding debt management, and on-time bill payments that can increase the creditworthiness of likely borrowers to progress firm performance (Van Rooij, Lusardi & Alessie 2011).

In the light of the above-posed literature, we poised that.

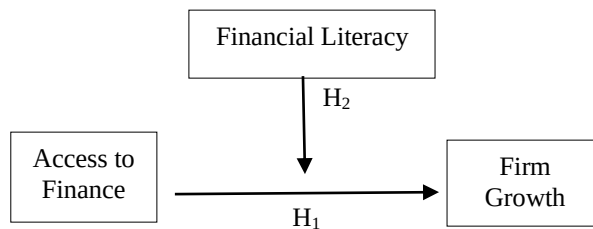
H₁: *Access to Finance has a direct and positive relationship with the firm growth.*

H₂: *There is a moderation effect between AF and FG relationship. And FG will rise through AF but more rapidly for those with higher FL.*

Hypotheses are presented in the figure below.

Figure 1

Conceptual Model



3. RESEARCH METHODOLOGY

The projected hypothesis is tested via a sample of SMEs from Lahore, Pakistan. In Pakistan, it is the second-most densely inhabited city with 7 million populations. We elect this city in Pakistan because it is the core hub and pivot of industries, containing SMEs. SMEs in emerging economies like Pakistan still encounter numerous challenges. In Pakistan, the industrial sector acts as a backbone and main pillar because it expands the GDP, produces employment chances in the state and it also enlarges the export level (Akhtar & Liu, 2018).

The illiteracy of industrialists produces problems and issues regarding the attainment of AF decisions, which creates complications for managing small organizations in developing nations (Baah Nuakoh, 2003). The research instrument used in this study was

adopted from authenticated existing scales, for instance (Anderson & Eshima, 2013; Dahmen & Rodríguez, 2014; Wiklund & Shepherd, 2005). To collect empirically rigorous data, the authors deliberated a comprehensive questionnaire that was translated, piloted, and administered in the native language. For conducting this study, the FG is evaluated by using different items. Such as a seven-point Likert scale (Anderson & Eshima, 2013), and measures of financial literacy (FL) (Dahmen & Rodrihuez, 2014) to scrutinize the managers' FL levels.

A seven-point Likert scale resonating from strongly disagree to strongly agree is applied to evaluate FL. Similarly, for access to finance five items, seven-point Likert scales were adopted (Cooper et al., 1994; Wiklund & Shepherd, 2005). Correspondingly, some common questions about firm respondents are also designed, for example (the number of employees, age, and gender). These questions were essential to be answered by the respondents of firms. The sampling frame of this research comprises SMEs located in the central region of Pakistan. According to the SMEDAP, the benchmarks to describe SMEs in Pakistan by several employees of up to 250, a paid-up capital of up to Rs.25 million, and annual sales of up to 250 million rupees.

SME owners and managers were targeted for this study because financial decisions are mainly influenced by the owners. A sample of 581 matched SMEs was identified from different sources and through cooperation with the chamber of commerce. We identified the firms' names, contact personnel, contact numbers, and e-mail addresses. Multiple methods were utilized for the sake of data collection, some were mailed, and some were personally disseminated. We conducted follow-up actions for the potential respondents by sending reminders through e-mails and telephone to motivate them to participate in the survey. The data collection procedure was completed over three months from February to April 2022. Finally, 206 usable questionnaires were received with a return rate (RR) of 34%.

The regression analysis is used as a central statistical method for evaluating the AF and FG relationship with a recommended moderating impact of FL. The most applicable technique for estimating such relationships is the hierarchical regression (Cohen et al., 2003) and this technique has received a generous commendation in entrepreneurial

studies as a model evaluator (Rauch et al., 2009).

This study followed different previous studies (Adomako & Danso, 2014; Boso et al., 2013; Cadogan et al., 2006) in the conception of interacting variables. Owing to the insertion of interacting variables in the regression test, there comes the problem of multicollinearity. The following studies suggest how coefficient bias and endogenous and exogenous variables must orthogonalize (Little, Bovaird & Widaman, 2006). Subsequent arguments show, all the involved variables in the study of interactive expressions be positioned residually. For the assessment of the interrelatedness between AF, FL, and FG a three-step process was embraced. The first step comprised the approximation of non-hypothesized variables. In the second model, the key variables were adapted, while the third model was assessed through the collaboration expressions nestled in the key effect model. To test multicollinearity the VIFs were calculated for all regressions in the study models. Verdicts from the collinearity test succeeding the residual cantering approach are shown in table 2 of the result and discussion section. The study variables intricate in the regression evaluation reveal a lower VIF, which is way below the suggested cut-off value of 10.00 (Baum, 2006) representing there are no apprehensions concerning multicollinearity (Aiken & West, 1991). Therefore, all the study variables can be utilized to infer the regression outcomes.

Regression equations for all three models are:

$$\text{firm growth} = \alpha + \beta_1 FS + \beta_2 FA + \beta_3 IP + \beta_4 MA + \beta_5 ED + \beta_6 ME + \beta_7 GN + e \quad (1)$$

$$\text{firm growth} = \alpha + \beta_1 FS + \beta_2 FA + \beta_3 IP + \beta_4 MA + \beta_5 ED + \beta_6 ME + \beta_7 GN + \beta_8 AF + \beta_9 FL + e \quad (2)$$

$$\text{firm growth} = \alpha + \beta_1 FS + \beta_2 FA + \beta_3 IP + \beta_4 MA + \beta_5 ED + \beta_6 ME + \beta_7 GN + \beta_8 AF + \beta_9 FL + \beta_{10}(AF * FL) + e \quad (3)$$

Where, FS=firm size, FA=firm age, IP=industrial type, ME=CEO/managers' experience, MA=CEO/manager's age, ED=CEO/manager's education, GN=gender, AF=access to finance, FL=financial literac

4. RESULTS AND ANALYSIS

To test the convergent validity of this relationship, we used factor loadings, average variance, and composite reliability of variables as estimated by a previous study (Hair et al., 2010). In table 1, the CR values showed loads of all items are greater than 0.5. The range of constructed values of the CR should be (0.790-0.820) imitating the proposed value of 0.7 (Hair et al., 2010). The AVE tells the value of variance taken to measure the error term must be higher than the level of 0.50 (Hair et al., 2010). In table 1, the value of AVEs for each multi-item constructed is under the range of (0.715 -0.845) showing that the association of every constructed item is lower than the square roots of its average variance extracted. As the obtained values of Cronbach's alpha were above the recommended value (0.60), all items were verified to be statistically significant (see table 1).

Table 1

Summary of Analytical Measures and Composite Reliability Values.

Variable	Measuring Item	Cronbach's alpha	CR	AVE
FL	4	.75	0.790	0.715
AF	5	.82	0.820	0.837
FG	3	.73	0.796	0.845

Table 2

Collinearity Diagnostic Test

Firm growth=dependent variable	Collinearity statistics	
	VIF	Tolerance
Firm's size	.912	1.068
Firm's age	.810	1.214
Manager's age	.920	1.017
Manager's experience	.871	1.150
Education	.926	1.131
Gender	.953	1.062
Industry type	.950	1.101
AF	.869	1.160
FL	.891	1.116
FL×AF	.941	1.314

Note: this table comprises findings of the collinearity assessment after the residual centering approach. The results showed that there is no issue of multi-collinearity amongst study variables.

Table 3*Descriptive statistics and Discriminant validity*

Variable s	Me an	SD	1	2	3	4	5	6	7	8	9	10
Firm's size	12.73	1.21										
Firm's age	27.19	2.43	.09									
Manage r's age	3.70	1.87	.13*	-.01								
Manage r's experien ce	28.39	2.29	.07	.38**	.15*							
Educati on	2.16	1.26	.18*	.13*	.17**	.18**						
Gender	15.16	1.71	-.08*	-1.5**	-.01*	.04	.06					
Industry type	.30	.56	-.13*	.04	-.06	-.08	.09	-.07				
AF	5.97	.84	.19**	-.07	.02	.03	-.07	.03	.16**	(87)		
FL	3.92	1.10	.07	.05	.04	.13*	.13*	-.06	.07*	.26**	(90)	
FL×AF	3.89	.95	.23**	-.16**	.03	-.02	.18**	.03	.11*	.41**	.19**	(90)

Note: *Correlation is significant at the .05 and ** correlation is significant at the .01 level. Both (one-tailed).

In table 3, the three-prolonged approach is used for the estimation of the discriminant validity descriptive statistics of study variables by following some previous studies (Adomako & Danso, 2014; Fini et al., 2012). The bold figures are average variance extracted whereas off-diagonal values are correlations. SD=standard deviation. Non-logged transformed age and employees reported.

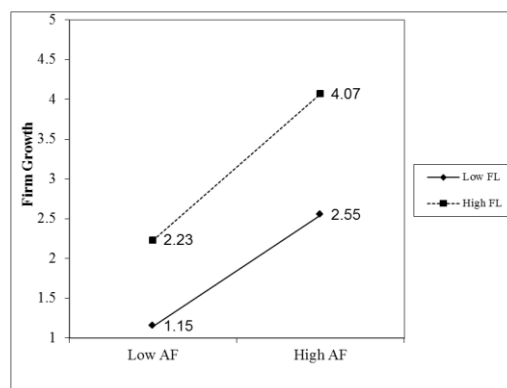
Figure 2.*Interaction Effect of Access to Finance with Financial Literacy on the Growth of the Firm*

Table 4.*Hierarchical Regressions with Firm Growth (Dependent variable) (N=206)*

Variables	Model 1	Model 2	Model 3
Controls			
FS	.173**	.152**	.129**
Age of firm	-.128**	-.107	-.113
Nature of Industry	.037	-.087	.083
Manager's age	-.050	-.046	-.042
Education	.179**	.176**	.143*
Experience	.025	.031	.017
Gander	.035	.037	.025
Main effect			
AF	.281***	.371***	
FL	.184**	.196**	
Interaction effect			
H1=AF×FL			.531***
Model fit			
F	3.941***	4.474***	5.613***
R2	.281	.315	.398
Adjusted R2	.210	.272	.361

Table 4 delivers the upshots of the classified regression models for the FG. In Figure 2, the interaction terms in the graph concerning FL and AF are demonstrated. The study findings of the proposed hypothesis are discussed. In table 4, model 1 contains the effects of all study variables while Model 2 tests our first hypothesis. The results showed that AF has a direct and positive effect on SME growth. Model 3 presents the results of (H₁) as there is a moderating effect of entrepreneurs' FL between the AF and FG relationship. The finding showed FG will rise with the AF but more rapidly for those with the higher FL. As displayed (in model 3), the interaction term of the entrepreneur's FL level with the AF is positive and significant ($\beta=0.51<.01$). figure 2 (graph of interaction) specifies that the connection between FG and AF is extra positive for those with high FL. Thus, the findings of this study support hypothesis 1 (H₁)

Note: critical t- values are 1.282, 1.646, and 2.325 for $\alpha=.10$, $\alpha=.05$, and $\alpha=.01$ correspondingly (one-tailed). *p <.10 **p <.05 ***p <.01.

5. DISCUSSION

The reliable role of financial literacy in the emergent economies was found to be significant in the firm growth and financial accessibility relationship which provides support (Adomako et al., 2015). Constructing on the resource-based view logic, we argued that the owner's and managers' FL moderates the relationship between AF and FG in such a way that this association is robust and substantial. Empirical results of this research indicate that FL certainly, expedites the AF and FG association, thus (Hilgert et al., 2003) call for research on the significance of FL. This verdict adds to the theory of entrepreneurial finance literature. Thus theoretically, the outcomes show that this study fills a long-lasting gap in the current literature by defining that an association between FG and AF is moderated by FL.

Owing to the specific features of SMEs and organizational structure owners-managers have a supreme role in all activities of SMEs and decisional undertakings, both the current and future. Whereas poor decisions are harmful to the firm's sustainability and allow prevalent operative problems. Thus, the FL of owners for the FG seems critical (Samuel Adomako et al., 2015). Many factors are attached to the performance of SMEs but financial literacy is fundamental in all because poor financial knowledge of SME owners puts their firms down. Undoubtedly, managerial decisions significantly affect firms; a better verdict can improve firms' competency to face competitive tasks or else may initiate financial disaster. Therefore, owners should be financially literate to act rationally in today's highly unpredictable business environment. If SME administrators are not aware of appropriate financial facts about the requirement of corporations (Beck & Demircuc-Kunt, 2005). Likewise, owners' FL also plays a key role in acquiring finance that is considered the lifeblood of any business (Lusardi & Tufano, 2009; Lusardi et al., 2012; Graña-Alvarez et al., 2022).

This study provides new light on the significance endorsed by the theory of FL in decision-making (Banks et al., 2010; Van Rooij Lusardi & Alessie, 2011) and behavior (Cole et al., 2009). Devoid of this theory is improbable to extract new insights into the role of AF to FG relationship. The consequence is that researchers project studies to

embrace the role of FL when firms shot high ranks of AF. This study indicates that without considering the moderating effect of FL on the relationship between AF and FG, we disregard the vital influence of entrepreneurial finance literature, and therefore, researchers may have studied an impulsive and maybe overly optimistic sight of the significance of access to finance in the growth of the firm.

Some managerial and policy implications are also there. The findings of this study advocate that FL is significant in turning AF into greater consequences. This delinquent has been theoretically strained by the dent of international financial institutions, for instance, the World Bank. First, inferring from an expert's viewpoint, the findings of this study suggestively illustrate that FL can contribute and help firms apply rigorous financial activities by establishing AF and FG relationships. These insights are especially domineering for SME managers to attain, exploit and learn new financial facts to empower the firms to mend proficiency and excellence in financial services to boost FG. This is because businesspersons with rigorous management expertise are well capable in the evaluation and comparison of feasible financial activities, for example, bank accounts, credit and loan options, payment tools, saving products, insurance coverage, and investments (Drexler, Fischer & Schoar, 2014). Thus, SME owners, administrators, and the policymakers of Pakistan and other emerging economies try to put higher attention, not only to AF but also to the prominence of FL.

The findings of this study showed, financially literate managers have more AF to high FG. Without FL, only AF is not sufficient to attain high FG levels. One of the most important implications is, if managers-owners have stress-free AF means they are also required to persuade in the processes of financial administration, and the attainment of higher FG consequence. The conclusion is that high levels of FL (entrepreneur's ability) tend to transform financial access to enriched FG outcomes. This is prospective to assist venture businesspersons in emerging economies in general and Pakistan is specific in their financing decisions.

6. CONCLUSION

This study examined the moderating impact of FL between AF and FG relationships

in the context of developing economies such as Pakistan. The presumed outcomes suggest that financial literacy assists firms in effectively organizing their financial aspects and activities leading to improved firm growth outcomes. The hypothetically derived model is formed to identify the linkage among AF, FL, and FG. The model was empirically inspected by intensifying empirical investigations about SMEs. And the findings support that, the owner's and managers' FL moderates the relationship among AF and FG in such a way that this association is robust and substantial.

Empirical results of this research indicate that FL certainly, expedites the AF and FG association. This verdict adds to the theory of entrepreneurial finance literature. Thus theoretically, the outcomes show that this study fills a long-lasting gap in the current literature by defining that an association between FG and AF is moderated by FL. The proposed hypothesis contended that there is a moderation effect between the access to finance and firm growth relationship and growth will rise with financial accessibility but more rapidly for those with higher financial literacy. Thus, the conclusion is that high levels of FL (entrepreneur's ability) tend to transform financial access to enriched FG outcomes.

This has the potential to aid entrepreneurial individuals in emerging economies in a general sense and particularly in Pakistan, in making informed financial decisions. And FL is crucial for the growth of SMEs and managers should recognize the importance of financial management. Quite interestingly, this study opens avenues for the upcoming scholars to step forward in the evaluation of how and why financial literacy influences access to finance and SME growth in developed economies.

The interpretation of the results should consider the following limitations. The study centers on SMEs in overall, meanwhile, diverse SMEs may operate in several industries for example (mining manufacturing, agriculture, and banking). The practice of industrial dummies in the regression analysis for the sake of controlling industrial effects may not be sufficient to partially out industrial effects (Wan & Hoskisson, 2003). Future studies, by converging on SMEs limited to a particular industry could overcome this limitation to support dealing with the industrial effect. Second, the significance of the research outcomes is country-specific due to data from a sample of SMEs in Pakistan. Although,

the organizational structure in Pakistani firms might be analogous to many other emergent nations. So, the findings of this study can be generalized to other emerging economies. Yet, it is significant to draw attention to that there could be variances that could lead to diverse implications. Therefore, validating this study by taking a sample from other developing countries of the world could be prolific. Future studies might evaluate the moderating effect of FL to AF and FG relationship by taking a sample from established economies, where SMEs comparatively have more resources to examine how the outcomes conferred here change. While, in this study, several factors were controlled that reason for the variance in firms' growth (firm age, firm size, industry, entrepreneurs' education, age, gender, and working experience).

Some theoretically persuasive covariates that have been deliberated in previous research work, did not embrace in this study, for instance, industry maturity (Eisenhardt & Tabrizi, 1995). This might bind conclusive assessment of the relative importance of the AF and FG relationship in this study and suggests a chance for future researchers to join forces in this direction.

Finally, a cross-sectional sample impedes the exclusion of the probability of causal bias. Particularly because this study centers on FG, a key avenue for future research should be the omission of a probable endogeneity bias in this relationship (Hamilton & Nickerson, 2003). A longitudinal study would support future researchers to apply techniques for example vector autoregression for the evaluation of Granger causality (Colombo & Garrone, 1996) amongst F, FL, and FG.

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