



## Research Article

# Financial Access, Microfinancing, and Financial Literacy of Microentrepreneurs as Enablers of Business Growth: A Test of Mediation and Moderation

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### ABSTRACT

Despite the efforts of public and private organizations to address financing constraints, this remains to be a major problem in many developing economies. A considerable number of micro entrepreneurs continue to be heavily reliant on informal lending, while others still prefer internal financing. As high interest rates and restrictions on capital may hinder growth of microenterprises, these may have significant implications on livelihood and the economic condition in general. This research explored the roles of microfinancing and financial literacy on access to finance and enterprise growth. A descriptive-causal research was employed in Brgy. Bagong Pook, Rosario, Batangas, Philippines as the locale. A survey questionnaire was used to gather primary data from micro entrepreneurs. Descriptive statistics through frequency and percentages were employed to describe microfinancing, while mean and standard deviation were presented to describe the growth, access to finance, and financial literacy. Inferential statistics through binary logistic and hierarchical linear regression were utilized to perform the moderation and mediation analyses. The outcomes conclude that having access to finance and using formal financing sources lead to microenterprise growth, while the use of informal micro financing sources adversely affects growth. A partial mediation was rendered in terms of informal microfinancing, while financial literacy was observed to be a significant moderator of access to finance and growth. This research intends to promote a new practice — the shift from informal and inefficient financing to increase financial literacy and better microfinancing schemes which aims for the achievement of enterprise growth.

### INTRODUCTION

#### A. Background of the Study

The micro, small, and medium enterprises (MSMEs) sector is considered as the backbone of many economies in the world. According to the Philippine Statistics Authority (PSA, 2020), 99.51% of establishments in the country are said to be MSMEs, 88.77% of which are microenterprises, followed by small enterprises at 10.25%, and medium enterprises at 0.49%. In 2018, MSMEs contributed to 35.7% of the total gross domestic product (GDP) and generat-

generated around 5.7 million jobs (House of Representatives Congressional Policy and Budget Research Department Report, 2018).

Despite the COVID-19 outbreak, it can be observed that a lot of microenterprises have emerged especially in the countryside communities. Roy Canivel for the Philippine Daily Inquirer cites that the number of Department of Trade and Industry (DTI) registrations for enterprises increased by 44% from 2019 to 2020. People proactively looked for ways to earn de-





spite the global crisis, even though having to operate in a smaller scale to start their own business ventures. Although this phenomenon may possibly assist the nation towards economic recovery, the struggle still lies in the ability to sustain and maximize the growth of these businesses in the long run.

In maximizing the growth potential of this sector, it is essential to identify key issues that may have a significant effect on operations. These may involve access to financing, the provision of capital requirements, and the ability to create effective and efficient financial decisions for the enterprise. Daño-Luna, et. al. (2018) cited that access to finance was one of the factors that affects small and medium enterprises (SME) competitiveness, which is essential to achieve growth. Likewise, Bongomin, et.al. (2017) mentions that the role of enterprises in achieving economic growth has been restricted by the lack of access to financial services. Fowowe (2017) identified deficiencies in capital as a major constraint for SMEs in reaching their full potential. This is supported by Bakhtiari, et.al (2020), stating that access to credit was still among the significant challenges affecting a firm's competitiveness, employment growth, and job quality in the Asia-Pacific Region.

Nguyen and Canh (2020) categorized the sources of financing as external, informal, formal, and a combination of financing sources. Formal sources include those from banks, cooperatives, and other duly registered financial services providers such as loan associations; while informal sources include borrowing from loan sharks and pawning valuable assets in exchange for funds. In the Philippines, as mentioned in

the latest Bangko Sentral ng Pilipinas (BSP) Report on financial inclusion, majority of Filipino borrowers still rely on informal and illegal sources of credit. 54.0% borrow from friends and relatives, while 10.1% borrow from loan sharks and 5-6 lenders. According to Santos (2019), informal lending is the most common source of funding in the country and that it has been a significant platform for credit access amongst businesses.

In response to these issues, the DTI championed programs driving entrepreneurship in the communities. These include the establishment of Economic and Financial Learning Centers (EFLC) and Consumer Empowerment Groups (CEG) to promote awareness and financial literacy. Likewise, the BSP implemented microfinancing strategies and regulatory incentives to promote better access to finance. Microfinancing pertains to the provision of a broad range of financial services including loans, payment services, and insurance to poor and low-income households and, their microenterprises (Asian Development Bank (ADB), n.d.). Nonetheless, these cited initiatives still appears to fall short. Data from the International Finance Corporation (IFC) estimates that 65 million firms or 40% of the formal MSME sector in developing countries have an unmet financing need of \$5.2 trillion every year. In the study of Dewi and Heykal (2018), they concluded that although majority of the services are being made available to the entrepreneurs, there are still significant obstacles in terms of implementation. Meanwhile, researches on financial literacy also indicates that levels of financial literacy are still low across various parts of the world (Jorgensen et al., 2016).



The ADB Microfinance Strategy Report mentions that microfinance development should be addressed holistically. This may be done by integrating social interventions such as awareness building programs and financial literacy and numeracy trainings to the community. According to Hussain, et. al. (2018), financial literacy serves as an interconnecting resource that minimizes the lack of information when having loan application evaluations. As mentioned by Khan (2017), financial literacy drives concerned microenterprises away from becoming victims of cheating, fraudulent activities, and wrong decisions particularly concerning their enterprises. Bongomin, et.al. (2017), argued that low levels of financial literacy among enterprise owners result to the restrictions in MSME growth. Okello, et. al. (2017) also mentioned that entrepreneurs continuously engage in decision-making on the procurement, allocation, and utilization of resources; thereby supporting the need to be equipped with adequate financial literacy. Entrepreneurs are likely to succeed if business owners have the ability to navigate complex scenarios that may arise in the venture. High financial literacy allows entrepreneurs to harness opportunities and avoid risks with their business dealings and in their financial decisions (Ameliawati & Setiyani, 2018).

This research explored the relationship between access to finance to enterprise growth and how financial literacy and microfinancing affect these relationships. As this study claims that financing through informal platforms, prompted by low levels of financial literacy, is a prevalent condition in the community, this relationship will be explored as the same may significantly weaken growth potential of enterprises.

In addition, although, there are various publications gathered on the contributions of access to finance and literacy towards economic growth, a research gap was identified on the mediating and moderating roles of microfinancing and financial literacy in the pursuit of enterprise growth.

This initiative aims to create an awareness program on credit and the negative implications of informal lending, and for stakeholders to see the need to address probable deficiencies on the accessibility, availability, affordability, and accommodation of current financial services providers. All these strategies intend to promote a new practice — the shift from informal and inefficient financing platforms to better microfinancing schemes which will eventually lead towards enterprises growth and address UN Sustainable Development Goals no. 1 and no. 8 pertaining to no poverty and decent work and economic growth respectively.

### *B. Research Framework*

This research is primarily anchored on the study of Angeles, et. al (2019) which acknowledges access to finance as key to the development of microenterprises, but cites the gap on the mediating effect of microfinancing between the two variables. The results of their study suggested that the effect of access to finance on microenterprise growth is heightened when microfinancing is being maximized. It was also concluded that the preferences toward personal financing limits the ability to expand the business. For future researchers, the study recommended incorporating other factors such as financial literacy and competi-



tiveness as enablers of growth.

In order to support the claim that financial literacy has a significant effect on the growth of microenterprises, the framework of Bongomin, et. al (2017) was utilized. The research sought to establish whether financial literacy moderates the relationship between access to finance and growth of SMEs. The results of the study revealed that financial literacy has a positive and significant moderating effect on the relationship between access to finance and growth of enterprises. While Angeles et. al. (2019) conducted their study using a multi-regional locale, and the work of Bongomin et. al. (2017) was performed in the country of Uganda, this research focused on a barangay in Rosario, Batangas, Philippines.

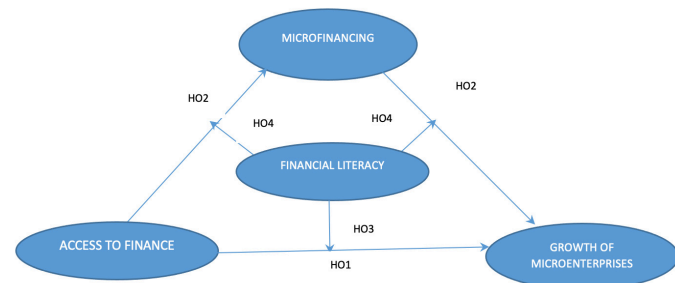


Figure 1. Operational framework

This study aims to measure access to finance, growth of microenterprises, microfinancing, and financial literacy levels amongst the chosen respondents in the target community. Access to finance pertains to the respondent’s perception on accessibility, availability, affordability, and accommodation of credit or financing sources. Growth of microenterprises refers to the extent through which the operations of the business entity have improved over the past one to two years. Microfinancing refers to the sources of financing preferred by the microenterprises categorized

as formal, informal, and internal financing. Lastly, financial literacy pertains to the entrepreneur’s personal knowledge of finance.

### C. Research Objectives

The study aimed to determine the effect of access to financing to the growth of microenterprises and reveal the mediating and moderating roles of the source of microfinancing and financial literacy in the relationships presented. Using the gathered data, this research envisioned a campaign that will boost financial literacy and promote efficient entrepreneurship in the target community thereby enabling growth for the sector. The following hypotheses were tested:

H<sub>01</sub>: Access to finance has no significant effect on the growth of microenterprises.

H<sub>02</sub>: Microfinancing does not significantly mediate the effect of access to finance on the growth of microenterprises.

H<sub>03</sub>: Financial literacy does not significantly moderate the effect of access to finance on the growth of microenterprises.

H<sub>04</sub>: Financial literacy does not significantly moderate the mediated effects between access to finance, microfinancing, and the growth of microenterprises.

## MATERIALS AND METHODS

This study employed a descriptive causal research to describe the profile and preferred microfinancing sources, and how these are affected by access to finance and level of financial literacy. The respondents were the owners of the microenterprises and total enumeration was employed with 103 owners who partic-



ipated in the study. The locale was limited to Brgy. Bagong Pook, which is adjacent to the town proper. This barangay has the largest residential population and is where significant growth in the microenterprise sector has been observed during the past few years. The list of businesses was obtained from the municipal government and informed consent was sought to ensure that data subjects were aware of their rights in accordance with the Data Privacy Act of 2012. All responses were handled with utmost diligence and confidentiality.

A self-administered survey questionnaire was adopted from the study of Angeles et. al. (2019). The first section contains the demographic profile and the profile of the businesses as to ownership type, location, and the nature and length of operations. The second section identifies the microfinancing options categorized into formal, informal, and internal. The third section pertains to the growth of microenterprises measured using a 6-point Likert scale in terms of the degree of change based on level of income, capital, products or resources, and number of employees in the past 1-2 years. The last section was used to assess the variable access to finance. Using a similar 6-point Likert scale, the respondents were asked to express their level of agreement or disagreement with statements pertaining to the accessibility, availability, affordability, and accommodation of credit. Meanwhile, the survey questionnaire utilized in the study of Bongomin et. al. (2017) was adopted to measure the level of financial literacy based on the respondents' behavior, attitude, skills, and knowledge towards the financial aspects of an enterprise. A pilot study was conducted among 30 microenterprise owners in Ba-

Barangay Talaibon in Ibaan. This was the chosen locale due to its similarities with the community being assessed. The instrument passed the significant loadings in Cronbach's alpha. Questions measuring 'access to finance' and its subcategories rendered an overall scale of 0.918, while questions measuring 'financial literacy' rendered an overall scale of 0.864. All other variables with categorical responses, such as business profile, source of funds, and business growth were deemed not required for internal reliability test (Tang et. al, 2014).

Descriptive statistics through frequency and percentage were used to present the preferred microfinancing sources while composite mean and standard deviation were used to present the levels of growth, access to finance, and financial literacy. Inferential statistics using binary logistic regression and hierarchical linear regression were utilized to determine the mediation and moderation effects. Qualitative data through open-ended questions were also gathered through the survey administered. Using textual analysis, the study identified the characteristics of credit providers preferred by the micro entrepreneurs and the challenges encountered in terms of lending.

## **RESULTS AND DISCUSSION**

Based on the results, majority of microenterprises were funded internally (53%) followed by those with formal financing (32%), while those who resort to informal microfinancing platforms comprise the smallest portion (15%). Meanwhile, formal microfinancing which garnered 37 responses may be a reflection of the relatively higher results on access to finance and financial literacy in the community as presented in



the succeeding table. The results for informal micro-financing were lower than expected with only 17 respondents. Although this may appear as an acceptable figure, the mere presence of informal microfinancing patronizers should be considered as a red flag nonetheless, due to its negative economic implications in the long run.

**Table 1. Composite Means and Standard Deviations of Measurement Variables**

Part	Variable	Composite Mean	Standard Deviation	Interpretation
III.	Growth of Microenterprises	3.16	0.722	Fair
	- Income	3.32	0.819	Fair
	- Capital	3.29	0.870	Fair
	- Products/Resources	3.19	0.829	Fair
	- Number of Employees	2.84	0.768	Fair
IV.	Access to Finance	4.34	0.856	Very Good
	- Accessibility	4.28	0.946	Good
	- Availability	4.30	1.099	Good
	- Affordability of Credit	4.11	1.034	Good
	- Accommodation from Credit Providers	4.68	0.725	Very Good
V.	Financial Literacy	4.40	0.821	Very Good

Results show that the respondents assess their growth level as fair in terms of income (M=3.32, S.D.=0.819), capital, (M=3.29, S.D.=0.870), products/resources (M=3.19, S.D.= 0.829), and number of employees (M=2.84, S.D.= 0.768). The overall assessment on the level of growth was likewise fair (M=3.16, S.D.=0.722). For this portion, the assessment of growth was limited only to the respondents' personal assessment on the level of change or improvement in their business operations in the short term, and did not include quantitative assessments. Nonetheless, the results show that although the MSME sector in the Philippines has continued growing in volume during the past few years (Canivel, 2021), business growth may still be restrained from reaching maximum returns. This may be caused by several factors including the shifts in demand and consumption patterns brought about by the pandemic (Shinozaki & Rao, 2021), weak financial management practices (Cammayo & Cammayo, 2020), and internal environment limitations and strategic plan development weaknesses (Janesa-Iliev & Debarliev, 2015) among others.

Meanwhile, the overall results for access to finance was interpreted as very good (M=4.34, S.D.=0.856). This means that respondents are generally aware of the operations of formal financing institutions in the community and acknowledge these firms' willingness to extend credit to low-income and small-time businesses. This may be a result of the continuous efforts from the government, in partnership with the private sectors that aim to improve access to financial products and services in the country through the years (Improving Financial, 2021). Nonetheless, the results on access to finance may still have some room for improvement especially in the aspects of accessibility, availability, and affordability where it was found that the respondents seem to encounter setbacks in terms of compliance to loan requirements, collateral, and interest rates. Lastly, the overall level of financial literacy among the respondents was assessed as very good (M=4.40, S.D.=0.821). This denotes that the respondents assess themselves as capable of managing the financial aspects of their business enterprise effectively.

Open-ended questions were asked to qualify the characteristics preferred in a credit provider and the aspects of lending that the respondents usually find to be difficult or challenging. The responses gathered include flexible loan term, low interest rates, fast and easy transaction, simple loan requirements, health and insurance benefits, and accommodating or approachable loan officers. These responses denote that the respondents are seeking for availability, affordability, and accommodation from credit providers. Such results are in line with BSP's national baseline survey on financial inclusion, which states that the major considerations of borrowers are interest rate (58%),





loan amount (42%), loan term or period (35%), and ease of loan application (33%). Meanwhile, other responses were too many requirements, frequency of payment, high interest rates, consideration for missed payments, and availability of collecting agents. These factors are relating to the availability, accessibility, and affordability aspects of access to finance and are also in line with the major factors identified by the BSP.

*A. The Effect of Access to Finance on Growth of Microenterprises*

Results show that access to finance has significant effect on growth of microenterprises. Furthermore, it was shown that 0.194 or 19.4 % of the variability observed in the growth of microenterprises is explained by access to finance. This means that the micro entrepreneurs' perception on access to finance significantly affects business growth (Table 2), which implies that entrepreneurs who have a positive outlook towards credit providers and perceive their services as accessible, available, and affordable among others, tend to experience improvement in their business operations.

**Table 2. The Effect of Access to Finance on Growth of Microenterprises**

Model	Factors	Unstd. Beta	Std. Error	t-value	p-value
1	(Constant)	1.547	.334	4.634	.000
	Access to Finance	.372	.075	4.924	.000

*F=24.247, P-value=.000, R=.440, R<sup>2</sup>=.194, DV=Growth of Microenterprises*

This is in line with the study of Bongomin et. al (2017), which cites that access to finance by SMEs assists in realizing growth in output, employment generation, and profitability. This is also consistent with an article reviewed by What Works Centre for Local Economic Growth (2016), that access to finance had a positive impact on at least one firm performance analyzed namely credit, employment, and sales. In the

*B. The Mediating Role of Microfinancing on the Effect of Access to Finance on Growth of Microenterprises*

To understand the process through which the variables access to finance and growth of microfinancing are related, the test of mediation was performed (Table 3). As the preliminary criteria for mediation in terms of formal microfinancing were satisfied, the test for mediation was allowed.

**Table 3. Formal Microfinancing as the Mediator**

Model	Factors	Unstd. Beta	Std. Error	t-value	p-value
1	(Constant)	1.547	.334	4.634	.000
	Access to Finance	.372	.075	4.924	.000
<i>F=24.247, P-value=.000, R=.440, R<sup>2</sup>=.194, DV=Growth of Microenterprises</i>					
2 - enter the mediator	(Constant)	1.593	.349	4.569	.000
	Access to Finance	.355	.083	4.273	.000
	Formal	.070	.148	.475	.636

*F=12.143, P-value=.000, R=.442, R<sup>2</sup>=.195, DV=Growth of Microenterprises*

It was shown that 0.195 or 19.5% of the variability in the growth of microenterprises is explained by access to finance and the presence of formal financing. However, the outcomes as presented turned out as not significant, therefore, there is no mediation in the model tested. The relationship between access to finance and growth is still significant which supports that access to finance remains to be a predictor of growth of microenterprises even with the presence of a mediator. These imply that even without the intervention from formal financing institutions, entrepreneurs who have a good access to finance will continue to achieve growth regardless of the former's presence. The results contradict the analysis of Angeles et. al. (2019) where it was found that the impact of access to finance on enterprise growth is increased when microfinancing is maximized.

The preliminary criteria for testing the mediation in terms of informal microfinancing was also satisfied, thus allowing the test of mediation (Table 4). The





outcomes illustrate that the effect of access to finance on growth is significant and informal microfinancing serves as a mediator in this relationship.

**Table 4. Informal Microfinancing as the Mediator**

Model	Factors	Unstd. Beta	Std. Error	t-value	p-value
1	(Constant)	1.547	.334	4.634	.000
	Access to Finance	.372	.075	4.924	.000
<i>F</i> =24.247, <i>P</i> -value=.000, <i>R</i> =.440, <i>R</i> <sup>2</sup> =.194, <i>DF</i> =Growth of Microenterprises					
2 – enter the mediator	(Constant)	1.965	.344	5.721	.000
	Access to Finance	.297	.076	3.926	.000
	Informal	-.567	.173	-3.273	.001
<i>F</i> =18.645, <i>P</i> -value=.000, <i>R</i> =.521, <i>R</i> <sup>2</sup> =.272, <i>DF</i> =Growth of Microenterprises					

Results show that 0.272 or 27.2% of the variability in microenterprise growth is explained by the access to finance and the presence of informal financing. It can also be observed that there is still a significant effect between the independent and dependent variable even when the mediator is removed from the model; thus, demonstrating a partial mediation. The negative beta coefficient on the mediator also implies that the micro entrepreneurs who would opt to finance their businesses through informal lending platforms despite having access to finance, may still hinder their potential for business growth. This is supported by Turkson et. al. (2020), stating that informal finance is one of the biggest obstacles of firms in Ghana.

Meanwhile, the role of internal microfinancing between access to finance and growth of microenterprises failed to mediate. Preliminary criteria namely independent variable to mediator and mediator to dependent variable did not render a significant effect, thus deferring the need to run the test for mediation.

*C. The Moderating Role of Financial Literacy on Access to Finance, Microfinancing, and Growth of Microenterprises*

Based on outcomes as illustrated in Model 2, access to finance did not significantly affect growth of

microenterprises when financial literacy is present (Table 5). However, the interaction between access to finance and financial literacy rendered a significant relationship and that 0.485 or 48.5% of the variability in the growth can be explained by access to finance and financial literacy.

**Table 5. Model Summary for the Moderating Effect of Financial Literacy on Access to Finance, Formal Microfinancing, and Growth of Microenterprises**

Model	Factors	Unstd. Beta	Std. Error	Std. Beta	t-value	p-value
1	(Constant)	.439	.318		1.378	.171
	Access to Finance	.071	.076	.084	.937	.351
	Financial Literacy	.549	.079	.624	6.942	.000
<i>F</i> Change=.41.887, <i>P</i> -value=.000, <i>R</i> =.679, <i>R</i> <sup>2</sup> =.456						
2	(Constant)	.836	.371		2.250	.027
	Access to Finance	.036	.077	.042	.464	.644
	Financial Literacy	.507	.081	.576	6.291	.000
	Financial Literacy x Access to Finance	-.107	.053	-.165	-1.998	.048
<i>F</i> Change=.3.991, <i>P</i> -value=.048, <i>R</i> =.691, <i>R</i> <sup>2</sup> =.477						
3	(Constant)	.872	.384		2.269	.025
	Access to Finance	.025	.082	.030	.306	.760
	Financial Literacy	.506	.081	.575	6.239	.000
	Financial Literacy x Access to Finance	-.108	.054	-.167	-2.003	.048
	Formal	.047	.120	.032	.393	.695
<i>F</i> Change=.155, <i>P</i> -value=.695, <i>R</i> =.691, <i>R</i> <sup>2</sup> =.478						
4	(Constant)	.979	.394		2.486	.015
	Access to Finance	.024	.082	.029	.299	.766
	Financial Literacy	.480	.084	.545	5.729	.000
	Financial Literacy x Access to Finance	-.082	.058	-.127	-1.418	.159
	Formal	.097	.127	.064	.761	.449
	Financial Literacy x Formal	-.089	.075	-.106	-1.189	.238
<i>F</i> Change=.1.413, <i>P</i> -value=.238, <i>R</i> =.697, <i>R</i> <sup>2</sup> =.485						

This implies that financial literacy serves as a moderating variable between access to finance and growth of microenterprises. The effect of access to finance to the growth of microenterprises is strengthened by financial literacy. This means that the more that microenterprise owners are financially literate, the better their awareness and understanding of access to finance is, leading to growth. This is also in line with the results of Bongomin, et. al. (2017), which also observed financial literacy as a moderator variable in the effect of access to finance to growth of MSMEs. However, upon entry of the mediating variable formal microfinancing (Model 3) and the presence of interaction between financial literacy and formal microfinancing







(Model 4), non-significant relationships were noted. This means financial literacy does not moderate the mediated effects of access to finance, formal microfinancing, and growth of enterprises. This is expected since results showed that formal microfinancing has no mediating effect between access to finance and growth.

Results of the test of moderation showed that access to finance did not significantly affect growth of microenterprises when financial literacy is present (Table 6). However, the interaction between access to finance and financial literacy rendered a significant relationship.

**Table 6. Model Summary for the Moderating Effect of Financial Literacy on Access to Finance, Informal Microfinancing, and Growth of Microenterprises**

Model	Factors	Unstd. Beta	Std. Error	Std. Beta	t-value	p-value
1	(Constant)	.439	.318		1.378	.171
	Access to Finance	.071	.076	.084	.937	.351
	Financial Literacy	.549	.079	.624	6.942	.000
<i>F Change=41.887, P-value=.000, R=.675<sup>2</sup>, R<sup>2</sup>=.456</i>						
2	(Constant)	.836	.371		2.250	.027
	Access to Finance	.036	.077	.042	.464	.644
	Financial Literacy	.507	.081	.576	6.291	.000
	Financial Literacy x Access to Finance	-.107	.053	-.165	-1.998	.048
<i>F Change=3.991, P-value=.048, R=.691<sup>2</sup>, R<sup>2</sup>=.477</i>						
3	(Constant)	.989	.399		2.479	.015
	Access to Finance	.034	.077	.041	.447	.656
	Financial Literacy	.479	.085	.544	5.627	.000
	Financial Literacy x Access to Finance	-.097	.054	-.150	-1.790	.077
	Informal	-.169	.161	-.087	-1.051	.296
<i>F Change=1.104, P-value=.296, R=.695<sup>2</sup>, R<sup>2</sup>=.483</i>						
4	(Constant)	.993	.401		2.475	.015
	Access to Finance	.036	.078	.043	.466	.642
	Financial Literacy	.476	.086	.541	5.516	.000
	Financial Literacy x Access to Finance	-.091	.060	-.141	-1.511	.134
	Informal	-.147	.184	-.076	-.801	.425
	Financial Literacy x Informal	.013	.055	.025	.246	.806
<i>F Change=0.060, P-value=.806, R=.695<sup>2</sup>, R<sup>2</sup>=.483</i>						

The model shows that 0.483 or 48.3% of the variability in microenterprise growth can be explained by access to finance, financial literacy and the presence of informal microfinancing. This denotes that financial literacy also served as the moderating variable and

implies that the effect of access to finance to growth of microenterprises is strengthened by financial literacy. However, the resulting beta coefficient in the case of informal microfinancing is negative. This implies that higher financially literacy will lead to a better perception on access to finance, but resorting to informal financing will still lead to a decline in the growth of microenterprises. Adding the mediating variable informal microfinancing (Model 3) and the presence of interaction between financial literacy and informal microfinancing (Model 4) resulted to a non-significant relationship. This means financial literacy does not moderate the mediated relationship between access to finance, informal microfinancing and growth of enterprises.

The test of moderation in the case of internal financing showed that the relationship between access to finance and financial literacy is statistically significant (Table 7). Though access to finance did not significantly affect the growth when the moderator is present, financial literacy served as the moderating variable in this model through affecting the presence between access to finance and microenterprises growth.

**Table 7. Model Summary for the Moderating Effect of Financial Literacy on Access to Finance, Internal Microfinancing, and Growth of Microenterprises**

Model	Factors	Unstd. Beta	Std. Error	Std. Beta	t-value	p-value
1	(Constant)	.439	.318		1.378	.171
	Access to Finance	.071	.076	.084	.937	.351
	Financial Literacy	.549	.079	.624	6.942	.000
<i>F Change=41.887, P-value=.000, R=.675<sup>2</sup>, R<sup>2</sup>=.456</i>						
2	(Constant)	.836	.371		2.250	.027
	Access to Finance	.036	.077	.042	.464	.644
	Financial Literacy	.507	.081	.576	6.291	.000
	Financial Literacy x Access to Finance	-.107	.053	-.165	-1.998	.048
<i>F Change=3.991, P-value=.048, R=.691<sup>2</sup>, R<sup>2</sup>=.477</i>						





3	(Constant)	.688	.393		1.748	.084	
	Access to Finance	.060	.080	.071	.751	.454	
	Financial Literacy	.498	.081	.566	6.151	.000	
	Financial Literacy x Access to Finance	-.093	.055	-.144	-1.703	.092	
	Internal	.126	.112	.086	1.126	.263	
	<i>F Change=1.269, P-value=.293, R=.695, R<sup>2</sup>=.484</i>						
4	(Constant)	.703	.397		1.774	.079	
	Access to Finance	.059	.080	.070	.742	.460	
	Financial Literacy	.495	.082	.562	6.056	.000	
	Financial Literacy x Access to Finance	-.089	.056	-.137	-1.587	.116	
	Formal	.127	.113	.087	1.130	.261	
	Financial Literacy x Internal	-.024	.053	-.035	-.461	.646	

Results also showed that 0.485 or 48.5% of the variability in growth can be explained by access to finance, financial literacy and the presence of internal financing. These results are in line with the study of Adomako (2015), wherein the role of financial literacy as a moderator between access to finance was acknowledged. In the said study, this linkage was utilized in creating a framework that aim to identify the resources and skills needed for maximizing enterprise growth. Meanwhile, accounting for the mediating variable internal microfinancing (Model 3) and the presence of interaction between financial literacy and internal microfinancing (Model 4) resulted to a non-significant relationship was noted.

### CONCLUSION AND RECOMMENDATIONS

The study revealed that access to finance significantly affects growth of microenterprises. The type of microfinancing does not have any mediating effects between access to finance and growth. Financial literacy, on the one hand, significantly moderates the effect of access to finance and growth of microenterprises. Lastly, financial literacy did not show any significant moderating effects upon interaction with the mediating variable microfinancing.

Based on these outcomes, access to finance plays a

significant role in the attainment of enterprise growth. Entrepreneurs who have a good perception towards these areas tend to avail the services of formal credit institutions, which turn out to be beneficial for the firm. Meanwhile, those who are generally not aware or have certain biases tend to prefer informal financing, which adversely affects their growth. The lack of mediation between access to finance and growth in terms of formal financing denotes that the growth will still be attained if awareness on access to finance is held by the business owners, while the negative and partial mediation caused by informal microfinancing further substantiates its negative implications to the growth of the firm. Lastly, the role of financial literacy as the moderator denotes that effect of access to finance on growth is strengthened when financial literacy is present.

Based on the conclusions stated above, the following are recommended:

1. Micro entrepreneurs should engage in programs and activities that may improve their knowledge about the accessibility, availability, affordability, and accommodation of credit providers in the community. Improving their perception on access to finance shall be beneficial in widening their options to funding, which may further lead to an increase in the quality or quantity of the products being offered and thereby increasing their bottom line in the long run.
2. As 15% of the sample group were noted to still use informal microfinancing, the local government unit may employ programs that seek to disperse information on the negative implica-



tions of informal lending. The reiteration of the law on informal lending may likewise be incorporated in the program in order to regulate the demand for this type of financing.

3. Programs on financial literacy amongst micro entrepreneurs should be provided. Although the outcome on the level of financial literacy was relatively higher than expected, there should still be room for improvement in terms of basic bookkeeping, business finance, and cost and savings concepts where the lowest scores were gathered. The local government unit may partner with concerned financial institutions such as banks and cooperatives in holding these programs that aim to improve the knowledge of micro and small businessmen.

Given the outcomes of this research, an awareness campaign for the micro entrepreneurs in the barangay is recommended. This program aims to further enhance the financial literacy of micro entrepreneurs, reintroduce the products and services provided by banks and other formal lending institutions, diminish any existing biases or misconception about access to finance, regulate the demand for informal lending which hinders growth of the microenterprises, and create a platform that will connect the micro entrepreneurs with banks, cooperatives, local government units, and other concerned stakeholders is recommended.

3. The required data was gathered from a single barangay, thus, the results of this study may not be relevant on a wider perspective. In terms of the measurement variables, the assessment of

growth was limited only to the respondents' personal assessment on the level of change or improvement in their business operations in the short term and did not include quantitative assessments. Future research may embark on the long-term effects of having access to finance and financial literacy on growth which can then be measured using quantitative data. Likewise, the variables growth of microenterprises and access to finance were taken as a whole. Future researchers may opt to consider its subcategories for a more in-depth analysis of the causal relationships. For the demographic characteristics, as these were only used to describe the sample group, succeeding studies may reflect these variables as a contributor in the regression analysis. Lastly, other factors such as the interest rates, level of competition, customer loyalty, and management skills among others may also have a significant effect on the interaction between the variables. Nonetheless, despite the limitations and recommendations, the researcher believes that this study opened the door for more complex statistical analysis that seeks to add value for community development. Future researchers may explore, analyze, and improve on the analytical tools employed.

#### REFERENCES

- Adomako, S. (2015). The moderating influence of financial literacy on the relationship between access to finance and firm growth in Ghana. *Venture Capital, an International Journal of Entrepreneurial Finance*. ISSN: 1369-1066 (Print) 1464-5343 (Online).
- Ameliawati, M. and Setiyani, R. (2018). The Influence of Financial Attitude, Financial Socialization, and Financial Experience to Financial Management Behavior with Financial Literacy as the Mediation Variable. *Journal of KnE Social Sciences*, 3(10), 811.
- Angeles, I. Callara M.S. & De Guzman, A. (2019). The Mediating Effect of Microfinancing on Access to Finance and Growth of Microenterprises: Evidence from the Philippines. *Journal of Global Entrepreneurship Research*.
- Bongomin, G., et. al. (2017). The relationship between access to finance and growth of SMEs in developing economies, financial literacy as a



- moderator. Review of International Business and Strategy Vol. 27 No. 4, 2017.
- Cammayo, E. & Cammayo, K. (2020). Actors Affecting the Performance within the Micro Small Medium Enterprise Sector in Isabela, Philippines. *Journal of Critical Reviews*. ISSN-2394-5125.
- Canivel, R. (2021). Pandemic gives rise to new entrepreneurs. Retrieved from [www.business.inquirer.net](http://www.business.inquirer.net)
- Dewi, E. & Heykal, M. (2018). Financial Inclusion Implementation Program for the Development in the area of South Tangerang, Banten. IOP Conf. Series: Earth and Environmental Science 126-012074.
- Fowowe, B. (2017). Access to finance and firm performance: Evidence from African countries. *Review of Development Finance* Volume 7 Issue 1.
- Improving Financial Inclusion: A Priority in the Philippines. (2021). Agence Francaise De Developpement. Retrieved from [www.afd.fr/en/actualities/improving-financial-inclusion-priority-philippines](http://www.afd.fr/en/actualities/improving-financial-inclusion-priority-philippines) last May 22, 2022.
- Hussain, J., et. al. (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* Vol. 25 No. 6, 2018.
- Janesa-Iliev, A. & Debarliev, S. (2015). Factors Affecting Growth of Small Business: The case of a developing country having experienced transition. *European Scientific Journal* October 2015 edition vol.11, No.28 ISSN: 1857 – 7881
- Jorgensen, et. al. (2016). Financial Attitudes and Responsible Spending Behavior of Emerging Adults: Does Geographic Location Matter? *Journal of Family and Economic Issues*, 38(1), 70–83. <https://doi.org/10.1007/s10834-016-9512-5>
- Khan, S. N. (2017). Impact of Financial Literacy, Financial Knowledge, Moderating Role of Risk Perception on Investment Decision. SSRN Electronic Journal Mandatory Allocation of Credit Resources to Micro, Small and Medium Enterprises. (2018). Manual of Regulations for Banks. Retrieved from [www.bsp.gov.ph](http://www.bsp.gov.ph)
- MSMEs in the Philippines. (2020). Congressional Policy and Budget Research Department. House of Representatives Report No. 19.
- Nguyen, B. & Canh, N. (2020). Formal and informal financing decisions of small businesses. *Journal of Small Business Economics* 57:1545–1567. Philippine Statistics Authority Report, 2020. <https://psa.gov.ph/>
- Shinozaki, S. & Rao, LN. (2021). COVID-19 Impact on Micro, Small, and Medium-Sized Enterprises under the Lockdown: Evidence from a Rapid Survey in the Philippines. ADBI Working Paper 1216. Tokyo: Asian Development Bank Institute.
- Tang, Cui, & Babenko. (2014). Internal consistency: Do we really know what it is and how to assess it? *Journal of Psychology and Behavioral Science*. June 2014, Vol. 2, No. 2
- Turkson, A. & Gyeke-Dako (2020). The role of formal and informal finance in the informal sector in Ghana. *Journal of Small Business & Entrepreneurship*, 34:3, 333-356, DOI: 10.1080/08276331.2020.1724002202 A0 MSE Statistics. (n.d.) Retrieved from [www.dti.gov.ph](http://www.dti.gov.ph)