



Research Article

Access to Finance as a Moderator between Financial Literacy and Debt Level of Micro and Small Enterprises in the Northern Province of Sri Lanka.

Kalaipriya Kalaieesan*

National Institute of Business Management, 120/5 Vidya Mawatha, Colombo, 07, Sri Lanka

Article Info

Keywords:

Access to Finance
Debt level
Financial literacy
Micro and Small Enterprises
Post – crisis region

Abstract

Increasing debt levels among Micro and Small Enterprises (MSEs) threaten not only business survival and growth but also the livelihoods they sustain within local communities. This study examines the impact of financial literacy on the debt levels of MSEs in Sri Lanka's Northern Province, a region affected by prolonged post-conflict economic challenges. Grounded in Resource-Based Theory (RBT) and the Knowledge-Based View (KBV), financial literacy is treated as a multidimensional construct comprising of, bookkeeping, saving, debt, investment, and insurance literacy, and viewed as a critical resource for business owners' financial decision-making. Data was collected through a structured survey among 380 MSEs across manufacturing, trading, and service sectors and analysed using SPSS and SmartPLS. The findings reveal a strong, statistically significant negative relationship between financial literacy and debt levels, indicating that financially literate owners are less likely to accumulate unsustainable debt. Debt literacy shows the strongest effect, while insurance literacy among MSEs remains notably low. Access to finance significantly moderates this relationship, strengthening the impact of financial literacy on debt reduction.

Introduction

Even though Micro Small Enterprises (MSEs) of Sri Lanka play a significant role in building our economy, a large number of these businesses struggle with high levels of debt (Mithula, 2015). In developing nations, MSEs are invariably linked to social and economic issues including poverty, economic inequality, and unemployment (Forum, 2024). The MSE sector in Sri Lanka account for 90% of all the businesses, contributing 52% to the GDP of the country and 45% to the national employment (Sri Lanka Export Development Board, 2024). Thus, expanding the MSE sector aids in the nation's recovery from the current economic crisis, encourage export diversification, reduce provincial inequities, and foster growth in developing communities (Ghura et al., 2023). Accordingly, this study focuses on understanding the financial literacy of these MSE owners and the debt level of these entities.

Due to the economic crisis of 2022, 89% percent of Sri Lankan MSEs had already been negatively impacted (International Labour Organization, 2023). Throughout the several economic crises (2020 - 2023), employment in the enterprises that survived shrank

by 20%. Small businesses experienced the largest employment contraction (23%), closely followed by micro sized businesses (22%).

Based on the International Labour Organization and NielsenIQ's survey of 521 MSEs in 2023 post economic crisis, revealed that MSEs that have managed to survive are now heavily indebted, which could pose a threat to their ability to continue operating, recover, and expand. Up till the end of 2022, the average total amount of debt owed by MSEs in Sri Lanka was 786,655 rupees and 1,996,250 rupees respectively (International Labour Organization, 2023). During the lockdowns implemented in 2020 due to the pandemic, the amount of financing available to MSEs had already been decreased. During the post crisis, credit to the private sector shrank to -5.1% in March 2023 after slowing down from 15.9% in 2018 to 6.2% in 2022 (Central Bank of Sri Lanka, 2022). The annual report also highlights that, with high interest rates and limited financial resources, MSEs were unable to grow and reinvest for future expansion. As banks demand higher levels of collateral for both working capital and investment loans, MSEs have a harder time getting to finance (Saleem, 2017). Thus, this

* Corresponding author.

E-mail address: kalaipriya@nibm.lk

Received 13 July 2025; Received in revised form 17 November 2025; Accepted 07 December 2025

Available online 20 February 2026

© 2024 The Author. This is an open access article under the CC BY-NC-ND license (<https://creativecommons.org/licenses/by-nc-nd/4.0/>)

clearly highlights the high debt levels of MSEs, and the challenges faced with access to finance.

The sustainability and the success of these businesses depend heavily on the financial literacy of their owners (Mithula, 2015). Strong financial literacy equips them to manage cash flow effectively, make informed investment decisions, and navigate debt responsibly (Ghura et al., 2023). Small businesses need to ensure their survival, or at the very least, able to escape financial distress to achieve success. Thus, there is a burning requirement for sound financial knowledge of MSEs, precisely in developing countries (Sawaeen & Ali, 2021; Al-Muzaini, 2023). Despite Sri Lanka reporting a noteworthy adult print literacy rate of 92% as of 2023 (Department of Census and Statistics, 2024) which is the highest among South Asian nations, it is surprising to discover that the financial literacy rate of the country is only 57.9% as per the latest available financial literacy survey in 2021 (Central Bank of Sri Lanka, 2021). The rate is further lower in the rural areas of the nation recording only 12.10%, which is significantly less than the global average (Central Bank of Sri Lanka, 2021). This study focuses on the impact of this level of financial literacy of MSE owners in an economically marginalized region.

This study particularly concentrates on the Northern Province of Sri Lanka. The unemployment, poverty and debt levels are high in the Northern Province of Sri Lanka (Department of Census and Statistics, 2024), where these people were separated from the rest of the island, during the civil war, and even years after that also the situation continues. In 2023, The average unemployment rate reported in Sri Lanka was 4.7%; however, the unemployment rate in Jaffna, was 5.7% (Department of Census of Statistics, 2024). Further, based on the Labour force survey, only around 32.7% are engaged in self-employment out of the employed population in the Northern Province as of 2023 (Department of Census of Statistics, 2024). Based on the latest available poverty headcount index as of 2019, the national headcount index is 14.3% where as the poverty level of Northern province is 23.8%, and also the Mullaitivu district reporting the highest percentage (44.5%) of poverty in Sri Lanka (Department of Census of Statistics, 2024). According to Multidimensional Vulnerability Index of Sri Lanka as of 2023, large amount of population in Northern Province of the country lives below the poverty line (UNDP, 2023). Further according to Kadirgamar (2020), micro finance loans adversely affect the business and families of this province. The business owners of Northern Province have lost millions as interest, properties, their businesses and also lives due to high debt (Mithula, 2015).

According to the publication of Committee for the Abolition of Illegitimate Debt (2020), the microfinance sector in Northern Sri Lanka is highly challenging, where it maintains abusive interest rates, keeping the maximum rate of 35% only as advertised, and in reality, charging higher effective rates and using aggressive collection methods. According to Economic Development Framework for a Northern Master Plan (Central Bank of Sri Lanka, 2018), in the post-war context microfinance institutions aggressively targeted the Northern Province, leading to widespread over-indebtedness among vulnerable populations. The limited economic opportunities and a strong reliance on MSEs of the province highlight the importance of understanding the high debt-level of these entities in the post conflict situation (Committee for the Abolition of Illegitimate Debt, 2020). According to the literature review, financial literacy has been recognized as a key competency of an entrepreneur. Although prior studies have explored the impact of financial literacy on debt management in large scale businesses and listed corporates, there is a gap in understanding how specific financial literacy influence debt levels in Sri Lankan MSEs (Assifuah-Nunoo, 2023). Also, the

relationship between financial literacy and personal financial outcomes has been studied in the finance literature (Hilgert & Hogarth, 2003; Lusardi & Mitchell, 2014; Remund, 2010; Abreu & Mendes, 2010), there has not been sufficient studies focused on financial literacy from the perspective of MSEs (Charfeddine et al., 2024). Further, According to Nyamboga et al., (2014), from the previous studies conducted, there is mixed evidence on the effects of financial literacy on the debt level of MSMEs. Thus, this study aims at identifying the level of financial literacy of MSE entrepreneurs and the debt level of MSEs, to analyze level of financial literacy and access to finance in deciding the debt level of these enterprises, particularly in the Northern Province.

Drawing on the Resource-Based Theory (RBT) and Knowledge-Based View (KBV), this study contributes to existing literature by investigating the impact of financial literacy on the debt levels of MSEs, in a marginalized economy. RBV highlights the recognition of resources of the business owner and KBV explains the path by which knowledge translates to action, through the access to finance. By examining the moderating role of access to finance, this research offers novel insights into the complex relationship between financial literacy, debt, and access to finance in a post-conflict context. Thus, this study intends to answer the research questions, what is the impact of financial literacy on the debt level of Northern province and what is the moderating role of access to finance in this relationship. The findings of this study are expected to inform the development of targeted financial literacy programs and policies to enhance the financial resilience of MSEs in the Northern Province.

Literature Review

MSEs operate in environments where resource constraints, financial risks, and strategic decision-making capabilities directly influence their performance and sustainability. The literature reveals that the debt level of the firm, financial literacy and access to finance play a central role in shaping the outcomes of MSEs. These interdependencies are better understood through the RBT and the KBV, which together emphasize, that the unique resources and knowledge possessed by the entrepreneur, particularly in financially constrained, post-conflict contexts, can be decisive in achieving competitive advantage, resilience, and sustainable growth.

Debt Level of the Firm

Finances for an entity can be obtained either from internal or external funding sources (Flynn, 2017). Earnings, and undistributed profits are internal financing sources whereas share issues and borrowings are external sources of financing (Bester & Scheepens, 1996). The studies indicate inconsistent findings in relation to the relationship between the debt structure and business outcomes. Debt structure and business outcomes were reported as negatively correlated in number of studies (Phan, 2018; Flynn, 2017; Kannadhasan, 2014; He & Xiong, 2012), whereas there are studies highlighting the positive relationship between debt structure and firm performance (John & Muthusamy, 2011; Bae, 2009; Titman & Tsyplakov, 2007).

According to Myers (1977) and Hart (1996), debt volume and future investment are inversely correlated. Meanwhile, some studies highlight that, debt is expected to improve future finance and investment (Myers, 1977). On the other hand, Aivazian and Santor (2008) discovered that underinvestment issues are a result of debt financing. He and Xiong (2012), Flynn (2017), and Kalemli-Ozcan et al. (2022) anticipated that debt will cause problems for future funding. Taiwo et al., (2016) states that

personal savings and unstructured loans from friends and lenders rank among the top sources of funding for small businesses where the additional sources that contribute to a small business's capital structure are banks, informal financial markets, and partners.

High debt level is described in the literature as over indebted with the distressing condition where the entities are unable to pay mature expenses or debts, resulting in unavailability of current assets, inadequacy of equity and forcing them for liquidity problems (Younas et al., 2021). The high debt level issues begin when a business fails to meet due payments, and the cash flow forecasts unveil that the business is unable meet the maturing obligations (Aviantara, 2021). High debt level experienced by an organization might trigger forced liquidation and bankruptcy (Younas et al., 2021).

Financial Literacy

The term financial literacy term was initially created in 1787 in America, where the country confessed the need for literacy to overcome the misperception and extensive debt-trap in USA due to ignorance of credit, circulation and nature of currency (Financial Corps, 2014). After that, a number of changes happened, and financial literacy was commonly used in numerous ways by several scholars, organisations, and governments (Hung et al., 2009).

Financial literacy is defined as the capability of decision makers to understand and analyze financial information to make wise financial choices (Marriott & Mellett, 1996). Financial literacy has been developed as a serious element for the performance of MSEs, particularly in developing economies (Rahadjeng et al., 2023; Buchdadi et al., 2020). Financial literacy, as defined OECD (2022), is the combination of consciousness, knowledge, ability, attitude, and behaviour essential to make detailed financial decisions, to reach personal financial health. The revised UK Adult Financial Capability Framework identified financial literacy into four main segments, they are, financial understanding, financial competency, financial responsibility, and numerical literacy and Standard literacy. Financial literacy can also be divided into two broad levels: basic requirements and advanced competencies (Kuntze et al., 2019).

With reference to Hung et al., (2009) financial literacy is “the financial knowledge, attitude, and awareness that improve organizational performance”. This is the capability to appraise the new and complex financial options to make knowledgeable judgements in choice of instruments and degree of usage for the long-run interests (Mandell & Klein, 2007).

Access to Finance

The empirical evidence has shown that one of the biggest obstacles for MSEs' entrepreneurs is getting access to financing (Kraemer-Eis & Lang, 2014; Boscoianu et al., 2015; Nagaraju et. al, 2013). Cowling et al., (2016) claims that MSEs' access to external financing differs significantly from that of larger businesses, since MSEs can only access the private loan and equity markets, but larger businesses can access both private and public markets.

According to Hussain et al., (2018), one of the key conclusions in the literature is that MSMEs face external financing constraints and that having inadequate financial literacy also has a harmful impact on MSMEs' chances of surviving, expanding, and innovating. Fraser et al., (2015), referenced by Hussain et al., (2018), highlights the relationship between a lack of financial management expertise and a company's inability to obtain

financing, which negatively impacts the firm's capacity to obtain the right loan and equity and ultimately results in bankruptcy. According to a World Bank (2022) study, having access to financing improved business performance and growth by lowering risk, facilitating market entry, and promoting innovation and entrepreneurship, especially in developing nations. Based on the investigation of the funding practices of Sri Lankan small businesses, own savings is the preferred source of funding; share capital provided no significant contribution to the financing of Sri Lankan MSEs; commercial bank loans were the primary source of debt financing (Kuruppu, 2015). Despite the existence of a well-developed and competitive financial sector the owners of MSEs in Sri Lanka keep choosing unregulated debt funding, such as loans from friends and family incurring high cost of debt (Gamage, 2015). Thus, access to debt does not explain the causal pathway between literacy and outcomes but rather conditions or moderates the strength of that relationship. This conceptualization aligns with prior studies that treat financial access as a contextual moderator influencing the impact of financial capability on enterprise performance and sustainability (Lusardi & Mitchell, 2014; Gamage, 2015; Morgan & Trinh, 2019).

Resource Based Theory of Entrepreneurship

With reference to the RBT of entrepreneurship developed by Barney (1991) emphasizes that for MSEs, the entrepreneur is the resource carrier whose personal resources impact the firm's competitive advantage and performance. Therefore, it is important to investigate the level of financial literacy of the entrepreneur as he is the sole decision maker in the MSEs, and the financial decision of the business is critical for the success as well as the survival of business.

The RBT framework for managing the resources of a firm, diversification strategy, and efficiency opportunities, was established by Penrose (2009). This proposed conceptualizing a business as an organized bundle of resources, in order to tackle how the business may achieve its objectives and strategic actions (Penrose, 2009). RBT started to take shape in the 1980s. RBT suggests a model for identifying and predicting the critical components of competitive advantage and organizational success. Large organizations were increasingly focused on the resource-based view of strategic implementation. However, the researchers recognized something was lacking in terms of small businesses. Thus, KBV came into existence, highlighting the fact that the most important components of a long-term competitive advantage for organization are its capacity to use and produce knowledge. The resources, business procedures, capacities, business features, expertise, knowledge, etc. that a business controls to understand, and execute plans intended to increase effectiveness and efficiency are referred to as resources in RBT, according to Barney (1991). The RBV of entrepreneurship and the KBV states that opportunity-based entrepreneurship and the growth of new businesses are significantly predicted by the resources available to founders. The importance of financial, social, and personal resources is emphasized by this strategy (Barney, 1991). Consequently, being able to access resources enhances the ability of the firm to spot and take advantage of opportunities.

In summary, the literature underlines that the interaction between debt level, financial literacy, and access to finance is complex, context-dependent, and deeply influenced by the entrepreneur's resource profile. Within the framework of RBT and KBV, these factors highlight that the business owners' financial capabilities are not merely supportive, but central to sustaining competitive advantage. This theoretical grounding provides a lens for interpreting the study findings on how financial literacy and access

to finance influence the debt-related outcomes for MSEs in this unique setting.

Development of Hypothesis

With the support of the literature review this section focused on developing the hypothesis for the study highlighting the direct impact of financial literacy on debt level of the firm and the moderating effect of access to finance on this relationship. Based on the hypothesis the conceptual framework is also developed for the study.

The latest studies on financial literacy research highlights the link between financial literacy, financial decision-making and firm level outcomes (Guiso & Viviano, 2015; Adomako et al., 2016; Esiebugie et al., 2018). The sustainability and growth of MSEs are significantly influenced by financial knowledge and behaviour, which in turn plays a crucial role in deciding debt and financing (Bongomin et al., 2018). Several researchers have identified and agreed on the association between financial literacy and business performance (Zuhair et al., 2015; Esiebugie et al., 2018; Benedict et al., 2021). The studies indicate that entrepreneurs with high levels of financial literacy perform better in their businesses financing (Charfeddine et. al, 2024). According to literature, financial literacy is highly essential to small business achievement and improves their financial decision making (Lusardi & Mitchell, 2014). Aron, Muellbauer, and Murphy (2006), emphasize the necessity of regularly conducting research to monitor the business financial behaviour and debt levels in order to reduce the financial risks associated with loan non-performance and payback default.

On the other hand, as per the study conducted by McKenzie and Lounsbury (2009), it is important to understand that even someone who is financially knowledgeable can also take poor financial decisions that put them in danger of falling into a severe debt trap. According to Huston (2010), financial literacy is critical for MSEs to stay alive and respond to the changes in economic conditions. The results of a study conducted to identify the connection between over indebtedness and financial literacy by Lusardi and Tufano (2015) highlighted only one-third of the respondents were able to apply financial ideas to understand everyday financial decisions, which indicated low levels of financial literacy. People who lack the financial literacy to make informed decisions are more vulnerable to the wide range of financial services available on the market and are less able to differentiate between safe and risky investments (Assifuah-Nunoo, 2023). Also, individuals with lack of financial literacy are more likely to experience financial difficulties like default and debt (Lyons, 2004). The study of Disney and Gathergood (2013), supports this viewpoint by pointing out that people with low financial literacy tend to underestimate the cost of credit and become more vulnerable to

debt accumulation, where businesses with lower financial literacy typically take on higher levels of debt and may even become overly indebted.

H1: Financial literacy influences the level of debt of the MSEs

Financial literacy enables managers and owners of MSEs in developing economies to access financial options to make appropriate financial decisions and selections on the complex financial products offered by the financial systems without feeling intimidated (Njoroge & Gathungu, 2013; Bongomin et al., 2018). The relevance of financial literacy and its ability to assist business owners in making wise financial decisions and accessing the funds from external sources to expand their enterprises, has increased recently (Potrich &Vieira, 2018).

Financial access, according to Fatoki (2014), enables MSEs to make better financial decisions and to comprehend and manage risk. It also helps to advance practices like avoiding excessive debt. Even though it is still difficult to access financial institutions in South Asia, many of the continent's nations or at least its most populous regions, have relatively easy access to several banking institutions for savings and loans. In several South Asian nations, multiple borrowing, that is, borrowing from several financial institutions, has raised concerns (Asia Development Bank, 2023). Although the need for MSEs to be financially included is not new, the ongoing difficulty of MSEs to survive because of their financial constraints highlight the importance of improving financial inclusion through financial literacy (Adomako et al., 2016). The KBV is used to strengthen the understanding of the relationship between financial literacy and financial accessibility that can result in obtaining external debt for entities. According to this theory financial knowledge helps people get access to credit. According to Curado and Bontis (2006), the KBV argues that knowledge is a strategic resource that businesses can leverage to gain a competitive edge. Organizations can utilize financial literacy as a valuable tool to gain access to funding. Ye and Kulathunga (2019) claim that financial literacy is viewed as an intellectual and knowledge asset necessary for managing finances, arriving at wise financial judgements and obtaining credit from potential sources.

H2: Access to finance moderates the relationship between financial literacy and debt level of the MSEs

Based on the review of literature the conceptual framework (figure 1) was developed for the study. Financial literacy has been conceptualized with five dimensions and access to finance into four (appendix 1).

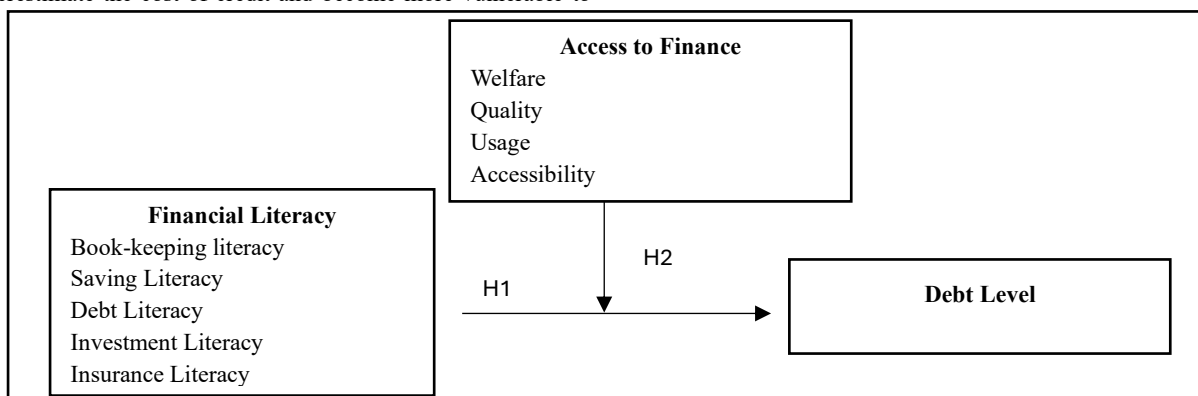


Figure 1: Conceptual Framework
Source: Own Elaboration

Methodology

Under the research paradigm of positivism, the quantitative research approach is applied in this study. Although behavioural constructs often involve subjective perceptions, prior research has demonstrated that quantitative methods within a positivist framework are effective for investigating financial behaviour, literacy, and decision-making, as these constructs can be operationalized and measured using validated instruments (Robson & McCartan, 2016; Saunders et al., 2019). The survey method is used to collect the data among the sample of MSEs in the Northern Province of Sri Lanka. Numerous definitions of MSEs are applied by various international organizations, statistics agencies and nations based on factors, such as, number of employees, capital investment, asset value, turnover, and balance sheet (Sri Lanka Export Development Board, 2024). However, applying turnover as a parameter in studies is effective because with the increase of technology the number of employees cannot be considered as a valid criteria and the growth of the business is highly determined by revenue generation (Esubalew & Raghurama, 2017). To define MSEs, this study applied the turnover as a parameter where entities with less than Rs. 250 million annual turnover is considered MSEs (Institute of Policy Studies Sri Lanka, 2017).

The target population for the survey is MSEs that are registered with DS divisions of the five districts as of year 2023. From the target population of 27,316 MSEs a representative sample of 380 was selected for the data collection based on statistical power analysis. Accordingly, 379 or more responses are needed for a confidence level of 95%, where the real value is within $\pm 5\%$ of the measured/surveyed value. Participants were

approached through the Divisional Secretariat offices and invited to complete a structured questionnaire, either in person or via electronic means. The sampling strategy applied is convenience sampling due to the practical constraints in post-conflict areas, and the participants were selected based on specific characteristics such as the primary decision maker of the entity. The main challenge of generalizability in convenience sampling was minimized with the large sample, covering diverse respondents, providing useful insights into the target population.

Analysis and Discussion

The data collected from 380 MSEs were examined using statistical software SPSS and Smart PLS. The demographic and descriptive statistics, measurement model assessment, structural model testing and the discussion of the findings are presented in this section.

The analysis of the data reveals the following characteristics of demographics; 145 made up 38.0% of the sample were from Jaffna district, 115 entrepreneurs (30.3%) from Vavuniya, 56 (14.7%) from Mannar, 43 (11.3%) from Mullaitivu, and 21 (5.5%) from Kilinochchi. Focusing on the gender of the participants in the survey, majority of respondents (67.9%) were males and 32.1% of them were females (Table 1). All these entrepreneurs have indicated that they are the primary decision makers of the entity. Though they obtain information to make their financial decision from their support system such as friends, relatives, experts, and banks staff, the business financial decisions are taken by the business owners.

Table 1: Demographic Profile of the Respondents

Variable	Category	Frequency	Percentage (%)
District	Jaffna	145	38.2
	Kilinochchi	21	5.5
	Mannar	56	14.7
	Vavuniya	115	30.3
	Mullaitivu	43	11.3
Gender	Female	122	32.1
	Male	258	67.9
Education	Post-graduate education or equivalent	39	10.3
	Professional qualification	91	23.9
	Graduate	79	20.8
	G.C.E A/L completed	113	29.7
	G.C.E O/L completed	24	6.3
	Grade 6 - 9	12	3.2
	Primary school – up to grade 5	10	2.6
	No formal education	12	3.2

Source: Survey Data, 2025

Looking at the educational qualifications in Table 1, a significant percentage (84.7%) of the business owners are having G.C.E Advanced level or above qualification. The descriptive statistics in Table 2 below offer a comprehensive

overview of Book-keeping literacy, Saving Literacy, Debt Literacy, Investment Literacy and Insurance Literacy and Access to finance.

Table 2: Descriptive Statistics of the Variables

Variable	Min	Max	Mean	Std. Deviation	Skewness	Kurtosis
Financial Literacy	1	5	2.54	1.01	0.062	-1.286
Book-keeping Literacy	1	5	2.95	1.42	0.018	-1.531
Saving Literacy	1	5	2.86	1.33	0.104	-1.424
Debt Literacy	1	5	2.37	1.27	0.474	-1.233
Investment Literacy	1	5	2.57	1.21	-0.036	-1.454
Insurance Literacy	1	5	1.96	1.05	0.848	-0.615
Access to Finance	1	5	3.30	1.53	-0.402	-1.578
Welfare	1	5	3.31	1.57	-0.362	-1.562
Quality	1	5	3.30	1.54	-0.392	-1.536
Usage	1	5	3.31	1.54	-0.381	-1.530
Accessibility	1	5	3.30	1.53	-0.373	-1.522

Source: Survey Data, 2025

The descriptive statistics indicate that respondents demonstrated moderately negative outcomes across key financial dimensions, suggesting a generally negative self-perception in these areas. Specifically, respondents highly lack insurance literacy where the mean value is 1.96. The standard deviation is between 1.05 to 1.53, reflecting a fair amount of

variation in responses. All variables show a roughly normal distribution as the skewness and kurtosis are within ± 2 . The debt level of the MSEs was a computed variable and the descriptive statistic of this variable is provided in Table 3 below.

Table 3: Descriptive Statistics of the Measured Variable

Variable	Min	Max	Mean	Std. Deviation	Skewness	Kurtosis
Debt Level (Debt/Equity)	0.03	5.29	1.11	1.42	1.23	3.33

Source: Survey Data, 2025

Looking at the debt-to-equity ratio in Table 3, MSEs have relatively high debt with a mean value of 1.11 and ranging from 0.03 to 5.29 reflecting variability. According to Table 4, the scales demonstrate strong internal reliability, with book-keeping literacy, debt literacy, investment literacy and accessibility of finance scoring above 0.84. Saving literacy

(0.776), insurance literacy (0.761) also shows acceptable reliability supporting the consistency of the questionnaire items. All KMO values are above 0.68, which indicates that the data is suitable for factor analysis, and the constructs used in the questionnaire are valid representations of their respective concepts.

Table 4: Reliability and Validity Testing

Scale	Type of Scale	No. of Items	Cronbach's Alpha (CA)	KMO Value
Financial Literacy				
Book-keeping Literacy	5 - point Likert	6	0.887	0.845
Saving Literacy	5 - point Likert	3	0.776	0.781
Debt Literacy	5 - point Likert	5	0.860	0.766

Investment Literacy	5 - point Likert	3	0.847	0.873
Insurance Literacy	5 - point Likert	3	0.761	0.875
Access to Finance				
Welfare	5 - point Likert	3	0.682	0.742
Quality	5 - point Likert	3	0.778	0.681
Usage	5 - point Likert	3	0.692	0.767
Accessibility	5 - point Likert	3	0.852	0.893

Source: Survey Data, 2025

The Variance Inflation Factor (VIF) indicator was computed in SmartPLS to test for multicollinearity. According to the results for the variables, there is no substantial multicollinearity if the indicator value is less than 10. Most statistical tests assume that the population variance is equal, thus, the Levene test should be performed for population consists of two or more groups (Gastwirth, Gel & Miao, 2009). In this study MSEs are from

the manufacturing, trading, and services sectors, thus Levene’s test was performed to ensure there are no substantial variations in the measurements of the variables within and between the categories. As there were no noticeable differences between the groups (Table 5), the survey responses were analyzed as a whole.

Table 5: Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Debt to Equity	Based on Mean	0.944	9	370	0.487
	Based on Median	0.765	9	370	0.649
	Based on Median and with adjusted df	0.765	9	269.787	0.649
Access to Finance	Based on Trimmed Mean	0.913	9	370	0.514
	Based on Mean	1.438	9	370	0.170
	Based on Median	0.793	9	370	0.623
Financial Literacy	Based on Median and with adjusted df	0.793	9	341.102	0.623
	Based on Trimmed Mean	1.618	9	370	0.108
	Based on Mean	0.912	9	370	0.515
	Based on Median	0.878	9	370	0.545
	Based on Median and with adjusted df	0.878	9	354.598	0.545
	Based on Trimmed Mean	0.911	9	370	0.515

Source: Survey Data (SPSS)

The study model was assessed using SmartPLS 4.0 to test the hypothesized relationships among the constructs: Financial Literacy (FL), Access to Finance (ACF), and Debt level (DT). Financial literacy is conceptualized as a multidimensional construct consists of book-keeping literacy (BL), saving literacy (SL), debt literacy (DL), investment literacy (IL) and

insurance literacy (IS). The access to finance is also conceptualized as a multidimensional construct consists of welfare (WEL), quality (QLY), usage (USE) and accessibility (ABY). The analysis discovered acceptable reliability and validity indicators, confirming the robustness of the model.

Table 6: Diagnostics for Confirmatory Factor Analysis

	α	p_A	CR	AVE
Financial Literacy	0.893	0.894	0.895	0.881
Access to Finance	0.852	0.772	0.785	0.884
Optimal Values	> 0.7	> 0.7	> 0.7	> 0.5

Note: α = Cronbach Alpha; p_A = Rho A; CR = Composite Reliability; AVE = Average Variance Extraction

Source: Survey Data (SmartPLS)

According to the results of the Fornell–Lucker criteria (Table 7) shown that, the square root of the AVE for each variable have exceeded its maximum correlation with other variables. Thus,

the results from the measurement model demonstrate high validity and reliability.

Table 7: Discriminant Validity

	ATF	DT	FLT
ATF	0.506		
DT	0.195	0.474	
FLT	0.058	0.126	0.251

Note: ATF = Access to finance; DT = Debt level; FLT = Financial Literacy

Source: Survey Data (SmartPLS)

Discriminant validity is verified across all constructs using HTMT. The findings of the measurement model highlighted

that all outer loading surpassed 0.7, excluding an item that was deleted due to its low loading (Table 8).

Table 8: Outer Loadings of the Model

	AF	BL	DL	DT	IL	IS	SL
AF1	0.878						
AF10	0.772						
AF11	0.875						
AF2	0.781						
AF3	0.877						
AF4	0.871						
AF5	0.871						
AF6	0.673						
AF7	0.772						
AF8	0.681						
AF9	0.675						
BL1		0.887					
BL2		0.910					
BL3		0.712					
BL5		0.748					
BL6		0.890					
DL1			0.755				
DL2			0.871				
DL3			0.863				
DL4			0.734				
DL5			0.647				
DT				1.000			
IL1					0.776		
IL2					0.862		
IL3					0.836		
IS1						0.805	
IS2						0.771	
IS3						0.773	
SL1							0.872

SL2	0.758
SL3	0.857

Note: Threshold: Loadings > 0.7

AF- Access to Finance, BL – Bookkeeping Literacy, DL – Debt Literacy, DT – Debt level, IL – Investment Literacy, IS – Insurance Literacy

Source: Survey Data (SmartPLS)

The path coefficient from financial literacy to the debt level of MSE was found to be significant and negative ($\beta = -0.630$, $p < 0.05$). This suggests that business owners with higher levels of financial literacy which comprises of bookkeeping, saving, debt, investment and insurance literacy, are less likely to get into high debt levels. The interaction effect (Access to Finance \times Financial Literacy) is significant ($\beta = -0.553$, $t = 2.281$, $p =$

0.004). This indicates that access to finance moderates the relationship between financial literacy and debt level. Specifically, when access to finance improves, the debt-reducing effect of financial literacy becomes stronger, suggesting a synergistic benefit. Further, the NFI score of 0.869 and the SRMR score of 0.023 suggest that the model has a good fit.

Table 9: Results of the Structural Equation Modeling (SEM) with Moderation Effect

Hypothesis	Relationship	β	R ²	t-statistics	p-value
H1 (A)	Financial Literacy → Debt Level	-0.630	0.78	4.388	0.000
H2 (A)	Access to Finance X Financial Literacy → Debt level	-0.553	0.72	2.281	0.004

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, n.s.= not significant;(two tailed test), (R) = Rejected; (A) = Accepted
Source: Survey Data (SmartPLS)

The figure 2 below illustrates the final model, where financial literacy accounted for a substantial proportion of variance in the debt level ($R^2 = 0.78$), indicating that 78% of the variation in debt level of MSEs is explained by financial literacy of the

business owners. Furthermore, the effect of the moderator, access to finance, on direct relationships was also tested to be positive

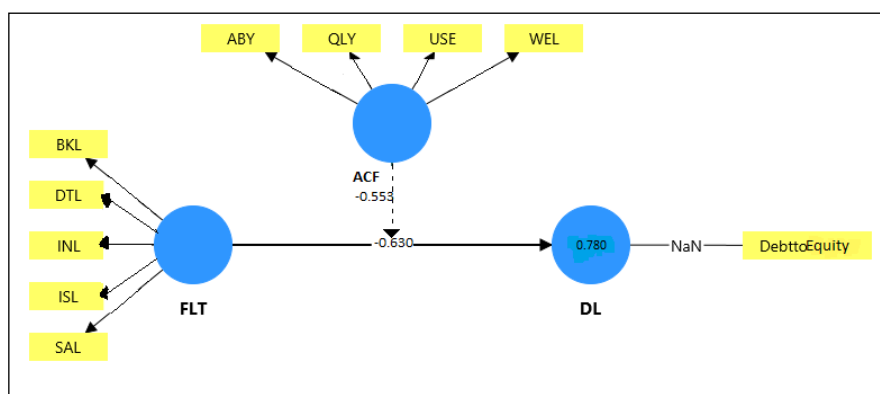


Figure 2: Final Model loadings, R² and β Moderator Analysis
Source: Survey Data (SmartPLS)

Discussion

This study analyses the effect of financial literacy on debt level and the moderating role of access to finance. Though previous literature has mixed evidence on the influence of financial literacy and financial outcomes (Hilgert & Hogarth, 2003; Lusardi & Mitchell, 2014; Remund,

2010), this study highlights a strong significant influence concerning financial literacy and debt level of MSEs. However, numbers of studies also identified that the financial literacy level of decision makers has a substantial impact on business decisions (Fatoki, 2014).

The study findings are also constant with previous research concerning financial literacy and business financial performance and the growth of MSEs (Wazdi et al., 2024; Estelami & Estelami, 2023; Assifuah-Nunoo, 2023; Duarte et al., 2018). Further the study findings indicates that higher the financial literacy among MSE business owners would lead to enhanced performance with better debt management, supporting the findings recent studies conducted by the researchers (Assifuah-Nunoo, 2023; Molina-García et al., 2023). Improved financial literacy allows MSE owners to manage the business funds, improved bookkeeping, efficient saving behaviour, manageable debt, better investment and insurance (Adomako et al., 2016).

Interestingly the most substantial impact was identified between debt literacy and debt level, where the average debt to equity ratio is significantly high for most of the entities considered in the survey, as most owners were not adequately aware of debt and compound interest impact. Surprisingly, the insurance literacy is very low among the province highlighting that the business owners are not prepared for any future losses or uncertainties as they are not aware of the concept of insurance and its significance. Few studies conducted in MSEs in relation to future readiness and proactiveness of businesses also confirmed these findings (Lusardi & Tufano, 2015; Idris et al., 2018). Moreover, the study confirmed that access to finance moderates the relationship between financial literacy and the debt level of MSEs. The study findings are aligned with the findings of previous studies in the literature which analyzed the influence of financial literacy on financial access of financial products for developing countries (Changwasha, 2019; Changwasha & Mutezo, 2023). This study highlights that insufficient financial literacy adversely influences the access to finance for MSEs. The previous study conducted in identifying the barriers for entrepreneurs also concluded that lack of knowledge and resources is a significant barrier for the access to credit (Metu & Nwogwugwu, 2024). Also, the studies conducted identified that access to finance is vital for MSEs to come out from debt challenge, poverty, and ensure sustainability (Assifuah-Nunoo, 2023). Thus, this study confirms with the prior literature, demonstrating that financial literacy is vital for the informed debt related decision. Specifically, this study highlighted this influence for a post-conflict situation in a rural community, where it is identified the more particularly the insurance literacy and debt literacy are significantly lower in Northern Province.

Construed through RBT and KBV, the study positions financial literacy, specifically the debt and insurance literacy, as a critical intangible resource and specialized knowledge asset that enhances the capacity of MSEs for effective debt management, risk mitigation, and performance improvement. In line with RBT, such literacy can create a source of continual competitive advantage when it is valuable, rare, and inimitable (Grant, 1996; Barney, 1991), while KBV underlines its role in enabling informed decision-making and adaptive capability (Kogut & Zander, 1992). The moderating effect of access to finance reflects the need for complementary resources to fully leverage

knowledge assets, where the relatively low literacy levels observed in the Northern Province highlight a critical gap that constrains competitive potential in economically marginalized, post-conflict environments (Metu & Nwogwugwu, 2024; Assifuah-Nunoo, 2023).

Conclusion

The primary objective of this study is to identify the influence of financial literacy of business owners on the debt level of MSEs in the Northern Province of Sri Lanka and also to identify the moderating role of access to finance. The study results indicated that there is a significant negative relationship between financial literacy and debt level, which implies business owners with enhanced capability in bookkeeping, savings, investment, insurance and debt management are capable of making sound financial decisions, avoiding high level of debt. The study also demonstrated that access to finance significantly moderates the relationship between financial literacy and debt level. This suggests that financially literate business owners are able to reach financial institutions to obtain appropriate funds and manage their debt level wisely. This study contributes to the RBT and KBV by empirically testing financial literacy as an important resource that influences the firm level financial outcome. This also confirms that the business owner is the key resource carrier whose skills shape the sustainability of the business.

The study also contributes to the limited literature on MSEs particularly in post conflict and economically deprived regions. As financial literacy is considered as a multidimensional construct, it provides a wholistic insight into competencies that influence the financial outcome. The study findings also highlight the urgent need for a specific financial literacy programme tailored to MSE owners in rural and post conflict areas. While highlighting the valuable contribution derived from this study, the following limitations need to be acknowledged. As this study focused particularly on MSEs in the Northern province, challenging to generalize the findings to other parts of the country with different socioeconomic contexts. Also, there could be respondent bias due to self-reported data, and the cross-sectional nature of the study creates challenges in understanding causal relationships. The future studies can emphasis on longitudinal approaches to observe the relationship between financial literacy and debt level. The studies can also focus on comparative research between provinces and test additional moderating variables for further understanding.

References

- Abreu, M., & Mendes, V. (2010). Financial Literacy and Portfolio Diversification. *Quantitative Finance*, 10, 515-528. <https://doi.org/10.1080/14697680902878105>
- Adomako, S., Danso, A. & Ofori-Damoah, J. (2016). The moderating influence of financial literacy on the relationship between access to finance and firm growth in Ghana, *Venture Capital*, 18(1), 43-61.
- Aivazian, V. A., & Santor, E. (2008). Financial constraints and investment: assessing the impact of a World Bank credit program on small and medium enterprises in Sri Lanka. *Canadian Journal of Economics*, 41(2), 475-500.
- Al-Muzaini, N.S. (2023). The portrayal of SME leaders in Kuwait on SDG 12, Management and Sustainability: An Arab Review, 2(3).
- Aron, Janine & John M. (2006), Review of Monetary Policy in South Africa since 1994, CSAE Working Paper Series, Centre for the Study of African Economies, University of Oxford.
- Asian Development Bank. (2023). Financial soundness indicators for financial sector stability in the ASIAN region. <https://www.adb.org>.
- Assifuah-Nunoo, E. (2023). Access to finance, financial literacy and small and medium-scale enterprises sustainable performance, *Journal of Engineering Applied Science and Humanities*, 8(2), 118-142.
- Aviantara, R. (2021). Scoring the financial distress and the financial statement fraud of Garuda Indonesia with as the financial solutions. *Journal of Modelling in Management*. <https://doi.org/10.1108/JM2-01-2020-0017>
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
- Bae, H., & Goyal, V. K. (2009). Creditor Rights, Enforcement, and Bank Loans. *The Journal of Finance*, 64(2), 823-860. <https://doi.org/10.1111/j.1540-6261.2009.01450.x>
- Benedict, A., Gitongab, J.K., Agyemanc, A.S. & Kyeid, B.T. (2021). Financial determinants of SMEs performance. Evidence from Kenya leather industry.
- Bester, H., & Scheepens, J. (1996). Internal Finance versus Bank Debt: The Chains from Establishing a Debt History, *Credit and Capital Markets–Kredit und Kapital*, (4), 565-591.
- Bongomin, G. O. C., Munene, J. C., Ntayi, J. M., & Malings, C. A. (2018). Determinants of SMMEs growth in post war communities in developing countries: Testing the interaction effect of government support, *World Journal of Entrepreneurship, Management and Sustainable Development*, 14 (1), 50-73.
- Boscoianu, Mircea, Lupan, & Mariana. (2015). Innovative Instruments for SME Financing in Romania - a New Proposal with Interesting Implications on Markets and Institutions. *Procedia Economics and Finance*. 32. 240-255.
- Buchdadi, Agung, Sholeha, Amelia, Ahmad, Nazir & Mukson. (2020). The influence of financial literacy on SMEs performance through access to finance and financial risk attitude as mediation variables. *Academy of Accounting and Financial Studies Journal*, 24, 1-16.
- Central Bank of Sri Lanka, (2020 - 2024). Annual Report, Colombo.
- Charfeddine, L., Ben, & Khediri, K. (2024). Financial development and environmental quality in UAE: Cointegration with structural breaks. *Renewable and Sustainable Energy Reviews*, 55, 1322-1335. <https://doi.org/10.1016/j.rser.2015.07.059>
- Changweshwa, M. (2019), The relationship between financial literacy and financial access among SMEs in the Ekurhuleni metropolitan municipality, South Africa.
- Changweshwa, M. & Mutezo, A.T. (2023), The relationship between financial literacy and financial access among SMES in the Ekurhuleni municipality, 23(1), 1142.
- Claessens, S. (2006). Access to Financial Services: A Review of the Issues and Public Policy Objectives. *The World Bank Research Observer*, 21, 207-240. <https://doi.org/10.1093/wbro/lkl004>
- Committee for the Abolition of Illegitimate Debt, (2020). Analysis Report, Jaffna.
- Cowling, M., Liu, W. and Ledger, A. (2016), Small business financing in the UK before and during the current financial crisis, *International Small Business Journal: Researching Entrepreneurship*, 30(7), 778-800.
- Curado, C., & Bontis, N. (2006). The Knowledge-Based View of the Firm and Its Theoretical Precursor. *Inderscience Enterprises Ltd. International Journal of Learning and Intellectual Capital*, 3, 367-381. <https://doi.org/10.1504/IJLIC.2006.011747>
- Department of Census and Statistics, (2019 - 2023). Labour Force Survey, Colombo.
- Disney, Richard & Gathergood, John, (2013). Financial literacy and consumer credit portfolios, *Journal of Banking & Finance*, 37(7), 2246-2254.
- Duarte, P., Silva, S.C., & Ferreira, M.B. (2018). How convenient is it? Delivering online shopping convenience to enhance customer satisfaction and encourage e-WOM, *Journal of Retailing and Consumer Services*, 44, 161-169.
- Esiebugie, U., Richard, A.T., & Emmanuel, A.L. (2018). Financial literacy and performance of small and medium scale enterprises in Benue state, Nigeria. *International*

- Journal of Economics, Business and Management Research, 2 (4), 65-79.
- Esubalew, A. A., & Raghurama, A. (2017). Revisiting the global definitions of MSMEs: parametric and standardization issues. *Asian Journal of Research in Business Economics and Management*, 7(8), 429-440.
- Estelami, H. and Estelami, N.N. (2023). The differential impact of cognitive style on the relationship between financial education and financial literacy, *Journal of Financial Services Marketing*, 29(2), 1-15.
- Fatoki, O. (2014). The Causes of the Failure of New Small and Medium Enterprises in South Africa. *Mediterranean Journal of Social Sciences*, 5, 2039-2340.
- Financial Corps. (2014). Financial literacy, schooling, and wealth accumulation (No. w16452). National Bureau of Economic Research.
- Flynn, S. J. (2017). Debt structure and future financing and investment. Arizona State University.
- Forum. (2024). Global Assessment Report on Disaster Risk Reduction 2024. Global assessment report on disaster risk reduction. <https://doi.org/10.18356/9789211067545>
- Gamage, P. (2015). Bank Finance for Small and Medium-Sized Enterprises in Sri Lanka: Issues and Policy Reforms. *Studies in Business and Economics*, 10, 32-43. <https://doi.org/10.1515/sbe-2015-0018>
- Ghura, H., Harraf, A., Li, X., and Hamdan, A. (2023). The moderating effect of corruption on the relationship between formal institutions and entrepreneurial activity: evidence from post-communist countries, *Journal of Entrepreneurship in Emerging Economies*, 12(1) 58-78.
- Guiso, L. & Viviano, E. (2015), How much can financial literacy help?, *Review of Finance*, 19(4), 1347-1382.
- Hart, S. (1996). Does It Pay to Be Green? An Empirical Examination of the Relationship between Emission Reduction and Firm Performance. *Business Strategy and the Environment*, 5, 30-37. [https://doi.org/10.1002/\(SICI\)1099-0836\(199603\)5:1<30::AID-BSE38>3.0.CO;2-Q](https://doi.org/10.1002/(SICI)1099-0836(199603)5:1<30::AID-BSE38>3.0.CO;2-Q)
- He, Z., & Xiong, W. (2012). Rollover Risk and Credit Risk. *The Journal of Finance*, 67(2), 391-430. <https://doi.org/10.1111/j.1540-6261.2012.01721.x>
- Hilgert, M.A., Hogarth, J.M., & Beverly, S.G. (2003). Household Financial Management: The Connection between Knowledge and Behavior. *Federal Reserve Bulletin*, 89, 309-322.
- Hung, Angela, Parker, Andrew, & Yoong, J. (2009). Defining and Measuring Financial Literacy. RAND Corporation Publications Department, Working Papers. 708. 10.2139/ssrn.1498674.
- Hussain, J., Salia, S. & Karim, A. (2018). Is knowledge that powerful? Financial literacy and access to finance: an analysis of enterprises in the UK, *Journal of Small Business and Enterprise Development*, 25(6),985-1003.
- Huston, S.J. (2010). Measuring financial literacy, *Journal of Consumer Affairs*, 44(2), 296-316.
- Idris, N.H., Faisal-Wee, N.M., Ismail, S., & Abd Samad, K. (2018). Financial knowledge, debt literacy and over-indebtedness, *The Journal of Social Sciences Research*, 3, 22-29.
- International Labour Organization, (2023). *World Employment and Social Outlook*, Geneva.
- John. S., & Muthusamy, K. (2011). Impact of Leverage on Firms Investment Decision. *International Journal of Scientific & Engineering Research*, 2 (4), 1-16.
- Gastwirth, J. L., Gel, Y. R., & Miao, W. (2009). The impact of Levene's test of equality of variances on statistical theory and practice. *Statistical Science*, 24(3). <https://doi.org/10.1214/09-sts301>
- Grant, R. M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal*, 17(S2), 109-122. <https://doi.org/10.1002/smj.4250171110>
- Institute of Policy Studies Sri Lanka, (2017). *National Policy Framework for Small Medium Enterprise (SME) Development*, Colombo.
- Jacek Jaworski, & Leszek Czerwonka. (2021). Meta-study on the relationship between profitability and liquidity of enterprises in macroeconomic and institutional environment, *Journal of the Indian Institute of Management Calcutta*, 48(2), 233-246.
- Kadrigamar, A. (2020). Debt, Distress, Suicide. Retrieved from <https://www.cadtm.org/Debt-Distress-Suicide>
- Kalemli-Ozcan, Şebnem, Laeven, L., & Moreno, D. (2022). Debt Overhang, Rollover Risk, and Corporate Investment: Evidence from the European Crisis. *Journal of the European Economic Association*.
- Kannadhasan, M. (2014). Does financial leverage influence investment decisions? The case of pharmaceutical firms in India. *The Case of Pharmaceutical Firms in India*.
- Klapper, Leora & Lusardi, Annamaria & Georgios A. (2013). Financial literacy and its consequences: Evidence from Russia during the financial crisis, *Journal of Banking & Finance*, 37(10), 3904-3923.
- Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization Science*, 3(3), 383-397. <https://doi.org/10.1287/orsc.3.3.383>
- Kraemer-Eis, Helmut & Lang, Frank. (2014). The importance of leasing for SME finance. EIF Working Paper.
- Kuntze, R., Wu, C., Wooldridge, B.R., & Whang, Y. (2019). Improving financial literacy in college of business students: modernizing delivery tool, *International Journal of Bank Marketing*, 37(4), 976-990.

- Kuruppu, Gayithri & Azeez, Athambawa. (2016). Financing Preferences of Small and Medium Enterprise Owners of Sri Lanka: Does Pecking Order Theory Hold?. *Journal of Business & Economic Policy*. 3. 2375-0774.
- Lusardi, A., & Mitchell, O. S. (2014). Financial Literacy Around the World: An Overview. *SSRN Electronic Journal*, June. <https://doi.org/10.2139/ssrn.1810551>
- Lyons, A. C. (2004). A Profile of Financially At-Risk College Students. *The Journal of Consumer Affairs*, 38, 56-80.
- Mandell, L., & Klein, L. (2007). Motivation and Financial Literacy. *Financial Services Review*. 16.
- Marriott, N., & Mellett, H. (1996). Health care managers' financial skills: measurement, analysis and implications. *Accounting Education*, 5(1), 61-74. <https://doi.org/10.1080/09639289600000006>
- McKenzie, T. L., & Lounsbury, M. A. F. (2009). School physical education: The pill not taken. *American Journal of Lifestyle Medicine*, 3, 219-225. <http://dx.doi.org/10.1177/1559827609331562>
- Metu, A.G. and Nwogwugwu, U.C. (2024). Challenging factors affecting access to finance by female micro entrepreneurs in Anambra state, Nigeria, *Journal of African Business*, 25(1), 142-154.
- Molina-García, A., Dieguez-Soto, J., Galache-Laza, M.T., & Campos-Valenzuela, M. (2023). Financial literacy in SMEs: a bibliometric analysis and a systematic literature review of an emerging research field, *Review of Managerial Science*, 17(3), 787-826.
- Mithula, G. (2015). Rise of Financial Institutions & Northern Province Debt Trap. *Colombo Telegraph*. <https://www.colombotelegraph.com/>
- Morgan, P. J., & Trinh, L. Q. (2019). Determinants and Impacts of Financial Literacy in the Lao PDR, *ADB Working Papers*, Asian Development Bank Institute.
- Myers, S. C. (1977). Determinants of corporate borrowing. *Journal of financial economics*, 5(2), 147-175.
- Nagaraju, B., Padmavathi, G.V., Shantharaj, M. P., & Sampulatha, S.P., (2013). A study to assess the knowledge and practice on bio-medical waste management among the health care providers working in PHCs of Bagepalli Taluk with the view to preparing informational booklet. *International Journal of Medicine and Biomedical Research*. 2. 28-35.
- Njoroge, C. W., & Gathungu, J. M. (2013). The effect of entrepreneurial education and training on development of small and medium size enterprises in Githunguri District-Kenya. *International Journal of Education and research*, 1(8), 1-22.
- Nyamboga, M., Sungwacha, & Singoro. (2014). Factors influencing loan repayment performance among group borrowers in Bungoma West District, Bungoma County. *Journal of Business and Management*. 16. 24-28.
- OECD, (2002 - 2014). The OECD principles of corporate governance. *Contadina Administration*, (216).
- O'Neill, B., & Xiao J. J. (2012). Financial Behaviors before and after the Financial Crisis: Evidence from an Online Survey. *Journal of Financial Counseling and Planning*, 23, 33-46. http://afcpe.org/assets/pdf/v23_j3.pdf
- Phan, T. C., Rieger, M. O., & Wang, M. (2018). What leads to overtrading and under-diversification? Survey evidence from retail investors in an emerging market. *Journal of Behavioral and Experimental Finance*, 19, 39-55. <https://doi.org/10.1016/j.jbef.2018.04.001>
- Penrose, E. T. (2009). *The theory of the growth of the firm*. Oxford University Press.
- Potrich, Ani Vieira, & Kelmara. (2018). Demystifying financial literacy: a behavioral perspective analysis. *Management Research Review*. 41. 10.1108/MRR-08-2017-0263.
- Rahadjeng, Erna M., Imam. (2023). MSME Strategy the Impact of Financial Literacy, Self-Efficacy, and Financial Attitudes in improving MSME Business Performance in Indonesia. *Journal of Finance and Business Digital*. 2. 65-80.
- Remund, D.L. (2010), Financial literacy explicated: the case for a clearer definition in an increasingly complex economy, *Journal of Consumer Affairs*, 44(2), 276-295.
- Robson, C., & McCartan, K. (2016). *Real World Research* (4th ed.). Wiley
- Saleem, Q. (2017). Overcoming constraints to SME development in MENA countries and enhancing access to finance: IFC advisory services in the Middle East and North Africa.
- Saunders, M.N.K., Lewis, P. and Thornhill, A. (2019). *Research Methods for Business Students*. 8th Edition, Pearson, New York.
- Sawaeen, F.A.A., & Ali, K.A.M. (2021). The nexus between learning orientation, TQM practices, innovation culture, and organizational performance of SMEs in Kuwait, *Interdisciplinary Journal of Information, Knowledge and Management*, 16.
- Sri Lanka Export Development Board, (2024). *Export Performance Indicators*, Colombo.
- Taiwo, J.N., Agwu, Edwin, Aregan, A.I., & Ochei, I. (2016). Microfinance and Poverty Alleviation in Southwest Nigeria: Empirical Evidence. *International Journal of Social Sciences and Management*. 3. 256.
- Titman, S., & Tsyplakov, S. (2007). A dynamic model of optimal capital structure. *Review of Finance*, 11(3), 401-451.
- UNDP. (2023). *Understanding Multidimensional Vulnerabilities: Impact on People of Sri Lanka*, Colombo.

Van Rooij, M. et al. (2011). Financial Literacy and Stock Market Participation. *Journal of Financial Economics*, 101, 449-472. <https://doi.org/10.1016/j.jfineco.2011.03.006>

Wasiuzzaman, S., Nurdin, N., Abdullah, A.H. and Vinayan, G. (2020) Creditworthiness and Access to Finance of SMEs in Malaysia: Do Linkages with Large Firms Matter? *Journal of Small Business and Enterprise Development*, 27, 197-217. <https://doi.org/10.1108/jsbed-03-2019-0075>

Wazdi, B.P., Yuliawati, A.K., Rofaida, R. & Sari, M. (2024). Financial literacy, job satisfaction, job performance and organizational performance: new evidence, *Journal of Humanities and Social Studies*, 8(1), 70-75.

World Bank. (2022). Small and medium enterprises (SMEs) finance World Bank Web site, available at: www.worldbank.org/en/topic/sme/finance.

Younas, N., Uddin, S., & Muhammad, Y. (2021). Corporate governance and financial distress: Asian emerging market perspective. *Corporate Governance: The International Journal of Business in Society*.

Ye J, Kulathunga K. (2019). How Does Financial Literacy Promote Sustainability in SMEs? A Developing Country Perspective. *Sustainability*, 11(10),2990. <https://doi.org/10.3390/su11102990>

Zuhair, S., Wickremasinghe, G., & Natoli, R. (2015). Migrants and self-reported financial literacy: insights from a case study of newly arrived CALD migrants, *International Journal of Social Economics*, 42(4), 368-386

Appendix 1

Table 1: Operationalization Table

Variable	Measurement	Scale	Related Literature
Financial Literacy	Financial Knowledge Financial behaviour Financial attitude	5-point Likert scale	Questions adapted from OECD. (2013), Potrich, A.C.G. and Vieira, K.M. (2018) O’Neill and Xiao (2012) and OECD (2013): OECD (2020). Van Rooij et al. (2011), Klapper et al. (2013) and OECD. (2020).
Access to Finance	Welfare Quality Usage Accessibility	5-point Likert scale	Claessens (2006) Wasiuzzaman, S., Nurdin, N., Abdullah, A.H. and Vinayan, G. (2020)
Debt level	Level of debt in total capital	Measured variable	Jacek Jaworski & Leszek Czerwonka (2021)

Source: Own Elaboration