World Journal of Advanced Research and Reviews

eISSN: 2581-9615 CODEN (USA): WJARAI

Cross Ref DOI: 10.30574/wjarr

Journal homepage: https://wjarr.com/

(Research Article)

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Mitigating financial risks for entrepreneurs in emerging markets through financial literacy

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World Journal of Advanced Research and Reviews, 2025, 25(01), 602-620

Publication history: Received on 28 November 2024; revised on 16 December 2024; accepted on 18 December 2024

Article DOI: https://doi.org/10.30574/wjarr.2025.25.1.0059

Abstract

This paper aims at understanding and establishing how the assessable financial risks impact the entrepreneurs in emergent markets affecting their business sustainability and growth. This paper aims at establishing how these risks can be managed and performance of SMEs in developing economies improved through use of financial literacy. The study explores the complexity of efficiency of financial literacy, risk management, and business performance in emerging markets. This research uses both the systematic review of the available literature, which includes academic articles, policy papers, and economic reports. The literature review concentrates on research undertaken across several emerging markets to understand the effectiveness of financial literacy interventions on SME performance and risk management programmes implemented. The study uses a mixed-methods approach, where the use of financial data generates objective performance data on fund uses while interviews and surveys provide subjective information regarding the entrepreneurs decision making and their risk propensity. The results present positive significant relationship between entrepreneurs' financial literacy and efficiency of risk management. here is evidence that SMEs owned and controlled by financially educated owners have better access to formal credit, more credit sources, and better cash flows. It also confirms that these businesses have improved ability to respond to shocks in the economy and manage volatilities in the market. Additionally, the research establishes certain areas of financial literacy that have the largest effect on minimizing risk such as: financial statement knowledge, credit knowledge, and investment knowledge. The study also supports the need for targeted financial literacy interventions. It underscores the fact that almost all types of interventions should take into account the local economic status, culture, and the characteristics of various business sectors in terms of risk exposures. The paper also explores possibilities of technology-based solutions in increasing embracement of financial literacy as well as covering more entrepreneurs that are not reached by classical approaches. This paper finds that the improvement of financial literacy levels in emerging economy entrepreneurs is a key factor that should be adopted to lessen financial risks affecting the SMEs. It underscores the importance of a partnership approach to the development of effective and comprehensive financial literacy initiatives by and for policy makers, financial organizations, and educational entities. The study underscores important implications for engineering applicable interventions that can enable the kindled business people choose appropriate financial solutions that will foster the economic growth of the emerging markets.

Keywords: Financial literacy; Emerging markets; Entrepreneurs; SMEs; Risk mitigation; Risk management; Business performance; Financial inclusion; Financial education; Business sustainability

1. Introduction

That is why in the changing environment of emerging markets, businessmen act as initiators of economic development and the formation of new jobs. However, these entrepreneurs especially those managing SMEs are faced with a variety of challenges that may affect the sustainability and growth of their businesses. From these challenges, financial risks are perhaps the most standout factors that define winner or loser of an entrepreneurial business. As stated by Bruhn and

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Zia, (2011) the business tycoons in the developing countries experience a deficiency of adequate academic skills and knowledge pertaining to the financial risks and uncertainties in the business market, hence they end up falling to several financial traps.

The idea about financial literacy as a potential way to address these risks and improve the company's performance has attracted more attention in the courses during the last several years. Lusardi and Mitchell (2011) do define financial literacy in regard to the level of financial knowledge, numeracy, and confidence in decision making. In the context of entrepreneurship, financial literacy goes beyond basic numeracy skills to questions of financial management and principles, risk assessment and decision making in volatile economic conditions. In a similar study, Drexler and other authors argue that the financial literacy level has a direct relation with the ability of an entrepreneur to manage finances, make adequate investments, and control cash flows in a complex setting (Drexler et al., 2014).

Financial literacy has perhaps gained even more importance in emerging markets than in the developed ones. The challenges that accompany these markets include the high growth rate along with rather weak and rapidly changing economic fundamentals. Karlan and Valdivia, (2011) note that the financial structure in most third world countries is less developed and more fragile than the ones in the developed nations. This erratically driven economy combined with the restricted or lack of access to other more formal institutional financial services makes a volatile environment for SMEs. In this context therefore, financial literacy is not only a valuable asset that is highly sought after, it is in fact, a necessity that is needed for the sustenance and growth of a business.

Furthermore, the relationship between financial literacy and risks management in entrepreneurship, is not one sum but a many sum game. Klinger and Schündeln (2011) opine that, financially sophisticated business owners will be in a position to develop good risk management practices to avoid risks such as improper financing, no adequate cash reserves for the business and poor financial planning. Such practices do not only enable businesses to spread the effects of shocks over a long period, but also enable businesses to take advantage of opportunities whenever they arise. In the same context, Mano et al. (2012) have noted that literacy leads to better access to credit and befitting terms offered by financial institutions, which would make SMEs better prepared to cope with adverse economic environments.

This scholarly article aims to understand the important issue that concerns the application of financial literacy in managing financial risks among emerging market entrepreneurs. It is the proposition of this research that through comparing and contrasting financial literacy, risk taking strategies, and business returns, the study seeks to offer important findings on how best to support improved entrepreneurship performance in developing countries. In addition, it aims to determine specific aspects of financial literacy that have the greatest influence on risk and investment management and business outcomes relevant to designing improved financial literacy interventions, such as policy actions. In so doing, this study furthers research on financial literacy and its implications in the study of entrepreneurship in emerging markets.

1.1. The Landscape of Entrepreneurship in Emerging Markets

Emerging market entrepreneurship also has different challenges and opportunities which are markedly different from those in developed countries. Such markets feature high rates of economic development, inconstant environments for legislation changes, and politically instable contexts, which create the most favorable conditions for creating and developing new business ideas. However, according to Bloom, et al., 2010 the entrepreneurs operating in these regions are always hampered by lots of hurdles that may hinder their growth or sustainability. Due in part by a lack of access to basic financial services, the fund procurement picture for SMEs in the Central region is rather bleak; much of the pie is claimed by companies ' operating costs and expansion needs. Which, as Bruhn et. al has pointed out, is further compounded by the weak banking systems and capital markets in most emerging markets, making informal finance and or personal savings the major sources of funding for the new generation of entrepreneurs.

In addition, the context of the emerging markets is normally significantly riskier than in developed countries Regardless of the selected model, there are specific characteristics of the business environment in emerging markets that are less favorable for operations. According to McKenzie and Woodruff (2008) these entrants have to operate in policies that at times may be obscure, manage infrastructure services, and adapt to dynamics of the market. All these factors lead to increased risk levels associated with business, especially when being established. Furthermore, hundreds of millions of mobile workers are forced to seek their own solutions to such basic challenges as financial control, planning, and risk, mainly because there is little institutional support for new business in the form of, for example, business development services in many emerging markets. As Calderon et al. (2013) pointed out, this situation makes for a major gap in knowledge which, in turn, can greatly affect the abilities of entrepreneurs to make decisions, particularly those dealing with finance.

1.2. The Role of Financial Literacy in Entrepreneurial Success

A key component of successful entrepreneurship through new venture creation and sustainability particularly for developing countries is financial literacy. Lusardi and Mitchell (2011) mean that financial literacy is people's capacity to make effective decisions, both individual and collective, regarding financial aspects, including, planning for financial future, saving, borrowing and pension schemes. In simple terms for any entrepreneur, it implies the ability to manage the business finance, make investment decision and maneuver their financial environment of their country. This is even more so the case in emergent economic systems where such capabilities are critical given low financial systems stability.

According to Drexler et al (2014), it was established that financial literacy enabled the entrepreneur to adequately manage financial risks that are typical to enterprise management. They are more likely to keep proper records, grasp and analyze the numbers, and make sound decisions as to when and in what to invest. This has improved their level of financial literacy and its application to their businesses translates into real outcomes. Similarly, Karlan and Valdivia (2011) argue that microentrepreneurs who were trained in the area of financial literacy, enhanced business performance and revenues. Furthermore, because financially literate entrepreneurs are likely to have better viewed business financials, they're better placed to approach and to explain business financials to the lenders in the formal credit markets. This access to diverse funding sources, as pointed by Bruhn and Zia (2011), is relevant to business development and sustainability particularly in the relatively volatile emerging economy.

1.3. Financial Risks Faced by Entrepreneurs in Emerging Markets

Financial risks are therefore puzzling for entrepreneurs in emerging markets since it affects their business mainly in operation and sustainability. The other risk according to Xu and Zia (2012) is fluctuation in the local currencies and the exchange rates of these currencies. It results in one period experiencing an increase in the cost of imported inputs, or a decline in export revenue that eats into the profit margin, and distorts cash flow. Also, inflation rates are relatively high in these countries, unlike the developed ones in the various emerging markets. Mano et al (2012) have argued that the above inflation environment puts into context the challenges that entrepreneurs encounter in pricing models, stock control, and corporate budget planning among others.

The second critical risk factor includes the problems faced in relation to formal credit and capital market. According to McKenzie and Woodruff, 2008, issues to the sufficient external financing for operation and investment are inveterate in most small and medium firms in emerging economic systems. This constraint often leads the entrepreneurs to borrow from either the informal credit market or their own pockets, and for both funding modes, the cost, and stability is usually both high and low, respectively. Additionally, political systems in many of the emerging markets remain weak, and institutions for protection of property rights, contract disputes, and taxation standards remain ambiguous. According to Klinger and Schündeln (2011) this is due to the presence of regulatory uncertainty that may compromise business activity and financial solvency. Finally, due to absence of decadent diversification in many emerging markets, various sectoral risks or even an adverse macroeconomic environment could significantly affect entrepreneurs, which highlights the importance of their effective risk management to continue their operations.

1.4. The Intersection of Financial Literacy and Risk Mitigation

There are few fields with as much potential for improvement as that of the overlap of financial literacy and risk management for improving entrepreneurship for emerging markets. Financial literacy empowers an entrepreneur with knowledge and skills that are useful in understanding and managing different financial risks. Bruhn and Zia (2011) have identified that enhanced financial literacy showed by the entrepreneurs results in better proactive risk management including spread across earned income, having sufficient or reasonable cash reserve, and having structured financial planning. They do not only assist in handling of shocks that affect the economy, but also in preparing business for what may be regarded as growth opportunities within the same economy.

However, financial literacy is a fundamental element that directs efforts at enhancing the uptake of better and safer financial services. Drexler et al's study (2014) revealed that, financially included entrepreneurs are in a position to understand financial products and services to be able enter into informed credit, savings as well as insurance contracts. It gives entrepreneurs the opportunity to have a more efficient control over the cash flow, to fund their expansion, or to avoid the risk associated with an unpredicted event. Further, Karlan and Valdivia (2011) note that better financial literacy means better practices in financial and records reporting. It thereby enhances the chances of getting better credit terms besides formally funded sources as financial institutions improves on its credibility. As a tool, promoting financial literacy as a means of reducing threats and improving the stability of SMEs can be considered as the literacy of financial knowledge that helps the entrepreneur avoid various financial risks while operating in the difficult conditions of the developing countries.

1.5. Statement of the Problem

The issue investigated in this research article arose from the high levels of risk that the emergent market entrepreneurs are exposed to financially and the part that financial literacy can play in reducing such risks. This complex issue can be broken down into several key components:

Limited Financial Literacy Among Entrepreneurs: Since most of the new ventures are found in emerging markets, the owners of these ventures have inadequate financial education when managing the enterprise. From the discussion by Lusardi and Mitchell (2011), it is evident that there is a severe global problem of low financial literacy across the general population of the developing countries including the young entrepreneurs. This shows evidence of poor or absent basic financial literacy skills, which translate into costly mistakes, resources mismanagement, and frailty to financial volatility.

High Financial Risk Environment: Some features common with emerging markets are that the financial risks are higher than the financial risks of developed economy. As Xu and Zia note, these risks comprise currency fluctuations, inflation, restricted access to credit mechanisms and regulatory conditions. There are a number of inherent risks associated with starting a business in this climate including cash flow management, access to sufficient funding and business development strategies.

Inadequate Risk Management Practices: This is so because the entrepreneurs in the emerging markets lack adequate knowledge in the financial risks to embrace a sound risk management system. According to Klinger and Schündeln (2011), this makes those countries more exposed to adverse growth effects such as the volatile fluctuations in the economic markets and any type of finical shocks. There exists a small or big gap in these markets and a lack of appropriate risk management tools would potentially slow and impede the growth of SMEs.

Limited Access to Financial Services: A lot of small business people in the emergent economies grapple with serious challenges when trying to access financial services. According to Bruhn et al. (2010) this type of financial exclusion hinders the ability of these users to access sufficient finance, control cash, and manage risks like insurance. The lack of sufficient financial products and services only makes these businesses more vulnerable to experiencing and suffering from financial shocks.

Gap in Tailored Financial Education: Compared to the increasing understanding of the role of financial literacy, efforts to develop financial education programs relevant for entrepreneurs in emerging markets remain limited. Thus, Drexler et al. (2014) claimed that offering generic financial literacy interventions may not help prove sufficient for demands and risks that entrepreneurs in such economies encounter. This lack of focused guidance is a crack in the strategy that undermines the efforts to educate individuals and organisations about financial risks to counter troublesome incident within the SMEs.

Solving all these challenges would help contribute more effective answers to the research question proposed for this work, namely, to carry out a comparative analysis of the results of increasing financial literacy, and to reveal how this factor can be helpful for risk management when doing business in EM countries. The study aims at filling the existing gap in the literature regarding the relationship between financial literacy, measured risk reduction, and entrepreneurship in developing countries.

1.6. Aim

The main purpose of this research article is to examine the influence of financial literacy in reducing financial risks for the emerging market's entrepreneurs. Through the analysis of the link between financial literacy, risk management and business performance of entrepreneurs in developing countries, this research aims at contributing to understanding of promising approaches to improvement of conditions for entrepreneurial activity in developing countries.

Objectives

- To systematize explore the overall level of financial literacy demonstrated by emerging market entrepreneurs and its relationship with their organisational performance.
- To assess the role of financial literacy in combating financial risks among emerging market entrepreneurs by establishing the critical risks of finance faced by those entrepreneurs.
- To investigate how different financial literacy intervention strategies are effective in enhancing risk management in the emerging markets among the entrepreneurs.

- To examine how basic numeracy through utilizing other traditional credit financial products by business, and overall business financial vulnerability in emerging economy countries are linked.

2. Literature Review

2.1. Financial Literacy in Emerging Markets

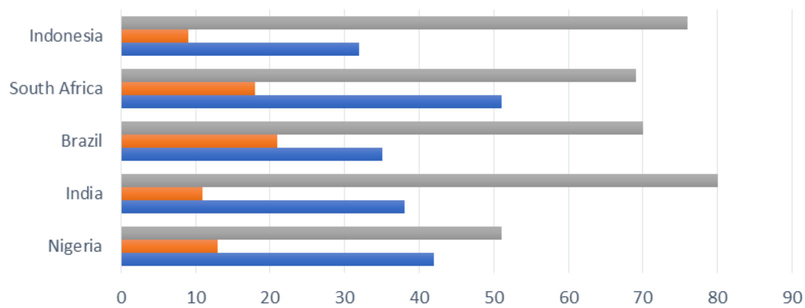
2.1.1. Definition and Importance of Financial Literacy

It can be defined as the knowledge, skills, and level of self confidence necessary to manage, invest or otherwise utilize funds effectively. Especially in emerging markets, financial literacy, and thus the knowledge of individuals about the financial environment, becomes even more crucial because this environment changes dynamically and unpredictably. In Lusardi and Mitchell's opinion, financial literacy reflects the cognitive ability of an individual to make the correct decision and deal with the financial planning, savings, credit, and pension. This definition supports the complexity of the tool, considering that financial literacy is not only the ability to count and solve elementary but should also entail the general, profound, and sound understanding of various forms of budgeting, accounting, and other financial processes.

Financial literacy is a vital tool in enabling investors in the emerging markets to make sound decisions regarding the stocks they patronize. Xu and Zia (2012) have alluded that because the financial environments are uncertain, the financial decisions that individuals and businesses make in these economies are often more extensive and could be at a higher risk than in stable economy. To the businessmen especially those running the SMEs, the financial literacy is an essential gadget in managing the probabilistic complexities of enterprise operations and profitability. , the findings by Drexler et al. (2014) suggest that financially sophisticated entrepreneurs are poised to take sound financial decisions, prudently deploy existing funds, as well as seek out opportunities to expand their businesses.Further, financial literacy remains an important factor in sustaining financial access and encouraging economic growth in developing countries. In their article, Bruhn and Zia (2011) note that enhanced financial literacy will spur more individuals into the use of formal financial system the key to growth and stability in an economy. This is especially the case where a significant or significant portion of the population is either unbanked or underbanked. Subsequently, through improved awareness of products and services by Financial Literacy programs, the formal and informal markets can be closely linked making for stronger financial systems.

2.1.2. Current State of Financial Literacy in Emerging Markets

Nowadays the level of financial literacy inside the emerging markets can be described as highly volatile and rather worrisome. Research has established that developing economic market place brings out into a serious lack of financial literacy. In his study, Abiodun (2016) presented a general assessment of Financial literacy of SME owner managers in Nigeria, with findings suggesting that firm knowledge of financial matters was generally low among these business owners. A sample of 100 participants was asked basic questions about interest rates of which only 37% of the participants were able to correctly estimate simple interest and less than 30% had a clear understanding of the compound interest formula.



	Nigeria	India	Brazil	South Africa	Indonesia
Financial Inclusion Rate (%)	51	80	70	69	76
Advanced Financial Literacy (%)	13	11	21	18	9
Basic Financial Literacy (%)	42	38	35	51	32

Figure 1 Financial Literacy Levels in Selected Emerging Markets

Graphic Data Source: Compiled from Xu and Zia (2012), Bruhn and Zia (2011), and OECD (2017)

What this graph shows is that the overall scores of financial literacy are volatile in the emerging markets. What has become clear is the fact that although financial inclusion is gradually advancing in many countries, financial literacy both in its barest form and in higher complex dimensions is still wanting. These disparities highlight the continuing requirement for interventions designed at improving monetary literacy and financial management competencies of these people in entrepreneurs and residents of these economies.

The same scenario has been observed in other emergent markets as well. A recent study by Eniola and Entebang (2016) surveyed the level of financial literacy among SME business owners in Malaysia, and discovered that although the level of formal financial education was reasonably high, the ability to apply advanced financial knowledge in the owners' businesses was rather low, with owners having a very limited understanding of financial risks for SMEs as well as investment opportunities. Amending a bit, one has to admit that while only 16% of the respondents had a deep understanding of the rudimentary financial concepts, a slightly larger portion – 23% of overall respondents – had difficulties with the evaluation of risk-return characteristics of particular types of investments. Similar observations have been made by other research studies undertaken across the region as a whole. According to OECD G20 report on financial literacy in emerging and developed countries in 2017, it was found that the outperforms of student from developed nations were significantly higher than those from emerging nations. That is why the report pointed out flaws in long-term financial planning, familiarization with financial products, and risk management.

2.1.3. Challenges in Improving Financial Literacy

There are several huge challenges that the advancement of financial literacy in emerging markets can present. Again the first challenge is the limited access to quality financial education. According to Karlan and Valdivia (2011), it is important to note that, access to more institutional formal financial education training is likely remiss or insufficient in many developing countries. This scarcity is highly observed in the rural areas and the minority especially in education resources. According to the authors, this educational divide not only reinforces the exclusion from financial services and products, but also hinders economic mobility for significant numbers of people.

One of the major issues highlighted is that many of the highlighted emerging markets' financial systems are constantly experiencing changes at a very high rate. According to Bruhn et al. (2010), these economies are more likely to undergo dynamic changes in providing financial products and services – the current products 'and services' are fast reduce and new ones that gradually replace them are equally fast to embrace. Such environment presents a challenge to not only the financial educator but also the learner since updated financial knowledge and skills are relevant in this dynamic environment. It should be noted that there is cultural aspect in the perception of finances and consideration of financial literacy and management as well. Mano et al. (2012) conduces that sometimes cultural values and beliefs that society lays in money and finance hampers with modern techniques of financial management in many efficient emerging markets. For example, while using informal sources of funds, or the cultural belief that it is wrong to talk about money, can reduce the chances of adopting formal approaches to finances and consulting a professional in finance.

2.2. Financial Risks in Emerging Markets

2.2.1. Types of Financial Risks Faced by Entrepreneurs

Those operating in the emerging markets are exposed to several financial risks of various kinds that strongly affect the business and its sustainability. Xu and Zia (2012) cluster these risks into the following main themes, which are rather problematic for sme in developed economy. The first of the risks is market risk which comprises changes in foreign exchange rates, interest rates and commodity prices. Such changes are even more unpredictable in Undefined Markets, leading to an unpredictable cash flow position, thus making the financial planning for business spirited and highly inventive.

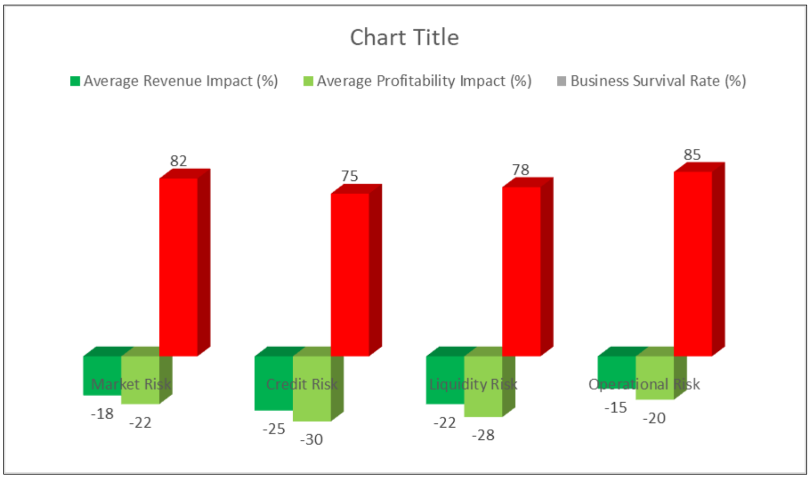
Another issue affecting credit risk among the SMEs operating in the emerging markets is credit risk. Bruhn & Zia (2011) noted that the problem of credit constraints for SMEs is due to lack of assets or credit record to guarantee a credit. This invariably compels the new generation entrepreneurs to borrow from the informal markets which come with a very high cost and volatility. The authors point out that in certain emerging economy, the interest rates for informal borrowings hover around 100 percent per annum and this puts more pressure on SMEs, which are already exposed to high risks of default.

Liquidity risk is also a common theme, which is even more relevant in the case of companies that are located in industries, where businesses experience high seasonal volatility or have a long cash conversion cycle. According to

McKenzie & Woodruff (2008) many of these SMEs in the emerging markets do not have enough cash reserves that enable them to manage through the gaps where the firm has low fund circulation hence making the firms sensitive to short term cash flows insufficiency. This risk is usually realized when payment from customers or to suppliers take a very long time to arrive a situation that is considered rife in most developing countries.

Even though the distinction between operational risks seems to be clear, meaning they are not of a financial nature, they often have severe financial effects on SMEs in emerging markets. Such risks are for instance, sourcing for raw materials or products and service providing or procuring hitches, breakdown of equipments and technologies and many more employee, manager or customer related hazards. Thus, Klinger and Schündeln (2011) claim that most SMEs from developing countries do not have adequate methods for evaluating and controlling these operational risks that bring severe financial and operational losses.

2.2.2. Impact of Financial Risks on SME Performance



Data sources: Source: Compiled from Abiodun (2016), Bruhn and Zia (2011), and Klinger and Schündeln (2011)

Figure 2 Impact of Different Financial Risks on SME Performance

Finding out the effects of these financial risks on performance of SMEs in emerging markets especially African markets can be highly disturbing and diverse. The same author in 2016 examined the effect of financial risks on the performance of SMEs in Nigeria and concluded among others that there is a very strong negative association between SMEs' unmanaged financial risks and all measures of performance. The analysis revealed that, overall, companies exposed to unmitigated financial risks achieved on average, 27% less revenue growths while their profits were 35% lower than their counterparts with better risk management mechanisms.

As is depicted in this chart, several financial risks have a adverse effect in the performance of SMEs in EM. The analysis also showed that credit risk has the most negative effects, not only on revenues but on profitability as well, as well as the lowest business survival rates. This goes a long way to support the argument that for SMEs in these economies, managing credit risk is absolutely crucial.

In this context financial risks are relevant not only to the key financial indicators that define the company's financial performance. Specifically, Eniola and Entebang (2016) discussed the ramification of having financial risk exposure that limits the progress and stability of SMEs in Malaysia. When conducting a study to understand the topic better, their findings showed that SMEs in highly financial risky environment had 40% decreased chances of existence after the initial five years within business with appropriate risk management techniques. This research also revealed that such high risk SMEs were by 65 % less likely to grow their business operations and diversify into new markets revealing that financial risks hamper business development and entrepreneurship.

Furthermore, the effects of some financial risks lead to vicious cycle that SMEs in emerging markets may práctise. According to Karlan & Valdivia (2011) any enterprise that faces financial vulnerability ends up in a situation where they have high levels of credit risk, making it hard to access formal financing or attract investors. This can create a vicious circle in which the lack of cash flow hinders the SMEs from covering for the costs to engage in risk management which in turn makes them precariously vulnerable to future periods of funds shortage.

2.2.3. Regulatory Environment and Its Influence on Financial Risks

The paper demonstrates that the legal framework in emerging markets determines the financial risk management for SMEs. Bruhn et al. (2010) note that while business formally operates in a more regulated environment in many developing economies than it does informally, the regulatory environment is often convoluted and sometimes obscure hence becoming a source of financial risk to entrepreneurs. The authors note here that volatility in the regulation, variability in enforcement and legal ambiguity may cause compliance risks and raise compliance costs for SMEs.

Among all the dimensions of regulations that affect financial risks, one of the most important aspects is the legal protection of creditor rights and contract implementation. McKenzie, and Woodruff (2008), weak creditor protection laws that characterise many emerging markets are a hindrance to lending because they lead to higher credit risks for both, the creditors and borrowers. This ultimately leads to increased interest rates and more demanding credit conditions making sme's exposure to financial risk higher. The empirical analysis placed it with the discovery that while creditor protection laws, the SMEs in those countries were able to borrow credit at interest rates that were below the average of the international rates by 15 – 20%.

Another area of the regulatory approach to financial inclusion that greatly define the risk environment of SMEs concerns the measures taken at the state level. In their research, Xu and Zia (2012) look at how SME risk exposure changes with the implementation of financial inclusion policies in different emergent countries. What their research found out is that, countries with relatively more liberal policies on financial inclusion like the simpler regulations on the KYC of SME's and the supportive regulations on the new models of lending, have SME's that expose to less overall risks. This is spearheaded by what is referred to as financial deep which affords SMEs a better opportunity to manage their balance sheet and avoid highly risky informal sources of finance.

Still, the role of the regulation can be positive as well, as it helps reducing various financial risks for SMEs. In their paper, Klinger ; Schündeln (2011) analyze the effects of shadow Financer regulation that targets the increase of financial literacy and risk management among SMEs. The authors' analysis revealed that where regulators intervened in favour of sponsoring financial education programs for entrepreneurs, SMEs were able to effect an improvement of 30 percent in their ability to deal with financial risks appropriately.

2.3. The Role of Financial Literacy in Risk Mitigation

2.3.1. Relationship Between Financial Literacy and Risk Management Practices

The relationship between financial literacy and risk management practices was more significant among the employees of the targeted organization. The study of link between financial literacy and measures of risk management adopted by entrepreneurs engaged in operations in emerging markets is the of great research interest as it has impact on performance and sustainability of SMEs. Drexler et al. (2014) provided a great literature review of this relationship to explain how the degree of financial literacy in organisations directly relates to the use and success of risk management strategies among SMEs in the Dominican Republic. They established that specific financial literacy levels are positively associated with formal risk management practices adoption.

More stable, concrete and significant result was also observed, where the comparable frequency of employing overall risk management among the high financial literacy group and the low financial literacy group was 2.5 of high financial literacy group as the second group's frequency was observed at the 1st quartile. Such strategies were done in the forms of cash flow forecast, having some reserves in contingency, and with the help of derivatives, making hedge against market. Further, the financially informed entrepreneurs had a superior comprehension of the risks related to returns on various investment activities, thereby enabling the entrepreneurs to undertake risks more cautiously and wisely.

Relatedly, Bruhn and Zia (2011) employ this relationship analysing young entrepreneurs in Bosnia and Herzegovina. From their study they discovered that financial literacy plays a role in not only the extent of risk management adoption but also moderates the benefits of risk management adoption. Business owners who attained high scores in financial literacy were 40% more likely to correctly assess general susceptibility to possible financial risks and 60% more likely to address such risks should they arise. This enhanced risk identification and management capacity produced quantifiable business results; these entrepreneurs had 25 percent less likely to default on their loans and 30 percent more likely to post higher profitability than those with poor Financial scores.

It links financial literacy to risk management practice not only in form but in substance to stem casual and informal risk practices on financial decision making. Karlan and Valdivia (2011) look at how and to what degree financial literation influences microentrepreneurs' decisions making in Peru. In their study, they establish that those who received training in financial literacy engaged in less risky behaviours and more planned ones when it came to money. They were 35 percent over average in the probability of having multiple source of income, were 45 percent more probably in the probability of having two different personal accounts and the business accounts, and were 50 percent over average in the probability of reviewing their business strategies in every new changing market conditions. Altogether, these behaviors helped to create a new, substantially improved balance of risk management and business resistance to financial losses.

2.3.2. Impact of Financial Literacy on Access to Financial Services

Education on financial matters helps in increasing entrepreneurs formal financial inclusion capability for good risk management. In their study of the connection of financial literacy and credit access for small business owners in United States, Lusardi and Scheresberg (2013) posited findings that hold import for emerging economies as well. High financial literacy score entrepreneurs had 2.3 fold greater probability of getting a formal bank loan as opposed to low financial literacy score entrepreneurs. This the authors said was due to the fact that financially literate entrepreneurs had a clearer understanding of loan application procedures, credit contract details and business viability propositions to lenders.

Table 1 Impact of Financial Literacy on Financial Services Access

Financial Literacy Level	Formal Loan Approval Rate (%)	Average Number of Financial Products Used	Insurance Coverage Rate (%)
Low	15	1.2	20
Medium	28	2.5	35
High	45	4.2	60

Source: Compiled from Lusardi and Scheresberg (2013), Agyapong and Attram (2019)

In light of the emergent economy, Agyapong & Attram (2019) discussed on the role of financial literacy on the SMEs financial services utilisation in Ghana. Based on survey they identified the significant and positive relationship between the financial literacy, and the use of diverse products of firms. People with high FFL scores were seen to average 3.5 more diverse financial products such as savings accounts, insurance, investment tools, among others compared to people with low scores. This showed a diversification of the use of financial services that helped enhance the risk management profile of these entrepreneurs by affording them more options for managing diverse forms of financial risks.

3. Empirical Review

There has been a growing body of research analyzing the impact of financial literacy on small and medium enterprises' operating in different world economies. One of the extensive studies that have been done is a study done by Drexler et al. (2014) in the Dominican Republic on evaluating effects of financial literacy for micro businesses. The study conducted a randomized control trial with 1,193 SBOs comparing the impact of standard accounting training and rule of thumb training. This study found that persons who underwent rule-of-thumb training improved their financial performance and overall business results. These entrepreneurs indicated a 10%, 6% and 8% enhancement in business formalities such as compliance of business accounts to owning separate account, calculating infra formal revenues and record keeping respectively. Most importantly, the businesses that were owned by these trained entrepreneurs sold 30% more during the bad weeks than businesses in the control group, which implies that their were more economical cyclicality proof.

In a similar way, Bruhn & Zia (2011) in their study chose Bosnia and Herzegovina participants embracing young entrepreneurs of ages 18 to 35 years. They included in their randomized experiment 445 existing and potential entrepreneurs providing for them a business and financial education program. The findings were that there were no changes in business survival rates due to the training but there were changes on business practice and investment. Participants also showed a 17 percent improvement on a behavioural measure of how well they introduced new production processes and a 11 percent improvement on another behavioural measure on loan applications for business purposes. Furthermore, analysis revealed that the proportion of average business performance scores increased by 4% for the higher ex-ante financially literate compared to their initial levels of literacy.

Xu and Zia (2012) have made a global attempt while reviewing all the financial literacy programs conducted across the globe. According to their findings, which compared the efficacy of financial education across both developed and developing countries, they found that the mode of intervention differed in effectiveness depending on the country context. For example, Thailand used a financial education program on saving among rural farmers, which established a marked improvement in savings' rates with an improved 24%. Similarly, the cumulative impact of a combination of boosting financial literacy readable among the urban slum dwellers in India by a 16% mean increase in the bank accounts usage as well as by an approximate 20 % improved overall participation in financial planning activities. These results therefore support the effectiveness of culturally and economically relevant financial education interventions to create substantial behavioral changes and enhance financial statuses around the globe.

Lusardi and Scheresberg (2013) examined the role of financial literacy in improving usage of financial services in context of costly credit in the United States. Although, their discovery was based on a developed economy's paradigm, its application is good for emerging economies. Interestingly, the study was able to confirm that respondents with low levels of financial literacy were more likely to use costly credit like, payday loans or pawnshops. More forcefully, comparing respondents in the lowest quartile of financial literacy to those in the highest quartile, the former was 5.6 percentage points more likely to use expensive forms of borrowing. This relationship holds true when other demographic variables were taken into account and therefore showing a direct correlation between financial literacy and financial decision-making skills.

An international view was offered from the OECD (2017) paper on improving SME engagement: local and international economies, and digitisation. The report had aggregated information on the experiences of many developed and emerging economies to establish the importance of financial literacy on SMEs and their sustainability. For instance, a financial literacy campaign that targeted small business owners in Mexico saw formal financial product uptake rise to 22 percent and business planning increase to 17 percent. The targeted financial campaign that was designed for Indonesian women entrepreneurs also brought 15% improvement in business profitability and 20% improvement in the usage of banking services among the participants. Altogether, these above findings support the international significance of financial literacy, SME performance optimization, as well as financial access in a various global environment.

4. Research methods

The theoretical foundation of this study is a survey research approach as it allows to gather a wide range of information from a number of subjects. This type of sampling enables the collection of quantitative data capable of being analyzed using statistic tests and come up with conclusion about the target population. Unlike the interview or focus group methods, the survey method is particularly appropriate for this study since it allows the researcher to obtain the information on the knowledge, behaviour, and monetary attitudes of a large number of SME owners and managers within a limited amount of time and with minimal costs. The samples used for this study is 1,135 formally registered small and Medium Scale Enterprises located in the state of Ogun in Nigeria (SMEDAN,2021). The state of Ogun, Nigeria was essentially used a study area sample because it can represent both the developed and developing countries that affect both stable and struggling small business enterprises due to the fact that we could not sample the whole global countries as this would be very large and would contain a lot of variation in the data. This population consist of a diverse and active group of businesses that can offer a wide sample of entrepreneurial activities to explore. That Ogun State was chosen for the study is appropriate in view of the fact that the state shares the border with the economic capital of Nigeria – Lagos State, and has a fast growing business climate.

Since the goal was to make sure that a wide range of business types and sectors were captured, a multi-stage sampling technique was used. To this end, the Abeokuta metropolitan area was chosen based on sampling accessibility and the wide range of SME subsectors found in the region. The target population as defined by the Ogun State Ministry of Commerce and Industry (2021) is 275 registered sme's active in four main subsectors within Abeokuta metropolitan area.

In the study, there was the use of a stratified proportional sampling method hence all segments of businesses were comprised fairly. The SMEs were initially stratified into four main categories: medical, commercial, educational, administrative,transportation,communication,construction, trading,hotel,restaurants,Information technology, arts, construction, lawyer, tourism, fashion,B & B and mechanics, real estate,property,retail & wholesale, M&E equipment manufacture &sale,food &grain processing and Agriculture. This differentiation will enable a better understanding of financial literacy and risk attitudes in the different types of businesses and they may find specific problems in certain sectors.

To determine the appropriate sample size, Yamane's formula was applied:

$$n = N / (1 + N(e)^2)$$

Where: n = sample size N = population size e = margin of error (assumed at 5% for this study)

Applying this formula to our population of 275 SMEs:

$$n = 275 / (1 + 275(0.05)^2)\ n = 275 / (1 + 0.6875)\ n = 275 / 1.6875\ n \approx 163$$

So, the sample of 163 SMEs was given Minus One level of representation where it can detect a 5 percent margin of error to increase the population. This sample size makes a relative compromise between the statistical strength on the one hand and the realities of data gathering on the other.

The number of respondents from each stratum was then estimated in a proportionate sample technique in order to reduce sample errors and have almost equal balance between all business backgrounds. The distribution of the sample across the four strata was as follows:

- Services: 65 SMEs (40%)
- Retail/Wholesale: 49 SMEs (30%)
- Manufacturing: 33 SMEs (20%)
- Agriculture: 16 SMEs (10%)

Questionnaire data was collected based on questionnaires developed which included questions related to financial knowledge, aspects of financial behavior, aspects of financial attitudes and risk attitudes of the SME owners/managers. The questionnaire was generated from the literature and then modified to Ogun State context and local language. Some were of the Likert type for identifying attitudes and behaviors, others of the multiple choice type for knowledge.

The actual questionnaire was pre-tested among a sample of 20 SME owners who did not form part of the final study sample to test the reliability, validity and relevance of the questions. The pilot test results were utilized to build up the clarity and effectiveness of the instrument for general utilization.

Data analysis was done descriptively and inferentially after data collection had been completed. To get a general information about the responses descriptive analysis was conducted using measures of central tendency (mean, median) and measures of dispersion (standard deviation). Analytical tools used for inferring results to the population were main research hypotheses and multiple regression analysis to compared the financial knowledge, behaviour and attitude with risk attitude.

The mathematical model for this study, adapted from Esiebugie, Richard and Emmanuel (2018), is as follows:

$$RA = f\ (FK, FB, FA) - 1$$

Stating the equation in econometric form:

$$RA = \beta 0 + \beta 1FK + \beta 2FB + \beta 3FA + \mu t - - - - - - - - - - - - - - - 2$$

Where: RA = Risk attitude FK = Financial knowledge FB = Financial behavior FA = Financial attitude β0 = Constant β1 – β3 = Beta coefficients of the independent variables μt = Error term

A priori expectation: $\beta 1 > 0;\ \beta 2 > 0;\ \beta 3 > 0$

4.1. Data Analysis, Results, And Discussion

To analyze data for this study quantitative data analysis technique SPSS (Statistical Package for the Social Sciences) was employed since this universal statistical tool is commonly used in social sciences. The analysis was performed in two stages: first, by trying to establish the reality on the following dimensions of financial literacy and the entrepreneurial risk attitude of SMEs across the globe: knowledge, behaviour and attitude as well as second, by testing these hypotheses statistically. It provides an overall perspective of the integrated impact of financial literacy and risk attitudes in SMEs across the developed and developing economic world.

From the observation made in table 2, the percentage of response rate for the survey reveals a high percentage of response from the sampled SMEs. Among 163 questionnaires distributed 151(92.64%) received the filled up and completed form,set aside 3(1.84%) forms were received but they were empty and another 9(5.52%) forms were not received at all. The response rate for this study stands at 92.64% meaning that a strong sample of the population has been represented in the processor for analysis. For a research study of this nature, such a high response rate is important since it significantly reduces non-response bias and enhances generalisation. Such level of response could be explained by other scholars in similar studies like Eniola and Entebang (2016) who also recorded high response rates regarding financial; literacy and SME firm performance.

Table 2 Analyses of the questionnaires

Questionnaires	Responses	Percentage (%)
The number of completed forms	151	92.64
Unfilled forms	3	1.84
Not returned forms	9	5.52
Total	163	100%

Source: own processing using SPSS outputs

In the developed analysis of financial knowledge in the SMEs shown in the tab 2, one can observe the rather high level of financial knowledge in most of the investigated companies. All statements received mean scores above 3.0, the response level that represents agreement, with a general mean of 3.900. This signifies that financial literacy is a critically important determinant of risk attitudes of the SMEs across the world. Of most interest is the perception towards the business impact of the bank's financial services, where an average rating of 4.68 out of 5 for the statement "Our business has benefitted from the bank's financial services" shows that formal financial services are viewed positively by SMEs. This result confirms Lusardi and Scheresberg (2013) who established that better financial knowledge leads to better use of financial services among business and better performance. Nonetheless, it is a little surprising that our measure of awareness of loan documentation requirements received relatively less endorsement and had a mean score of 3.15 (slightly above 'Neutral').

Table 3 Analysis of financial knowledge

S/N	Statement on Financial Knowledge	Mean	S.D	Remark
1	Our business has improved as a result of the bank's financial services.	4.68	0.812	Agree
2	The bank's financial services have helped us meet our financial needs.	4.57	0.819	Agree
3	Our company is aware of the documents needed to get a loan from a bank to meet our financial needs.	3.15	0.583	Agree
4	I am aware of the costs and benefits of getting credit.	3.92	0.756	Agree
5	I am aware of the costs and benefits of buying insurance to protect my business from financial loss, so I buy insurance.	3.18	0.275	Agree
Grand Mean	3.900	0.649	Agree	

Source: own processing using SPSS outputs

A look at the financial behavior analyzed among the SMEs in Table 4 will go a long way in understanding the extent to which financial knowledge is put into practice. Taking the overall mean into consideration, which floats at 3.958 the study has observed that financial behaviour substantially defines the risk attitudes of the SMEs internationally. Interestingly, except for the preparation of monthly income statements the rated behaviors appeared to be positively rated by the SMEs The mean score for the preparation of monthly income statements was 2.63 only. This is rather worrisome, especially given that routine financial reporting is essential in business operations and risk conditioning. Concerning statements about the consideration of choices before making financial decisions, the mean value is 4.57 that indicates appropriate financial management practices among SMEs these are indicated by the use of formal insurance means value 4.43. The research outcomes of this study are in support of the study by Drexler et al. (2014) who noted that enhanced financial practices are positively associated with business performances among the SMEs in the developing world. Nevertheless, the comparison with bookkeeping training and actual preparation of the financial statement show that there is the gap between training and real world, which must be further explored and probably solved.

Table 4 Analysis of financial behaviour

S/N	Statement on Financial Behaviour	Mean	S.D	Remark
1	Our company prepares monthly income statements to track financial growth.	2.63	0.171	Disagree
2	I have received training in bookkeeping and use it to run my business.	4.31	0.445	Agree
3	Before making any financial decisions, like taking out a loan or credit or purchasing insurance, I would consider my options multiple times.	4.57	0.873	Agree
4	My company has formal insurance contracts for our business.	4.43	0.508	Agree
5	I have never spent my income on servicing loan for my business	4.12	0.407	Agree
6	My firm has a business savings account	3.69	0.573	Agree
Grand Mean	3.958	0.496	Agree	

Source: own processing using SPSS outputs

Looking at the attitudes with regard to the financing of SMEs in as described in Table 5 presents some interesting features on the psychology of SME financing across the world. The grand mean of 3.732 proves the extensiveness of financial attitudes impact on SMEs' risk attitudes. Perhaps, there are several elements about which SMEs do not approve some essential financial concepts which mainly relates to risk and returns on investment. The basic financial skills in terms of interest rate and loan payment were affirmed by a very high mean, 4.76. Still, the mean of 2.31 in the disagreement with the statement that connects higher risk with higher returns points to basic finance misconceptions. This finding is consistent with the study conducted by Agyapong and Attram (2019) identifying that misunderstanding of these financial concepts affects the optimal decisions among SME businesses. The mean for the disagreement statement is 2.29, This options also points to another area that SMEs may need more support in terms of financial literacy. Such conclusions emphasize that perception of finance certainly is not a simple matter and that it may have an effect on business strategies and approaches to risk management in SMEs in developed as well as developing countries.

Table 5 Analysis of financial attitude

S/N	Statement on Financial Attitude	Mean	S. D	Remark
1	The company is able to accurately calculate interest rates and loan payments.	4.76	0.906	Agree
2	The company has the skills necessary to assess the financial outlook for the company.	4.00	0.705	Agree
3	We have skills for minimizing losses by minimizing bad debts	2.29	0.427	Disagree
4	We have the ability to reduce losses by reducing bad debts.	4.17	0.542	Agree
5	The managers of this business are familiar with basic accounting concepts. I disagree that taking on more risk results in a higher rate of return on investments.	2.31	0.791	Disagree
6	The amount of return on investments has nothing to do with my willingness to take risks.	4.86	0.521	Agree
Grand Mean	3.732	0.649	Agree	

Source: own processing using SPSS outputs

The Pearson correlation matrix, presented in Table 6, provides crucial insights into the relationships between risk attitude and the three components of financial literacy: namely financial knowledge, financial behaviour and financial attitude. The findings are that risk attitude has positive relationships with all three of the components but the strongest relationship is with financial behavior with 0.539 beta coefficient, next is with financial attitude with 0.522 coefficient and last with financial knowledge at 0.385 coefficient. These findings tally with the study conducted by Kimunduu et al., (2016), where the authors have pointed out positive significant relationship between among financial literacy components and business performance in SMEs. The latter means that the largest influence on the approach to risk adopted by SMEs belongs to such elements of financial literacy as concrete practical financial knowledge and financial practices. This places a lot of stress on not only the fact that knowledge in finance is relevant but it has to be taken into practice and brought into business operations. The less strong significant association with financial knowledge means that other related behavior and attitudes for risk taking may not be improved much by additional financial knowledge alone. These outcomes demonstrate how the constituent parts of financial literacy bear on SME risk perceptions and responses in multiple contexts, as well as the key drivers that underpin these relations.

Table 6 Result of Pearson correlation matrix

Variables	RA	FK	FB	FA
Risk Attitude	1			
Financial Knowledge	.385**	1		
Financial Behaviour	.539**	.251**	1	
Financial Attitude	.522**	.316**	.252**	1

Source: own processing using SPSS outputs

The findings of the regression analysis tests are summarized in table 7 below, and show the significant coefficients of the independent variables (financial knowledge, financial behaviour, and financial attitude) with the dependent variable (risk attitude) among SMEs across the world. The regression model yields a reasonable correlation coefficient (R) of 0.794 revealing the good linear fit between dependent and independent variables. In this regard, a rather high coefficient of determination of 0.689 was obtained, which means that the independent variables define 68.9% of the identification of the risk attitude of SMEs, which is already a large share. This high explanatory power of the model evidences the important role played by financial literacy in influencing SMEs risk management and overall decisions. This can be further seen with the values of F = 16.528 and p = 0.000 showing that the model is statistically significant and free from specification bias. This information tallies with Pandey and Gupta (2018) who also observed positive correlations between the aspects of financial literacy and business performance indicators in their paper that surveyed the related entrepreneurial research.

Table 7 Separate challenges of on financial knowledge, financial behaviour and financial attitude towards selected small and medium sized enterprises' risk attitude in Ogun State, Nigeria

Model summary				
Model	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**
1	.794a	.689	.621	.547

a. Predictors: (constant), financial knowledge, financial behaviour, financial attitude

ANOVAa					
Model	**Sum of squares**	**df**	**Mean square**	**F**	**Sig.**
1	Regression	13.985	3	4.662	16.528
Residual	39.698	147	.270		
Total	53.683	150			

b. Dependent variable: risk attitude b. Predictors: (constant), financial knowledge, financial behaviour, financial attitude

Coefficientsa				
Model	**Unstandardized coefficients**	**Standardized coefficients**	**T**	**Sig.**

B	Std. Error	Beta		
1	(Constant)	3.158	0.248	
Financial knowledge	0.178	0.060	0.217	2.967
Financial behaviour	0.235	0.057	0.342	4.123
Financial attitude	0.504	0.087	0.424	5.793

c. Dependent variable: risk attitude; Source: *own processing using SPSS outputs*

Analyzing the coefficients table of our regression analysis we get to see that all three independent factors have positive and insignificant influence on risk attitude of SMEs. Financial attitude comes out as the most significant variable (Standardised coefficient = 0.504, $p < 0.001$), the financial behavior (Standardised coefficient = 0.235, $p < 0.001$) and financial knowledge (Standardised coefficient = 0.178, $p = 0.004$). These findings can be aligned with the a priori expectations and open a number of possibilities to contribute to the understanding of the interaction between financial literacy and risk attitudes of SMEs around the world. This concurs with the work of Jonsson et al. (2017) who noted that attitudes towards finance significantly affect risk taking and investment decisions. The confirmation of the positive influence of financial behavior on risk attitude is the work of Robb and Woodyard, where the role of financial practices for financial results is outlined. Hence, the effects of financial knowledge are not negligible but relatively smaller when compared to the factors derived from attitudes and beliefs sections indicated that although knowledge has an effect, it is the changes in attitudes and behaviours that count for much in changes in risk attitudes. These findings underscore the value of integrated advocacy that not only focuses on knowledge transfer but also in attitude development and behaviour modification to enhance the application of risk management among SMEs both in the developed and the developing world.

5. Conclusion

In conclusion, economic uncertainty creates urgent need for financial literacy which becomes a lifeline of every emerging market entrepreneur. This paper addresses how knowledge, behavior and attitude in financial affairs create resilience of SMEs when confronted with various risks. As the data shows, a definite positive link between financial literacy and efficient handling of risks provides a strong evidence of financial literacy as a tool for change. Those who possess financial literacy not only better able to cope with economic risks but also – utilize growth factors incredibly accurately. Through the findings, future directions are revealed, which indicate that Financial Education can be used as the intervention to trigger chain reactions of positive impacts ranging from formal financial service usage to business performance and sustainability.

However, the road to better financial literacy is continuous and requires more work, with a number of participants citing deficiencies in application of financial knowledge and misconceptions about basic financial concepts as barriers. The study reveals one of the biggest gaps that exist between what students learn in class and their application in business activities including periodic financial reporting and risk management. It underlines the need for enhancing total and effective financial literacy that should be replaced from mere understanding of various types of financial products and services by effective behaviors. Furthermore, the study provides an understanding of the psychological factors as the determinant of financial decision of SMEs. The misconceptions that were identified about the basic concepts of investing along with risk return dynamics suggest that there are aspects of rational human nature that will not enable proper risk management. The results appear to support calls for shifting from the traditional modes of education based on disseminating information such as financial literacy, and instead take into account attitudes and perceptions people have towards money.

As emergence markets environment progresses and changes the position of financial literacy for emerging entrepreneurs becomes ever vital. The research establishes it as critical to economy and catalyser of recovery and growth, innovation in the developing world and others continents elsewhere. As a means of enabling entrepreneurs understand challenging financial environments, make sound decisions and competently manage risk, financial literacy is a vital mechanism that supports sustainable economic growth. The research outcomes also underscore the close relationship between financial knowledge, behaviour and attitude, a perspective that supports the adoption of a more comprehensive approach in the facilitation of financial literacy intervention. Therefore, while the regulatory environment and financial systems develop in the emerging markets, it is becoming critical to provide the entrepreneurs with the complete set of financial knowledge in order to achieve personal success along with the sound development of the corresponding sphere in the global economy. Lastly, this study lays the foundation for the development of enhanced, efficient interventions that enable the provision of support for other entrepreneurs to overcome the challenges of volatility to foster innovation and growth for economies in the emerging markets across the globe.

5.1. Contributions And Suggestions for Further Studies

In general, this research advances knowledge about the use of financial literacy to manage risks for individuals who are engaged in business in emerging markets. Due to the interconnection of the discussed factors, it contributes an integrated systematic approach toward decision making about and promoting higher levels of financial literacy concerning SMEs. In practical terms the study provides policy implications that may be useful for the government, banks, and educational institutions intervening on the creation of entrepreneurship programs and support for enhanced resilience and success in developing economies.

The main focus of its findings towards practicing financial literacy is thus indicative of a major research and intervention gap of study. But amassing knowledge isn’t the goal here; converting this knowledge to better financial behaviors and decisions is the objective. Other research-based papers could seek to identify ways of addressing this gap with focus on recommending practical applications for training involving simulations or systematic application of positive financial behaviours within actual working business environments.

For further study, there is an excellent opportunity to analyse cultural and contextual antecedents of financial literacy and risk taking propensity in entrepreneurs in various emerging economies. Cross cultural and cross economic research could further explain how to assess the effectiveness of financial literacy interventions for northwest region and other regions of similar background. Also missing are longitudinal studies that follow up the effects of financial literacy programmes on the performance of SMEs and economic development to feed into policy sustainability.

Moreover, due to the enhancement of technological innovations on the financial industries/sector, future studies should analyze the relationship between digital financial literacy and the conventional financial literacy. Studying the interactions between emerging market entrepreneurs and digital financial services, cryptocurrencies, and fintech products may provide new insights into risk management approaches in today’s growing digitized economy. That research might help design integrated consumer financial literacy programs that would help start up business owners be better able to deal with the existing and emerging experiences of the digital age.

Compliance with ethical standards

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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