Supporting SMEs Financial Resilience during Crises: A Framework to Evaluate the Effectiveness of Financial Literacy Programs Targeting SMEs

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Abstract: Financing capital investments and working capital have been the key challenges for small businesses during and in the aftermath of the pandemic. Excessive indebtedness can increase the fragility of firms, particularly during times of uncertainty. While there are several programs globally that target entrepreneurs' financial literacy, most of them do not take into consideration entrepreneurs' financial resilience during and after crisis times such as pandemics. The objective of this paper is to discuss the status of financial literacy programs targeting entrepreneurs. This paper conducts a review of the relevant literature to establish the initial understanding and then generates a framework consisting of entrepreneurs' financial literacy along with its components. This is done by carrying out qualitative content analysis of the various financial literacy initiatives targeting entrepreneurs in twenty countries globally to understand their target segments, scope, initiating organisations and limitations. The paper then suggests a framework for entrepreneurs' financial education that takes into consideration financial resilience during and after crisis situations in general and pandemics in particular.

Keywords: Financial literacy, financial resilience, crisis, financial education JEL classification: G18, G32, L26

1. Introduction

Entrepreneurship is acknowledged under the Sustainable Development Goals (SDGs) agenda as one of the effective means to promote sustainable and inclusive growth, job creation as well as social and environmental impact. The SDGs promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalisation and growth of micro, small and medium-sized enterprises (MSMEs), including through access to financial services. In order to play a transformational role in sustainable economic development, there is a need for enabling local ecosystems that can promote entrepreneurship while

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taking into consideration the global challenges shaping the economy. This requires closer examination of the enabling factors that can promote entrepreneurs' financial well-being, resilience and sustainability. One of the key pillars of this ecosystem is entrepreneurship education that enables entrepreneurs to develop sustainable and resilient activities that contribute to poverty eradication and sustainable development.

The recent Covid-19 pandemic emphasised the importance of financial literacy for human well-being. The pandemic did not only impact the physical well-being of people, but had serious implications on their financial health as well, especially for the vulnerable ones. People with poor financial management skills and low or non-existent savings faced financial distress that further worsened social injustice and inequalities in many countries. Financial mistakes and mismanagement can impact not only individual welfare but create negative externalities that affect all economic participants as well (Abdullah & Anderson, 2015). On the other hand, globalisation and the complexities of modern financial markets and investment securities have intensified the need for financial literacy (Rodrigues et al., 2019).

The OECD defines financial literacy as "the process by which financial consumers/ investors improve their understanding of financial products and concepts and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being" (OECD, 2005). It is a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial wellbeing (Atkinson & Messy, 2012).

Financial literacy is a key component of entrepreneurship education given its important role in promoting the growth and financial sustainability of micro, small and medium-sized enterprises (MSMEs). The importance of financial skills for MSMEs is recognised by the G20/OECD High-Level Principles on SME financing published in 2015 with Principle 7 asserting the need to "Enhance SME financial skills and strategic vision" (G20/OECD, 2015). MSMEs make up the majority of enterprises in the world, providing employment and contributing significantly to national incomes (Atkinson, 2017). Moreover, the fast pace of change in our economies and the constant threat of financial crisis has made it crucial to address the competencies in monetary and financial matters, giving rise to increased national, international and supranational initiatives promoting financial literacy (JA Europe, 2016). In this regard, various international organisations have developed practical tools and programs to support entrepreneurial learning that include elements of financial literacy (OECD/INFE, 2015). As financial education influences behaviours and promotes empowerment, financial inclusion and awareness, it requires a coordinated and integrated approach aligning resilience, ethics and sustainable development objectives while mobilising various stakeholders.

Several studies demonstrate how the lack of financial literacy can hinder entrepreneurship development (Abubakar, 2015). Financial education can help enhance financial literacy by increasing financial knowledge, skills and attitudes (OECD/INFE, 2015). In addition, it can potentially improve worker confidence and productivity, enhance employability and help workers stay employed by avoiding financial difficulties (Lopus et al., 2019). For example, Wagner and Walstad (2019) investigated how financial education in high school, college, or in the workplace affects the short- and long-term financial behaviours of adults. While short-term financial behaviours focus on money or credit management tasks, long-term financial behaviours are future-oriented and involve planning. They argued that financial education is more likely to have a positive influence on long-term than short-term financial behaviours. On the other hand, Xiao and O'Neill (2016) explored potential effects of financial education on the financial education from a specific source are positively associated with perceived financial capability. Another study by Setyowati et al. (2018) showed that the level of Islamic financial literacy has a positive effect on financial management planning.

Given the significance of financial literacy for economic development, several governments and institutions globally have incorporated financial education programs targeting the public. In addition, numerous international aid projects now include elements of personal finance education as part of their efforts to further economic growth (Lopus et al., 2019).

As the economies operate under increasing risks caused by climate crisis and rapidly changing technologies, and given that the frequency of pandemics and global uncertainties is expected to rise in the future, SMEs financial literacy that integrates resilience and risk management considerations is critical to promote the achievement of both financial inclusion and well-being. This paper aims to explore the current status of SMEs financial literacy and suggest a framework of financial literacy that can enhance its effectiveness in promoting resilience during and after crises in general and pandemics in particular. To do so, it starts with a general overview of the concept of financial literacy, its determinants and challenges. It then analyses various financial literacy initiatives targeting SMEs to understand their target segments, scope, initiating organisations and limitations. Finally, it provides a general assessment and policy recommendations on the development of entrepreneurs' financial education that takes into consideration financial resilience during and after crisis or pandemics.

This study employs a qualitative research approach and uses content analysis of existing financial literacy initiatives to understand the key features and shortcomings of existing financial education programs targeting entrepreneurs. The exploratory research develops an integrated financial education framework together with a financial literacy roadmap that aligns resilience, financial well-being and sustainability objectives. The paper expands the OECD/INFE framework with an additional competency area that focuses on strengthening MSMEs financial resilience. The objective is to assess the critical role of financial education in promoting entrepreneurs' financial well-being during and after pandemics.

This paper proceeds in five sections. After this introductory section, Section 2 provides an overview of the literature. Section 3 explains the research method employed. Section 4 discusses the research findings. Section 5 suggests a set of policy recommendations including a financial literacy framework that integrates resilience considerations. Section 6 is the conclusion.

2. Literature Review

The review of the literature identifies three key aspects of financial literacy: (i) its impact on SMEs financial well-being, resilience and crisis management, (ii) its impact on business performance and success, and (iii) its components. The following sections discuss how these aspects are examined in the literature.

2.1 SMEs Financial Well-Being, Financial Resilience and the Covid-19 Pandemic

MSMEs face many challenges that can negatively impact their financial well-being. These include the lack of financial planning, limited access to funding, lack of capital, unplanned growth, low strategic and financial projection, excessive fixed-asset investment and capital mismanagement (Karadag, 2015). Furthermore, as commercial banks rely heavily on collateral-based lending, entrepreneurs lacking physical assets and acceptable collateral have limited access to credit needed for production (Nyamboga et al., 2014).

Financial resilience is the ability to meet a major expense today without borrowing money or asking family or friends' support. In the case of MSMEs, this includes the ability to cover fixed costs such as salaries, the ability to pay back debt, the readiness to invest instead of spending and the ability to diversify the sources of income. Resilience would mean that if the main source of income is lost, the entrepreneur can still meet his basic expenses without borrowing or liquidating the business.

MSMEs and entrepreneurs were amongst the vulnerable groups that were adversely affected during the recent COVID-19 pandemic. In addition to the pressures from financial market volatility, high commodity prices, and supply-chain and trade disruptions, MSMEs often have fewer liquidity buffers than larger enterprises and tend to seek external finance to cope with crisis which can come in the form of credit, overdrafts and lines of credit. This explains the record growth of MSME loans and government credit guarantees during the pandemic. A study by Bartik et al. (2020) explored the impact of coronavirus disease 2019 (COVID-19) on small businesses by conducting a survey of more than 5,800 small businesses that are members of Alignable, an online network of small businesses across North America. The study highlighted the financial fragility of many small businesses with the median business with more than \$10,000 in monthly expenses having only about two weeks of cash on hand. In addition, the majority of businesses were planning to seek funding through the Coronavirus Aid, Relief, and Economic Security (CARES) Act.¹ However, they faced many problems with accessing the program, such as bureaucratic hassles and difficulties establishing eligibility. According to the OECD, many government-rescue measures took the form of debt. From a sample of 55 countries, 87% used direct lending, and 62% used debt moratoria for MSMEs.²

¹ CARES is a \$2 trillion financial rescue package established by the U.S. Congress in March 2020, in response to the coronavirus pandemic. The package included direct benefits to various segments including small businesses.

² https://oecdcogito.blog/2022/03/29/is-financial-diversification-the-key-to-sme-resilience/ (last accessed on 8 September, 2022).

Fostering SMEs financial resilience requires both short-term and long-term approaches. While the long-term approach consists into allocating funds to savings, insurance and pension, the short-term approach requires the availability of alternative financing instruments that provide emergency liquidity to MSMEs such as venture capital funds, credit guarantee facilities, digital financial platforms and trade finance. However, utilising these initiatives implies that MSMEs are aware of these opportunities and must be financially savvy to use them which may not be the case for many MSMEs.

2.2 Impact of Financial Literacy on Business Performance and Success

Several studies demonstrated the impact of financial literacy on MSMEs financial performance (Gathungu & Sabana, 2018; Kimunduu et al., 2016), financial growth (Hossain et al., 2020), and loan repayment ability (Nyamboga et al., 2014). The OECD/ INFE (2015) asserted that properly designed financial education has the potential to encourage innovation and help entrepreneurs to improve their access to and use of financial services, enhance their financial management practices and help scale up their business. Njaramba et al. (2015) conducted a study on 11 migrant African-Australian women entrepreneurs in the Cairns region and found that women entrepreneurs have a high level of financial literacy, which is positively related to their high level of education. Trunk and Dermol (2015) discussed the role of financial literacy and entrepreneurial intention in the European Union (EU) integration and demonstrated that financial literate individuals are better equipped for taking more effective measures to improve their economic well-being. However, the authors also showed that there is no correlation between the constructs of financial literacy and entrepreneurial intention.

Leifels and Metzger (2015) conducted a special analysis of the KfW Start-up Monitor 2014³ and showed that when it comes to financial matters, experienced entrepreneurs are more competitive and their start-ups are more resilient. Among other things, this is due to the fact that they have fewer problems obtaining external funding and their ability to use favourable sources of finance. Ćumurović and Hyll (2019) supported the same argument and showed a highly significant and positive correlation between financial literacy and self-employment. In another study, Klapper et al. (2015) examined the relationship between financial literacy and entrepreneurship, using US data from the national financial-capability surveys. The results of the study suggest that financial literacy exerts a high impact on both the probability of being an entrepreneur and on entrepreneurial performance in the US. Another study by Dahmen and Rodríguez (2014) found a strong association between the small businesses' financial strength and the business owners' habits of mind with regards to their financial statements. On the other hand, Adomako and Danso (2014) argued that the direct

³ The KfW Start-up Monitor has been conducted since the year 2000 as a representative annual population survey of start-up activity in Germany. The survey is based on a very comprehensive start-up concept (full-time and part-time entrepreneurs, commercial and self-employed entrepreneurs, new business formations, company takeovers and participations in enterprises) and provides an all-encompassing account of start-up activity. The 2013 survey period ran from 24 July to 5 December 2013. Retrieved from https://www.kfw.de/About-KfW/Newsroom/Latest-News/Pressemitteilungen-Details_203712.html#, last accessed on May 21, 2023.

effect of financial literacy on firm performance is dependent on the internal strength (financial capital availability and resource flexibility) of the firm. Karadag (2015) took a more comprehensive "strategic financial management" approach to assess the impact of financial management practices and SME performance.

2.3 Components of SMEs Financial Literacy

A report by the OECD distinguishes four financial literacy areas for adults: (i) money and transactions, (ii) planning and managing, (iii) risk and reward and (iv) financial landscape (OECD, 2016). Each area comprises a set of core competencies such as budgeting, saving, investing, debt management, etc. From an Islamic perspective, Aisyah and Saepuloh (2019) highlighted three aspects of Islamic financial literacy, namely basic money management, financial planning, charity donation and zakat. Figure 1 below provides an overview of the key components of the financial literacy programs targeting SMEs.

Financial Knowledge	Financial Capability
 General financial skills Understanding financial products and services Use of financial products and services Financial statements understanding Personal finance 	 Financial planning and budgeting Financial accounting Funding and access to finance Financial risk Liquidity management Debt management Saving Investing Money management Cash-flow management Tax management Insurance Working capital management



Financial literacy components can be classified into two broad categories: (i) financial knowledge, and (ii) financial capability. While the financial knowledge component focuses on the knowledge and understanding of general finance concepts to make informed financial choices and use financial products, the financial capability component comprises the necessary competency areas that enable entrepreneurs to maintain the financial sustainability of their business.

Supporting SMEs Financial Resilience during Crises: Effectiveness of Financial Literacy Programs Targeting SMEs

3. Research Method

This paper uses a qualitative methodology to establish the initial understanding in order to develop a framework of SMEs financial literacy along with its components. To do so, a literature review of the concept and dimensions of entrepreneurs' financial literacy was performed. In addition, the literature review was supported by qualitative content analysis of the various financial literacy initiatives targeting entrepreneurs using a global sample of twenty initiatives from twelve countries (Appendix 1). The financial education initiatives were analysed according to their target segment, scope, initiating organisation and limitations. Content analysis is one of the most widely used methods of analysis in a variety of contexts, including but not limited to linguistics, social psychology, sociology of knowledge, anthropology and communication (Krippendorff, 2013). It is one of the standard approaches applied to investigate research challenges from documented evidence. The implementation of the content analysis approach in our study identifies a set of financial literacy competency areas applicable to entrepreneurs. A set of additional competency areas to promote entrepreneurs financial resilience is then suggested. These competency areas were then divided into five groups including: (i) Choice and use of financial services (2 sub-competencies), (ii) Financial and business management and planning (4 sub-competencies), (iii) Risk and insurance (2 sub-competencies), (iv) Financial landscape (3 sub-competencies), and (v) Financial resilience (5 sub-competencies).

The paper expands the OECD/INFE framework with an additional competency area that focuses on strengthening MSMEs financial resilience. This enables assessing the critical role of financial education in promoting entrepreneurs' financial well-being during and after pandemics.

4. Findings

Our research began with the state-of-the art analysis of similar studies on entrepreneurs' financial education. Many financial literacy components were found, however the suitable indicators for entrepreneurship financial education were selected and organised into five categories: (i) Choice and use of financial services, (ii) Financial and business management and planning, (iii) Risk and insurance, (iv) Financial landscape, and (v) Financial resilience. The review of global entrepreneurship financial education initiatives highlights several key findings.

4.1 Content, Scope, Initiating Organisations

Overall, financial literacy programs differ between countries and regions. In Indonesia, for example, financial literacy levels and needs for MSMEs are recognised in policy frameworks while in other countries financial literacy levels are either addressed outside of the national strategies (like the case of China) or not measured (like in Japan and Bangladesh) (OECD 2017a). Initiatives outside of national strategies consist mainly in programs sponsored by banks (examples include the financial literacy education month by the People's Bank of China, financial literacy camps by banks in India, etc.), private sector organisations or non-profit organisations (NGOs). This section analyses

twenty case studies of financial literacy for entrepreneurs. The analysis of the various financial literacy programs targeting entrepreneurs shows that the majority are focused on general financial literacy with very limited considerations of digital finance and sustainable finance literacy. With regards to the target segments, the initiatives target entrepreneurs in general, in addition to specific segments such as women entrepreneurs, young and micro entrepreneurs.

In terms of the content, financial literacy areas include basic financial literacy concepts such as the fundamentals of finance and economy, financial management, accounting, risk management, insurance, tax management, financing, financial analysis, investing, spending and savings, money management and financial planning. Other programs like Secure Africa focus on financial stability management to empower unprivileged people. On the other hand, other organisations like the Islamic Corporation for the Development of the Financial Sector (ICD) Financial Literacy Program integrates alternative financing concepts such as crowdfunding, in addition to providing guidance on wealth growth.

4.2 Effectiveness in Addressing SMEs Resilience during and after Pandemics

The recent Covid-19 pandemic highlighted the need for preparedness measures in addition to financial interventions during the pandemic. With inadequate investments in pandemic preparedness and response in most of the countries globally, interventions during the pandemic become expensive and ineffective (World Bank, 2017), thus requiring the development of innovative and integrated approaches of pandemic management. SMEs can play an important role in economic recovery since they comprise more than 75% of enterprises and account for more than 20% of exports, 45% of employment, and 52% of GDP globally.

Since their businesses are more vulnerable to demand downturn, disrupted fund flow, shrinking financing, high inflation, shortage of raw materials and fuel, as well as talent migration, SMEs suffer disproportionally in the crisis compared to other segments in the economy. While the twenty programs analysed focus on financial literacy skills, the majority address mainly general financial literacy skills without specific reference to financial resilience. Only two programs discuss financial technology and crowdfunding. On the other hand, most of the programs are not aligned with national literacy strategies, which limits their effectiveness in promoting financial resilience.

When assessing the effectiveness of financial education initiatives targeting SMEs in promoting resilience, a four-stage model can be considered as depicted in Figure 2. The pre-pandemic phase should focus on strengthening SMEs resilience by promoting financial and investment diversification. In this phase, two key questions should be addressed: What is the level of financial preparedness? And what is the response capacity of SMEs? Current short- and long-term financial strategies must be redirected to address potential cash flow shortages, financial solvency and future viability. Once the outbreak occurs, efforts should be redirected to changing business models and promoting alternative funding mechanisms such as asset-backed finance, venture capital and online alternative finance. An assessment of national recovery packages shows that government use of alternative financing instruments and sources to channel

Supporting SMEs Financial Resilience during Crises: Effectiveness of Financial Literacy Programs Targeting SMEs



Figure 2. A multistage model for assessing SMEs financial resilience during pandemics *Source*: Authors.

SME-specific support remains limited. Once the disease becomes a pandemic, focus should be concentrated on expanding SME access to a range of financing instruments, particularly for highly leveraged SMEs. Finally, the post-pandemic recovery phase should focus on greening, digitalisation and financial planning.

5. Policy Recommendations

Financial literacy plays a critical role in promoting entrepreneurs financial well-being and resilience. A report by the OECD suggests that identifying MSMEs as a target group within national strategies for financial education would contribute to addressing some of the challenges they face (Atkinson, 2017). On the other hand, strengthening pandemic prevention, preparedness and response capacities necessitates deliberate policy approaches to long-term recovery, focusing on promoting financial resilience and sustainability. To do so, policymakers play a vital role in developing and executing integrated recovery plans that foster MSMEs financial resilience. This paper demonstrates that encouraging SMEs financial resilience necessitates an enabling financial literacy framework that integrates digital and sustainable finance considerations.

Preliminary analysis of the global SME financial literacy programs indicate that the majority of the initiatives focus on general financial literacy with very limited focus on financial resilience, which limits their effectiveness in strengthening prevention, preparedness and response capacities of SMEs during and post-pandemics.

Figure 3 suggests an entrepreneur finance literacy framework that integrates the resilience considerations discussed earlier, the general SME financial literacy competency areas together with the enabling ecosystem. The framework expands the OECD/INFE core competencies framework on financial literacy for MSMEs (OECD, 2018a)

Dalal Aassouli and Habib Ahmed



Figure 3. Financial literacy framework to strengthen entrepreneurs' resilience Source: Adapted from OECD (2018a).

by integrating an additional competency area focusing on financial resilience in addition to Islamic finance consideration for SMEs operating in Islamic finance jurisdictions together with an enabling ecosystem for a successful implementation of the framework.

The framework is based on five areas of competency; each area comprises a number of skills that are required at every phase of the pandemic: (i) choice and use of financial services, (ii) financial and business management and planning, (iii) risk and insurance, (iv) financial landscape and (v) financial resilience. The last competency area is critically important as it integrates resilience objectives into the framework.

Financial resilience supports financial inclusion and is connected to the ability of entrepreneurs to cope with a financial emergency and the sources of money they can rely on. It is the ability to cope with a financial emergency such as a sudden loss of income or an unexpected expense. While most of the SME initiatives focus on financial inclusion by increasing access to financial services, less focus on financial resilience. The financial resilience competency area comprises five key components: (i) business model transition, (ii) revenue resilience, (iii) financial diversification, (iv) sustainable finance literacy, and (v) digital literacy.

Promoting a responsive business model consists in aligning with new trends, adopting new practices and expanding operations. During the pandemic, many businesses had to adapt their businesses quickly to long periods of restrictions, with a large number of SMEs increasing their use of digital tools. Business model transition can also be related to revenue resilience, which consists in maintaining SMEs financial position and rethinking their revenue planning by exploring new sustainable revenue streams while reducing costs. For example, how can the SME benefit from the increased digital literacy in the society to generate revenues? And how can additional revenues be generated through asset monetisation?

The recent pandemic demonstrated that many SMEs don't have the ability to cope with a financial emergency such as a sudden loss of income or an unexpected expense. According to the Global Findex Database, 55% of adults in developing economies could reliably access emergency money in a one-month timeline, but 45% could not. Thus, financial diversification is important to strengthen SMEs financial resilience as it allows them to tap into alternative financial instruments. The OECD, for example, suggests eight alternative financing instruments beyond traditional bank lending, namely: leasing, factoring, private equity, venture capital and business angel financing, specialised SME exchanges, debt crowdfunding/peer-to-peer (P2P) lending, equity crowdfunding, blockchain-based financing, and trade finance (OECD, 2020).

On the other hand, recognising that a strategy underpinned by environment, social and governance (ESG) principles results in better financial performance, higher returns for investors and a stronger, more resilient business model which ultimately benefits all and given the international sustainable development challenges, financial education should also integrate sustainability considerations. Therefore, sustainable finance literacy must be at the very core of SMEs financial education. In fact, sustainable finance has gained popularity globally with more innovations in the banking and capital markets segments. According to Refinitiv, sustainable financing totalled US\$79.1 billion during the first half of 2020, with European borrowers accounting for 63% of overall sustainable lending. A growing number of financial institutions globally have voluntarily adopted and implemented a broad range of sustainability practices in response to emerging challenges and stakeholder expectations regarding social and environmental impact. This growing awareness about the materiality of sustainability issues can also be noticed among regulators and policymakers globally with the issuance of various principles on sustainable and responsible banking and investments. These include Bellagio Sustainability Assessment and Measurement Principles (BellagioSTAMP), the Principles of Values-based Banking, the Principles of Responsible Banking, Value-Based Intermediation (VBI), and the Principles for Responsible Investment (PRI), etc.

Finally, as digitalisation is gaining momentum across financial markets globally, digital adoption can stabilise and strengthen SMEs business models during times of uncertainty. For example, with artificial intelligence (AI), automation and predictive analytics can enhance revenue planning and thus support revenue resilience during pandemics. Digital financial services (DFS) can be defined as financial operations using

digital technology, including electronic money, mobile financial services, online financial services, i-teller and branchless banking, whether through bank or non-bank institutions (OECD, 2018b). DFS can encompass various monetary transactions and can also include non-transactional services, such as viewing personal financial information through digital devices (OECD, 2017b). The connection of technology and financial products offers a crucial tie on enhancing financial literacy (Mabula & Ping, 2018). In this regard, several studies demonstrated the positive influence of technology and financial literacy on sound financial management and performance of SMEs (Chittithaworn et al., 2011; Mabula & Ping, 2018; Makhbul & Hasun, 2010). In addition, digital financial services extend the potential reach and access of financial services and therefore create opportunities to develop financial literacy competencies, confidence and experience with finance (OECD, 2018b). Therefore, financial literacy frameworks should take into account digital finance innovations such as distributed ledger technologies (DLT) like blockchain. For example, initial coin offerings (ICOs), one of the most prominent applications of blockchain for finance, can promote SME financing as it allows for an innovative and inclusive way of financing in addition to the traditional financing channels for SMEs, i.e. initial public offerings (IPOs), crowdfunding and venture capital (OECD, 2019).

In addition, a successful implementation of the framework requires three key enabling factors: (i) alignment with national financial literacy strategies, (ii) an integrated top-down bottom-up approach, and (iii) promoting an ecosystem for alternative financing models targeting SMEs.

5.1 Alignment with National Financial Literacy Strategies

One of the key objectives of national financial literacy strategies is to ensure the quality of the financial environment, which creates the preconditions for the development of financial literacy and financial inclusion.⁴ National financial literacy strategies should have clear references to sustainable finance and digitalisation as well as SME financial emergency support such as government relief programs. A study by the OECD evaluates national financial literacy strategies in 29 countries and economies that are part of the OECD International Network for Financial Education (OECD/INFE) (OECD, 2022). While resilience can be considered as one aspect of financial inclusion, in addition to financial products and services access, most of the national financial literacy strategies focus on financial inclusion (through increased access to accounts and increased use of services like payments, savings and borrowing), less focus on financial resilience.

In Indonesia, for example, the national strategy on financial literacy identifies ten priority targets, including MSMEs. While the strategy integrates references to digital financial services such as P2P lending, it does not provide guidance on SMEs financial resilience during a crisis. The same applies to India, where the national strategy for financial education focuses mainly on financial inclusion and increasing the use of digital financial services without any reference to SMEs resilience.

⁴ National Strategy for Financial Literacy in Latvia 2021–2027.

Supporting SMEs Financial Resilience during Crises: Effectiveness of Financial Literacy Programs Targeting SMEs

5.2 An Integrated Top-down Bottom-up Approach

A review of global financial literacy initiatives highlights several stakeholders that promote financial education. These include financial institutions, academic institutions, regulatory bodies, non-profit organisations (NGOs), etc. A comprehensive and tailormade financial literacy education targeting entrepreneurs at country levels requires an integrated top-down bottom-up approach whereby financial education is integrated in the national strategies with dedicated institutional and governing arrangements. An OECD/INFE survey highlights that 59 countries report developing a national strategy for financial education, implementing one or revising it and developing a new one, with an additional five planning one (OECD/INFE, 2015). However, many countries still lack inclusive financial literacy strategies that align financial inclusion, financial resilience and financial well-being. In addition, other stakeholders such as financial institutions, academia and non-profit organisations should play a key role in promoting financial education awareness and capacity building.

5.3 Promoting an Ecosystem for Alternative Financing Models Targeting SMEs

Many studies found a positive relationship between government support and SME growth or performance (Hossain et al., 2020). Governments play a critical role in creating a conducive environment for entrepreneurship development. This can be achieved by promoting safe and formal ways of saving as well as policies that aim to strengthen SME financial resilience during and after pandemics. Further, promoting sustainable finance and digital financial services requires a conducive ecosystem with increased and transparent regulation as well as market incentives and infrastructure. For example, to accelerate digital sustainable finance, several countries have implemented enabling frameworks as shown in Figure 4 below.

	Malaysia	Indonesia	European Union
Sustainable Finance	 SRI Framework Value-Based Intermediation (VBI) Financial Sector Blueprint 2022-2026 	 Roadmap for Sustainable Finance in Indonesia 2015–2019 	 EU's Strategic Agenda 2019-2024 EU Sustainable Finance Strategy
Digitalisation	 Financial Sector Blueprint 2022-2026 	 Digital Finance Innovation Road Map and Action Plan 2020- 2024. OJK blueprint for digital banking transformation Regulation No.12/POJK.03/2018 on the Implementation of Digital Banking Services by Commercial Banks 	 EU Digital Finance/Fintech Action Plan



Finally, as the activities of SMEs operating in Islamic finance jurisdictions are based on Islamic finance principles, their financial literacy programs should also integrate ethical considerations such as permissibility, equity and social justice, risk sharing and the link to the real economy.

6. Conclusion

This study attempted to investigate and assess global entrepreneurs' financial literacy initiatives. The suggested financial literacy framework can support policymakers and other private sector organisations involved in SMEs capacity building in designing national strategies and tailormade programs to strengthen entrepreneurs' financial resilience and well-being during and after pandemics. It could also support governments preparedness and recovery strategies. The framework can also serve as a basis to assess the effectiveness of financial literacy programs in promoting SMEs financial resilience.

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Appendix 1. Entrepreneurs Financial Literacy Programs

Program Name	Country	Initiating Organization	Areas Covered
All Citizens Financial			
Literacy Programme	Nigeria	African Centre for Citizens Orientation	Banking and Investment
			Financial Management, Accounting, Costing, Risk
Financial Literacy Toolbox	Kenya	Microsave Consulting	Management, Financing, and Debt Finance
DTB Financial Literacy	· ·	Ŭ U	
Training	Kenya	Diamond Trust Bank	Financial Management
DSIK Financial Literacy	· ·	German Sparkassenstiftung Eastern	Financial Management, Credit Access, Saving, Budget, Debt,
Project	Rwanda	Africa (DSIK)	and Loan Management
Financial Literacy for			Accounting, Financial Statements, Capital Access, Financial
MSME's	India	CRISIL	Analysis, Working Capital, and Long Term Investment
			Financial Management, Cash-flow Management, Record
Financial Education for			Keeping, Banking, Credit Reporting, Risk Management and
Small Business	USA	EastWest Bank	Insurance, and Tax Paying Management
FDIC Money Smart	USA	Federal Deposit Insurance Corp	Accounting, Financial Management, Tax
SCORE	USA	US Small Business Administration	Financing or Capital Management
360 Degrees of Financial	0011	oo oman baomeoo nammor ation	i manenig er oupraa islandgement
Literacy	USA	American Institute of CPAs	Tax Management, Financial Management and Projection
Interacy	0011	Business Development Bank of Canada	Tax Management, Financial Management and Frojection
Finacial Literacy for SMEs	Canada	under CPA	Fundamentals of Finance, Cash Flow, Financial Statement
T macial Enteracy for SMES	Callaua	under CLA	Personal and Business Credit, Budgeting, Cyber Security,
Entrepreneur			Fraud Detection, Tax Filing, Tracking Income and
Empowerment Program	USA	Flyte	Expenses, Bookkeeping, Preparing Financial Statements
INVEST Financial &	USA	riyte	Expenses, bookkeeping, Freparing Financial Statements
Forecasting models for			
U U	Malta	Malta Business Bureau	Financial and Investment Choices, Personal Finance
Entrepreneurs	Maita		Savings, Financial Planning, Emergency Fund,
ICD Financial Literacy	Courd: Austria	Islamic Corporation for the	
Program Digital Internationalisation	Saudi Arabia	Development of the Private Sector (ICD)	Crowdfunding, Financing, Investments, and Wealth Growth
0			
and Financial Literacy Skills			
for micro-entrepreneurs		D ID ID	m
(DIFLSME)		DIFME	Taxation
National Bank of Bahrain			
(NBB) Financial Literacy		VDD	
Project	Bahrain	NBB	Financial Management and Planning
		Financial Education	
		Coordinating Unit (FECU) at Bank of	
		Zambia in collaboration with German	
		Savings Banks Foundation for	
	_	International	
Micro Business Simulation	Zambia	Cooperation (SBFIC)	Basic Accounting and Financial Control Principles
HINDRISE Financial			
Literacy Camp	India	Hindrise Social Welfare Foundation	Financial Management
Financial Knowledge for			Budgeting, Savings, Debt Management and Financial
Africa (FiKA)	Kenya	Equity Group Holdings	Services and Products
Financial Education of		Central Bank of Jourdan in colaboration	Financial Technology, Financial Consumer Protection and
MSMEs	Jordan	with Jordan River Foundation	Financial Capabilities, Financial Awareness
Mexico Financial Education			
Program	Mexico	National Financiera	Credit Access, Risk Management, and Credit Reporting