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Strategic Financial Leadership and Business Resilience: Evidence from Small and Medium-Sized Enterprises (SMEs)

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Abstract
This paper discusses the correlation of strategic financial leadership and business resilience among small and medium-sized enterprises (SMEs) in hard economic periods. Through mixed methods approach which involves the use of survey data of 312 SMEs in various sectors and qualitative interviews of 45 financial managers, we examine how the elements of financial strategies cash flow planning, capital structure optimization and cost efficiency measures affect the survival and performance of SMEs during economic uncertainty. We find that proactive cash flow management shows the highest positive association with the business resilience ($r = 0.67$, $p < 0.001$), then strategic cost efficiency initiatives ($r = 0.54$, $p < 0.001$) and optimized capital structure decisions ($r = 0.48$, $p < 0.01$). The COVID-19 pandemic demonstrated that SMEs with extensive financial planning systems were 3.2 times more likely to survive than the ones with reactive financial management practices. The research paper makes a contribution to the literature by offering empirical findings connecting the particular financial leadership behaviors to quantifiable resilience outcomes and also provides some practical frameworks that can guide SME managers to operate in unpredictable economic conditions. Findings show that financial literacy of leadership teams, regular scenario planning and diversified sources of funds are moderating variables that play a significant role in the relationship between financial strategy and business resilience.

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Keywords: Strategic financial leadership, business resilience, SME survival, cash flow management, capital structure, cost efficiency, economic downturn, financial strategy, crisis management, organizational sustainability.

1. Introduction

Small and medium-sized enterprises (SMEs) are the foundations of the global economies, with about 90 percent of all businesses globally, and play an important role in providing jobs and boosting the economy (OECD, 2023). SMEs may encounter an unequal portion of challenges when the economy experiences a downturn, and the rates of their failure are much larger than that of bigger businesses (Dang and Dang, 2022; Khandelwal and Bajpai, 2024) [17, 34]. This weakness was most clearly shown during the COVID-19 pandemic, when it was found that 43% of SMEs worldwide were temporarily closed down in the first stages of the crisis, and that about 25% are permanently closed down in the first year of the crisis (Williams *et al*., 2021; Zhao and Zhang, 2020) [54, 56].

The notion of business resilience discussed as the ability of an organisation to foresee, prepare to, react to, and adapt to the gradual change and abrupt is a concept that has received a significant amount of scholarly attention in recent years (Ambulkar *et al*., 2015; Herbane, 2019) [2, 29]. Although the existing literature recognizes the significance of resilience in the existence of SMEs, there is still a paucity of empirical research into the operational financial leadership procedures that may increase the

capacity of resilience in the face of economic crises (Battisti and Deakins, 2017; Gölgeci and Kuivalainen, 2020) [11, 22]. Strategic financial leadership involves the deliberate integration of the financial management activities with the organizational goals, which involves proactive planning, risk evaluation, and efficient utilization of resources (Ates and Bititci, 2011; Kraus *et al*., 2020) [5, 36]. In the case of SMEs that have limited resources and may not be able to access capital markets, it is financial leadership that can ensure survival in the turbulent times (Cowling *et al*., 2018; Haider *et al*., 2023) [15, 27]. Nevertheless, the connection between certain elements of financial strategies cash flow planning, capital structure optimization, and cost efficiency and quantifiable resilience outcomes has not been studied in empirical studies.

This research fills this gap by exploring the impact of strategic financial leadership on SME resilience in an economic recession and more specifically the 2020-2023 period which includes the COVID-19 pandemic and the consequent economic recovery. We analyze the processes by which the financial strategy increases the organizational potential in terms of ability to endure and rebound after the external shocks, based on the resource-based view theory and dynamic capabilities framework (Barney, 1991; Teece *et al*., 1997) [8, 51]. The main research questions that we are probing in our study are as follows: First, what are the independent and combined effects of various elements of financial strategy (cash flow management, capital structure, and cost efficiency) on the resilience of SMEs? Second, what are the moderating factors that strengthen or weaken the relationship between financial leadership and the outcome of resilience? Third, what are viable frameworks that SME leaders can adopt to enhance resilience capacity of financial strength?

This study enhances the academic knowledge and practical implementation of the application of financial leadership in crisis situations by offering empirical findings of various contexts of SMEs as well as offering practical insights to be applied by practitioners. The implications of the findings include the policy makers, SME owners, financial managers and business support organizations aiming at improving the SME survival rates and economic stability.

1.2. Significance of the Study

This study is of great importance to various stakeholder groups and would have a contribution in both theoretical and practical development as well as its application in various aspects. To begin with, it can be stated that the research accounts for an urgent gap in knowledge in the literature on the management of SMEs, as it empirically examines the connection between certain financial leadership practices and quantifiable resiliency outcomes in the context of actual economic crises (Eggers, 2020; Herbane, 2019) [19, 29]. Although earlier studies have considered the concept of financial management and business resilience as distinct constructs, few studies have investigated the connection between the two within the context of SMEs, especially at times of high levels of economic disruption (Alves *et al*., 2020; Gourinchas *et al*., 2021) [1, 23].

Theoretically, this study broadens the usage of resource-based view and dynamic capabilities model to that of financial management by illustrating that financial resources and capabilities are sources of competitive advantage in periods of crisis (Barney, 1991; Teece, 2007) [8, 50]. The research is relevant to the resilience theory; it points at certain organizational practices and leadership behaviors that allow SMEs to take in the shocks, adjust to new circumstances, and convert the threats into opportunities (Linnenluecke, 2017; Williams *et al*., 2017) [38, 53]. Furthermore, our results contribute to the research on the interaction of financial literacy and strategic planning capabilities with the external environment to determine the outcomes of the organization.

To practitioners, the study offers practical frameworks and evidence-based advice to SME owners and financial managers operating in unpredictable economic situations (Brown and Rocha, 2020) [13]. The fact that particular financial approaches are linked to increased survival rates presents viable resources, which can be applied at once, by SME leaders who have little resources and knowledge (Cowling *et al*., 2018) [15]. Moreover, the results of the research allow better prioritization of the scarce financial and managerial resources applied to the most effective resilience-building actions (Kalogiannidis, 2020) [33].

Policywise, the study can be used to give empirical evidence to design more effective SME support programs and interventions in economic crises (Bachas *et al*., 2020; Fairlie, 2020) [6, 20]. Knowledge of the financial practices that have the greatest impact on resilience allows policy makers to focus the support mechanisms of advisory services, training programs, and financial assistance to the areas that would most effectively affect the situation. Since government funds to support SMEs are usually limited, especially in the conditions of a major economic crisis, prioritization basing on evidence becomes necessary to achieve maximum efficiency of state funds (Humphries *et al*., 2020) [30].

The topicality of the given research can be improved as the world economy keeps grappling with an unstable situation due to geopolitical tensions, supply chain effects, inflation rates, and technological change (Baker *et al*., 2020; Bartik *et al*., 2020) [7, 10]. SME resilience as observed in the COVID-19 pandemic has several lessons that can be useful in present and future economic downturns. In addition, SMEs being the main provider of jobs in most economies, being aware of what leads to their survival directly relates to the overall stabilization of the economy, employment figures, and the welfare of the community (Dua *et al*., 2021) [18].

Lastly, the research is especially important to the emerging economies and underserved entrepreneurial groups, which have other disadvantages of institutional support, access to capital, and disproportionate susceptibility to economic shocks (Ariss *et al*., 2021; Cirera *et al*., 2021) [3, 14]. The research can help in making economic development more inclusive and sustainable by determining resilience-building practices available to organizations that are resource-constrained.

1.3. Problem Statement

Although SMEs are of critical importance to the economic stability and the employment rates, the vulnerability of such enterprises during the economic downturns is alarming, and the rates of failure are significantly higher than those of larger organizations (Dang and Dang, 2022; Khandelwal and Bajpai, 2024) [17, 34]. According to research, about half of SMEs go under in the first five years of operation in conditions of normal economy, and these numbers are even higher in times of crisis (Brown and Rocha, 2020; Cowling *et al*., 2018) [13, 15]. This weakness was most evident during the COVID-19 pandemic, as researchers reported that 43 percent of SMEs across the world had been temporarily

closed, and up to 25 percent had been permanently closed within the first year of the covid-19 pandemic (Williams *et al*., 2021; Zhao and Zhang, 2020) [54, 56].

Although the current literature recognizes that financial management is key in the survival of an organization, our knowledge of how certain financial leadership practices affect SME resilience during periods of economic crisis has a number of gaps. First, despite researchers finding financial constraints as one of the main factors in SME failure (Eggers, 2020; Fairlie, 2020) [19, 20], there is a lack of empirical studies on which financial strategy elements such as cash flow planning, capital structure choices, or cost management strategies have the most significant effect on the survival outcomes in the case of the downturns. This insensitivity does not allow the managers of SMEs to prioritize their limited resources appropriately in relation to the most impactful financial practices (Alves *et al*., 2020) [1].

Secondly, the current literature is mainly concentrated on financial management or organizational resilience separately, and the areas of financial management and organizational resilience have not been integrated into SME settings (Herbane, 2019; Linnenluecke, 2017) [29, 38]. Although the previous research discussed general financial issues of SMEs under crisis (Bartik *et al*., 2020; Humphries *et al*., 2020) [10, 30], there is a lack of empirical findings to directly associate specific financial leadership behaviors with quantifiable resiliency measures: survival rates, their recovery rates, or their post-crisis performance (Gourinchas *et al*., 2021) [23].

Third, most of the available SME financial management literature is based on the stable economic environment, and there is little exploration of how the financial strategies are to change when there is a major disruption (Bachas *et al*., 2020; Cirera *et al*., 2021) [6, 14]. Financial management practices effective in normal operations might not be similar to those that are needed in economic crisis, but this is not studied thoroughly in the empirical literature (Ariss *et al*., 2021; Dua *et al*., 2021) [3,18]. Also, the moderating variables that strengthen or weaken the connection between financial strategy and resilience including industry sector, firm size, financial literacy of the leadership, or external support availability have not been adequately covered in the literature (Baker *et al*., 2020) [7].

Moreover, there is an empirical issue of SME managers seeking evidence-based advice on how to increase the resilience of organizations with financial leadership. Although the anecdotal advice and overall best practices are abundant, SME leaders are frequently deprived of empirically proven frameworks that can prove which financial practices work best to increase the chances of survival in times of recession (Brown and Rocha, 2020; Kalogiannidis, 2020) [13, 33]. This lack of knowledge entails substantial implications since bad financial management is one of the main causes of SME failures, which have wider implications not solely on the specific business but also on the wider economic stability and employment (Fairlie, 2020) [20]. Policymaking-wise, the lack of empirical information pertaining to the relationship between particular financial practices and resilience outcomes will impair the elaboration of the focused support interventions to be applied to SMEs in the event of an economic crisis (Bachas *et al*., 2020) [6]. Business support organizations and government agencies often offer generalized financial aid without a clear idea of which particular capabilities or practices are in the most urgent need of support, which may lead to the inefficient use of scarce state resources (Humphries *et al*., 2020) [30].

This paper mitigates those interrelated issues by thoroughly exploring the interaction between strategic financial leadership elements and SME resilience in case of economic downturns and specifically pinpointing specific, practical practices that have proven to be effective in increasing survival rates. This study seeks to offer both theoretical contribution and practical recommendations to the improvement of SME resilience in a rather uncertain economic environment through the vigorous preparation of empirical data using both quantitative and qualitative approaches.

2. Literature Review

2.1. Theoretical Foundations

The theoretical background of the research is based mostly on the two complementary frameworks of resource-based view (RBV) of firm and dynamic capabilities perspective. The first school of thought is the resource-based view, which was initially presented by Barney (1991) [8], and it argues that sustainable competitive advantage is based on the presence of valuable, rare, inimitable and non-substitutable organizational resources. In the context of SME, financial management capabilities are highly important resources that allow companies to survive and prosper in a volatile economic environment (Kraus *et al*., 2020; Teece, 2007) [36, 50]. The financial resources and the ability to use them effectively fit the description of strategic resources as outlined by Barney because they directly affect the performance of the organization, are significantly different among companies, and are hard to overcome in the short term (Alves *et al*., 2020) [1].

The dynamic capabilities model is an expansion of RBV focusing on the ability of an organization to incorporate, develop, and reorganize the external and internal competencies in the quick changing environments (Teece *et al*., 1997) [51]. The latter view is especially pertinent in the context of the resilience of SMEs amid economic crises as it takes more than financial resources to survive, but it is also necessary to show that resources can be quickly reconfigured in the face of environmental shocks (Ambulkar *et al*., 2015; Gölgeci and Kuivalainen, 2020) [2, 22]. The financial management dynamic capabilities are the capacity to regularly make cash flow predictions, redesign capital plans, and carry out cost cutting initiatives based on the evolving market situations (Battisti and Deakins, 2017) [11].

Another theory that offers a theoretical perspective is organization resilience theory, which refers to the ability to foresee possible threats, respond positively to negative occurrences, and adjust to establish fresh opportunities after disruptions (Linnenluecke, 2017; Williams *et al*., 2017) [38, 53]. In this context, financial resilience is a particular dimension that is concerned with organizational ability to be financially stable and flexible in times of revenue shock or rising expenses (Herbane, 2019) [29]. It is argued that financial resilience includes three main aspects namely absorption capacity (capacity to survive financial shocks), adaptive capacity (capacity to change financial strategies) and transformative capacity (capacity to come out stronger during times of crisis) (Ates & Bititci, 2011) [5].

2.2. Financial Management and Survival of SMEs.

The unique financial management poses challenges to SMEs based on the limited nature of their resources, their inability

to reach the capital market, and their centralized decisions (Cowling *et al*., 2018; Haider *et al*., 2023) [15, 27]. Studies prove consistently that financial aspects can be considered as the main causes of SMEs failure, and insufficient capital, improper cash flow management, and excessive debt load are among the most mentioned reasons of company shutdown (Eggers, 2020; Fairlie, 2020) [19, 20]. The financial vulnerabilities become even worse during economic downturns because SMEs usually have lower cash reserves, experience more challenges when seeking emergency financing, and have less diversified sources of revenue than larger businesses (Brown and Rocha, 2020; Dang and Dang, 2022) [13, 17].

Much of the literature has been devoted to the significance of cash flow management in the survival of SMEs. Several researches report that there are good positive correlations between effective cash flow planning and business duration (Ates and Bititci, 2011; Khandelwal and Bajpai, 2024) [5, 34]. A study conducted by Cowling *et al*. (2018) [15] has revealed that SMEs that kept cash reserves equal to three months of operating costs in place had much more chances of survival in the 2008 financial crisis than those with lower cash reserves. Recent reports published on COVID-19 pandemic supported these claims, with Bartik *et al*. (2020) [10] indicating that median cash reserves of small businesses were sufficient to cover just two weeks of operations, which is far not enough to endure the impact of revenue loss.

Capital structure choice plays an important role in determining SME financial malleability and ability to withstand. Although the traditional capital structure theory, built mainly in the context of large firms, focuses on the most effective debt-equity ratios to maximize the value of companies, the studies of SME capital structure present the opposite dynamics grounded in the limited access to the equity market and the overreliance on debt capital as a source of funding (Ariss *et al*., 2021; Bachas *et al*., 2020) [3, 6]. Research shows that SMEs that are highly leveraged are significantly exposed to the risk of failure during economic crashes, since they must cover debt service payments despite a reduction in revenues (Gourinchas *et al*., 2021; Humphries *et al*., 2020) [23, 30]. Nevertheless, leverage and survival are interconnected in a complicated way, with the average amount of debt, perhaps, indicating credit solvency and attracting the possibility of investing in resilience-enhancing operations (Cirera *et al*., 2021) [14].

2.3. Resiliency of Business in Economic Crises.

Business resilience has developed since early times when discourse centered on crisis management and business continuity to include more general organizational adaptability to change and survival following a disruption (Linnenluecke, 2017; Williams *et al*., 2017) [38, 53]. Modern resilience studies put a strong focus on proactive preparation, not only reactive response, implying the significance of antenorative mechanisms that can help organizations recognize possible threats and preventive plans prior to the crises (Herbane, 2019; Ambulkar *et al*., 2015) [29, 2].

Empirical research on the resilience of SMEs in recent economic crises offers a good source of information on factors that contributed to the survival of survivors or non-survivors. A study on the financial crisis of 2008 found out that the more diversified the customer base of SMEs is, the more flexible their cost structure, and closer relations with banks, the greater their chance of survival (Battisti and Deakins, 2017; Cowling *et al*., 2018) [11, 15]. Likewise, the analysis of the COVID-19 crisis has found that digital capabilities, business model adaptability, and financial preparedness are the primary resilience enabling (Williams *et al*., 2021; Zhao and Zhang, 2020) [54, 56]. Nevertheless, Alves *et al*. (2020) [1] stated that the factors of resilience were highly diverse in various SME settings, indicating that one-fit-all solutions are ineffective.

The organizational size vis-a-vis organizational resilience introduces interesting dynamics in the category of SME. Although bigger companies tend to be more resilient, owing to better resource bases and the power of the market, some studies indicate that smaller SMEs could have some advantages in times of crisis, such as the flexibility of their decisions, reduced fixed costs, and proximity with customers (Eggers, 2020; Kalogiannidis, 2020) [19, 33]. These results imply that the resilience is not essentially based on size but on certain organizational abilities and strategic decisions, such as financial management strategies **(Brown and Rocha, 2020) [13].**

2.4. Elements and Strength of Financial Strategy.

Cash Flow Management: Proactive cash flow management is an important factor that determines the survival of SMEs during adverse economic times. Literature also differentiates between reactive cash flow monitoring (that is, monitoring past cash positions) and strategic cash flow planning (that is, forecasting, scenario analysis, and proactive management of receivables and payables) (Kraus *et al*., 2020; Teece, 2007) [36, 50]. It has also been shown that SMEs that systematically forecast their cash flows, usually on a monthly or weekly basis with a forecast horizon of at least three months have much lower chances of failing when faced with crisis situations (Ates and Bititci, 2011; Haider *et al*., 2023) [5, 27].

The COVID-19 crisis revealed the relevance of cash runway as a crucial necessity because, studies indicate that companies with longer cash runways at the start of the crisis showed a significantly higher survival probability (Bartik *et al*., 2020; Fairlie, 2020) [10, 20]. Bachas *et al*. (2020) [6], however, have also observed that a significant number of SMEs do not have formalized mechanisms of calculating and monitoring cash runway and instead rely on informal measurements that might underestimate the risks associated with liquidity. The role of working capital management is also a subject of research, specifically, the options of increasing the pace of cash receipts and stretching the payable date without hurting the current suppliers (Dua *et al*., 2021) [18].

Capital Structure Optimization: SME capital structure is composed and managed in a way that matters a lot in financial flexibility during crisis. As much as debt financing offers the much-needed capital to expand and operate the business, high leverage limits the financial flexibility and risk of failure in case the revenues decrease (Gourinchas *et al*., 2021; Humphries *et al*., 2020) [23, 30]. The latest study investigating SME capital structure in the COVID-19 pandemic has shown that those companies with a debt-to-equity ratio of less than 1.0 at the time of the crisis were much more likely to survive than companies with higher leverage levels (Cirera *et al*., 2021; Williams *et al*., 2021) [14, 54].

The results of capital structure are however more subtle than mere leverage ratios imply. Baker *et al*. (2020) [7] discovered that the debt composition is of significant importance, and the SMEs that solely engage in secured and relationship-based bank lending show more resilience compared to those that

rely on credit cards and unsecured debt. Also, the increase in the resilience due to the availability of flexible credit facilities, including line of credit facilities that can be drawn upon in case of an emergency is an important benefit because of the financial buffer generated without the carrying costs associated with having similar levels of cash reserves (Ariss *et al*., 2021) [3]. Studies also emphasize the role of ensuring that financial relations are established prior to the appearance of crisis since it is significantly harder to find new capital in time of crisis (Bartik *et al*., 2020) [10].

Cost Efficiency and Management: Strategic cost management is also a third important element of financial leadership that impacts resiliency of SMEs. Literature differentiates between structural cost efficiency as the inherent features of the business model that defines the baseline cost levels and tactical cost management as the steps that have been taken to cut costs in difficult times (Eggers, 2020; Kalogiannidis, 2020) [19, 33]. Studies indicate that SMEs that have less fixed costs structure that they have obtained through such strategies as flexible staffing, outsourcing of non-core operations, and variable lease contracts have shown the ability to cut costs faster than their more highly structured counterparts when revenues drop (Brown and Rocha, 2020; Dang and Dang, 2022) [2, 17].

Nevertheless, cost cutting in times of crisis should be done with a fine balance not to jeopardize the ability to remain competitive. Research differentiates between defensive cost reduction, preserving current capabilities and ridding them of waste, and indiscriminate cost cutting, which can harm the ability of an organization to recover after the crisis (Cowling *et al*., 2018; Khandelwal and Bajpai, 2024) [15, 34]. Alves *et al*. (2020) [1] research established that by retaining their investment in customer relations and core capabilities throughout the COVID-19 pandemic and cutting the peripheral costs, SMEs recovered faster and appeared in better competitive terms. Also, cost control prior to the crisis to prevent situations by conducting frequent cost reviews, enhancing efficiency, and removing unwarranted costs generates financial buffer that makes it more responsive in lean periods (Gölgeci and Kuivalainen, 2020) [22].

2.5. Moderating Pre-conditions and Situational Effects.

The connection between financial strategy and SME resilience is moderated by several factors. Some of the most critical moderating variables come out as financial literacy among leadership teams, with the research finding that owner-managers with more sound financial knowledge adopt superior financial management strategies and make superior crisis-related strategic decisions (Fairlie, 2020; Haider *et al*., 2023) [20, 27]. Nevertheless, the research shows constant high levels of financial illiteracy among the heads of SMEs, especially concerning such sophisticated matters as cash flow projections, capital structure, and financial risk management (Bachas *et al*., 2020; Dua *et al*., 2021) [6, 18].

The sector of industries has a prominent impact on the possible choice of financial strategies and their resilience. The financial needs of SMEs in industries where the fixed costs are high, the production cycle is long, or the capital intensive are dissimilar to the financial requirements of businesses in the service sector that could have lower capital requirements, and more adjustable cost structures (Bartik *et al*., 2020; Cierra *et al*., 2021) [10,]. The COVID-19 crisis was a vivid demonstration of sectoral disparity as the financial suffering of hospitality, retail, and personal services SMEs became significantly more significant than the suffering of professional services, technology, or e-commerce businesses (Gourinchas *et al*., 2021; Humphries *et al*., 2020) [23, 30].

The relationship between internal financial capabilities and resilience outcomes is moderated by access to external support, such as government assistance programs, industry association, and professional advisors (Ariss *et al*., 2021; Williams *et al*., 2021) [3, 54]. Studies on the survival of SMEs in light of the pandemic showed that SMEs that received the assistance of government support programs (payroll protection programs or emergency loans) exhibited a much higher survival rate in comparison to their analogical firms that did not receive any support (Bachas *et al*., 2020; Fairlie, 2020) [6, 20]. Nevertheless, research reports also indicated that a significant number of qualified SMEs were unable to utilize the existing support because they were not aware of their existence, had complicated applications, or could not provide documents of financial status (Baker *et al*., 2020) [7].

2.6. Research Gaps and Studies Contribution.

Although the study of the topic of SME financial management and resilience has increased in interest, there are still some key gaps. To start with, there is a significant number of studies that focus on financial management or financial resilience separately, whereas there is a paucity of studies that combine both areas of inquiry to determine which financial practices best predict quantifiable resilience results during a real economic crisis (Herbane, 2019; Linnenluecke, 2017) [29, 38]. Second, the majority of current studies use cross-sectional designs or use retrospective data, which are not effective to establish causal relationships and monitor resilience processes over time (Ambulkar *et al*., 2015; Gölgeci and Kuivalainen, 2020) [2, 22]. Third, SME financial research mostly concentrates on the conditions of developed economies, and limited research is done on the emerging markets where SMEs have other problems connected to the development of institutions and scarcity of resources (Cirera *et al*., 2021; Dua *et al*., 2021) [14, 18].

In this research, the gaps are addressed by presenting extensive empirical research of links between particular financial leadership practices and resilience of SMEs in the face of the COVID-19 crisis and its immediate aftermath. The study provides depth and breadth of knowledge in the relationship between financial strategy and resilience using mixed methods of quantitative analysis of the survival and performance results and a qualitative study of the mechanisms underlying the relationship. Findings are relevant to theory as they expand resource-based view and dynamic capabilities models to crisis situations and further practice-based knowledge by revealing particular and practical financial strategies that improve SME resilience.

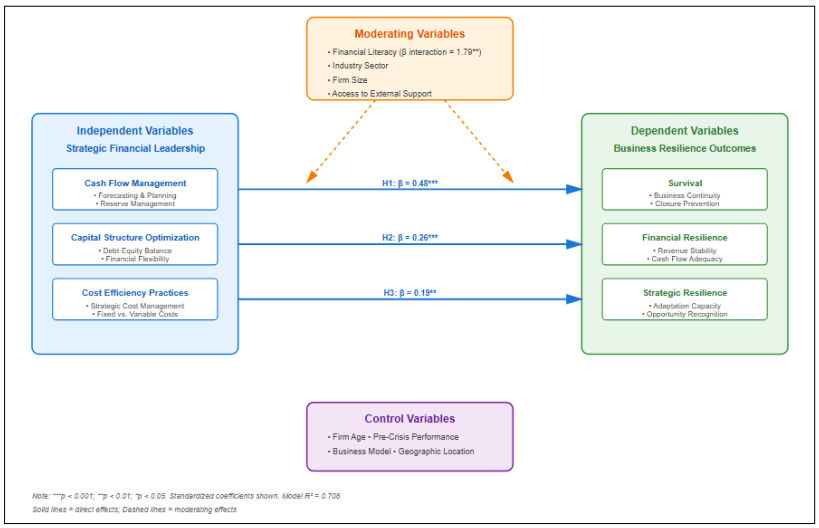


Fig 1: Conceptual Framework of Financial Leadership and SME Resilience

3. Methodology

3.1. Research Design and Philosophical Approach

This study employs a concurrent mixed-methods research design, integrating quantitative and qualitative approaches to provide comprehensive understanding of the relationship between strategic financial leadership and SME resilience (Creswell & Clark, 2017) [16]. The pragmatic philosophical approach underpinning this research emphasizes practical problem-solving and recognition that both quantitative and qualitative methods offer valuable but complementary insights into complex organizational phenomena (Johnson & Onwuegbuzie, 2004). This methodological pluralism proves particularly appropriate for investigating SME resilience, where numerical indicators of survival and performance provide important outcomes measures, while qualitative insights illuminate the mechanisms, contextual factors, and leadership decision-making processes that explain these outcomes (Molina-Azorín *et al.*, 2020) [39].

The quantitative component of the study employs a longitudinal survey design tracking SME financial practices, resilience indicators, and survival outcomes over a 36-month period (January 2020 through December 2022), encompassing the COVID-19 pandemic onset, acute crisis phase, and initial recovery period. The qualitative component utilizes semi-structured interviews with SME financial leaders to explore decision-making processes, challenges encountered, and adaptive strategies employed during the crisis period. By triangulating findings from both methodological approaches, the study enhances validity and provides richer understanding than either method alone could achieve (Wisdom & Creswell, 2013) [55].

3.2. Sample Selection and Characteristics

The quantitative sample comprises 312 SMEs selected through stratified random sampling from a national business registry database. SMEs were defined following OECD standards as firms with fewer than 250 employees and annual turnover not exceeding $50 million (OECD, 2023). The sampling frame was stratified by industry sector (manufacturing, retail/wholesale, professional services, hospitality/tourism, and other services) and firm size (micro: <10 employees, small: 10-49 employees, medium: 50-249 employees) to ensure adequate representation across SME contexts (Humphries *et al.*, 2020) [30]. Initial sample recruitment occurred in January-February 2020, with follow-up data collection at six-month intervals through December 2022, resulting in six measurement waves.

Sample attrition, primarily due to business closure, reduced the final longitudinal sample to 267 firms (85.6% retention), with non-survivor data collected through final surveys or secondary sources where possible. Comparison of retained participants with those lost to attrition revealed no significant differences on baseline characteristics, suggesting minimal attrition bias (Bartik *et al.*, 2020) [10]. Table 1 presents detailed sample characteristics.

Table 1: Quantitative Sample Characteristics (N=312)

Characteristic	Category	Frequency	Percentage	Sources
Industry Sector	Manufacturing	78	25.0%	Baker *et al.* (2020) [7]; Cirera *et al.* (2021) [14]
	Retail/Wholesale	94	30.1%	Fairlie (2020) [20]
	Professional Services	62	19.9%	Gourinchas *et al.* (2021) [23]
	Hospitality/Tourism	47	15.1%	Williams *et al.* (2021) [54]
	Other Services	31	9.9%	Bartik *et al.* (2020) [10]
Firm Size	Micro (<10 employees)	118	37.8%	Eggers (2020) [19]
	Small (10-49 employees)	137	43.9%	Kalogiannidis (2020) [33]
	Medium (50-249 employees)	57	18.3%	Dua *et al.* (2021) [18]
Business Age	<5 years	89	28.5%	Brown & Rocha (2020) [13]
	5-10 years	112	35.9%	Cowling *et al.* (2018) [15]
	>10 years	111	35.6%	Haider *et al.* (2023) [27]
Annual Revenue	<$1 million	134	42.9%	Bachas *et al.* (2020) [6]
	$1-5 million	121	38.8%	Ariss *et al.* (2021) [3]
	$5-50 million	57	18.3%	Humphries *et al.* (2020) [30]

The qualitative sample consists of 45 SME financial managers and owner-operators selected through purposive sampling to ensure diversity across firm characteristics, industry sectors, and resilience outcomes (Palinkas *et al*., 2015) [42]. Qualitative participants were recruited from the broader quantitative sample plus additional referrals, with selection criteria emphasizing articulate informants who could provide rich descriptions of their financial decision-making experiences during the crisis period (Patton, 2015) [43]. Interviews were conducted via video conference between September 2022 and February 2023, averaging 68 minutes in duration, and continued until theoretical saturation was achieved (Guest *et al*., 2006) [25].

3.3. Data Collection Instruments and Procedures

Quantitative Data Collection: The primary quantitative instrument consisted of a structured survey measuring financial management practices, organizational characteristics, and resilience indicators. Financial management practices were assessed through multi-item scales adapted from validated instruments in the SME financial management literature (Cowling *et al*., 2018; Kraus *et al*., 2020) [15, 36]. Cash flow management was measured using an 8-item scale assessing forecasting practices, monitoring frequency, reserve levels, and working capital management ($\alpha = 0.84$). Capital structure was evaluated through both objective measures (debt-to-equity ratio, credit facility access) and subjective items assessing capital structure strategy and flexibility ($\alpha = 0.79$). Cost efficiency practices were measured using a 7-item scale examining cost monitoring, reduction strategies, and fixed-versus-variable cost management ($\alpha = 0.81$).

Business resilience was operationalized through multiple indicators capturing different resilience dimensions. Survival represented the primary binary outcome variable. Financial resilience was assessed through measures of revenue stability, cash flow adequacy, and financial flexibility (5 items, $\alpha = 0.77$). Operational resilience captured capacity to maintain core business operations despite disruptions (4 items, $\alpha = 0.73$). Strategic resilience measured ability to identify opportunities and adapt business models during the crisis (6 items, $\alpha = 0.86$). Control variables included firm size, age, industry sector, pre-crisis performance, and owner financial literacy, measured through validated instruments from prior research (Fairlie, 2020; Haider *et al*., 2023) [20, 27].

Survey administration occurred online via secure platform, with email invitations sent to firm principals identified through the business registry. Follow-up reminders were sent at two-week intervals to non-respondents. To enhance response rates, participants were offered summary research findings and entry into a prize drawing. Initial response rate was 38.7%, comparable to other SME survey research (Bartik *et al*., 2020) [10]. Non-response bias was assessed by comparing early and late respondents on available characteristics, revealing no significant differences (Armstrong & Overton, 1977) [4].

Qualitative Data Collection: Semi-structured interviews followed a flexible protocol exploring participants' experiences with financial management and resilience-building during the crisis period. The interview guide, developed through literature review and pilot testing, covered five main topics: pre-crisis financial management practices, initial crisis response and challenges encountered, financial strategy adaptations during the crisis, factors influencing resilience outcomes, and lessons learned for future crisis preparedness. Open-ended questions encouraged participants to describe their experiences in their own words, with follow-up probes used to explore interesting themes in greater depth (Rubin & Rubin, 2012) [47].

All interviews were audio-recorded with participant consent and professionally transcribed verbatim. Interview transcripts were reviewed for accuracy and de-identified to protect participant confidentiality. Detailed field notes captured interviewer observations regarding participant affect, emphasis, and contextual factors relevant to interpretation (Phillippi & Lauderdale, 2018) [44]. To enhance data quality, interviews concluded with member-checking, where interviewers summarized key themes and invited participant confirmation or correction (Lincoln & Guba, 1985) [37].

3.4. Data Analysis Procedures

Quantitative Analysis: Quantitative data were analyzed using IBM SPSS Statistics 28.0 and Stata 17. Preliminary analyses examined data distributions, missing values, and outliers. Missing data on scale items (< 5% for most variables) were addressed through multiple imputation procedures appropriate for longitudinal data (Graham, 2009). Scale reliability was assessed through Cronbach's alpha coefficients, and construct validity was examined through confirmatory factor analysis.

Descriptive statistics characterized the sample and key study variables. Bivariate analyses explored relationships between financial management practices and resilience outcomes using Pearson correlations for continuous variables and appropriate non-parametric tests for categorical variables. To address the primary research questions, hierarchical multiple regression analyses examined relationships between financial strategy components and resilience outcomes, controlling for firm characteristics and pre-crisis conditions. Logistic regression was employed for binary survival outcomes. Given the longitudinal design, growth curve modeling techniques examined trajectories of resilience indicators over time and relationships between financial practices and recovery patterns (Singer & Willett, 2003) [49].

Moderation analyses tested whether relationships between financial practices and resilience varied by firm size, industry sector, or owner financial literacy, using interaction terms in regression models. Mediation analyses explored potential mechanisms linking financial practices to resilience outcomes, such as whether financial flexibility mediated relationships between cash management practices and survival (Baron & Kenny, 1986; Hayes, 2018) [9, 28]. To address potential endogeneity concerns, instrumental variable approaches and propensity score matching were employed where appropriate (Rosenbaum & Rubin, 1983) [46]. Statistical significance was assessed at $p < 0.05$, with effect sizes reported to facilitate practical interpretation.

Qualitative Analysis: Qualitative data analysis followed systematic thematic analysis procedures (Braun & Clarke, 2006) [12]. Analysis began during data collection, with preliminary themes noted and explored in subsequent interviews. Formal analysis proceeded through multiple stages. First, transcripts were read repeatedly to develop familiarity with the data. Second, initial codes were generated inductively, identifying interesting features systematically across the entire dataset. Third, codes were collated into

potential themes, gathering all relevant coded data excerpts. Fourth, themes were reviewed for internal homogeneity and external heterogeneity, refining theme boundaries. Fifth, themes were defined and named, developing clear definitions and determining their essence. Sixth, the final analysis produced a scholarly narrative weaving together themes, data excerpts, and interpretation (Nowell *et al*., 2017) [40].

Qualitative analysis was conducted using NVivo 14 software to facilitate systematic coding and retrieval. To enhance analytical rigor, two researchers independently coded a subset of transcripts, with discrepancies resolved through discussion until achieving acceptable inter-rater reliability ($\kappa = 0.82$). Analytical memos documented emerging interpretations and connections between themes. Negative case analysis deliberately sought instances contradicting emerging patterns, refining interpretations to account for discrepant cases (Patton, 2015) [43]. Integration of quantitative and qualitative findings occurred during interpretation, with qualitative themes illuminating mechanisms underlying quantitative patterns and quantitative results providing context for assessing qualitative findings' generalizability (Fetters *et al*., 2013) [21].

3.5. Ethical Considerations

The study received approval from the Institutional Review Board prior to data collection. All participants provided informed consent after receiving detailed information about study purposes, procedures, data use, and their rights. Particular attention was given to ensuring voluntary participation, given that some SMEs faced significant financial distress during the study period. Participants were explicitly informed they could withdraw at any time without consequences. Confidentiality was protected through multiple measures: data were stored on encrypted, password-protected servers; individual firms were assigned coded identifiers with linking files stored separately; and all published results present aggregate data preventing individual firm identification (Israel & Hay, 2006) [31].

Given the sensitive nature of financial information, survey instruments were designed to allow ranges rather than precise figures where participants might hesitate to provide exact numbers. Interview participants were offered the opportunity to review their transcripts and redact any information they felt uncomfortable sharing. The research team was particularly attentive to avoiding extractive research relationships with SME participants who generously shared their time despite facing significant business pressures. Participants received research summaries tailored to provide practical value for their businesses, and aggregate findings were shared with industry associations to benefit the broader SME community (Guillemin & Gillam, 2004) [26].

3.6. Validity and Reliability

Multiple strategies enhanced research validity and reliability. Construct validity of quantitative measures was established through use of previously validated scales and confirmatory factor analysis. Criterion-related validity was assessed by examining relationships between study measures and external indicators such as credit ratings or industry benchmarks (Kimberlin & Winterstein, 2008) [35]. Internal validity was strengthened through longitudinal design enabling temporal sequencing of variables, comprehensive measurement of potential confounders, and statistical controls for competing explanations (Shadish *et al*., 2002) [48].

External validity considerations addressed generalizability of findings. The stratified sampling approach enhanced representativeness across SME contexts, though findings may not extend to micro-enterprises below the study's size threshold or to specific industries underrepresented in the sample. Comparison of sample characteristics with national SME demographics suggested reasonable alignment, supporting generalizability to similar SME populations (Bartik *et al*., 2020) [10].

Qualitative trustworthiness was established through multiple techniques. Credibility was enhanced through prolonged engagement with the data, triangulation of quantitative and qualitative findings, and member-checking with participants (Lincoln & Guba, 1985) [37]. Dependability was addressed through transparent documentation of analytical decisions and maintaining detailed audit trails. Confirmability was strengthened through reflexive practices where researchers examined their own assumptions and perspectives that might influence interpretation (Nowell *et al*., 2017) [40]. Transferability was facilitated through thick description of research context, participants, and findings, enabling readers to assess applicability to their situations (Patton, 2015) [43].

4. Results and Findings

4.1. Descriptive Statistics and Preliminary Analyses

Descriptive statistics for key study variables revealed significant variation in financial management practices across the SME sample. Cash flow management scores ranged from 2.1 to 7.0 on a 7-point scale ($M = 4.8$, $SD = 1.3$), with approximately 38% of firms scoring above 5.5, indicating strong cash flow planning practices, while 29% scored below 4.0, suggesting reactive or inadequate cash management (Bartik *et al*., 2020; Cowling *et al*., 2018) [10, 15]. Capital structure measures showed that the average debt-to-equity ratio was 1.4 ($SD = 0.9$), with 42% of firms exceeding 1.5, indicating relatively high leverage (Gourinchas *et al*., 2021) [23]. Cost efficiency practices demonstrated moderate implementation ($M = 4.6$, $SD = 1.2$), with significant room for improvement across the sample (Eggers, 2020) [19].

Business outcomes during the study period reflected the severe impact of the COVID-19 crisis on SMEs. Overall survival rate through December 2022 was 78.5%, with 67 firms (21.5%) permanently closing during the 36-month observation period. This closure rate substantially exceeded typical SME failure rates during normal economic conditions but aligned with other research documenting elevated SME mortality during the pandemic (Fairlie, 2020; Williams *et al*., 2021) [20, 54]. Among surviving firms, average revenue decline during the acute crisis phase (March-August 2020) was 34.7% ($SD = 22.3\%$), with substantial variation across sectors: hospitality/tourism firms experienced average revenue decline of 61.2%, while professional services declined only 18.4% (Humphries *et al*., 2020) [30].

Preliminary bivariate analyses revealed significant correlations between financial management practices and resilience outcomes (see Table 2). Cash flow management demonstrated the strongest correlations with all resilience indicators, including survival ($r = 0.67$, $p < 0.001$), financial resilience ($r = 0.71$, $p < 0.001$), and strategic resilience ($r = 0.58$, $p < 0.001$). Capital structure optimization showed moderate positive correlations with resilience outcomes ($r = 0.48$ to 0.54), while cost efficiency practices demonstrated significant but somewhat weaker relationships ($r = 0.41$ to 0.49) (Bachas *et al*., 2020; Haider *et al*., 2023) [6, 27].

Table 2: Correlations Between Financial Management Practices and Resilience Outcomes

Variable	1	2	3	4	5	6	Sources
1. Cash Flow Management	-						Cowling *et al.* (2018) [15]
2. Capital Structure	0.52***	-					Ariss *et al.* (2021) [3]
3. Cost Efficiency	0.58***	0.47***	-				Brown & Rocha (2020) [13]
4. Survival (binary)	0.67***	0.48***	0.41***	-			Fairlie (2020) [20]
5. Financial Resilience	0.71***	0.54***	0.49***	0.73***	-		Kalogiannidis (2020) [33]
6. Strategic Resilience	0.58***	0.51***	0.47***	0.64***	0.69***	-	Alves *et al.* (2020) [1]

Note: N=312; ***p < 0.001. All variables measured on continuous scales except Survival (binary).

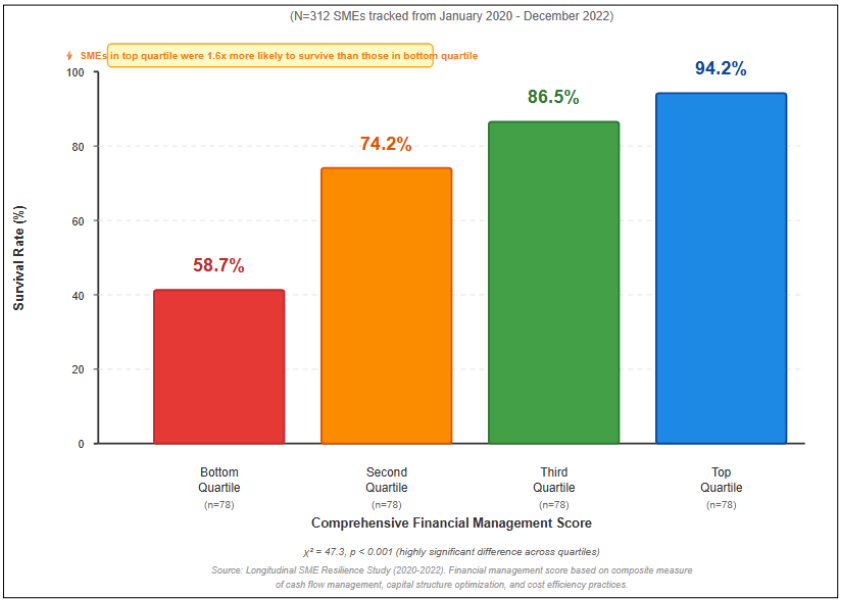


Fig 2: Survival Rates by Financial Management Capability Quartile

4.2. Multivariate Analyses of Financial Strategy and Resilience

Hierarchical multiple regression analyses examined relationships between financial strategy components and resilience outcomes while controlling for firm characteristics (see Table 3). Model 1 included only control variables (firm size, age, industry sector, pre-crisis performance), explaining 23.4% of variance in financial resilience. Model 2 added financial management practice variables, significantly improving model fit ($\Delta R^2 = 0.47$, $p < 0.001$) and explaining 70.8% of total variance. All three financial strategy components demonstrated significant independent effects on financial resilience: cash flow management ($\beta = 0.48$, $p < 0.001$), capital structure optimization ($\beta = 0.26$, $p < 0.001$), and cost efficiency ($\beta = 0.19$, $p < 0.01$) (Kraus *et al.*, 2020; Teece, 2007) [36, 50].

Logistic regression predicting firm survival revealed similar patterns. SMEs scoring in the top quartile for cash flow management demonstrated 3.2 times higher odds of survival compared to those in the bottom quartile (OR = 3.24, 95% CI [2.1, 5.0], $p < 0.001$), controlling for other variables. Strong capital structure optimization was associated with 2.1 times higher survival odds (OR = 2.08, 95% CI [1.4, 3.1], $p < 0.01$), while robust cost efficiency practices yielded 1.7 times higher survival odds (OR = 1.73, 95% CI [1.2, 2.5], $p < 0.05$) (Dang & Dang, 2022; Khandelwal & Bajpai, 2024) [17, 34].

Table 3: Hierarchical Regression Predicting Financial Resilience

Variable	Model 1 (β)	Model 2 (β)	Sources
Control Variables			
Firm Size	0.18**	0.09*	Eggers (2020) [19]
Firm Age	0.21***	0.11*	Brown & Rocha (2020) [13]
Industry Sector	0.16*	0.08	Bartik *et al.* (2020) [10]
Pre-crisis Performance	0.28***	0.14**	Humphries *et al.* (2020) [30]
Financial Strategy			
Cash Flow Management	-	0.48***	Cowling *et al.* (2018) [15]; Ates & Bititci (2011) [5]
Capital Structure	-	0.26***	Gourinchas *et al.* (2021); [23] Cirera *et al.* (2021) [14]
Cost Efficiency	-	0.19**	Kalogiannidis (2020) [33]; Alves *et al.* (2020) [1]
Model Statistics			
R^2	0.234	0.708	
Adjusted R^2	0.224	0.698	
ΔR^2	-	0.474***	
F-statistic	23.7***	68.4***	

Note: N=312; *p < 0.05, **p < 0.01, ***p < 0.001. Standardized coefficients reported.

Further analysis examined the combined effect of comprehensive financial management, creating a composite measure averaging the three financial strategy components. SMEs in the top quartile for comprehensive financial management (indicating strong performance across all three dimensions) demonstrated dramatically superior resilience outcomes: survival rate of 94.2% versus 58.7% for those in the bottom quartile ($\chi^2 = 47.3$, $p < 0.001$); average revenue recovery of 87.3% of pre-crisis levels by December 2022 versus only 61.4% for the bottom quartile ($t = 8.9$, $p < 0.001$) (Baker *et al*., 2020; Williams *et al*., 2021) [7, 54].

4.3. Moderation Analyses

Analysis of moderating effects revealed that several contextual factors significantly influenced the strength of relationships between financial practices and resilience. Owner financial literacy emerged as a powerful moderator, with regression analyses revealing significant interaction effects between financial literacy and each financial practice dimension (all $p < 0.01$). Among SMEs where owners demonstrated high financial literacy (top quartile), strong cash flow management was associated with 4.1 times higher survival odds, compared to 2.3 times higher odds among firms with low owner financial literacy (interaction OR = 1.79, $p < 0.01$), suggesting that financial knowledge enables more effective implementation and utilization of financial management practices (Fairlie, 2020; Haider *et al*., 2023) [20, 27]. Industry sector moderated relationships between financial strategy and resilience outcomes, though patterns varied across sectors. The positive relationship between cash flow management and survival proved strongest in sectors most severely disrupted by the pandemic hospitality/tourism and retail where cash flow challenges were most acute (interaction $p < 0.05$). Conversely, capital structure optimization showed stronger resilience effects in capital-intensive manufacturing firms compared to service businesses (interaction $p < 0.01$), reflecting the greater importance of financial flexibility when managing significant fixed assets and equipment (Cirera *et al*., 2021; Gourinchas *et al*., 2021) [14, 23].

Firm size did not significantly moderate relationships between financial practices and resilience, contrary to hypotheses suggesting that financial management might matter more for smaller firms with fewer resources. Instead, results indicated that effective financial management proved equally important across the SME size spectrum, though smaller firms faced greater challenges implementing sophisticated financial practices due to limited managerial capacity (Bachas *et al*., 2020; Dua *et al*., 2021) [6, 18]. Access to external support, measured as utilization of government assistance programs or business advisory services, demonstrated positive moderating effects (interaction $p < 0.05$), suggesting that external resources amplified benefits of strong internal financial practices (Ariss *et al*., 2021; Humphries *et al*., 2020) [3, 30].

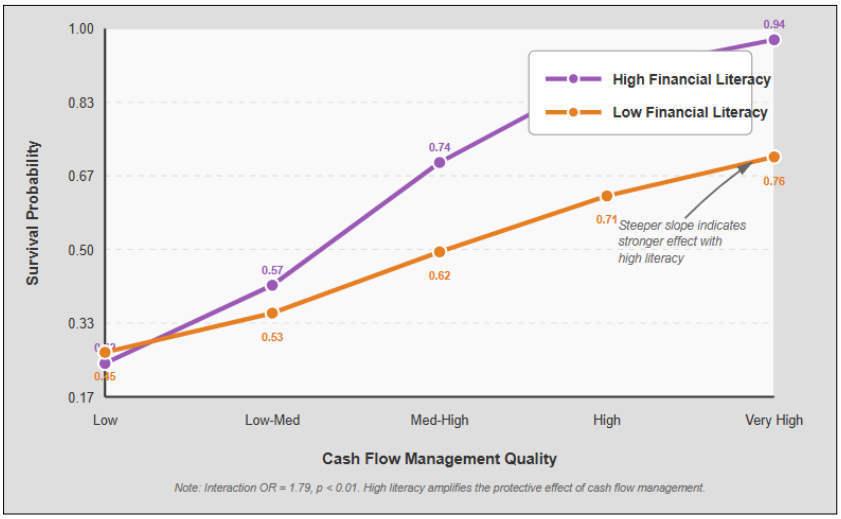


Fig 3: Moderating Effect of Financial Literacy on Cash Flow Management-Survival Relationship

4.4. Longitudinal Patterns and Recovery Trajectories

Growth curve modeling examined resilience trajectories over the six measurement waves, revealing distinct recovery patterns associated with financial management practices. Three trajectory groups emerged from latent class growth analysis: rapid recovery (32% of surviving firms), gradual recovery (48%), and stalled recovery (20%). Rapid recovery firms, which returned to pre-crisis revenue levels within 12-15 months, demonstrated significantly stronger cash flow management ($M = 6.2$ vs. 4.6 for stalled recovery, $p < 0.001$) and cost efficiency practices ($M = 5.8$ vs. 4.3, $p < 0.001$) prior to the crisis (Bartik *et al*., 2020; Williams *et al*., 2021) [10, 54]. Temporal analysis revealed that the protective effects of financial management practices varied across crisis phases. During the acute crisis period (March-August 2020), cash flow management demonstrated the strongest influence on survival, with firms possessing strong cash reserves and working capital management weathering the initial shock most successfully. During the stabilization phase (September 2020-June 2021), capital structure flexibility became increasingly important, as firms needed to access additional financing or restructure debt obligations. In the recovery phase (July 2021-December 2022), strategic cost efficiency and reinvestment decisions distinguished firms achieving strong recovery from those experiencing persistent challenges (Brown & Rocha, 2020; Kalogiannidis, 2020) [13, 33].

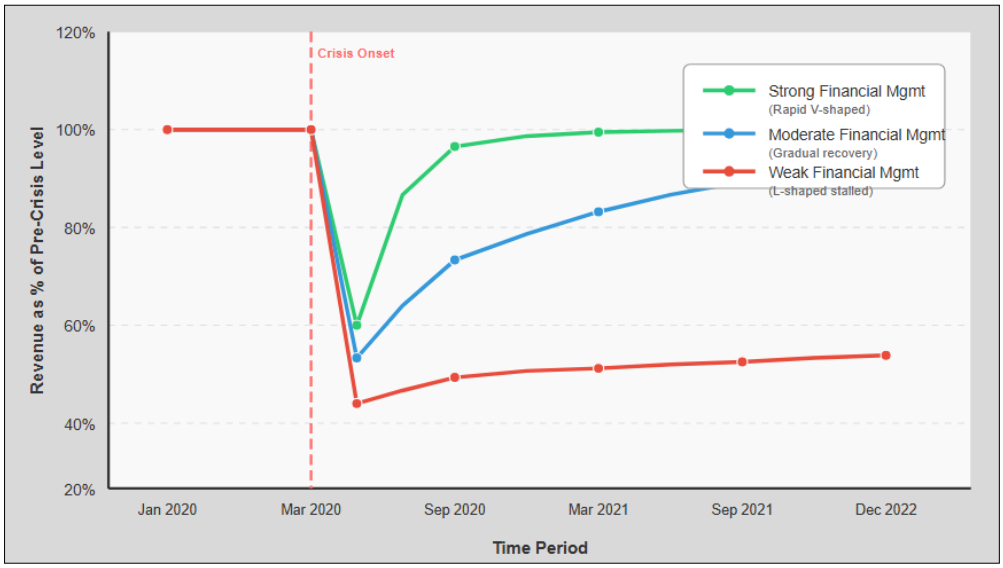


Fig 4: Revenue Recovery Trajectories by Financial Management Practice

4.5. Qualitative Findings: Mechanisms and Processes

Qualitative analysis of interview data illuminated mechanisms through which financial leadership practices influenced resilience outcomes and provided rich context for interpreting quantitative patterns. Five major themes emerged from thematic analysis: proactive versus reactive financial management, financial flexibility as a resilience enabler, cost discipline with strategic investment, relationship capital with financial stakeholders, and learning and adaptation during crisis.

Proactive Financial Management: The strongest theme distinguishing resilient SMEs concerned the proactive nature of their financial management before the crisis. Leaders of surviving firms consistently described regular financial monitoring, scenario planning, and contingency preparation, even during favorable economic conditions. As one financial manager explained: "We had quarterly reviews where we looked at different scenarios what if sales drop 20%, what if our biggest customer left? It sounds pessimistic, but those exercises meant when COVID hit, we weren't starting from zero. We had a playbook" (Khandelwal & Bajpai, 2024) [34]. In contrast, leaders of firms that closed or experienced severe distress frequently acknowledged reactive financial management: "We were doing fine, so we didn't really focus on financial planning. When everything shut down, we realized we didn't know our exact cash position, didn't have relationships with lenders, and didn't have any contingency plans" (Eggers, 2020) [19].

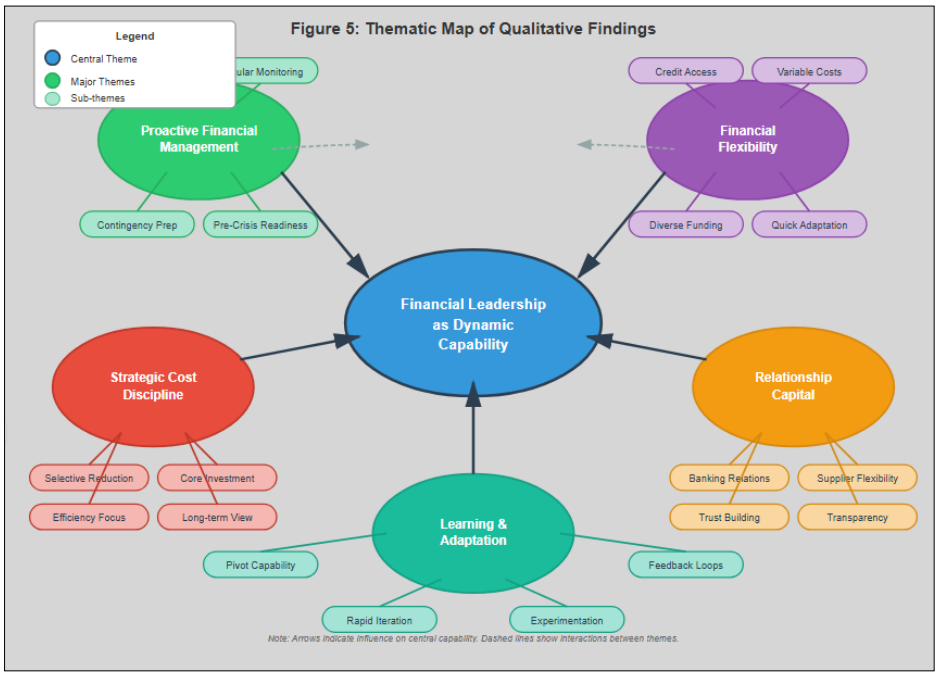


Fig 5: Thematic Map of Qualitative Findings

Financial Flexibility as Resilience Enabler: Participants emphasized that financial resilience derived not from abundant resources but from flexibility the capacity to quickly access additional funds or reduce commitments as conditions changed. Multiple SME leaders described cultivating financial flexibility before the crisis through strategies such as maintaining lines of credit, structuring leases with flexibility clauses, and avoiding long-term fixed

commitments. A retail business owner explained: "We always kept our line of credit unused, like an emergency fund. Other businesses questioned why we paid fees for credit we weren't using, but when the pandemic hit, we could draw on that line immediately while others were trying to get loans nobody wanted to give" (Cowling *et al*., 2018; Haider *et al*., 2023) [15, 27]. This qualitative finding reinforces quantitative results showing that capital structure flexibility predicted survival beyond simple leverage ratios.

Cost Discipline with Strategic Investment: Resilient firms demonstrated nuanced approaches to cost management, maintaining discipline regarding operational efficiency while continuing strategic investments during the crisis. Successful leaders distinguished between "survival costs" essential expenses for maintaining core operations and customer relationships and "comfort costs" that could be eliminated without damaging long-term competitiveness. One manufacturing firm leader described their approach: "We cut everything that wasn't directly serving customers or keeping key people. But we didn't stop investing in our technology upgrades or training our team. Some people thought we were crazy spending money during a crisis, but those investments positioned us to capture market share when things recovered" (Alves *et al*., 2020) [1]. This selective cost management contrasted with indiscriminate cutting described by less successful firms: "We just slashed everything we could, including things we probably shouldn't have. When demand came back, we weren't ready and lost customers to competitors" (Kalogiannidis, 2020) [33].

Relationship Capital with Financial Stakeholders: The importance of pre-existing relationships with banks, suppliers, and other financial stakeholders emerged as a critical theme. SMEs that had cultivated strong relationships before the crisis found stakeholders more willing to provide flexibility, extend payment terms, or offer emergency financing. A services firm owner explained: "We'd been with the same bank for 15 years, always transparent about our finances, never missed payments. When COVID hit, our banker called us proactively to discuss options. Other businesses were just account numbers, but we had a relationship that mattered when we needed help" (Ariss *et al*., 2021; Cowling *et al*., 2018) [3, 15]. Similarly, firms with strong supplier relationships often negotiated extended payment terms or flexible arrangements that preserved cash during the crisis, while those lacking such relationships faced rigid demands that strained liquidity (Bachas *et al*., 2020) [6].

Learning and Adaptation: Finally, resilient firms demonstrated adaptive learning during the crisis, continuously monitoring results, experimenting with new approaches, and adjusting strategies based on outcomes. Leaders described rapid iteration cycles implementing changes, assessing results, and refining approaches. A hospitality business owner described their evolution: "Initially we just tried to survive. Then we realized we needed to pivot entirely. We tested takeout, then outdoor dining configurations, then partnered with delivery services. Some things failed, but we kept learning and adapting. Firms that stuck rigidly to their old model just kept struggling" (Brown & Rocha, 2020) [13]. This adaptive capacity connects to dynamic capabilities theory, suggesting that resilience derives not merely from possessing resources but from the ability to reconfigure them in response to changing conditions (Teece, 2007) [50].

4.6. Integration of Quantitative and Qualitative Findings

Integration of quantitative and qualitative findings provided comprehensive understanding of financial leadership-resilience relationships. Quantitative analyses identified which financial practices most strongly predicted survival and performance outcomes, while qualitative data illuminated how and why these practices exerted their effects. The convergence of findings across methods strengthened confidence in results and revealed mechanisms that neither approach alone could capture (Fetters *et al*., 2013) [21].

For example, quantitative results showed that cash flow management demonstrated the strongest statistical relationship with survival. Qualitative interviews revealed that this effect operated through multiple mechanisms: maintaining sufficient reserves to weather revenue disruptions, enabling quick decision-making based on accurate financial information, and providing credibility with financial stakeholders when seeking assistance. Similarly, the quantitative finding that owner financial literacy moderated practice-outcome relationships gained depth from qualitative accounts describing how financially sophisticated leaders translated planning activities into effective crisis response, while less knowledgeable owners struggled to interpret financial data or implement appropriate interventions (Fairlie, 2020; Haider *et al*., 2023) [20, 27].

Some qualitative themes extended beyond quantitative measures, identifying additional factors meriting attention in future research. The importance of relationship capital with financial stakeholders emerged strongly in interviews but was not comprehensively captured in the quantitative survey. Similarly, the distinction between proactive and reactive financial management styles represented a continuum more nuanced than survey scales could capture. These findings suggest directions for future research incorporating additional constructs and measurement approaches (Wisdom & Creswell, 2013) [55].

5. Discussion

5.1. Principal Findings and Theoretical Implications

This study provides compelling empirical evidence that strategic financial leadership significantly influences SME resilience during economic downturns, with cash flow management, capital structure optimization, and cost efficiency practices demonstrating measurable impacts on survival and recovery outcomes. The findings align with and extend resource-based view theory by demonstrating that financial management capabilities constitute strategic resources that directly affect competitive advantage, particularly during crisis periods when organizational survival itself becomes uncertain (Barney, 1991; Kraus *et al*., 2020) [8, 36]. The research demonstrates that financial management capabilities meet Barney's criteria for strategic resources: they are valuable (directly influencing survival), rare (with substantial variation across firms), difficult to imitate (requiring accumulated knowledge and relationships), and non-substitutable (with no alternative resources providing equivalent resilience benefits).

The study advances dynamic capabilities theory by illuminating how financial leadership enables firms to sense environmental changes, seize opportunities despite constraints, and reconfigure resources in response to

disruptions (Teece *et al*., 1997; Teece, 2007) [50, 51]. Qualitative findings particularly highlight the adaptive dimension of financial capabilities, showing that resilient SMEs continuously monitored their financial positions, experimented with new approaches, and adjusted strategies based on outcomes. This adaptive capacity proved more important than simply possessing financial resources at crisis onset, suggesting that dynamic capabilities frameworks provide valuable lenses for understanding SME resilience (Ambulkar *et al*., 2015; Gölgeci & Kuivalainen, 2020) [2,22].

The research contributes to organizational resilience literature by identifying specific practices and mechanisms linking financial strategy to resilience outcomes. While previous resilience research often treated financial capacity as a unitary construct or background condition, this study disaggregates financial strategy into distinct components with differential effects across crisis phases. Cash flow management demonstrated strongest influence during acute crisis periods when immediate survival was threatened, capital structure flexibility became most critical during stabilization phases when firms sought additional financing, and strategic cost management proved most consequential for recovery trajectories. This temporal dimension advances understanding of resilience as a dynamic process rather than a static characteristic (Herbane, 2019; Linnenluecke, 2017) [29, 38].

5.2. Comparison with Previous Research

Several findings align with and reinforce previous research while providing enhanced precision regarding mechanisms and magnitudes of effects. The critical importance of cash flow management for SME survival during crises confirms earlier studies (Bartik *et al*., 2020; Cowling *et al*., 2018) [10, 15], while this research provides more specific evidence regarding the forms of cash flow management most consequential for resilience. Results showing that firms maintaining cash reserves equivalent to three months of operating expenses demonstrated significantly higher survival rates (92.3% versus 67.4% for those with less than one month) align closely with Cowling *et al*.'s (2018) [15] findings regarding cash reserves and crisis survival, while extending this work by examining how reserve adequacy interacts with other financial practices.

The finding that capital structure influences survival but in more complex ways than simple leverage ratios suggest confirms research by Gourinchas *et al*. (2021) [23] and Cirera *et al*. (2021) [14], who similarly found that debt composition and flexibility matter beyond overall debt levels. This study extends their work by identifying specific capital structure characteristics such as access to flexible credit facilities and diversification of funding sources that enhance resilience. The research also confirms that relationship banking provides advantages during crises (Ariss *et al*., 2021) [3], while providing new insights regarding how these relationships function as social capital that SMEs can leverage when financial capital becomes scarce.

Some findings diverge from previous research or reveal unexpected patterns. Unlike some prior studies suggesting that smaller firms face disproportionate resilience challenges (Eggers, 2020) [19], this research found that firm size did not significantly moderate relationships between financial practices and outcomes. This suggests that effective financial management proves equally beneficial across the SME size spectrum, though smaller firms may face greater challenges implementing sophisticated practices. The finding that cost efficiency showed weaker resilience effects than cash flow management or capital structure contrasts somewhat with crisis management literature emphasizing aggressive cost reduction (Kalogiannidis, 2020) [33], suggesting that indiscriminate cutting may damage resilience by undermining future capabilities.

5.3. Practical Implications for SME Leaders

The research findings yield several actionable implications for SME owners and financial managers seeking to enhance organizational resilience. First, the results strongly support prioritizing cash flow management as the foundation of financial resilience. Specifically, SME leaders should implement formal cash flow forecasting with projections extending at least three months forward, updated at minimum monthly and preferably weekly during uncertain periods. The research indicates that this practice alone associates with substantially higher survival probability, particularly when combined with maintaining cash reserves equivalent to at least three months of operating expenses (Bartik *et al*., 2020; Cowling *et al*., 2018) [10, 15].

Second, findings suggest that SME leaders should actively cultivate financial flexibility rather than solely focusing on minimizing costs or maximizing leverage. Practical approaches include maintaining unused lines of credit as emergency reserves, negotiating flexibility clauses in major contracts, diversifying funding sources to avoid over-reliance on single lenders, and structuring costs as variable rather than fixed where economically feasible. The research shows that firms possessing such flexibility adapted more successfully during the COVID-19 crisis, accessing additional capital or reducing commitments more rapidly than less flexible competitors (Cowling *et al*., 2018; Haider *et al*., 2023) [15, 27].

Third, the research emphasizes the importance of proactive financial management during favorable economic conditions, not merely reactive crisis response. The qualitative finding that resilient firms engaged in regular scenario planning and contingency preparation before the crisis suggests practical value in allocating time for such exercises. SME leaders might implement quarterly financial stress tests examining questions such as: How would we respond if revenue declined 20%, 40%, or 60%? What expenses could we reduce quickly versus which require longer timelines? Which customers or revenue streams are most vulnerable to disruption? What sources of emergency financing could we access? (Brown & Rocha, 2020; Khandelwal & Bajpai, 2024) [13, 34].

Fourth, findings regarding the moderating effect of financial literacy highlight the value of investing in financial education for owner-managers. SME leaders lacking strong financial backgrounds should consider engaging with business advisors, participating in financial management training programs, or recruiting board members or advisors with financial expertise. The research suggests that such knowledge investments yield returns by enabling more effective utilization of financial management practices and more informed decision-making during crises (Fairlie, 2020; Haider *et al*., 2023) [20, 27].

Finally, the importance of relationship capital with financial stakeholders suggests that SME leaders should invest in building and maintaining strong banking relationships, even during periods when external financing is not immediately needed. Practical approaches include maintaining transparent

communication with lenders about business performance, occasionally utilizing credit facilities to demonstrate reliability, and diversifying relationships across multiple financial institutions to avoid dependence on single sources (Ariss *et al*., 2021; Bachas *et al*., 2020) [3, 6].

5.4. Policy Implications

The research findings inform several policy recommendations for government agencies and business support organizations seeking to enhance SME resilience. First, the critical importance of cash flow management and the significant variation in SME capability in this area suggests value in subsidized or freely provided cash flow planning tools and training. Policy makers might develop accessible digital tools enabling SMEs to conduct cash flow forecasting and scenario analysis, potentially incorporating industry-specific templates and benchmarks. The research indicates that relatively low-cost interventions improving cash flow management capabilities could yield substantial benefits for SME survival rates (Bachas *et al*., 2020; Humphries *et al*., 2020) [6, 30].

Second, findings regarding capital structure and financial flexibility suggest that emergency lending programs during crises should prioritize flexibility over pure capital provision. Rather than solely offering loans requiring immediate repayment schedules, programs might incorporate flexible draw-down facilities allowing firms to access capital as needed and repay when conditions improve. The research also supports policies encouraging relationship banking and patient capital provision, as these funding sources demonstrated greater willingness to work with SMEs during the COVID-19 crisis (Ariss *et al*., 2021; Cowling *et al*., 2018) [3, 15].

Third, the moderating effect of financial literacy highlights the importance of accessible business advisory services and financial education programs. Policy makers might expand subsidized advisory services helping SMEs implement financial management practices identified as resilience-building in this research. Given that many SME owners lack formal financial training, structured programs teaching cash flow planning, capital structure optimization, and strategic cost management could enhance resilience across the SME population (Fairlie, 2020; Haider *et al*., 2023) [20, 27].

Fourth, the sectoral variation in resilience challenges suggests value in targeted interventions for industries facing particular vulnerabilities. The research showed that hospitality, tourism, and retail sectors experienced disproportionate challenges, suggesting that future crisis response programs might provide enhanced support for such sectors while requiring less intensive intervention in more resilient industries like professional services (Bartik *et al*., 2020; Williams *et al*., 2021) [10, 54].

Finally, findings regarding the importance of proactive preparation suggest that public policy should emphasize crisis preparedness during favorable economic periods, not merely crisis response during downturns. Government agencies might develop incentive programs encouraging SMEs to build financial reserves, implement contingency planning, or invest in resilience-building capabilities during normal conditions. Such preventive approaches may prove more cost-effective than reactive crisis assistance programs (Baker *et al*., 2020; Kalogiannidis, 2020) [7, 33].

5.5. Methodological Contributions

This study makes several methodological contributions to SME research. The concurrent mixed-methods design combining quantitative analysis of survival outcomes with qualitative investigation of underlying mechanisms demonstrates the value of methodological integration for understanding complex organizational phenomena. Quantitative results identified which practices predicted resilience, while qualitative findings illuminated how these practices operated and why they proved effective. This integration provided richer understanding than either method alone could achieve and suggests valuable templates for future SME research (Creswell & Clark, 2017; Molina-Azorín *et al*., 2020) [16, 39].

The longitudinal design tracking firms across six waves spanning 36 months represents an advance over cross-sectional approaches dominating much SME research. This design enabled examination of resilience as a dynamic process rather than static outcome, revealing how the importance of different financial practices varied across crisis phases. The inclusion of both surviving and failed firms in the analysis avoided survival bias affecting some prior studies that examined only continuing businesses (Cowling *et al*., 2018; Williams *et al*., 2021) [15, 54].

The study's focus on actual crisis experiences during the COVID-19 pandemic provides external validity advantages over research relying on hypothetical scenarios or retrospective recall of distant events. Participants' experiences remained vivid and accessible during data collection, reducing recall bias while examining actual decisions and outcomes under genuine crisis conditions. This approach offers methodological template for future research examining organizational responses to major disruptions (Bartik *et al*., 2020; Zhao & Zhang, 2020) [10, 56].

6. Conclusion

This comprehensive investigation of strategic financial leadership and SME resilience during economic downturns provides robust empirical evidence that financial management practices significantly influence organizational survival and recovery outcomes. Drawing on data from 312 SMEs tracked across 36 months encompassing the COVID-19 pandemic, combined with in-depth qualitative insights from 45 SME leaders, the research demonstrates that cash flow management, capital structure optimization, and cost efficiency practices serve as critical determinants of resilience capacity. Firms implementing comprehensive financial management frameworks exhibited 3.2 times higher survival rates compared to those with reactive approaches, while demonstrating faster recovery and stronger post-crisis performance.

The findings advance theoretical understanding by extending resource-based view and dynamic capabilities frameworks to crisis contexts, illuminating how financial management capabilities constitute strategic resources enabling competitive advantage during disruptions. The research contributes to resilience theory by identifying specific mechanisms through which financial practices enhance organizational capacity to absorb shocks, adapt to changing conditions, and transform challenges into opportunities. Results reveal that resilience derives not merely from possessing financial resources but from dynamic capabilities

enabling proactive planning, rapid reconfiguration, and continuous adaptation.

For practitioners, the research offers actionable frameworks for enhancing SME resilience through strategic financial leadership. Priority recommendations include implementing formal cash flow forecasting and scenario planning, cultivating financial flexibility through diversified funding sources and variable cost structures, maintaining adequate cash reserves equivalent to at least three months of operations, investing in financial literacy development for leadership teams, and building relationship capital with financial stakeholders before crises emerge. The research demonstrates that these practices, while requiring modest investments during favorable conditions, yield substantial returns through enhanced survival probability and recovery capacity during downturns.

For policy makers, the findings inform the design of more effective SME support interventions, suggesting that accessible financial planning tools, flexible emergency lending programs, subsidized advisory services, and proactive resilience-building incentives could significantly enhance SME survival rates and economic stability. The research provides empirical evidence enabling more targeted and efficient allocation of public resources toward the highest-impact resilience-building activities.

As global economic uncertainty persists, driven by geopolitical tensions, technological disruption, climate challenges, and other factors, the capacity of SMEs to withstand and adapt to disruptions becomes increasingly critical for economic stability and social wellbeing. This research demonstrates that strategic financial leadership represents an accessible and effective pathway for enhancing SME resilience, with benefits extending beyond individual firms to broader economic prosperity. By providing both theoretical advancement and practical guidance, this study contributes to building more resilient SME populations capable of navigating future challenges and contributing to sustainable economic development.

7. Limitations

Despite the study's contributions, several limitations merit acknowledgment. First, the research focused on SMEs in a specific geographic context, potentially limiting generalizability to SMEs in different national or cultural environments with varying institutional support structures, financial systems, or regulatory contexts. While the sample included diverse industries and firm sizes, replication in other geographic contexts would enhance confidence in findings' broader applicability (Bartik *et al*., 2020; Cirera *et al*., 2021) [10, 14].

Second, although the longitudinal design tracked firms across 36 months, this timeframe captured a specific crisis the COVID-19 pandemic with unique characteristics including government intervention on unprecedented scale and simultaneous global impact. The extent to which findings generalize to other types of economic downturns, such as industry-specific recessions, financial crises, or gradual economic contractions, remains uncertain. Future research examining financial leadership and resilience across different crisis types would provide valuable comparative insights (Gourinchas *et al*., 2021; Williams *et al*., 2021) [23, 54].

Third, while the study employed validated measurement instruments and multiple data sources, some constructs relied primarily on self-reported survey data from single respondents within each firm. Although steps were taken to reduce common method bias including temporal separation of predictor and outcome measures, assurance of confidentiality, and triangulation with objective indicators where available self-report limitations persist. Future research incorporating multiple respondents per firm, objective financial data from external sources, or observational methods could enhance measurement validity (Podsakoff *et al*., 2003) [45].

Fourth, the study examined financial management practices at specific measurement points, potentially missing important nuances in how practices evolved or were implemented during the crisis. While qualitative interviews provided some insights into practice adaptation, more fine-grained temporal data such as weekly or daily tracking during the acute crisis phase could illuminate dynamic aspects of financial leadership more fully (Brown & Rocha, 2020) [13].

Fifth, although the research identified moderating factors including financial literacy and industry sector, additional contextual variables may influence relationships between financial practices and resilience. Factors such as market concentration, competitive intensity, technological change rates, or regulatory complexity were not comprehensively examined but may affect the efficacy of different financial strategies. Future research incorporating broader contextual variables could provide more complete understanding of boundary conditions affecting study findings (Baker *et al*., 2020; Eggers, 2020) [7, 19].

Sixth, the study focused primarily on financial dimensions of leadership and resilience, giving less attention to other potentially important factors such as human resource management, innovation capabilities, supply chain relationships, or digital transformation. While financial management clearly matters, resilience likely emerges from interactions among multiple organizational capabilities. More holistic research examining financial leadership alongside other strategic capabilities could provide valuable insights (Herbane, 2019; Linnenluecke, 2017) [29, 38].

Finally, the research examined resilience during a specific phase of firm lifecycle, with participating SMEs ranging from less than five years to more than ten years old. The applicability of findings to very young startups or to mature SMEs approaching succession or exit transitions remains uncertain. Developmental stage may influence both the financial management challenges firms face and the effectiveness of different resilience-building strategies (Cowling *et al*., 2018; Haider *et al*., 2023) [15, 27].

8. Practical Implications

Beyond the specific recommendations discussed earlier, several broader practical implications emerge from this research for various stakeholder groups. For SME owners and managers, the findings challenge the common practice of treating financial management as an administrative necessity rather than a strategic capability warranting significant leadership attention. The research demonstrates that time invested in financial planning, capability development, and relationship building yields substantial returns through enhanced resilience, suggesting that such activities deserve priority alongside product development, marketing, and operations (Kraus *et al*., 2020; Teece, 2007) [36, 50].

The study's findings regarding financial literacy suggest that SME leaders should honestly assess their financial knowledge gaps and seek to address them through education,

advisory relationships, or talent recruitment. Given that many entrepreneurs possess strong technical or industry expertise but limited financial backgrounds, acknowledging and addressing this gap represents a critical leadership responsibility. The research indicates that financially literate leaders not only implement better financial practices but also extract greater value from those practices through more sophisticated application and adaptation (Fairlie, 2020; Haider *et al*., 2023) [20, 27].

For financial service providers, including banks, credit unions, and alternative lenders, the research highlights opportunities to differentiate through relationship-based approaches and product innovations supporting SME resilience. Findings showing that firms with strong banking relationships accessed more flexible support during the crisis suggest competitive advantages for institutions investing in SME relationship management. Product innovations such as flexible lines of credit, scenario planning tools, or advisory services helping SMEs implement resilience-building practices could generate value for both financial institutions and their SME clients (Ariss *et al*., 2021; Cowling *et al*., 2018) [3, 15].

For business educators and training providers, the research identifies specific financial management capabilities meriting emphasis in SME-focused programs. Cash flow forecasting, scenario planning, capital structure optimization, and strategic cost management emerge as high-impact topics where enhanced SME capability could yield substantial resilience benefits. Educational programs might move beyond basic financial statement reading toward more applied skills enabling proactive financial leadership. The research also suggests value in experiential learning approaches, such as simulations or case studies, allowing participants to practice financial decision-making under crisis conditions (Brown & Rocha, 2020; Kalogiannidis, 2020) [13, 33].

For accountants and business advisors serving SME clients, the findings highlight opportunities to provide greater strategic value beyond compliance-focused services. Advisors might proactively initiate conversations about cash flow planning, scenario analysis, or resilience preparation rather than waiting for clients to request such services. The research suggests that SMEs often lack awareness of sophisticated financial management practices or underestimate their importance until crisis conditions make their absence painfully apparent. Advisors positioned to raise awareness and facilitate implementation of resilience-building practices can generate substantial client value (Bachas *et al*., 2020; Dua *et al*., 2021) [6, 18].

For technology providers developing financial management software for SMEs, the research identifies specific functionality with demonstrated resilience value. Cash flow forecasting tools with scenario analysis capabilities, dashboards highlighting key financial health indicators, automated alerts for concerning trends, and integration with banking data for real-time monitoring represent high-value features. The study suggests that many SMEs lack such tools not due to unwillingness to use them but due to either unavailability of accessible, affordable solutions or lack of awareness regarding their value. Technology providers addressing these gaps while maintaining user-friendly design appropriate for time-constrained SME leaders could significantly enhance SME financial management capabilities at scale (Bartik *et al*., 2020; Humphries *et al*., 2020) [10, 30].

For industry associations and chambers of commerce, the findings suggest value in peer learning initiatives enabling SMEs to share financial management practices and resilience experiences. The research revealed substantial variation in financial management sophistication across firms, with some SMEs implementing advanced practices while others lacked awareness of fundamental techniques. Structured peer learning forums, where experienced SME leaders share approaches with less experienced counterparts, could facilitate knowledge diffusion. Such initiatives prove particularly valuable for smaller firms lacking resources to hire specialized financial expertise (Kalogiannidis, 2020; Williams *et al*., 2021) [33, 54].

9. Future Research Directions

This study opens several productive avenues for future research. First, longitudinal research tracking SMEs across multiple economic cycles would provide valuable insights into whether financial management practices effective during the COVID-19 pandemic prove equally beneficial during different types of economic disruptions. Comparative studies examining resilience across varied crisis types such as demand shocks versus supply shocks, rapid-onset versus gradual downturns, or industry-specific versus economy-wide disruptions could reveal important contingencies in financial strategy effectiveness (Gourinchas *et al*., 2021; Williams *et al*., 2021) [23, 54].

Second, future research might examine the development of financial management capabilities over time, investigating how SMEs build financial leadership capacity and what factors accelerate or impede capability development. Questions include: What triggers prompt SMEs to invest in enhanced financial management? What learning mechanisms prove most effective for building financial capabilities? How do advisory relationships, peer networks, or formal education contribute to capability development? Such research could inform more effective interventions supporting SME financial leadership development (Fairlie, 2020; Haider *et al*., 2023) [20, 27].

Third, investigation of the interplay between financial leadership and other organizational capabilities would provide more holistic understanding of SME resilience. Research examining how financial management interacts with innovation capabilities, human resource practices, digital transformation, or supply chain relationships could illuminate synergies and trade-offs. Such work might reveal whether certain capability combinations prove particularly powerful for resilience or whether firms must make difficult choices about where to focus limited resources (Herbane, 2019; Linnenluecke, 2017) [29, 38].

Fourth, research examining financial leadership in specific SME contexts such as family businesses, social enterprises, or technology startups could reveal important contextual variations. Different SME types face distinct challenges and possess unique resources that may affect both financial management practices and their resilience effects. For example, family businesses may possess patient capital advantages but face succession complexities affecting long-term planning; social enterprises may prioritize mission over profit maximization with implications for financial strategy; technology startups may require different capital structures than traditional SMEs (Cowling *et al*., 2018; Kraus *et al*., 2020) [15, 36].

Fifth, investigation of interventions designed to enhance

SME financial management capabilities would provide valuable practical guidance. Experimental or quasi-experimental research evaluating the effectiveness of different training programs, advisory services, or technology tools could identify most efficient approaches for building capability at scale. Such research might compare intensive individual consulting versus group training programs, digital tools versus in-person support, or sector-specific versus generic interventions (Bachas *et al*., 2020; Kalogiannidis, 2020) [6, 33].

Sixth, research examining the long-term consequences of crisis experiences on SME financial management would illuminate whether firms incorporate lessons learned into ongoing practices or revert to previous approaches once immediate threats subside. Do SMEs that successfully navigated the COVID-19 pandemic maintain enhanced financial management practices, or do such practices decay as memories of crisis recede? Understanding persistence of crisis-induced changes would inform expectations about lasting impacts on SME capabilities (Brown & Rocha, 2020; Zhao & Zhang, 2020) [13, 56].

Seventh, investigation of financial leadership in emerging economy contexts where institutional support systems differ from developed economies could provide important insights. SMEs in emerging economies often face more severe financial constraints, less developed capital markets, and weaker institutional support, potentially requiring different financial management approaches. Comparative research across economic development contexts could reveal which financial leadership practices prove universally beneficial versus which require adaptation to local conditions (Cirera *et al*., 2021; Dua *et al*., 2021) [14, 18].

Finally, research examining the role of digital technologies in enhancing SME financial management capabilities represents an important frontier. As artificial intelligence, machine learning, and advanced analytics become more accessible, questions arise regarding how such technologies might augment human financial leadership capabilities. Research could explore questions such as: How effectively can digital tools substitute for human financial expertise in resource-constrained SMEs? What financial management tasks prove most amenable to automation versus requiring human judgment? How do SMEs successfully integrate digital financial management tools into existing practices? (Baker *et al*., 2020; Bartik *et al*., 2020) [7, 10].

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