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SMEs Recovery Strategies: Systematic Review of Financial Support, Risk, and Innovation

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Abstract. This study synthesizes international evidence on SMEs' recovery strategies during crises, particularly Covid-19, by integrating financial support, risk management, and innovation into a single recovery framework while revealing underexplored methodological gaps. To identify principal internal and external drivers of SME recovery in crisis contexts and to examine trends and gaps in existing studies in terms of themes, methods, and publication patterns. A systematic literature review was implemented through structured identification, screening, and eligibility procedures; from 72 records, 35 relevant articles were retained and assessed by publication year, design, and thematic focus. The review indicates that financial and risk management, digitalization and automation, and government policy support are the most recurrent elements of recovery, whereas empirical, mixed-method, and longitudinal investigations remain scarce. Results suggest that SMEs withstand shocks best when managerial capabilities are reinforced by consistent policy instruments in finance and digital transformation; this calls for integrated recovery programs and more robust empirical research to enhance evidence generalization.

Keywords: Recovery; Management Risk; SMEs; Crisis; Systematic Literature Review; government policy.

1. Introduction

Small and Medium-sized Enterprises (SMEs) play a very important role in economic growth, especially in developing countries. As reported by The Word Bank, firms at this level represent 90% of businesses and provide employment for more than 50% of existing businesses (Bank, 2019). SMEs are often characterized by a limited number of employees, relatively low annual turnover, and smaller assets (Kahveci, 2023). They create jobs, support innovation, and play a role in income distribution. They are also often the backbone of local economies and can contribute to sustainable economic growth. Most SMEs operate in various sectors, such as trade, services, manufacturing, agriculture, and more.

In 2020, there was a global crisis caused by the covid-19 outbreak. Many sectors felt the impact such as the economy and health. The implementation of "New Normal" is often carried out in various countries as a form of prevention and reduction of the spread of the virus. However, this new rule is a spear turned against small and large businesses (Y Lu, Wu, Peng, & Lu, 2020) (Song et al., 2021). According to a report by the United Nations Conference on Trade and Development, 48% of SMEs in Indonesia are closed. In other. countries such as China, Thailand and the Philippines, the closure rate of SMEs in their respective countries is also above 50% (2022). Crises like covid-19 are not predictable, they can happen suddenly. Therefore, this research will focus on the recovery strategy of SMEs as one of the risk management to face (Zahara, Z., Ikhsan, Santi, I.N., 2023) (Zhu, X., Li, Y., Shang, 2022). The COVID-19 pandemic has had a huge impact on SMEs around the world, and many of these businesses are experiencing difficulties in running their businesses. Hence, this article will discuss the strategic aspects of SMEs' recovery after the crisis (Silva et al., 2021a). Many studies have discussed how to increase the income of MSMEs and the strategies that must be applied to be able to compete both before the Covid-19 pandemic crisis or after and this research will describe it based on scientific evidence in the form of previous research papers.

This research adopts a systematic literature review method with references from previous studies such as (Zamani, Smyth, Gupta, & Dennehy, 2022);(Mariani, Baggio, Fuchs, & Höepken, 2018);(Chintalapati & Pandey, 2022). The criteria for the articles taken are publications from 2017-2023, because the period covers three conditions that SMEs go through, namely before, during, and after the crisis. However, the articles used in this study are only articles in English and have Q1 and Q2 indexes, so after searching using Scopus with a predetermined syntax, elimination is carried out based on themes and based on indexes. In addition, the review process is also carried out by two authors to avoid researcher bias. From a theoretical point of view, this research adds to the literature related to the recovery strategy of SMEs which describes the situation based on previous research. Finally, it shows the research gap from 2017-2023. While managerially, it will provide information related to risk management for SMEs in the recovery process after the crisis and will be a strategic consideration for stakeholders.

2. Literature Review nad Theoretical Background

2.1. SMEs Concept

SMEs are businesses with a medium to low scale. However, there is no absolute measurement that applies to all countries in the world, making the calculation gray (Ma et al., 2023). Report by the United Nations Conference on Trade and Development there are various definitions of SMEs ((UNCTAD), 2022). In Bahrain, medium-sized companies are those with 51-250 employees (up to 400 for the construction sector) and an annual turnover of BD1 million-5 million. India, on the other hand, is ranked based on the amount of investment in business process equipment. The small level is more than twenty-five lakh rupees but not exceeding five crore rupees and the medium level is more than five crore rupees but not exceeding ten crore rupees. Generally, SMEs do not have a large amount of capital like HEIs, hence the importance of good financial management for SMEs. The owner must calculate in detail every financial need of his company. The source of funds that become capital must also be considered, make sure the source of funds comes from a trusted place with a debt ratio that is not too high. In order to compete and survive under any circumstances, financial management in SMEs is one of the important factors (Osano & Languitone, 2015).

2.2. Digital Marketing

Digital marketing has many benefits and plays an important role for Micro, Small, and Medium Enterprises (SMEs). Digital marketing allows SMEs to reach a larger market than they can reach locally. Unlike their local counterparts, they can reach customers across regions, countries, or even the entire world, depending on the type of product or service they offer. Digital marketing allows SMEs to sell their products or services online, which has become increasingly important especially during the COVID-19 pandemic. E-commerce platforms, online stores, and digital payments make online transactions easier. During the pandemic, SMEs are turning to digital marketing to increase their revenue (Zahara, Z., Ikhsan, Santi, I.N., 2023). In developing countries, the transformation to digital is one of the most important things, while for developed countries that have carried out digital transformation, it is necessary to innovate on the digital marketing that has been implemented (Zhu, X., Li, Y., Shang, 2022).

2.3. SMEs Management

Effective management is a major key to the success of SMEs. SMEs often operate with limited resources, including capital, labor, and time. Proper management helps SMEs allocate these resources efficiently, so as to achieve their goals without wastage. Effective management involves analyzing accurate data and information. This helps SMEs owners in making good and strategic decisions. Successful management also involves employee development. Through training, motivation, and recognition, SMEs can build a competent and dedicated team. Thus, good management is the cornerstone for the survival and growth of SMEs. Moreover, it helps SMEs to overcome challenges and take advantage of opportunities that exist in the business (Liu, Y., Dilanchiev, A., Xu, K., Hajiyeva, 2022).

3. Methodology

This study employed a systematic literature review to provide a transparent and This research adopts the systematic literature review method which makes as a guide. The Literature Review method is a research approach that focuses on collecting, analyzing, and synthesizing information that has been published in scientific literature (Zamani et al., 2022);(Mariani et al., 2018).

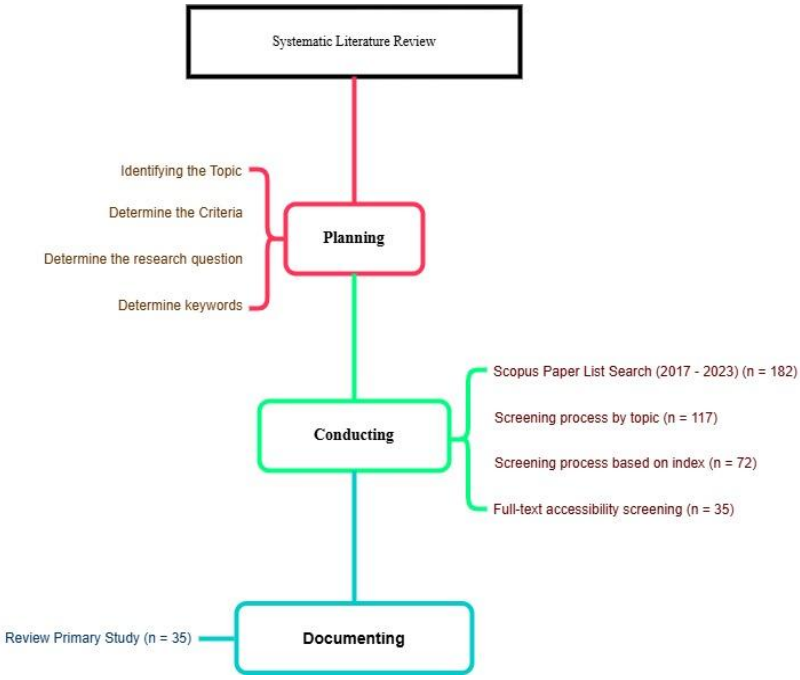

Figure 1 Research Method

At the planning stage we identified in terms of topics taken to determine the criteria that would be the primary study in this research. English-language papers and publications from 2017 to 2023 were selected. The selection of the publication period is because there are three eras that occurred, namely before, during and after the Covid - 19 crisis. Furthermore, determining research questions based on the problems identified. Table 1 is a list of research questions in this study.

Table 1 Research Questions

RQ.1.1	How many academic studies on the recovery process of SMEs after a crisis have been published between 2017 and 2023?
RQ.1.2	What journals have published recent research on the recovery process of SMEs after the crisis?
RQ.1.3	What research method techniques have been used in researching the recovery process of SMEs after the crisis?
RQ.2	What strategies are used by SMEs in the post-crisis recovery process from previous research?

In addition, this paper also describes the research gap based on the identification of previous studies according to the year of publication, journal, and methods used previously. The database used was Scopus with the search syntax TITLE-ABS-KEY (SMEs) AND TITLE-ABS-KEY (recovery) OR TITLE-ABS-KEY (risk management), which yielded a total of 182 articles. Then, several screening processes were carried out from the topics/abstracts and indexes, resulting in 117 and 72 articles, respectively. Only articles with Q1 and Q2 or SSCI and SCIE indexes from Web of Science and ScimagoJR were selected. There were 35 articles that were accessible (open access journals) and obtained by requesting them from the authors (closed access journals). The results showed that the main studies used as final references in this research were 35 articles.

RQ.1.1 How many academic studies on the recovery process of SMEs after a crisis have been published between 2017 and 2023?

Research on SMEs has been increasing for decades (Éltető, 2019). The topics range from simple to complex details. The fields of SMEs themselves are also diverse, just like the companies in general that we know. Figure 2 presents publications from primary studies that have gone through a screening process from year to year from 2017 to 2023.

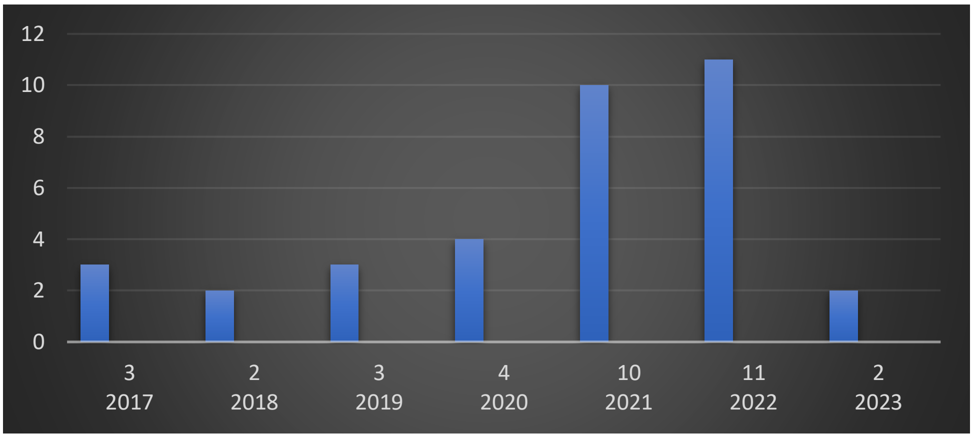

Figure 2 Number of Publications

The surge in publications occurred in 2022 and began to increase significantly since 2021. This coincided with the "Return to Normal" era after the Covid 19 crisis.

RQ.1.2 What journals have published recent research on the recovery process of SMEs after the crisis?

Journal ranking is one of the systematic stages of the literature review process to ensure that the research material in this paper has Q1 and Q2 indexes. The following Q1 and Q2 journals are the references in this research in table 2.

Table 2 Journal Ranking by Frequency (N=35 Articles)

Journal	N
International Journal of Disaster Risk Reduction	3
Small Business Economics	2
Environmental Hazards	2
Journal of Small Business Management	2
Journal of Innovation and Entrepreneurship	1
Journal of Theoretical and Applied Electronic Commerce Research	1
PLOS ONE	1
Frontiers in Public Health	1
International Journal of Organizational Analysis	1
Journal of Business and Industrial Marketing	1
Industrial Marketing Management	1
Engineering Economics	1
Economic Analysis and Policy	1
Journal of Services Marketing	1
Information Systems Frontiers	1
Entrepreneurship and Regional Development	1
Business Strategy and the Environment	1
BMC Public Health	1
Development in Practice	1
China Agricultural Economic Review	1
Journal of Corporate Finance	1
Journal of Cleaner Production	1
Emerging Markets Finance and Trade	1
Economics Letters	1
Cogent Business and Management	1
Journal of Legal Affairs and Dispute Resolution in Engineering and Construction	1
Society and Economy	1
Transportation Research Part E: Logistics and Transportation Review	1
Natural Hazards	1
Sustainable Cities and Society	1

The International Journal of Disaster Risk Reduction is the most cited journal in primary studies discussing the recovery process in SMEs, with 3 articles. It is followed by Small Business

Economics, Environmental Hazards, and the Journal of Small Business Management, each with 2 articles.

RQ.1.3 What research method techniques have been used in researching the recovery process of SMEs after the crisis?

Various methods were used by previous authors to find out how SMEs can survive after a crisis. The methods used by the relevant articles can be seen in table 3.

Table 3 List of Previous Research Methods

Metode	Previous Research
Kuantitatif	(Dörr et al., 2022); (Biduri & Proyogi, 2021); (Costa, J., Castro, 2021); (Ma, Z., Liu, Y., Gao, 2021); (Khasanah, N., Sriyana, J., Prasetyo, A., Nurdinawati, V., Hartopo, A., Wahyudianto, H., Gartika, D., Fahlevi, 2022); (Alharbi, 2022); (Fleming, D.M., Tähtinen, J., Kelliher, 2022); (Ozanne, L.K., Chowdhury, M., Prayag, G., Mollenkopf, 2022); (Zhu, X., Li, Y., Shang, 2022); (Ma, C., Cheok, 2022); (Bianchi, 2022); (Onjewu, A.-K.E., Hussain, S., Haddoud, 2022); (Pathak & Emah, 2017);(Shimada, 2017); (Herbane, 2019).
Kualitatif	(Silva et al., 2021b); (Costa, J., Castro, 2021); (Ma, Z., Liu, Y., Gao, 2021); (Wagner, A., Tsarouha, E., Ög, E., Preiser, C., Rieger, M.A., Rind, 2022); (Winkler, C., Thaler, T., Seebauer, 2022); (Fleming, D.M., Tähtinen, J., Kelliher, 2022); (Decker-Lange, 2018); (Pathak & Ahmad, 2018a); (Y. Zhang et al., 2020a); (Cathcart et al., 2020a); (Tanco et al., 2021); (Rico et al., 2021a); (L. Zhang et al., 2021a); (L. Lu et al., 2021).
Literature Riview	(Costa, J., Castro, 2021); (Doerr, S., Erdem, M., Franco, G., Gambacorta, L., Illes, 2021); (Sharma, G.D., Kraus, S., Liguori, E., Bamel, U.K., Chopra, 2022); (YahiaMarzouk, Y., Jin, 2022); (Rouhanizadeh et al., 2019); (Éltető, 2019); (Chowdhury et al., 2021).
Mix-Method	(Marks & Thomalla, 2017); (S Pathak & Ahmad, 2018); (Rouhanizadeh & Kermanshachi, 2020); (Y. Lu et al., 2020b).

RQ.2 What strategies are used by SMEs in the post-crisis recovery process from previous research?

From the 72 articles referenced in this article, there are various ways for SMEs to recover during or after a crisis. The solutions offered include the digital transition for SMEs, which can make consumers feel closer to the seller despite the distance between them (Nazirii, D., Belton, B., Loison, S.A., Reardon, T., Shikuku, K.M., Kaguongo, W., Maina, K., Ogello, E., Obiero, 2023); (Zahara, Z., Ikhsan, Santi, I.N., 2023). In addition to switching to digitalization, it turns out that the role of the government as a policy maker is very important for SMEs to survive and rise after the crisis, especially in making banking policy policies for SMEs (McCann, F., McGeever, N., Yao, 2023); (Hou, Y., Fang, 2023); (Arsawan, I.W.E., Koval, V., Suhartanto, D., Hariyanti, N.K.D., Polishchuk, N., Bondar, 2022). In order to survive during a crisis or recovery after a crisis, SMEs also need good management, there needs to be innovation and good financial management for SMEs owners in order to survive during the crisis and post-crisis (Ma, C., Cheok, M.Y., Chok, 2023).

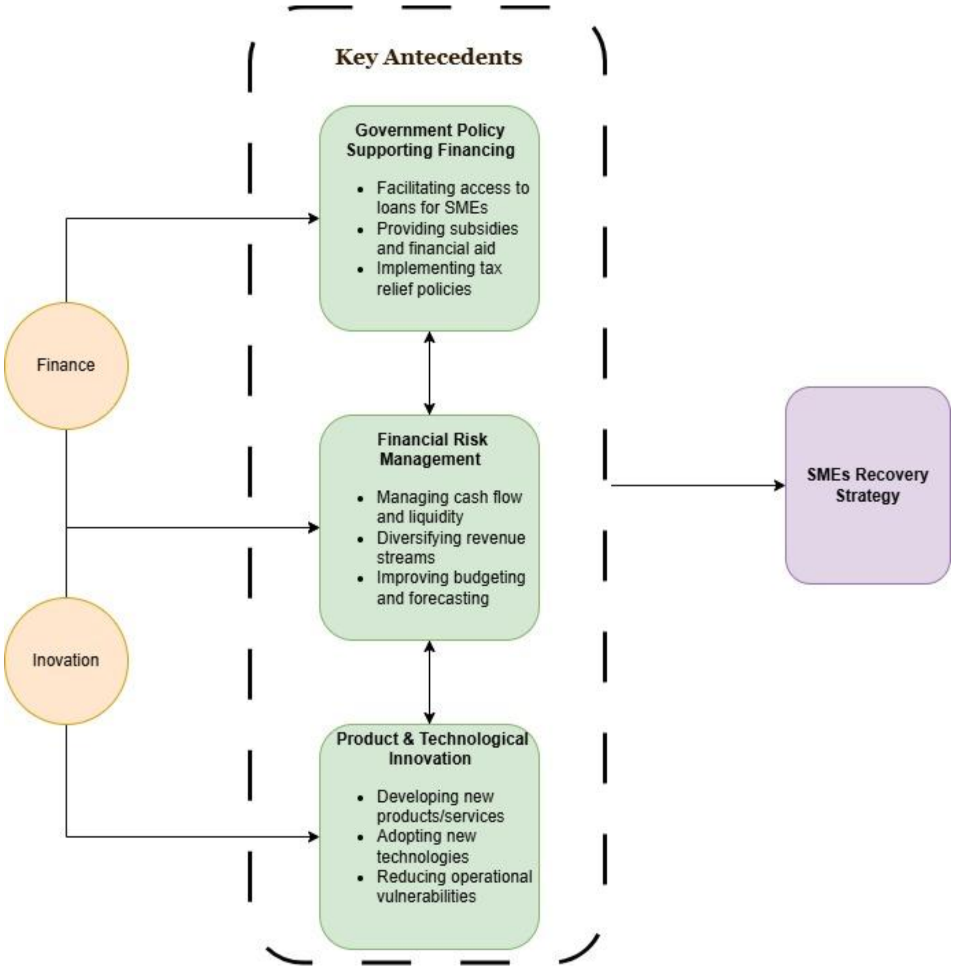

Figure 3 Number of Publications

The results of the discussion of the previous articles found that there are three things that are important points for the recovery process of SMEs. Firstly This is because during a crisis the income of SMEs will be greatly reduced and will even result in fatas such as business closures. Second, risk management needs good management so that SMEs do not close after the pandemic, besides that innovation needs to be done considering that crises always come suddenly. Third, digital transformation, this is very important especially for developing countries that have not yet carried out digital transformation, especially for digital marketing. For developed countries, digital innovation is needed to increase competition.

4. Results

4.1. Global Impact of the Crisis on SMEs

SMEs are the backbone of the global economy, contributing around 70% of global employment and GDP (World Economic Forum, 2022). Since 2000, the number of SMEs worldwide has generally increased up to 2021, although there was a slight decline from 328.51 million to 327.8 million between 2019 and 2020, coinciding with the outbreak of Covid-19 as a global pandemic (Dyvik, 2022). The pandemic triggered severe economic disruptions and a "new normal" characterised by mobility restrictions, social distancing, and changes in consumer behaviour. Highly restricted face-to-face interaction became one of the main factors behind declining revenues for many SMEs (UNCTAD, 2022). A joint study by the World Economic Forum and the National University of Singapore Business School shows that about 67% of SME representatives perceived survival and business expansion as their most pressing challenges in this period (World Economic Forum, 2022).

4.2. Crisis Effects on SMEs in Different Contexts

Survey evidence from various countries illustrates the depth and heterogeneity of the shock. In Sichuan, China, a survey of 4,807 SMEs finds that the main reasons firms could not survive were employees' inability to return to work, disrupted supply chains, and reduced market demand (Y. Lu et al., 2020c). In Indonesia, around 48% of SMEs are reported to have gone bankrupt and closed during the pandemic, underscoring the scale of the crisis in developing economies (UNCTAD, 2022). Nevertheless, some sectors such as manufacturing, transportation, and information and communication were relatively less affected and continued production by rapidly adjusting their operations and market reach (L. Zhang et al., 2021b). These differences indicate that recovery strategies need to be sector-specific rather than uniform across all SMEs.

4.3. SLR Findings: Key Drivers of SMEs Recovery

In this study, a systematic review of 35 primary papers identifies a variety of strategies used by SMEs to recover after crisis periods. Synthesising these studies suggests three main groups of recovery drivers: (1) government policy supporting financing, (2) financial risk management at the firm level, and (3) product and technological innovation (Costa, J., Castro, 2021; Y. Lu et al., 2020c; L. Zhang et al., 2021). These three elements are summarised conceptually in Figure 3 and together form the core of SMEs' recovery strategies.

4.3.1 Government Policy Supporting Financing

Government policy supporting financing is crucial for preventing large-scale closures and enabling SMEs to restart operations. Policy measures such as loan guarantees, interest subsidies, tax relief, and grants help SMEs address liquidity shortages and cover fixed costs during periods of suppressed demand (L. Zhang et al., 2021c; Y. Zhang et al., 2020). Yi Lu et al. (Y. Lu et al., 2020c) emphasise that governments should facilitate the rapid return of workers and logistics to SMEs and avoid overly restrictive regulations, while still maintaining health protocols. When these financial support measures are well targeted and implemented with clear rules, they can stabilise SMEs long enough for them to adjust their business models and seek new markets (Doerr, S., Erdem, M., Franco, G., Gambacorta, L., Illes, 2021).

4.3.2 Financial Risk Management

Financial risk management at the firm level emerges as a consistent determinant of resilience. Studies show that SMEs that actively manage cash flow and liquidity, diversify revenue streams, and improve budgeting and forecasting are better able to withstand prolonged demand shocks and supply-chain disruptions (Cathcart et al., 2020b; Doerr, S., Erdem, M., Franco, G., Gambacorta, L., Illes, 2021; Rico et al., 2021). Effective risk management allows SMEs to renegotiate with creditors and suppliers, prioritise critical expenditures, and gradually restore their revenue base. Conversely, firms with high leverage and weak financial planning are more likely to default or exit the market when crisis conditions persist (Cathcart et al., 2020b).

4.3.3 Product and Technological Innovation

Product and technological innovation accelerates recovery by enabling SMEs to adapt their offerings and reach customers through new channels. Many SMEs responded to the pandemic by adopting e-commerce platforms and social media, expanding their geographic reach, and introducing new products or services that matched changing consumer needs (Costa, J., Castro, 2021; Onjewu, A.-K.E., Hussain, S., Haddoud, 2022; YahiaMarzouk, Y., Jin, 2022). Social-commerce platforms such as TikTok Shop have been identified as promising alternative channels, with mobile-app data showing a 77% increase in user spending on TikTok in 2021 (Lesonsky, 2022). However, SME digitalisation still lags behind that of large firms due to limited technological knowledge and the perception that digital investments are costly (OECD, 2021). This suggests that financial support policies need to be complemented by capacity-building programmes that improve SMEs' digital skills and innovation capabilities.

4.4. Methodological Patterns and Research Gaps

From a methodological perspective, most previous studies on SME recovery rely on qualitative designs, such as interviews, case studies, and focus group discussions with SME stakeholders. In quantitative research, survey questionnaires are the dominant data-collection method, often capturing perceptions of impact, resilience, and performance over relatively short time periods. Only a small number of papers employ literature review approaches, and even fewer explicitly adopt a systematic literature review methodology, indicating that comprehensive evidence synthesis in this area remains limited.

In terms of publication trends, there is a noticeable spike in the number of studies published around 2021 and 2022, corresponding to the height of the Covid-19 crisis and the early recovery period. However, fewer articles examine longer-term post-crisis transformation, such as how SMEs sustain innovations and financial discipline after emergency support is withdrawn. This gap highlights the need for future research that not only documents immediate recovery strategies but also investigates how these strategies evolve into enduring capabilities that enhance SMEs' resilience to future shocks.

5. Conclusion

Throughout this paper, we present aspects that are often mentioned as important components in the recovery process of SMEs, which are risk management, financial management, innovating with digitization or automation, and support from government policies. The combined aspects become one of the promising solution offerings for SMEs to be implemented in a crisis. In addition, we show the research gap in this study by identifying in terms of years of publication and popular methods used among researchers in the scope of this study. Hopefully, this will serve as a new agenda for future researchers.

This study has several limitations that should be acknowledged. From a total of 72 relevant articles identified in the initial screening process, only 35 articles could be fully accessed and analyzed due to accessibility constraints. As a result, some relevant insights from inaccessible publications may not have been fully captured. Future research is therefore encouraged to include a broader range of accessible databases and publications to obtain more comprehensive findings. In addition, further studies may extend this research by incorporating empirical approaches, cross-country comparisons, or longitudinal analyses to validate and enrich the proposed framework for SME recovery.

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Author Contributions (CRediT)

All the authors were involved and collaborated to help analyze the data and prepare the report that culminated in this article.

Conflicts of Interest

The authors declare no conflict of interest.The authors declare no conflict of interest

Data Availability

This article utilizes previously published articles—listed in the references—as the primary material for the literature review.

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