

Senin, Saadan Mohamed; Juhdi, Noor Hasni; Omar, Ahmad Rafli Che; Hashim, Noor Azuan

## Article

Small and medium enterprises survival during the global crises: a systematic review of theoretical perspectives of building resilience in the time of crisis

Cogent Business & Management

## Provided in Cooperation with:

Taylor & Francis Group

*Suggested Citation:* Senin, Saadan Mohamed; Juhdi, Noor Hasni; Omar, Ahmad Rafli Che; Hashim, Noor Azuan (2024) : Small and medium enterprises survival during the global crises: a systematic review of theoretical perspectives of building resilience in the time of crisis, Cogent Business & Management, ISSN 2331-1975, Taylor & Francis, Abingdon, Vol. 11, Iss. 1, pp. 1-19, <https://doi.org/10.1080/23311975.2024.2395428>

This Version is available at:

<https://hdl.handle.net/10419/326515>

### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

### Terms of use:

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by/4.0/>

## Small and medium enterprises survival during the global crises: a systematic review of theoretical perspectives of building resilience in the time of crisis

Saadan Mohamed Senin, Noor Hasni Juhdi, Ahmad Rafli Che Omar & Noor Azuan Hashim

**To cite this article:** Saadan Mohamed Senin, Noor Hasni Juhdi, Ahmad Rafli Che Omar & Noor Azuan Hashim (2024) Small and medium enterprises survival during the global crises: a systematic review of theoretical perspectives of building resilience in the time of crisis, Cogent Business & Management, 11:1, 2395428, DOI: [10.1080/23311975.2024.2395428](https://doi.org/10.1080/23311975.2024.2395428)

**To link to this article:** <https://doi.org/10.1080/23311975.2024.2395428>



© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



Published online: 28 Aug 2024.



[Submit your article to this journal](#)



Article views: 3005



[View related articles](#)



[View Crossmark data](#)



Citing articles: 4 [View citing articles](#)

# Small and medium enterprises survival during the global crises: a systematic review of theoretical perspectives of building resilience in the time of crisis

Saadan Mohamed Senin, Noor Hasni Juhdi, Ahmad Rafli Che Omar and Noor Azuan Hashim

Faculty of Economics and Management, Universiti Kebangsaan Malaysia, Bangi, Malaysia

## ABSTRACT

Given that small and medium-sized enterprises (SMEs) are the backbone of the economy, SME survival and resilience are vital during financial, health, or social crises, such as war or political upheaval. The current study conducted a systematic literature analysis from theoretical perspectives supporting SME survival during a crisis. A Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) systematic review was performed, including literature from SCOPUS, Web of Science (WoS) and Google Scholar. Out of the 40 reviewed papers, the top five most commonly used theories to ensure SME resilience and survival were resource-based views, competitive advantage, leadership, entrepreneurial and innovation theories. The first paper in the review was from 2003 with research spanning up to 2022. The literature also employed quantitative, qualitative and mixed methodologies where most approaches were quantitative. Tangible and intangible resources, effective leadership, competitive advantage, entrepreneurial innovativeness and a combination of these resources could confirm long-term survival among SMEs during crises. Organisational survival in times of crisis is important and strategies must be examined for preparation in the future. Despite its importance, few studies have considered this domain. Therefore, this study is a significant contribution to the literature because it is one of few attempts that highlights the SMEs vulnerability during survival.

## ARTICLE HISTORY

Received 4 December 2023  
Revised 14 August 2024  
Accepted 16 August 2024

## KEYWORDS

Global crises; health crisis; terrorism; war; financial crisis; SMEs; SMEs survival; Post Covid-19; Entrepreneurial Innovativeness; SMEs resilience

## SUBJECTS

Qualitative Methods; Supply Chain Management; Logistics; Global Crises; SMEs Survival

## 1. Introduction

The SMEs play a crucial role in national economic development, providing employment opportunities, wealth creation and poverty reduction (Asgary et al., 2020). These enterprises also promote economic globalisation to ensure the increased global gross domestic product (GDP). Therefore, the difficulties arising from the process of economic globalisation, such as global financial and economic crisis, market competition and religious conflicts have a substantial effect on how SMEs can grow and perform over time (Naradda Gamage et al., 2019). These various complex global challenges have direct consequences on their ability to maintain continuous production operations. Generally, businesses utilise various strategies and policies during an emergency for effective crisis management and survival.

Regarding the financial issues a recently conducted study by Parayil Iqbal et al. (2023) stated that working capital is necessary and all-time curial management is pivotal for SMEs as it is directly linked with the financial performance of businesses regardless of their size. Therefore, SMEs are recommended to more a balanced approach towards the management of working capital in times of crisis instead of a conservative or aggressive approach. Importantly, Pathak et al. (2024) reported that SMEs seem to be vulnerable in the COVID-19 context due to their low resilience to deal with crises. It has resulted in negative consequences for SMEs, especially entrepreneurial SMEs. Various health crises impacting the global GDP included the 2020 coronavirus disease (COVID-19), which greatly affected numerous businesses

**CONTACT** Saadan Mohamed Senin ✉ [saadanms@gmail.com](mailto:saadanms@gmail.com); Noor Hasni Juhdi ✉ [n\\_hasni@ukm.edu.my](mailto:n_hasni@ukm.edu.my) ✉ Universiti Kebangsaan Malaysia, Bangi 43600, Malaysia

© 2024 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

(Zutshi et al., 2021) particularly micro business enterprises globally (Chikweche & Chaora, 2023) but the impact on businesses is not widely studied despite the growing post-COVID research. This situation encouraged numerous SMEs to develop new strategies to improve the crisis management system for effective outcomes. Moreover, political instability leading to war and terrorism influences national GDP, which causes poor economic development. These factors substantially affect small enterprises due to limited resources and financial support (AlQershi et al., 2023). Another study by DiBella et al. (2023) recommended that SMEs need to adopt transformative approaches towards sustainability that are economically superior and with such capabilities they can better absorb the crisis such as COVID-19. It is worth mentioning that SMEs are vulnerable to pandemics. For instance, COVID-19 proved to be very challenging for the SMEs survival. It is needed to identify the challenges they face during crises to draft strategies for building SME resilience. Although, it is one of the important issues but still limited research has focused on how the SMEs survive during the crisis (Erdiaw-Kwasie et al., 2023). Additionally, another study reported that it is necessary to study and develop the understanding of the crisis faced by the SMEs to better advance the practices of the managers and owners for better survival of SMEs. There is a greater need to pay attention to the SMEs vulnerability during the survival, despite its importance no dedicated attention have been paid to it (Hossain et al., 2022). Accordingly, the present study strives to address the following research objectives; (1) developing understanding about the SMEs survival during the global crisis. (2) To present a literature review on the theories used to study SMEs strategy to face the challenges.

Past literature has mainly emphasised financial and economic crises, which impacted the financial development and sustainable performance of various businesses worldwide. Contrarily, few studies have highlighted health-related and war-related crises regarding SME development. This study aims to enhance the understanding of SME survival during various global crises in the last century, including economic, financial, trade, health, war and terrorism-related crises. By outlining the impact of these crises on SMEs, the research seeks to provide insights into effective strategies and choices that can empower SMEs to navigate and thrive amidst challenging global circumstances. The study aims to contribute valuable knowledge that supports the development of resilient and adaptive approaches, ultimately improving the survival prospects of SMEs in the face of multifaceted crises.

## 2. Methodology

### 2.1. Research design

The present study is qualitative by follows the interpretive research philosophy. A systematic review was adopted to address the research questions. According to Chigbu et al. (2023) reviewing the literature involves accurate and detailed research evidence considering the structured analysis of the articles. For such types of studies, the systematic literature review is used as a more reliable and structured approach (Khaldi et al., 2023). Systematic reviews have been utilised in many domains and this study followed several steps based on guidelines in previous research (Dyment & Downing, 2020). Firstly, relevant literature was identified through search terms. Secondly, the inclusion and exclusion criteria were applied to obtain articles concerning the research objectives. Data were extracted and analysed followed by a report on the findings. All the details of the systematic literature review are presented in the next sections.

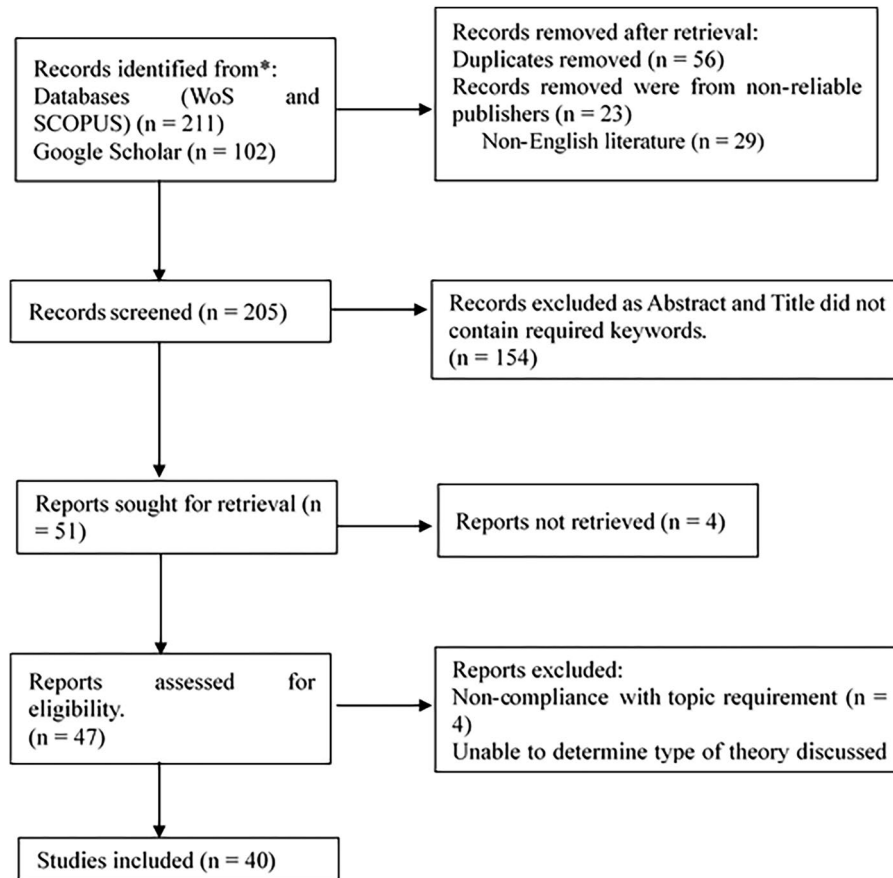
'The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA)' guidelines were used in this study. The SLR involved the following steps: (a) planning; (b) execution; and (c) reporting (Fouskas et al. (2020). The analysis processes included the general characteristics of the included articles and their methodological aspects, followed by the study themes and topics (refer to Table 1). Some sections or sub-sections that are a part of the PRISMA checklist were not included in this article as they were considered irrelevant or a requirement of meta-analysis. Table 1 presents the PRISMA checklist and the inclusion status of each item in this article. Figure 1 maps the PRISMA flowchart.

### 2.2. Search strategies and sources

The systematic review was performed from 1 January 2000 to 31 December 2022 based on the literature search of Scopus and WoS. Furthermore, Google Scholar was utilised to identify literature not detected

**Table 1.** The PRISMA checklist.

Section	Title	Status of occurrence
Title	Identification as a literature review	Yes
Abstract	Structured summary	Yes
Introduction	Rationale	Yes
	Objectives	Yes
Method	Eligibility criteria (inclusion and exclusion criteria mentioned)	Yes
	Information sources	Yes
	Search Strategy	Yes
	Study selection	Yes
	Data collection process, data items, and risk bias calculation	–
Results	Study selection	Yes
	Study characteristics	Yes
	Risk of bias within studies	–
	Results of individual studies	Yes
Discussion	A general interpretation of results in the context of other evidence	Yes
	Limitations	Yes
	Conclusions	Yes
	Implications	Yes
Other Information	Funding	–
	Registration and protocol	–
	Support	–
	Competing interests	–
	Availability of data, code, and other materials	–

**Figure 1.** PRISMA flowchart.

initially. The keywords used were designed based on the topic and the search strings involved combinations of 'SME survival', 'Health Crisis', 'Financial Crisis', 'Terrorism', 'War', 'COVID-19', 'SME Resilience', and 'SMEs'.

### 2.3. Inclusion and exclusion criteria

The study eligibility criteria were as follows:

1. Only English language research
2. Only journal papers
3. The title or abstract discusses theoretical frameworks or strategies SMEs use to improve performance and survive when encountering economic, financial, health, or war-like crises
4. Peer-reviewed research
5. Studies published between 2000 and 2022

The following exclusion criteria were applied:

1. Grey literature (books, book chapters, conference papers and theses)
2. Non-English papers
3. Papers that are missing theoretical perspectives
4. Non-peer-reviewed literature
5. Literature beyond the timeframe of 2000 to 2022

### 2.4. Data extraction

The data from the literature review contained the author names, publication years, titles, the theory used, the type of crisis studied, methodology type, journal names, main outcomes, implications and limitations. The data was stored using Excel worksheets by developing three sheets for WoS, Scopus and Google Scholar. Then all the titles and their details were combined into a single sheet to identify and remove the duplicates.

### 2.5. Search outcomes

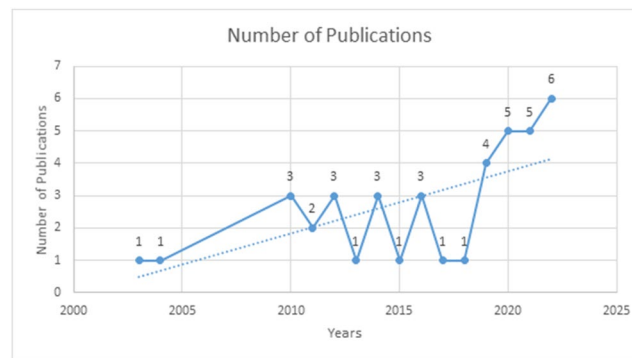
The search outcomes in [Figure 1](#) demonstrate 211 records retrieved from SCOPUS and WoS and 102 from Google Scholar. The first stage involved removing duplicates and papers that were not from reliable publishers, mainly from Google Scholar. A total of 56 papers were removed due to duplicate issues and 23 were excluded due to unreliable sources. Therefore, out of the 205 papers screened, 154 were removed due to the absence of accurate keywords in the titles and abstracts. Hence, 51 papers were retrieved, four of which could not be retrieved. Four out of the remaining 47 papers did not align with the topic requirements as the papers excluded discussions of SME survival during crises. Additionally, three papers did not identify the discussed theory. Therefore, a final set of 40 papers was included in the study.

## 3. Findings

### 3.1. Paper characteristics

The abovementioned section highlighted 40 papers included in the review process. First, the papers were analysed based on their publication years. Although the search was conducted from 2000 to 2022, the earliest paper was from 2003. [Figure 2](#) depicts one paper each from 2003, 2004, 2013, 2015, 2017 and 2018, two papers from 2011, and three papers from 2010, 2012, 2014 and 2016. Meanwhile, four papers were from 2019, five papers from 2020 and 2021, and six papers from 2022. [Figure 2](#) shows the trend line of growing publications over the years. A dotted line in the graph represents the growing trend.

All 40 documents included were journal papers listed in [Table 2](#). Two papers were from the European Management Journal, two from Frontiers, three from the Journal of Business Research, and four from the International Small Business Journal. Meanwhile, the remaining journals, such as Sustainability, Journal of Asian Economics, Journal of International Business Studies, Journal of Money, Credit and Banking and Journal of Risk and Financial Management each contributed a single paper.



**Figure 2.** Distribution of publications by year (2003–2023).

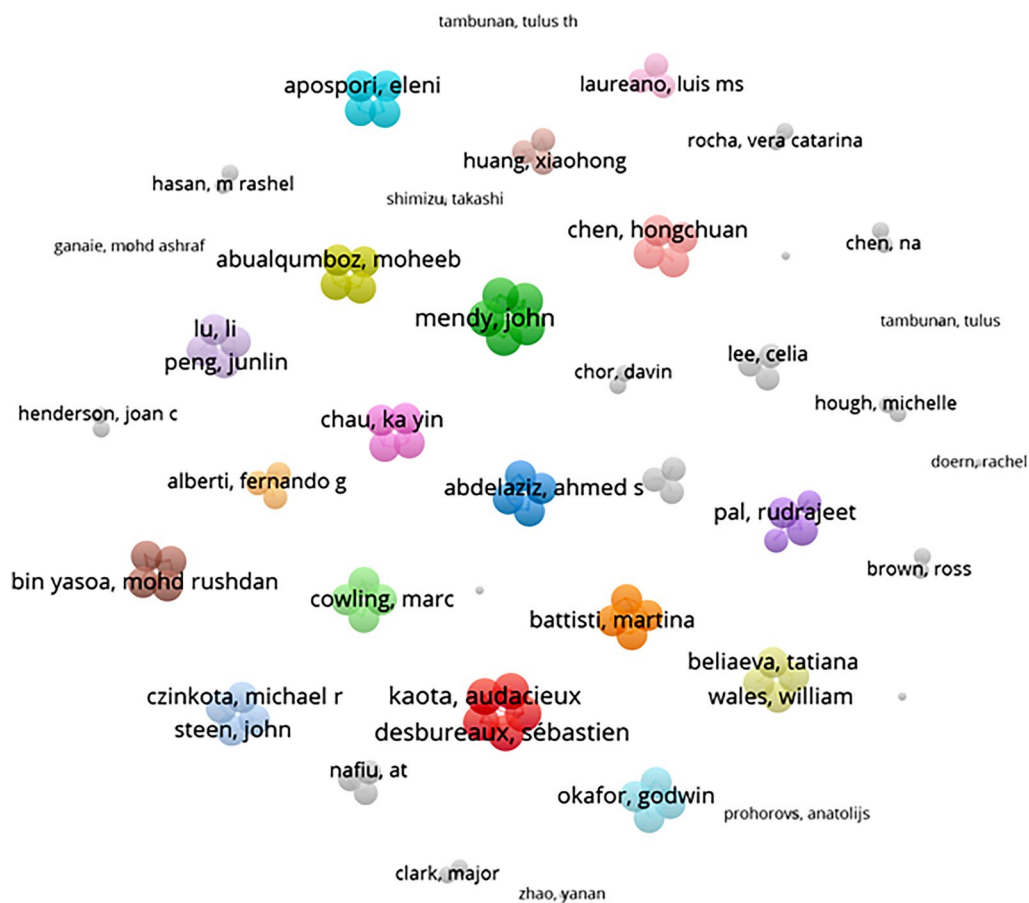
**Table 2.** Names and distribution by journals.

Journal name	Number of papers
<i>Asia &amp; the Pacific Policy Studies</i>	1
<i>Asian Business &amp; Management</i>	1
<i>Journal of Social Sciences</i>	1
<i>Defence and Peace Economics</i>	1
<i>Global Business Review</i>	1
<i>Global Journal of Flexible Systems Management</i>	1
<i>International Business Research</i>	1
<i>International Entrepreneurship and Management Journal</i>	1
<i>International Journal of Business and Management</i>	1
<i>International Journal of Decision Sciences, Risk, and Management</i>	1
<i>International Journal of Disaster Risk Reduction</i>	1
<i>International Journal of Hospitality Management</i>	1
<i>International Journal of Innovation and Applied Studies</i>	1
<i>International Journal of Learning and Intellectual Capital</i>	1
<i>International Journal of Multidisciplinary</i>	1
<i>International Journal of Production Economics</i>	1
<i>International Journal of Tourism Research</i>	1
<i>Journal of Asian Economics</i>	1
<i>Journal of Developing Economies</i>	1
<i>Journal of International Business Studies</i>	1
<i>Journal of International Economics</i>	1
<i>Journal of Money, Credit, and Banking</i>	1
<i>Journal of Risk and Financial Management</i>	1
<i>Journal of Small Business and Entrepreneurship Development</i>	1
<i>Management &amp; Organisational History</i>	1
<i>Social and Behavioural Sciences</i>	1
<i>Sustainability</i>	1
<i>The International Journal of Entrepreneurship and Innovation</i>	1
<i>World Development</i>	1
<i>European Management Journal</i>	2
<i>Frontiers</i>	2
<i>Journal of Business Research</i>	3
<i>International Small Business Journal</i>	4

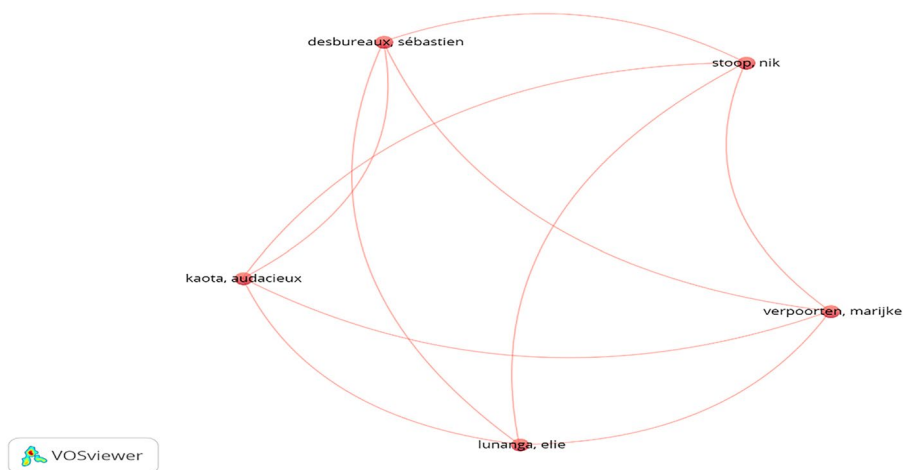
Above Figure 3 illustrates the co-authorship network involving 106 authors of the reviewed papers. A low level of co-authorship was present among the selected papers based on the 39 clusters with 123 links and 124 link strengths in the network graph. The largest cluster involved five authors, as depicted in Figure 4. This cluster illustrates 10 links between the five authors, which indicates that each cluster occurred in two papers with one of the other authors from the cluster.

The review contained all three methodology-based papers. Overall, 67% of the papers applied a quantitative methodology, 25% used qualitative methodology and 8% employed a mixed method based on research design (refer to Figure 5 and Table 3). The findings reported in Figure 3 show the majority of studies have used questionnaires to collect data from respondents and used emerging analysis techniques Structural Equation Modelling (SEM) and regression. It affirms that few studies have relied on secondary data sources. Whereas only a few studies have used mixed methods to verify their study results both qualitatively and quantitatively. It can be asserted that primary data analysis by using SEM is the most popular approach among researchers.





**Figure 3.** Co-authorship network (all papers).

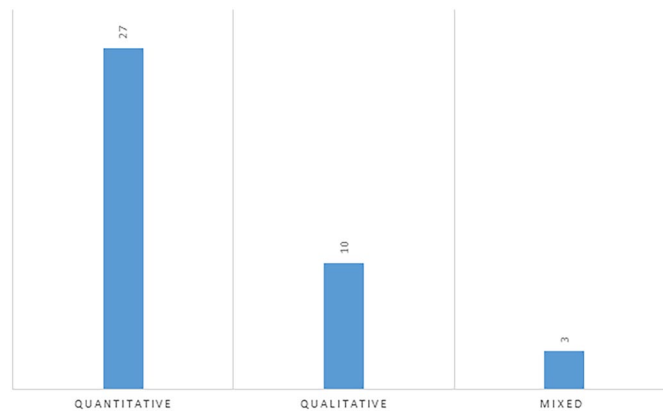


**Figure 4.** Biggest co-authorship cluster (largest cluster).

### 3.2. Thematic analysis

The themes in the selected studies were identified through a keyword analysis of the abstracts and titles. Figure 6 portrays the titles and abstract-based keyword analysis indicating three primary themes in red, green and blue. The first theme is the densest and demonstrates the main topic: the economic or financial crisis. Further analysis revealed that 20 of the 40 reviewed papers covered this theme.





**Figure 5.** Methodology wise type distribution.

**Table 3.** Methodological distribution.

Methodology	Type	Number of papers	
Quantitative	SEM	14	27
	Secondary Regression	11	
	Regression	2	
Qualitative	Conceptual Framework	4	10
	Argumentative Literature Reviews	5	
	Semi-Structured Interview	1	
Mixed	Interviews, Literature Analysis, Surveys	3	3



**Figure 6.** Keyword analysis (all papers).

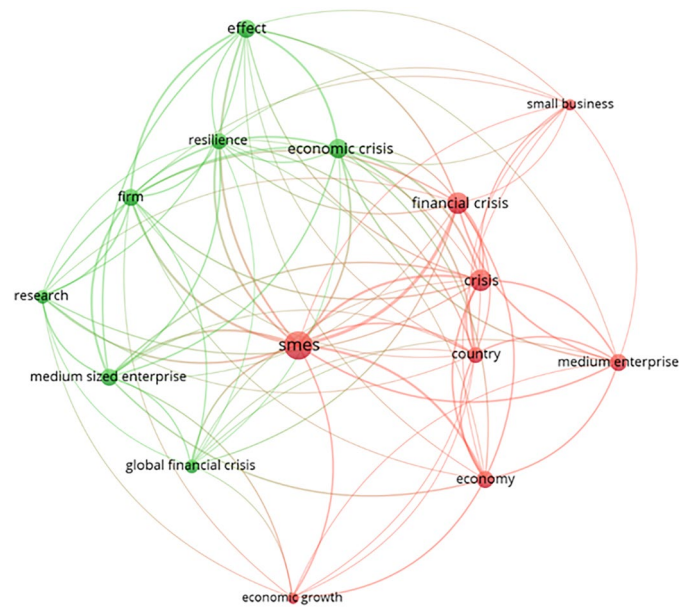
Following Figure 7 shows the green theme also highlighted China, COVID-19 and organisational resilience. This theme primarily entailed issues affecting organisational sustainability and highlighted the role of organisational resilience strategies in addressing these global challenges, such as COVID-19. The blue theme displays only two highlighted words, namely relationship and terrorism. This theme discussed how SMEs develop survival strategies and resilience against issues in their external environment regarding terrorism, wars, or civil or political upheaval.

Figure 8 depicts the keyword analysis of the papers discussing the first theme, which is SME survival during a financial crisis. Based on the network graph, the most used words were economic crisis, global financial crisis, small business and medium enterprise.

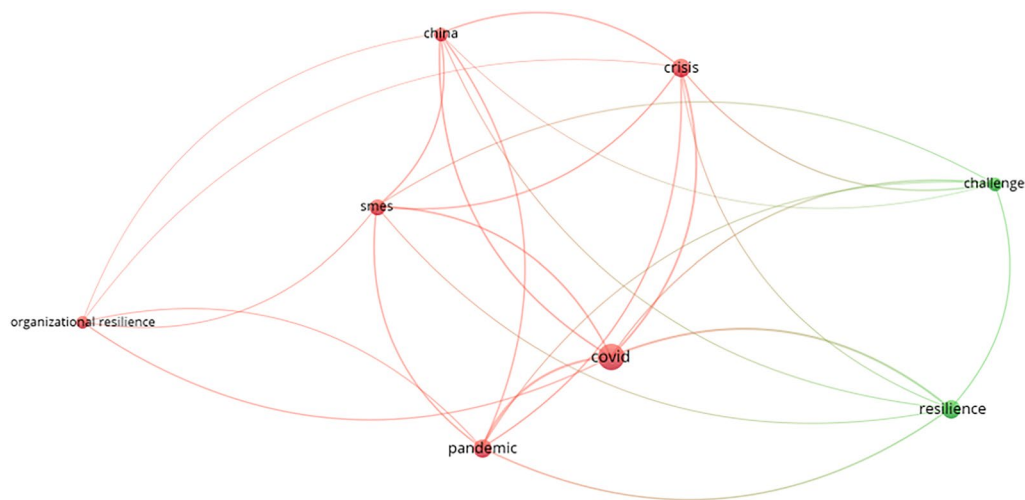
Figure 8 displays the keyword analysis of the second theme and Figure 9 portrays the third theme keyword analysis. Figure 9 outlines the pandemic, organisation resilience, crisis, COVID-19, China and other similar words indicating that the health crisis most commonly studied is the recent COVID-19 pandemic. The keyword analysis of the third theme emphasised wars, terrorism and other similar crises.

### 3.2.1. Economic, financial and trade crisis

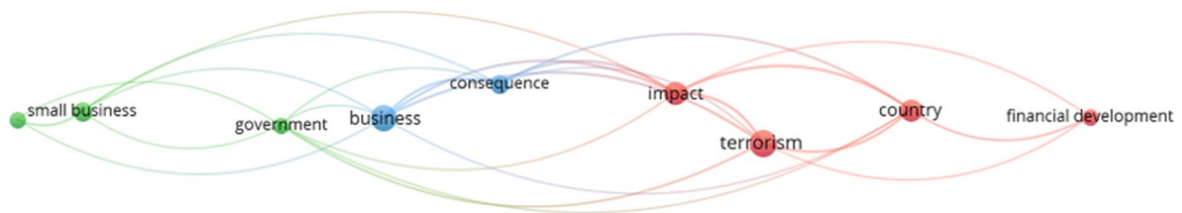
The main theories in past studies on economic, financial and trade crises utilised the RBV, competitive advantage and leadership theory. Other theories included entrepreneurial theory, stakeholder theory, theory of absolute advantage and traditional theory of capital structure. Pal et al. (2014) investigated the



**Figure 7.** Keyword analysis (theme 1).



**Figure 8.** Keyword analysis (theme 2).



**Figure 9.** Keyword analysis (theme 3).

economic crisis using various theories, namely RBV (including financial, material, network, intangible and social resources), competitive advantage theory (primarily emphasising redundancy, flexibility, networking and robustness) and leadership theory (incorporating top management, employee well-being and important decision-making process). Tambunan (2020) incorporated these theories to comprehend the economic crisis impact on SME financial and sustainable development. Meanwhile, Alberti et al. (2018), Varum and Rocha (2013) and Carbó-Valverde et al. (2016) mainly employed RBV.

The RBV states that innovative utilisation of internal and external sources is effective in achieving competitive advantage for the associated firms. Therefore, these studies suggested that the effective utilisation of valuable tangible and intangible resources of SMEs is effective in overcoming issues during the economic crisis by encouraging large companies to collaborate with them to provide financial support. Apart from RBV, Chowdhury (2011) highlighted leadership theory and promoted the role of top management in crisis management systems. Additionally, an effective leadership style is vital in improving the decision-making processes of top management during a crisis.

Cowling et al. (2015) emphasised RBV and a knowledge-based view (KBV) to investigate the impact of various internal and external factors on small business growth during an economic crisis. The main characteristics of the business highlighted were the size, age and sector of the industry. Furthermore, the study determined the significance of human capital in influencing SME performance during global crises. Macroeconomic and microeconomic conditions of the SMEs were also observed. Magrizos et al. (2021) outlined the stakeholder theory to determine the relationship between SME financial performance and CSR activities during the economic crisis. Essentially, CSR initiatives were crucial in SME resilience during an economic catastrophe. Hence, selecting effective stakeholders is vital to ensure effective SME financial performance during an economic crisis.

Tambunan (2019) employed the RBV and stakeholder theory in analysing a financial and economic crisis, mainly emphasising the inclusion of effective top management and shareholders to ensure financial support for the SMEs during the crisis to maintain their effective and innovative performance. Efficient and skilful top management was also proposed by Spillan and Hough (2003) and Pal et al. (2012) as they integrated the leadership theory in promoting SMEs sustainable development during the economic crisis. Furthermore, Beliaeva et al. (2020) and Karadağ (2016) outlined the relationship between entrepreneurial orientation, marketing orientation and firm performance based on the entrepreneurial theory during the economic crisis. This theory explains the boundaries and nature of the firm. Thus, implementing entrepreneurial strategies and policies during an economic and financial crisis is crucial in achieving the required outcomes.

Chor and Manova (2012) and Muhammad et al. (2010) developed an effective theoretical framework to comprehend the relationship between SME resilience and the global economic crisis using RBV and competitive advantage theories. These studies emphasised the influence of government and financial support in improving SMEs competitive advantage processes during the economic crisis to obtain the required outcomes by overcoming various issues. Brown and Lee (2019) also encouraged the integration of competitive advantage theory to investigate the relationship between SME resilience and economic crisis. Nonetheless, Proença et al. (2014) utilised the traditional capital structure theory to comprehend the relationship between SMEs capital structure and financial performance during the 2008 financial crisis in Portugal by observing asset structure, size, growth, profitability, cash flow, liquidity, long-term debts and short-term debts.

Investments from external sources gradually decrease during the financial crisis, specifically among SMEs due to higher economic pressure. Accordingly, private SMEs primarily depend on numerous internal sources for their investments. Zubair et al. (2020) used the Q-theory to explain the relationship between investments and growth opportunities in SMEs during the 2008 financial crisis. This theory emphasises that small firms undertake investments when various growth opportunities exist. Nevertheless, Smallbone et al. (2012) suggested that management and organisation practices are also critical to ensure SMEs continuous development during a financial crisis rather than merely emphasising economic pressure. Thus, the institutional theory was utilised to determine the relationship between the financial performance of the UK and NZ small firms and the global financial crisis considering the effect of various organisational factors. Y. Zhao (2009) investigated the trade crisis and utilised the absolute advantage theory to comprehend SME development in international trade during the global financial crisis. This investigation determined the challenges and opportunities SMEs in international trade during the crisis refer Table 4).

### 3.2.2. Health crisis

Over the years, a health-related crisis emerged as one of the leading challenges to developing SMEs. Past studies highlighting health-related crises and SMEs financial development were also discussed. The

**Table 4.** Summary of findings.

Reference	Crisis type	Crisis	Theory
(Pal et al., 2014)	Economic crisis	1990 to 1993 and 2007 to 2009 crises	<ul style="list-style-type: none"> <li>• RBV</li> <li>• Competitive advantage theory</li> <li>• Leadership theory</li> </ul>
(Magrizos et al., 2021)	Economic crisis	–	Stakeholder theory
(Smallbone et al., 2012)	Financial crisis	2008 financial crisis	Institutional theory
(Cowling et al., 2015)	Economic crisis	–	RBV
(Alberti et al., 2018)	Economic crisis	–	KBV
(Proença et al., 2014)	Financial crisis	2008 financial crisis	RBV
(Zubair et al., 2020)	Financial crisis	2008 financial crisis	The traditional theory of capital structure
(Y. Zhao, 2009)	Trade crisis	–	Q-theory
(Varum & Rocha, 2013)	Economic crisis	–	Theory of absolute advantage
(Muhammad et al., 2010)	Economic crisis	2008 financial crisis	RBV
(Tambunan, 2019)	Economic crisis	<ul style="list-style-type: none"> <li>• 'Asian economic crisis 1997/1998'</li> <li>• 'Global financial crisis 2008/2009'</li> </ul>	<ul style="list-style-type: none"> <li>• RBV</li> <li>• Stakeholder theory</li> </ul>
(Carbó-Valverde et al., 2016)	<ul style="list-style-type: none"> <li>• Trade crisis</li> <li>• Financial crisis</li> </ul>	–	RBV
(Karadağ, 2016)	Economic crisis	–	Entrepreneurial theory
(Spillan & Hough, 2003)	Economic crisis	–	Leadership theory
(Tambunan, 2020)	Economic crisis	<ul style="list-style-type: none"> <li>• The COVID-19</li> <li>• The 1997/98 Crisis</li> <li>• The 2008/09 Crisis</li> </ul>	<ul style="list-style-type: none"> <li>• RBV</li> <li>• Competitive advantage theory</li> <li>• Leadership theory</li> </ul>
(Beliaeva et al., 2020)	Economic crisis	2015–2016 Crisis	Entrepreneurial theory
(Brown & Lee, 2019)	Financial crisis	–	Competitive advantage theory
(Pal et al., 2012)	Financial crisis	2007 to 2011 crisis	Leadership theory
(Chowdhury, 2011)	Financial crisis	–	RBV
(Chor & Manova, 2012)	Financial crisis	–	Leadership theory
(Tingbani et al., 2019)	Terrorism	–	RBV
(Shimizu, 2019)	War	World War II	Competitive advantage theory
(Clark & Saade, 2011)	War	Korean war (1953)	RBV
(Prohorovs, 2022)	War	Russia-Ukraine war	Organisational theory
(Ganaie, 2020)	Terrorism	–	Keynesian theory
(Czinkota et al., 2010)	Terrorism	–	Demand-pull inflation theory
(Nafiu et al., 2014)	Terrorism	–	RBV
(Puteh et al., 2017)	War	Civil war	RBV
(Doern, 2016)	War	–	Marx's theory
(Sobaih et al., 2021)	Health crisis	COVID-19	Portfolio-balance model
(Li et al., 2022)	Health crisis	COVID-19	Leadership Theory
(Liu et al., 2020)	Health crisis	COVID-19	<ul style="list-style-type: none"> <li>• Innovation theory</li> <li>• Competitive advantage theory</li> </ul>
(Wided, 2023)	Health crisis	COVID-19	Innovation theory
(Henderson & Ng, 2004)	Health crisis	SARS	<ul style="list-style-type: none"> <li>• Entrepreneurial theory</li> <li>• Innovation theory</li> </ul>
(Lu et al., 2021)	Health crisis	COVID-19	RBV
(Zutshi et al., 2021)	Health crisis	COVID-19	RBV
(Stoop et al., 2021)	Health crisis	<ul style="list-style-type: none"> <li>• Ebola</li> <li>• COVID-19</li> </ul>	Agency theory
(H. Zhao & Chen, 2022)	Health crisis	SARS	Entrepreneurial theory
(Huang et al., 2022)	Health crisis	COVID-19	Economic theory
(Zighan et al., 2022)	Health crisis	COVID-19	Economic theory
			Entrepreneurial theory

behavioural nature of related stakeholders was explained under numerous theoretical frameworks. Therefore, various theories were incorporated in prior studies concerning SMEs and health-related crises. For instance, entrepreneurial theory was one of the principal theories employed by Zighan et al. (2022) and Field Zutshi et al. (2021). Although health-related crises cause numerous challenges, taking necessary measures could effectively achieve the required outcomes.

The concept of entrepreneurial orientation was employed to determine the organisational strategies of SMEs to enhance their resilience and survival in response to global challenges. Liu et al. (2020) also used innovation theory to examine the linkage between resilience, strategic agility and entrepreneurship in SMEs during the COVID-19 pandemic. These theories suggested that the combined effect of entrepreneurship and strategic agility is effective in determining solutions to COVID-19 issues. This finding could encourage SMEs to perform crucial measures to promote innovation processes and achieve positive outcomes. Li et al. (2022) stated that promoting innovation processes and developing new products would be effective for SMEs development during the COVID-19 crisis. Thus, the integration of innovation theory was highly critical.

Sobaih et al. (2021) employed innovation and competitive advantage theories to investigate the link between planned resilience, adaptive resilience and the performance of SMEs during the COVID-19 pandemic. Observably, such innovative strategies enhanced the performance of related firms during the COVID-19 crisis. Prior studies examining health-related crises utilised the behaviour theory, which states that an individual's surrounding environment significantly influences their behaviour. Stoop et al. (2021) mentioned that COVID-19 largely impacted the individual's behaviours compared to Ebola.

Employees' morale is usually low during a health-related crisis, which influences overall organisational resilience. Thus, Huang et al. (2022) employed behavioural theory and self-determination theory to analyse the relationship between business ethics, loss aversion, herd behaviour, the endowment effect and sustainable business resilience. Effective CSR policies during COVID-19 enhanced employees' self-determination in numerous SMEs, which encouraged their best performance even during a crisis. Considering the role of health-related crises in influencing the economic situation of a country, H. Zhao and Chen (2022) applied the economic theory to determine the effect of severe acute respiratory syndrome (SARS) on the 'total factor productivity' of numerous small enterprises in China. This theory defines the consumers and investors as efficient machines as they are considered the primary stakeholders of the SMEs, which impacts their growth and financial development. Based on this theory, the SARS pandemic significantly influenced labour productivity and SME performance.

Lu et al. (2021) employed the agency theory, which is an economic theory involving various individuals of a firm to comprehend their self-interest. An agency relationship is developed when an individual (the agent) is authorised by another person (the principal). The theoretical framework developed under this theory mainly emphasises the relationship between customers and employees during the COVID-19 outbreak. The pandemic affected employee and customer relationships, which led to negative outcomes. Therefore, vital and effective strategies were proposed. Wided (2023) explained resilience as a 'meta-capability' that significantly depends on organisational capabilities. The capability-based view theory was applied to determine the relationship between information technology capabilities, big data analytics capability, organisational resilience, strategic flexibility and SME performance during the COVID-19 situation. This application determined the significance of such innovative capabilities in enhancing SME performance during the health-related crisis to attract new stakeholders to gain effective outcomes. Henderson and Ng (2004) also utilised the dynamic capability view to determine the significance of developing innovative and effective capabilities among the employees of SMEs to achieve competitive advantage during the SARS outbreak by fulfilling the demands and requirements of related customers.

### 3.2.3. War and terrorism

War and terrorism are two critical global challenges significantly influencing the business world, specifically SMEs. Past literature has mainly emphasised the relationship between war or terrorism and SME resilience and sustainability. Numerous theoretical frameworks were developed in past studies using various theories, including the RBV, organisational theory, Keynesian theory, demand-pull inflation theory, Marx's theory, portfolio-balance model and contingency management theory. The past research included in the current study employed these theories to identify the link between SME development and global crises (terrorism and war). Past studies (Ganaie, 2020) (Czinkota et al., 2010; Tingbani et al., 2019) applied the RBV to develop an effective theoretical framework regarding SME resilience during terrorist attacks.

These studies outlined that terrorism directly or indirectly affects the financial and organisational performance of numerous businesses, specifically small businesses. Therefore, businesses could avoid this issue by establishing distinct resources and capabilities, which complicates imitating competitors. This statement supports the RBV, which emphasises the innovativeness of the resources and capabilities of a firm to achieve the required outcomes. Nonetheless, the RBV promotes competitive advantage, which encourages SMEs to consider vital steps to gain competitive advantage. Therefore, the primary focus is innovation processes and new product development. During global or national challenges, such as terrorist attacks, SMEs must use external and internal resources to fulfil public needs. This measure could sustain SME development during war or terrorism.

Nafiu et al. (2014) explained that terrorism is politically oriented and greatly influences society. Similarly, businesses, such as small firms are largely impacted by terrorism compared to large companies. Therefore, Nafiu et al. (2014) used Marx's theory to determine the effect of terrorism on SME resilience



in comparison to large companies. This situation represents the reality of a society where power holds all the privileges and the weak have to suffer all consequences. In contrast, Shimizu (2019) integrated the organisational theory to determine the linkage between organisational forms and the financial development of SMEs during World War II. This theory mainly emphasises the relationship between the firms and their environment, which determines their influence on organisational functions. This situation indicates that resource distribution among SMEs and large companies during the war is significantly disrupted, which negatively impacts SME survival. Contrarily, Clark and Saade (2011) stated that after the Korean War in 1953, SMEs were not given equal chances in financial support or other crucial resources, which resulted in the downfall of these firms. This concept was explained using the Keynesian theory, which states that inflation is substantially impacted by aggregate demand and the lack of resources in SMEs, which affects the overall productivity of the required goods by the public.

Prohorovs (2022) emphasised the effect of the Russia-Ukraine war on higher inflation rates. The demand-pull inflation theory was utilised to determine the relationship between the war and the higher inflation rates. Observably, the political instability and other issues from the Russia-Ukraine war impacted the overall supplies of goods to the related audience, which increased the prices of numerous goods. The situation affected almost all countries. During the war, the risks drastically increased for the investors, which prevented them from making any extra investments in numerous businesses. This situation largely impacts SMEs performance as they depend on external investments to perform their day-to-day operations.

Puteh et al. (2017) integrated the portfolio-balance model, which discusses the balance promoted by the investors between high-return investments and safe-return investments to maintain a balance in their portfolios during the civil war. This situation negatively influenced SME development and survival during the war. Moreover, Doern (2016) highlighted the relationship between management and employee engagement in small firms during the war. The contingency theory was applied, which emphasises an effective leadership style adopted by a manager to manage uncertain situations (in this case, war). This finding revealed the vital role played by the management of SMEs in affecting the financial and organisational performance of the firm during global crises.

#### 4. Discussion and suggestions

A systematic literature review was performed among studies published between 1922 and 2022 regarding the survival theories for SMEs worldwide during global or local crises. The systematic review revealed that most crises impacted SMEs, which are classified as health, financial, or economic and local or global upheaval in response to terrorism, political discord, or war-like situations. Although such crises and the responses of SMEs were examined in previous systematic reviews (Abed, 2022; Hossain et al., 2022; Naradda Gamage et al., 2019, 2020), few studies emphasised the theories used under this perspective. This gap was addressed in the current study and the identified theories are summarised in Table 5. A total of 19 theories were applied in the reported literature, including economic or financial theories, such as Marx's theory, Q-theory, Economic Theory, Keynesian Theory, management theories, such as agency-based management, leadership theory, stakeholder theory, institutional or organisational theory and resource and capability theories, such as RBV, KBV and competitive advantage.

Figure 10 illustrates that the RBV was the most quoted theory in the reviewed literature. A total of 15 out of 40 papers used this theory to explain their resilience and survival-building strategies for SMEs. Furthermore, the leadership theory and competitive advantage theory were used in six papers each. These three theories were used collectively in most papers. Three and five papers used innovation theory and entrepreneurial theory, respectively. Meanwhile, innovation theory and entrepreneurial theory were mainly applied collectively and interchangeably.

RBV was the most quoted theory in the reviewed literature. A total of 15 out of 40 papers used this theory to explain their resilience and survival-building strategies for SMEs. Furthermore, the leadership theory and competitive advantage theory were used in six papers each. These three theories were used collectively in most papers. Three and five papers used innovation theory and entrepreneurial theory, respectively. Meanwhile, innovation theory and entrepreneurial theory were mainly applied collectively and interchangeably.

**Table 5.** Theoretical summary.

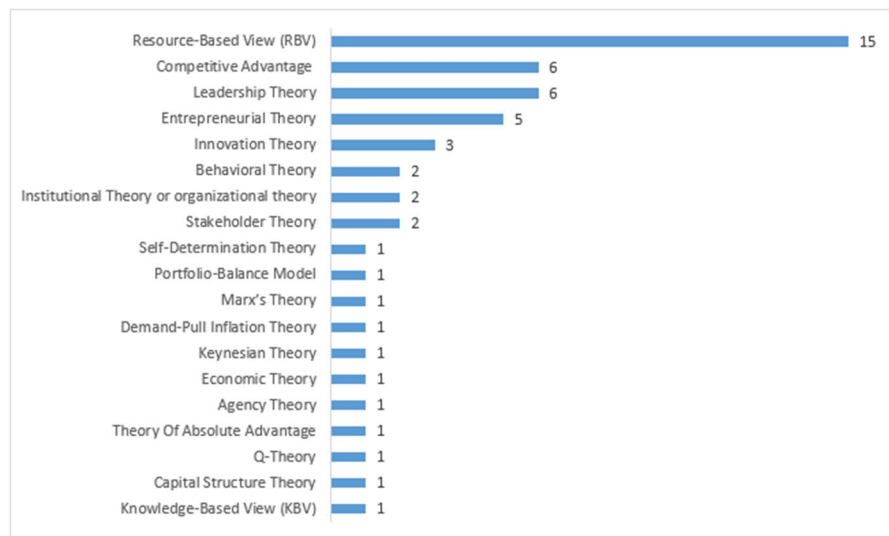
Theory	Explanation	SME survival context	References
Resource-Based View	Possession of strategic resources allows a company to be competitive.	Development of intangible, tangible, financial, human, and other similar resources to maximise the capabilities and capacities of SMEs that enable long-term survival.	(Alberti et al., 2018; Carbó-Valverde et al., 2016; Chor & Manova, 2012; Chowdhury, 2011; Cowling et al., 2015; Czinkota et al., 2010; Ganaie, 2020; Henderson & Ng, 2004; Muhammad et al., 2010; Pal et al., 2014; Tambunan, 2019, 2020; Tingbani et al., 2019; Varum & Rocha, 2013; Wided, 2023)
Leadership Theory	Leadership theory focuses on building moral standards and ethics that leaders follow to enhance the performance of companies.	The usage of effective leadership allows SMEs to develop and survive in the occurrence of any crisis.	(Chowdhury, 2011; Doern, 2016; Pal et al., 2012, 2014; Spillan & Hough, 2003; Tambunan, 2020)
Competitive Advantage	Making decisions based on the maximisation of competitive advantage allow companies to thrive.	Competitive advantage is the key to sales success and high profitability. Being excellent in a certain specific area that customers value is essential.	(Brown & Lee, 2019; Chor & Manova, 2012; Muhammad et al., 2010; Pal et al., 2014; Sobaih et al., 2021; Tambunan, 2020)
Stakeholder Theory	Stakeholder theory focuses on the capitalisation of the relationship between a business and its stakeholders.	During a crisis or in the recovery stages, a company, specifically SMEs can only survive if they are supported by various stakeholders, such as investors and customers.	(Magrizos et al., 2021; Tambunan, 2019)
Institutional Theory or Organisational Theory	The adoption of formal organisational structures to maximise resilience in business organisations	Companies that adopt standard practices and policies off organisational structures during crises leads to enhancing performance as these policies and practices are already tested and are well known.	(Shimizu, 2019; Smallbone et al., 2012)
Knowledge-Based View	Maximisation of knowledge used to support transformation	Companies encountering a crisis can use the knowledge resources to create innovative solutions that can lead to enhancing performance and survival outcomes.	(Cowling et al., 2015)
Capital Structure Theory	The value of a firm increases to a certain level of debt capital, which decreases if the borrowing continues.	The SMEs need to check their borrowing limits during crises to prevent loss.	(Proença et al., 2014)
Q-Theory	The theory of real investment that states investments increased with 'Q', which is the ratio of the market value of a company to the capital replacement cost.	The SMEs should avoid new investments during a crisis.	(Zubair et al., 2020)
Entrepreneurial Theory	Entrepreneurial actions that lead to the development of new products, services, and processes allow business improvement.	During crises, entrepreneurial behaviour maximises any opportunities in the external environment and allows SMEs to seek innovative ways to survive.	(Beliaeva et al., 2020; Karadağ, 2016; Liu et al., 2020; Zighan et al., 2022; Zutshi et al., 2021)
Theory of Absolute Advantage	Theory of absolute advantage means that one company has an absolute advantage in producing some product or service compared to its competitors.	In times of crisis, companies should maximise the production of products and services that they excel in compared to their competitors, which enables utilising their resources in the best possible way to ensure company survival and performance.	(Y. Zhao, 2009)
Innovation Theory	The innovation theory of entrepreneurship suggests that entrepreneurs create innovative disruptions that lead to better performance of organisations.	The SMEs can improve their organisational outcomes if entrepreneurs can cause innovative disruptions.	(Li et al., 2022; Liu et al., 2020; Sobaih et al., 2021)
Agency Theory	This is an economic theory that views a firm in the form of a set of contracts that exist among self-interested individuals.	The employees and stakeholders of an SME should not follow self-interests. However, organisational interests must be prioritised during crises.	(Lu et al., 2021)

(Continued)

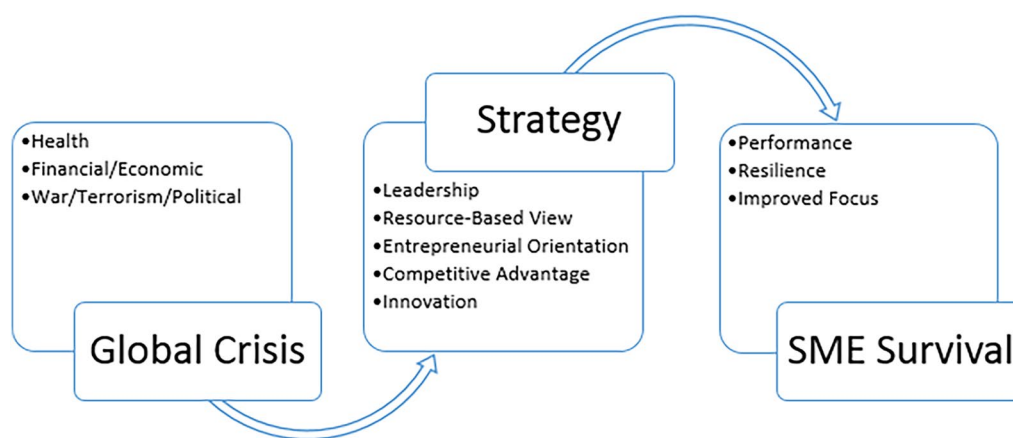


**Table 5.** Continued.

Theory	Explanation	SME survival context	References
Behavioural Theory	Behaviours are learned by interacting with the environment.	The SMEs can develop the best strategies based on the requirements within their external environment during a crisis.	(Huang et al., 2022; Stoop et al., 2021)
Economic Theory	Investors and consumers make the best choices for themselves.	Stakeholders of SMEs should make the best choices for company survival.	(H. Zhao & Chen, 2022)
Keynesian Theory	The Keynesian theory concerns the impact of demand on economic output and inflation.	Aggregate demand should be managed keenly by SMEs.	(Clark & Saade, 2011)
Demand-Pull Inflation Theory	Inflation occurs if the demand for goods exceeds the existing suppliers.	To control the inflation of prices, SMEs should manage their production in a way that demand can be matched during crises.	(Prohorovs, 2022)
Marx's Theory	Marx's theory outlines that social class differences between the working class and capitalists lead to exploitation.	The SMEs should avoid capitalism.	(Nafiu et al., 2014)
Portfolio-Balance Model	The PBM is an economic model of interest rates.	The PBM considers two types of assets, including domestic currency and some alternative resource, such as foreign currency, or gold. During a war, the value of financial currencies become weak, and companies might consider substitute currencies, such as gold for trade continuity and survival.	(Puteh et al., 2017)
Self-Determination Theory	Self-determination theory highlights human motivation, personality, and psychological needs of human resources that lead to growth on personal and organisational levels.	Companies that focus on the three basic needs of competence, autonomy, and relatedness of the employees can thrive under crises as the employees' capabilities to manage negative reinforcers in the environment are maximised.	(Huang et al., 2022)

**Figure 10.** Number of mentions for each theory in reviewed literature.

The top three theories, RBV, competitive advantage and leadership theory, are primarily employed by companies to enhance survival skills. An organisation is a bundle of resources and capabilities that do not work in isolation but instead as a single unit to improve competitiveness and performance outcomes (Chumphong et al., 2020; Khana et al., 2020; Lukovszki et al., 2021). Additionally, competitiveness is a



**Figure 11.** Conceptual framework.

multidimensional construct utilised to enhance organisational functioning and capabilities (Haseeb et al., 2019; Wijaya & Suasih, 2020). Similarly, effective leadership is as critical as any other resource for a company to maximise performance.

The SMEs that encounter any future global-level crisis could utilise these strategies that highlight the utilisation of resources and leadership capabilities at their disposal to maximise competitive advantage and increase survival chances (Falahat et al., 2018; Lewandowska et al., 2021; Marcati et al., 2008). It is consistent with recently conducted study for instance, Thomas and Douglas (2024) stated that SMEs must develop their agility as an internal source to better survive and reduce reliance on external factors. It is also proposed in Figure 11 that innovation as a potential strategic choice can help organisations to survive in times of crisis. Furthermore, intense competition or a turbulent environment in SMEs might be due to several global health and financial level crises or global or local upheaval due to war or terrorism. Innovative entrepreneurship is a key resource that could enhance survivability. The conceptual framework in Figure 11 summarises the findings in the form of crisis occurrence, strategy response and SME survival outcomes in performance, resilience and improvement of process focus.

## 5. Conclusion

A systematic literature review was conducted on past studies from 1922 to 2022 to explore the strategies SMEs used to survive global crises. The current study provided information on the influence of various global crises (health, war, trade, financial, economic and terrorism-related crises) on the development and performance of SMEs globally. The finding has provided in depth review on the literature and pointed out that different strategic choices such as entrepreneurial strategy and innovation strategy etc. can potentially help SMEs to survive in times of crisis. The SMEs could ensure the maintenance and effective productivity during the global crisis by taking the most suitable strategy to ensure maximum utilisation of resources and leadership to enhance competitive advantage and entrepreneurial innovation. These strategies prevent the influence of the crisis on employment opportunities and production capabilities of SMEs. Such strategies also increase SMEs financial opportunities and promote effective collaborations between SMEs and large companies and numerous entrepreneurial opportunities. For instance, a recently conducted study Thomas and Douglas (2024) contended that firms must use ambidexterity, absorptive capacity and agility for reconfiguration of internal resources and reduce their dependency on external resources. Therefore, increasing self-reliance may result in their superior performance. This study has highlighted various strategies for example innovation, so organisations can invest their resources in such strategic choices to better emerge as an agile organisation and better deal with the crisis.

This study performed a literature review analysis to investigate past theories used for SME survival during various global crises. Hence, the literature review involved no strict time restrictions (between 2000 and 2022). This study revealed various theoretical approaches by which the SMEs can survive in their times of crisis. For instance, companies encountering a crisis can use the knowledge resources to

create innovative solutions that can lead to enhancing performance and survival outcomes. Additionally, they can reduce their financing to deal with the potential loss and start investing in the new ventures. The literature also revealed that SMEs need to manage their production such that they meet the demand in times of crisis. And, from the human resources perspective, SMEs can extend their focus on the competence, autonomy and embeddedness of the employees to better manage the employees' capabilities to manage negative reinforcers in the environment are maximised. Future studies are suggested to examine the presented framework and outline one type of crisis to improve the generalisability of provided solutions. Researchers could investigate the application and effectiveness of the identified strategic choices, such as entrepreneurial strategy and innovation strategy, in the context of diverse global crises, including health, war, trade, financial, economic and terrorism-related crises. Additionally, examining the dynamic interplay between these strategies and their impact on SMEs' survival during crises could provide valuable insights. Furthermore, longitudinal studies could explore the long-term effects of these strategies on SMEs' development and performance, shedding light on sustained resilience and adaptability.

### Authors' contributions

**Saadon Mohamed Senin:** Conceptualisation, Writing- Original draft, Methodology. **Noor Hasni Juhdi:** Visualisation, Investigation. **Ahmad Rafli Che Omar:** Software, Validation, Writing- Reviewing and Editing, **Noor Azuan Hashim:** Supervision, Resources, Project Administration

### Disclosure statement

No potential conflict of interest was reported by the author(s).

### Permission to reproduce material

All the materials have been cited and permissions obtained from Other Sources if necessary

### Funding

This research study is funding by Universiti Kebangsaan Malaysia.

### About the authors

**Saadon Mohamed Senin**, Faculty of Economics and Management. Research Interest: Entrepreneurship & Business Continuity Plan.

**Noor Hasni Juhdi**, Faculty of Economics and Management. Research Interest: Management, Organisational Behaviour, Entrepreneurship, Innovation Management & Strategic Management.

**Ahmad Rafli Che Omar**, Faculty of Economics and Management. Research Interest: Management, Organisational Behavior, Entrepreneurship & Finance.

**Noor Azuan Hashim**, Faculty of Economics and Management. Research Interest: Innovation, E-commerce and Entrepreneurship.

### Data availability statement

Data is available from corresponding author on request.

### References

- Abed, S. S. (2022). A literature review exploring the role of technology in business survival during the Covid-19 lockdowns. *International Journal of Organizational Analysis*, 30(5), 1045–1062. <https://doi.org/10.1108/IJOA-11-2020-2501>
- Alberti, F. G., Ferrario, S., & Pizzurno, E. (2018). Resilience: Resources and strategies of SMEs in a new theoretical framework. *International Journal of Learning and Intellectual Capital*, 15(2), 165–188. <https://doi.org/10.1504/IJLIC.2018.091969>

- AlQershi, N., Saufi, R. B. A., Ismail, N. A., Mohamad, M. R. B., Ramayah, T., Muhammad, N. M. N., & Yusoff, M. N. H. B. (2023). The moderating role of market turbulence beyond the Covid-19 pandemic and Russia-Ukraine crisis on the relationship between intellectual capital and business sustainability. *Technological Forecasting and Social Change*, 186, 122081. <https://doi.org/10.1016/j.techfore.2022.122081>
- Asgary, A., Ozdemir, A. I., & Özyürek, H. (2020). Small and medium enterprises and global risks: Evidence from manufacturing SMEs in Turkey. *International Journal of Disaster Risk Science*, 11(1), 59–73. <https://doi.org/10.1007/s13753-020-00247-0>
- Beliaeva, T., Shirokova, G., Wales, W., & Gafforova, E. (2020). Benefiting from economic crisis? Strategic orientation effects, trade-offs, and configurations with resource availability on SME performance. *International Entrepreneurship and Management Journal*, 16(1), 165–194. <https://doi.org/10.1007/s11365-018-0499-2>
- Brown, R., & Lee, N. (2019). Strapped for cash? Funding for UK high growth SMEs since the global financial crisis. *Journal of Business Research*, 99, 37–45. <https://doi.org/10.1016/j.jbusres.2019.02.001>
- Carbó-Valverde, S., Rodríguez-Fernández, F., & Udell, G. F. (2016). Trade credit, the financial crisis, and SME access to finance. *Journal of Money, Credit and Banking*, 48(1), 113–143. <https://doi.org/10.1111/jmcb.12292>
- Chigbu, U. E., Atiku, S. O., & Du Plessis, C. C. (2023). The science of literature reviews: Searching, identifying, selecting, and synthesising. *Publications*, 11(1), 2. <https://doi.org/10.3390/publications11010002>
- Chikweche, T., & Chaora, B. (2023). Reimagining survival under COVID-19: A micro-business perspective of navigating constant disruption in Zimbabwe. *Journal of the International Council for Small Business*, 4(1), 1–11. <https://doi.org/10.1080/26437015.2022.2108739>
- Chor, D., & Manova, K. (2012). Off the cliff and back? Credit conditions and international trade during the global financial crisis. *Journal of International Economics*, 87(1), 117–133. <https://doi.org/10.1016/j.jinteco.2011.04.001>
- Chowdhury, S. R. (2011). Impact of global crisis on small and medium enterprises. *Global Business Review*, 12(3), 377–399. <https://doi.org/10.1177/097215091101200303>
- Chumphong, O., Srimai, S., & Potipiroon, W. (2020). The resource-based view, dynamic capabilities and SME performance for SMEs to become smart enterprises. *ABAC ODI Journal Vision. Action. Outcome*, 7(2), 129.
- Clark, M., & Saade, R. (2011). The role of small business in economic development of the United States: From the end of the Korean War (1953) to the present. Available at SSRN 1803161
- Cowling, M., Liu, W., Ledger, A., & Zhang, N. (2015). What really happens to small and medium-sized enterprises in a global economic recession? UK evidence on sales and job dynamics. *International Small Business Journal: Researching Entrepreneurship*, 33(5), 488–513. <https://doi.org/10.1177/0266242613512513>
- Czinkota, M. R., Knight, G., Liesch, P. W., & Steen, J. (2010). Terrorism and international business: A research agenda. *Journal of International Business Studies*, 41(5), 826–843. <https://doi.org/10.1057/jibs.2010.12>
- DiBella, J., Forrest, N., Burch, S., Rao-Williams, J., Ninomiya, S. M., Hermelingmeier, V., & Chisholm, K. (2023). Exploring the potential of SMEs to build individual, organizational, and community resilience through sustainability-oriented business practices. *Business Strategy and the Environment*, 32(1), 721–735. <https://doi.org/10.1002/bse.3171>
- Doern, R. (2016). Entrepreneurship and crisis management: The experiences of small businesses during the London 2011 riots. *International Small Business Journal: Researching Entrepreneurship*, 34(3), 276–302. <https://doi.org/10.1177/0266242614553863>
- Dymont, J. E., & Downing, J. J. (2020). Online initial teacher education: A systematic review of the literature. *Asia-Pacific Journal of Teacher Education*, 48(3), 316–333. <https://doi.org/10.1080/1359866X.2019.1631254>
- Erdiaw-Kwasie, M. O., Abunyewah, M., Yusif, S., & Arhin, P. (2023). Small and medium enterprises (SMEs) in a pandemic: A systematic review of pandemic risk impacts, coping strategies and resilience. *Heliyon*, 9(10), e20352. <https://doi.org/10.1016/j.heliyon.2023.e20352>
- Falahat, M., Tehseen, S., & Van Horne, C. (2018). Entrepreneurial innovativeness and its impact on SMES' performances. *International Journal of Entrepreneurship*, 22(3), 1–9.
- Fouskas, K., Pachni-Tsitiridou, O., & Chatziharistou, C. (2020). A systematic literature review on E-commerce success factors. *Strategic Innovative Marketing and Tourism*, 687–694.
- Ganaie, M. A. (2020). Global terrorism and its impact on business. *Research Review International Journal of Multidisciplinary*, 5(1), 15–17.
- Haseeb, M., Hussain, H. I., Kot, S., Androniceanu, A., & Jermisittiparsert, K. (2019). Role of social and technological challenges in achieving a sustainable competitive advantage and sustainable business performance. *Sustainability*, 11(14), 3811. <https://doi.org/10.3390/su11143811>
- Henderson, J. C., & Ng, A. (2004). Responding to crisis: Severe acute respiratory syndrome (SARS) and hotels in Singapore. *International Journal of Tourism Research*, 6(6), 411–419. <https://doi.org/10.1002/jtr.505>
- Hossain, M. R., Akhter, F., & Sultana, M. M. (2022). SMEs in covid-19 crisis and combating strategies: A systematic literature review (SLR) and A case from emerging economy. *Operations Research Perspectives*, 9, 100222. <https://doi.org/10.1016/j.orp.2022.100222>
- Huang, X., Chau, K. Y., Tang, Y. M., & Iqbal, W. (2022). Business ethics and irrationality in SME during COVID-19: Does it impact on sustainable business resilience? *Frontiers in Environmental Science*, 10, 870476. <https://doi.org/10.3389/fenvs.2022.870476>
- Karadağ, H. (2016). The role of SMEs and entrepreneurship on economic growth in emerging economies within the post-crisis era: An analysis from Turkey. *Journal of Small Business and Entrepreneurship Development*, 4(1), 22–31.

- Khaldi, A., Bouzidi, R., & Nader, F. (2023). Gamification of e-learning in higher education: a systematic literature review. *Smart Learning Environments*, 10(1), 1–31.
- Khana, M. P., Talibb, N. A., & Kowangc, T. O. (2020). The development of a sustainability framework via lean green six sigma practices in SMEs based upon RBV theory. *Development*, 12(5), 135–156.
- Lewandowska, A., Stopa, M., & Inglot-Brzęk, E. (2021). Innovativeness and entrepreneurship: Socioeconomic remarks on regional development in peripheral regions. *Economics & Sociology*, 14(2), 222–235. <https://doi.org/10.14254/2071-789X.2021/14-2/12>
- Li, Y., Chen, H., Wei, L., & Wei, L. (2022). COVID-19 pandemic and SMEs performance decline: The mediating role of management innovation and organizational resilience. *Frontiers in Public Health*, 10, 944742. <https://doi.org/10.3389/fpubh.2022.944742>
- Liu, Y., Lee, J. M., & Lee, C. (2020). The challenges and opportunities of a global health crisis: The management and business implications of COVID-19 from an Asian perspective. *Asian Business & Management*, 19(3), 277–297. <https://doi.org/10.1057/s41291-020-00119-x>
- Lu, L., Peng, J., Wu, J., & Lu, Y. (2021). Perceived impact of the Covid-19 crisis on SMEs in different industry sectors: Evidence from Sichuan, China. *International Journal of Disaster Risk Reduction: IJDRR*, 55, 102085. <https://doi.org/10.1016/j.ijdr.2021.102085>
- Lukovszki, L., Rideg, A., & Sipos, N. (2021). Resource-based view of innovation activity in SMEs: An empirical analysis based on the global competitiveness project. *Competitiveness Review: An International Business Journal*, 31(3), 513–541. <https://doi.org/10.1108/CR-01-2020-0018>
- Magrizos, S., Apospori, E., Carrigan, M., & Jones, R. (2021). Is CSR the panacea for SMEs? A study of socially responsible SMEs during economic crisis. *European Management Journal*, 39(2), 291–303. <https://doi.org/10.1016/j.emj.2020.06.002>
- Marcati, A., Guido, G., & Peluso, A. M. (2008). The role of SME entrepreneurs' innovativeness and personality in the adoption of innovations. *Research Policy*, 37(9), 1579–1590. <https://doi.org/10.1016/j.respol.2008.06.004>
- Muhammad, M. Z., Char, A. K., bin Yaso, M. R., & Hassan, Z. (2010). Small and medium enterprises (SMEs) competing in the global business environment: A case of Malaysia. *International Business Research*, 3(1), 66. <https://doi.org/10.5539/ibr.v3n1p66>
- Nafiu, A., Okpanachi, E., & Nurudeen, Z. (2014). An examination of the impact of terrorism on small and medium scale enterprises' mortality rates and standard of living in the Northern Region of Nigeria. *International Journal of Innovation and Applied Studies*, 7(4), 1400.
- Naradda Gamage, S. K., Ekanayake, E., Abeyrathne, G., Prasanna, R., Jayasundara, J., & Rajapakshe, P. (2019). Global challenges and survival strategies of the SMEs in the era of economic globalization: A systematic review. MPRA Paper. 1-29. <https://mpra.ub.uni-muenchen.de/98419/>
- Naradda Gamage, S. K., Ekanayake, E., Abeyrathne, G., Prasanna, R., Jayasundara, J., & Rajapakshe, P. (2020). A review of global challenges and survival strategies of small and medium enterprises (SMEs). *Economies*, 8(4), 79. <https://doi.org/10.3390/economies8040079>
- Pal, R., Andersson, R., & Torstensson, H. (2012). Organisational resilience through crisis strategic planning: A study of Swedish textile SMEs in financial crises of 2007–2011. *International Journal of Decision Sciences, Risk and Management*, 4(3/4), 314–341. <https://doi.org/10.1504/IJDSRM.2012.053372>
- Pal, R., Torstensson, H., & Mattila, H. (2014). Antecedents of organizational resilience in economic crises—An empirical study of Swedish textile and clothing SMEs. *International Journal of Production Economics*, 147, 410–428. <https://doi.org/10.1016/j.jipe.2013.02.031>
- Parayil Iqbal, U., Kumar Nooney, L., Mathew Jose, S., & Abraham Chacho, S. (2023). How did the SMEs weather the storm: An empirical inquiry into the working capital management during the times of external shock. *Journal of the International Council for Small Business*, 4(4), 413–435. <https://doi.org/10.1080/26437015.2023.2201690>
- Pathak, M. D., Kar, B., Panigrahi, R. R., & Shrivastava, A. K. (2024). Role of entrepreneurial resilience in SMEs to promote marketing and entrepreneurship amid Covid19 challenges. *Journal of Research in Marketing and Entrepreneurship*, 26(1), 44–62. <https://doi.org/10.1108/JRME-04-2022-0050>
- Proença, P., Laureano, R. M., & Laureano, L. M. (2014). Determinants of capital structure and the 2008 financial crisis: Evidence from Portuguese SMEs. *Procedia - Social and Behavioral Sciences*, 150, 182–191. <https://doi.org/10.1016/j.sbspro.2014.09.027>
- Prohorovs, A. (2022). Russia's war in Ukraine: Consequences for European countries' businesses and economies. *Journal of Risk and Financial Management*, 15(7), 295. <https://doi.org/10.3390/jrfm15070295>
- Puteh, S., Mada, R., & Hasan, A. (2017). *Teaching and learning innovation among trainer lecturer: a case study of undergraduate students teaching training program at the Polytechnic, Ministry of Higher Education Malaysia* [Paper presentation]. International Conference on Technology and Vocational Teachers (ICTVT 2017). <https://doi.org/10.2991/ictvt-17.2017.45>
- Shimizu, T. (2019). Small and medium-sized enterprises and their use of organizational forms in Japan after World War II. *Management & Organizational History*, 14(4), 423–441. <https://doi.org/10.1080/17449359.2019.1659823>
- Smallbone, D., Deakins, D., Battisti, M., & Kitching, J. (2012). Small business responses to a major economic downturn: Empirical perspectives from New Zealand and the United Kingdom. *International Small Business Journal: Researching Entrepreneurship*, 30(7), 754–777. <https://doi.org/10.1177/0266242612448077>



- Sobaih, A. E. E., Elshaer, I., Hasanein, A. M., & Abdelaziz, A. S. (2021). Responses to COVID-19: The role of performance in the relationship between small hospitality enterprises' resilience and sustainable tourism development. *International Journal of Hospitality Management*, 94, 102824. <https://doi.org/10.1016/j.ijhm.2020.102824>
- Spillan, J., & Hough, M. (2003). Crisis planning in small businesses: Importance, impetus and indifference. *European Management Journal*, 21(3), 398–407. [https://doi.org/10.1016/S0263-2373\(03\)00046-X](https://doi.org/10.1016/S0263-2373(03)00046-X)
- Stoop, N., Desbureaux, S., Kaota, A., Lunanga, E., & Verpoorten, M. (2021). Covid-19 vs. Ebola: Impact on households and small businesses in North Kivu, Democratic Republic of Congo. *World Development*, 140, 105352. <https://doi.org/10.1016/j.worlddev.2020.105352>
- Tambunan, T. (2020). MSMEs in times of crisis. evidence from Indonesia. *Journal of Developing Economies*, 5(2), 91. <https://doi.org/10.20473/jde.v5i2.20848>
- Tambunan, T. T. (2019). The impact of the economic crisis on micro, small, and medium enterprises and their crisis mitigation measures in Southeast Asia with reference to Indonesia. *Asia & the Pacific Policy Studies*, 6(1), 19–39. <https://doi.org/10.1002/app5.264>
- Thomas, G. H., & Douglas, E. J. (2024). Resource reconfiguration by surviving SMEs in a disrupted industry. *Journal of Small Business Management*, 62(1), 140–174. <https://doi.org/10.1080/00472778.2021.2009489>
- Tingbani, I., Okafor, G., Tauringana, V., & Zalata, A. M. (2019). Terrorism and country-level global business failure. *Journal of Business Research*, 98, 430–440. <https://doi.org/10.1016/j.jbusres.2018.08.037>
- Varum, C. A., & Rocha, V. C. (2013). Employment and SMEs during crises. *Small Business Economics*, 40(1), 9–25. <https://doi.org/10.1007/s11187-011-9343-6>
- Wided, R. (2023). IT capabilities, strategic flexibility and organizational resilience in SMEs post-COVID-19: A mediating and moderating role of big data analytics capabilities. *Global Journal of Flexible Systems Management*, 24(1), 123–142. <https://doi.org/10.1007/s40171-022-00327-8>
- Wijaya, P. Y., & Suasih, N. N. R. (2020). The effect of knowledge management on competitive advantage and business performance: A study of silver craft SMEs. *Entrepreneurial Business and Economics Review*, 8(4), 105–121. <https://doi.org/10.15678/EBER.2020.080406>
- Zhao, H., & Chen, N. (2022). Medium and long-term impact of SARS on total factor productivity (TFP): Empirical evidence from Chinese industrial enterprises. *Journal of Asian Economics*, 82, 101507. <https://doi.org/10.1016/j.asieco.2022.101507>
- Zhao, Y. (2009). Research on the Approaches of the participation of China's SMEs in International Trade under Financial Crisis. *International Journal of Business and Management*, 5(1), 69. <https://doi.org/10.5539/ijbm.v5n1p69>
- Zighan, S., Abualqumboz, M., Dwaikat, N., & Alkalha, Z. (2022). The role of entrepreneurial orientation in developing SMEs resilience capabilities throughout COVID-19. *The International Journal of Entrepreneurship and Innovation*, 23(4), 227–239. <https://doi.org/10.1177/14657503211046849>
- Zubair, S., Kabir, R., & Huang, X. (2020). Does the financial crisis change the effect of financing on investment? Evidence from private SMEs. *Journal of Business Research*, 110, 456–463. <https://doi.org/10.1016/j.jbusres.2020.01.063>
- Zutshi, A., Mendy, J., Sharma, G. D., Thomas, A., & Sarker, T. (2021). From challenges to creativity: Enhancing SMEs' resilience in the context of COVID-19. *Sustainability*, 13(12), 6542. <https://doi.org/10.3390/su13126542>