



African Journal of Biological Sciences



Pandemic Resilience: The Impact of COVID-19 on the Growth and Sustainability of Small Entrepreneurs – Structural Equation Modeling Study Using Smart PLS 4.0

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Article History

Volume 6, Issue Si4, July 2024

Received: 5 July 2024

Accepted: 30 July 2024

Published :4 August 2024

Doi:

10.48047/AFJBS.6.Si4.2024.5242-5260

Abstract

This study examines the impact of the COVID-19 pandemic on the growth and sustainability of small entrepreneurs in India using structural equation modeling with Smart PLS 4.0. The research investigates the relationships between Market Access (MA), Entrepreneurial Resilience (ER), Business Agility (BA), and Business Sustainability (BS). Data was collected from 275 small business entrepreneurs in India using a cross-sectional survey design. The results indicate that Business Agility positively influences Business Sustainability, and Entrepreneurial Resilience positively affects Business Agility. Market Access was found to enhance both Business Agility and Business Sustainability. Interestingly, the direct effect of Entrepreneurial Resilience on Business Sustainability was not supported, suggesting the importance of mediating factors. The study highlights the critical roles of Business Agility and Market Access as intermediaries that strengthen the overall resilience and sustainability of small businesses in the face of crises like the COVID-19 pandemic.

Keywords: Market Access (MA), Entrepreneurial Resilience (ER), Supply Chain Stability (SCS), Business Agility (BA), Social Capital (SC), Business Sustainability (BS)

1.Introduction

The COVID-19 pandemic has presented unprecedented challenges for small businesses and entrepreneurs worldwide (Nichifor et al., 2022; Najib et al., 2021). Recent research has highlighted that entrepreneurs have responded to the crisis with more resilient business models, underscoring the critical role of resilience in enabling small firms to survive during such turbulent times (Najib et al., 2021). The pandemic has brought to the forefront the importance of digital transformation and online interaction for small and medium enterprises (SMEs) to thrive (Nichifor et al., 2022). In the face of lockdowns, business closures, and supply chain disruptions, SMEs have had to rapidly pivot their business models to leverage digital technologies and adapt to the changing environmental factors (Nichifor et al., 2022).

Moreover, emerging economies have been particularly vulnerable, as SMEs in these contexts often have limited resources and face challenges in their supply chains and business relationships. Innovation has been identified as a key strategy for these enterprises to recover from the pandemic's impact and position themselves for long-term sustainability (Caballero-Morales, 2021). Understanding the factors that influence the resilience and growth of small entrepreneurs during the COVID-19 crisis is crucial for informing policy and supporting the recovery of this vital economic sector. This study aims to employ a structural equation modeling approach using Smart PLS 4.0 to examine the impact of various entrepreneurial, firm, and environmental factors on the resilience and sustainable growth of small businesses in the pandemic context (Le et al., 2020). By identifying the key determinants of resilience and growth, this research will provide valuable insights to policymakers, business support organizations, and small entrepreneurs themselves, enabling them to develop targeted strategies and interventions to foster the survival and long-term sustainability of small enterprises amidst the ongoing challenges posed by the pandemic (Fairlie, 2020). The COVID-19 pandemic has had an unprecedented and far-reaching impact on the global community since its emergence in late 2019. The sheer scale and speed of the outbreak have led to a rapid proliferation of research and scholarly publications across various disciplines, as the scientific community has sought to understand, mitigate, and respond to the multifaceted challenges posed by this public health crisis (Delardas & Giannos, 2022).

1.1 Overview of COVID-19 pandemic and its global impact

A significant proportion of the existing literature on COVID-19 has focused on the direct health impacts of the virus, including the epidemiology, clinical characteristics, and treatment of the disease (Delardas & Giannos, 2022). However, the pandemic has also had profound indirect effects, such as the widespread implementation of infection control measures like lockdowns, quarantines, and social distancing, which have disrupted social, economic, and psychological well-being on a global scale (Hall et al., 2021; Kohale et al., 2021; Mishra et al., 2020). The mental health consequences of the COVID-19 pandemic have been a particularly salient area of research, with numerous systematic reviews and meta-analyses examining the prevalence of conditions like anxiety, depression, and post-traumatic stress disorder among various populations (Bower et al., 2023; Kola et al., 2021; Santomauro et al., 2021). Researchers have identified several key factors that have contributed to the adverse mental health impacts of COVID-19, including social isolation, financial insecurity, disruptions to daily routines, and difficulties in accessing mental health services (Kola et al., 2021; Sacco et al., 2023). The pandemic has also exacerbated pre-existing disparities in mental health, with low-income and middle-income countries facing unique challenges in addressing the mental health needs of their populations (Kola et al., 2021). While the COVID-19 pandemic has undoubtedly had significant mental health consequences, it is important to consider potential counterpoints and alternative perspectives. Some researchers have argued that the pandemic may have also had positive effects on mental health for certain individuals or groups (Patel et al., 2023).

1.2 Importance of small entrepreneurs in the economy

Small entrepreneurs have been the backbone of the Indian economy, contributing significantly to the country's economic growth and development. These small businesses, commonly referred to as Micro, Small, and Medium Enterprises (MSMEs), play a crucial role in employment generation, output, exports, poverty alleviation, and economic empowerment (Garg, 202; Devi & Ramachandran, 2011; Singh et al., 2015; Nomani., 2016).

The MSME sector in India accounts for about 37% of the total manufacturing output and 33% of the country's exports (Nomani., 2016). These enterprises utilize labour-intensive production processes, which boosts employment and leads to a more equitable distribution of income (Nomani., 2016). They also provide livelihood opportunities through value-adding processing activities, particularly in agriculture-based economies, and nurture entrepreneurship by supporting the building of productive capacities and the creation of resilient economic systems through linkages between small and large enterprises (Nomani., 2016). (Singh et al., 2015). The growth of the small business sector is essential for the growth in GDP, employment generation, and total manufacturing production (Singh et al., 2015). By encouraging entrepreneurship and creating major employment opportunities at a relatively cheap capital cost, the MSME sector is the second-largest contributor to the economic and social development of the nation after agriculture (Singh & Gupta, 2023). The government has played a significant role in ensuring the growth of this sector by establishing various institutions to support it (Devi & Ramachandran, 2011). The MSME sector has filled the void of the employment crisis in India and across the world, making it a crucial player in the country's inclusive industrial growth (Singh & Gupta, 2023; Nomani., 2016).

2. Literature Review

Entrepreneurial resilience has emerged as a critical skill for entrepreneurs and small businesses to navigate challenging times, such as the COVID-19 pandemic (Castro & Zermeño, 2020). Research has highlighted three main perspectives on the effects of the crisis on entrepreneurship: the uncertainty perspective, the resilience perspective, and the opportunity perspective (Kuckertz & Brändle, 2021). The uncertainty perspective examines the significant disruptions caused by the pandemic, which have led to a high degree of volatility and unpredictability for entrepreneurs (Kuckertz & Brändle, 2021). In contrast, the resilience perspective focuses on how entrepreneurs have adapted and pivoted their business models to survive the crisis (Castro & Zermeño, 2020; Najib et al., 2021). This resilience has enabled some entrepreneurs to not only weather the storm but also identify new opportunities for growth and innovation (Kuckertz & Brändle, 2021) (Ratten, 2020). The opportunity perspective recognizes that the crisis has presented entrepreneurs with unique chances to contribute to societal well-being through innovative solutions and adaptations (Ratten, 2020). Entrepreneurs have demonstrated resilience by adopting new strategies, such as leveraging government support (Najib et al., 2021) and developing more resilient business models (Castro & Zermeño, 2020). However, not all entrepreneurs have been able to demonstrate the same level of resilience during the crisis. Some have struggled to adapt their business models and have been forced to shut down operations, leading to significant financial and personal hardship (Smallbone et al., 2012). The pandemic has highlighted the vulnerability of many small businesses, particularly those with limited resources and lack of diversification. While some entrepreneurs have found opportunities to innovate, others have faced overwhelming challenges that have tested their resilience and crisis management skills to the limit. (OECD SME and Entrepreneurship Outlook 2021, 2021)

2.1 Impact of COVID-19 on Small Businesses

The COVID-19 pandemic has had a significant impact on small businesses across the globe. The lockdowns, social distancing measures, and economic downturn have all contributed to the challenges faced by small business owners. Many have had to temporarily close their doors, leading to loss of revenue and potential bankruptcy. Others have had to adapt their business models to survive, such as transitioning to online sales or delivery services (Fairlie, 2020). The

pandemic has also highlighted the importance of having an emergency fund and diversifying revenue streams to weather such unexpected crises. Overall, the impact of COVID-19 on small businesses has been severe, and it will likely take years for many to fully recover (Bartik et al., 2020).

Several studies have explored the impact of COVID-19 on small businesses. The Resilience of Micro, Small, and Medium Enterprises in Facing COVID-19 in the Regional Economy found that the pandemic has caused significant losses for small businesses, with declines in sales, revenue, and disruptions to supply chains (Utomo et al., 2021). Similarly, The Impact of COVID-19 on Small Business Owners: The First Three Months after Social-Distancing Rest showed that small business owners experienced a sharp decline in the number of business owners in the first months of the pandemic (Fairlie, 2020). The impact on small businesses around the world is likely to be severe, as the early effects of COVID-19 on small businesses and entrepreneurs are not well known due to a lack of timely data (Fairlie, 2020). The Impact of Covid-19 on Small Business Owners: Evidence of Early-Stage Losses from the April 2020 further highlighted the financial fragility of many small businesses and the significant impact COVID-19 had on these businesses in the weeks after the disruptions began (Fairlie, 2020). The survey results provide evidence on businesses' expectations about the longer-term impact of COVID-19, as well as their perceptions of relief programs offered by the government (Bartik et al., 2020).

The impact of COVID-19 on small businesses has been severe and multifaceted. Beyond the immediate losses in sales, revenue, and supply chain disruptions, small business owners have had to grapple with the long-term uncertainty and financial fragility of their operation (Hoorens et al., 2020). Many have had to make difficult decisions to temporarily close or dramatically restructure their business models in order to survive. The pandemic has highlighted the critical importance of having emergency funds and diversified revenue streams to withstand unexpected crises (Cowling et al., 2020). While some small businesses have remained optimistic about the longer-term outlook, the road to recovery will likely be a long and challenging one for the majority. Ongoing government relief programs and other support measures will be essential to helping these enterprises navigate the continued economic turmoil caused by the COVID-19 pandemic. (Bosio et al., 2020) The COVID-19 pandemic has had a significant economic impact on small businesses worldwide, with India being no exception (Ramakumar & Kanitkar, 2020). A survey of over 5,800 small businesses in the United States revealed the financial fragility of many such enterprises, as well as the substantial impact of COVID-19 disruptions in the weeks following the onset of the pandemic (Bartik et al., 2020). Similarly, a study focusing on the Indian context found that the pandemic had far-reaching consequences for small business owners, both in the short and long term (Sahasranamam et al., 2021). The survey of Indian entrepreneurs highlighted their contributions beyond the economic considerations of their businesses, with many volunteering their time and services for societal causes during the pandemic. Additionally, the study compared the responses of Indian entrepreneurs to their peers in other Asian countries, such as Bangladesh, China, and Pakistan (Sahasranamam et al., 2021). Interestingly, the report identified four long-term trends that are likely to shape the post-COVID economy, including increased digitization, multi-sectoral collaboration, localization, and the prominence of inclusive business models (Sahasranamam et al., 2021).

Another study examining the impact of COVID-19 on micro, small, and medium enterprises (MSMEs) in Asia found that the severity of the pandemic's impact varied depending on the characteristics of the firms (Sonobe et al., 2021). The research also explored the relationship

between the use of online commerce and employment during this challenging period, as well as the government support received by these enterprises (Sonobe et al., 2021).

However, some studies have suggested that the economic impact of the pandemic on small businesses may not have been as severe as initially believed. For instance, a report examining the resilience of small businesses during the COVID-19 crisis found that many were able to adapt and even thrive despite the challenging circumstances (Alekseev et al., 2020). The report highlighted the ability of some small enterprises to pivot their business models, leverage digital technologies, and capitalize on emerging market opportunities. Furthermore, the study noted that government support and targeted interventions played a crucial role in mitigating the negative effects of the pandemic on small businesses in certain regions (Fadzil & Rashid, 2022).

2.2 Business agility

Business agility (BA) and business sustainability (BS) are two critical concepts in the modern business landscape. Business agility refers to the ability of a company to quickly adapt to changes in the market, while business sustainability focuses on the long-term viability and environmental impact of a business (So et al., 2006).

The existing literature suggests that business agility can positively influence business sustainability (Sampath & Krishnamoorthy, 2017).

Businesses that are able to quickly sense and respond to changing market conditions are better positioned to adapt their strategies and business models to address sustainability challenges (Ogrean & Herciu, 2020). This, in turn, can lead to improved financial performance, as well as a stronger alignment between the company's operations and its sustainability goals (Ogrean & Herciu, 2020).

The literature also indicates that the relationship between business agility and business sustainability may be mediated by a firm's innovation capabilities (AlTaweel & Al-Hawary, 2021). Agile organizations are better able to develop new products and processes that are more environmentally friendly and resource-efficient, ultimately enhancing their sustainability performance (AlTaweel & Al-Hawary, 2021; Geyi et al., 2020).

Furthermore, researchers have identified strategic agility as a key driver of long-term organizational effectiveness and competitive advantage, which can support a company's pursuit of sustainability (AlTaweel & Al-Hawary, 2021; Golob et al., 2020).

However, the relationship between business agility and business sustainability is not as straightforward as it may seem. While agility can enable companies to quickly adapt to changing market conditions, it does not necessarily guarantee long-term sustainability (Parida & Wincent, 2019). In fact, some studies have suggested that an excessive focus on agility can lead to a short-term, reactive mind-set that prioritizes profits over environmental and social considerations. Additionally, the costs associated with maintaining a highly agile organization may outweigh the potential benefits in terms of sustainability (El-Khalil & Mezher, 2020). Therefore, it is important for companies to strike a balance between agility and sustainability, taking a more holistic approach that considers the long-term implications of their business practices.

H1: Business agility has a positive and significance impact business sustainability.

2.3 Entrepreneurial Resilience

The COVID-19 pandemic has had a significant impact on businesses around the world, with small and medium-sized enterprises (SMEs) being particularly vulnerable. However, research has shown that entrepreneurs can demonstrate resilience in the face of such crises, adapting their business

models and finding new ways to thrive. A recent survey of Indian small business entrepreneurs captured their experiences during the pandemic, highlighting both the short-term and long-term consequences and opportunities they faced (Sahasranamam et al., 2021). The study found that Indian entrepreneurs not only had to adapt their business operations, but also contributed to their communities in meaningful ways, volunteering their time and services for societal causes (Sahasranamam et al., 2021). When compared to their peers in other Asian countries like Bangladesh, China, and Pakistan, the Indian entrepreneurs demonstrated a similar capacity for resilience and innovation (Sahasranamam et al., 2021). Moreover, the pandemic has accelerated several long-term trends that are likely to shape the post-COVID economy, including increased digitization, multi-sectoral collaboration, localization, and the prominence of inclusive business models (Sahasranamam et al., 2021). Entrepreneurs who are able to capitalize on these trends may be well-positioned for success in the years to come. The resilience of small businesses during the COVID-19 crisis has also been observed in other contexts.

However, the resilience of small businesses during the COVID-19 crisis has not been uniformly observed across all contexts. Some studies have shown that the pandemic has been particularly challenging for small enterprises, leading to high rates of business closures and financial distress in certain regions or industries (Bartik et al., 2020). The role of government support has been identified as a crucial factor in determining the survival of small businesses during the pandemic. Interestingly, research has revealed that entrepreneurs have displayed a remarkable capacity for resilience during the COVID-19 crisis, with many small business owners developing innovative new strategies and business models to navigate the significant challenges posed by the pandemic. This ability to adapt and pivot in the face of adversity is a key hallmark of entrepreneurial resilience (Zighan et al., 2021).

Entrepreneurial Resilience (ER) has emerged as a crucial factor in determining the success and adaptability of businesses, particularly in the face of challenges and uncertainties. Researchers have found that resilience can predict an entrepreneur's career success and the performance of their organization (Sari et al., 2022). Developing a deeper understanding of entrepreneurial resilience and its implications for business agility is therefore of significant importance (Liu & Wang, 2017). The COVID-19 pandemic has highlighted the importance of resilience for entrepreneurs and small-to-medium enterprises (SMEs) that have been significantly impacted by the crisis.(Castro & Zermeño, 2020) During times of crisis, resilience allows companies to adapt and grow stronger, rather than succumbing to the challenges.(Castro & Zermeño, 2020) A study in the Australian context found that entrepreneurial initiatives can act as a catalyst for growth, demonstrating the potential positive impact of resilience on business agility (Najib et al., 2021). Entrepreneurial resilience is a multifaceted construct that encompasses an entrepreneur's ability to overcome challenges, adapt to uncertainties, and maintain a positive mindset in the face of adversity.(Liu & Wang, 2017; Duchek, 2017) Factors that contribute to the development of entrepreneurial resilience include an entrepreneur's attitudes, behaviors, and access to resources and support systems (Castro & Zermeño, 2020).

While entrepreneurial resilience is often presented as a desirable trait, some scholars have argued that it can also have potential downsides. Certain resilience factors, such as an overly optimistic mindset or unwillingness to pivot strategies, may lead entrepreneurs to persist with unsuccessful ventures rather than adapting to changing circumstances.(Liu & Wang, 2017) Additionally, a sole reliance on personal resilience can make entrepreneurs reluctant to seek external support, which may hinder their ability to effectively navigate crises(Duchek, 2017).There is a need to balance the development of entrepreneurial resilience with openness to learning, flexibility, and utilization of

available resources and support systems. In conclusion, the literature suggests a positive relationship between entrepreneurial resilience and business agility.

H2: Entrepreneurial resilience has a positive and significance impact on business agility.

H3: Entrepreneurial resilience has a positive and significance impact on business sustainability.

H4: Entrepreneurial resilience has a positive and significance impact on market access

2.4 Market Access

The COVID-19 pandemic has had a significant impact on small entrepreneurs, with many facing unprecedented challenges to their businesses (Sahasranamam et al., 2021). As the world navigates the aftermath of the crisis, understanding the role of market access in building resilience for small entrepreneurs is crucial.

The pandemic has highlighted the importance of adaptability and innovation for small businesses to survive and thrive. Entrepreneurs have been required to respond to the situation with more resilient business models, leveraging new opportunities and strategies to maintain operations. In the context of emerging economies, innovation is identified as a key aspect of business recovery, enabling small and medium enterprises (SMEs) to adapt their products and services to new market demands (Caballero-Morales, 2021).

Government support has also played a vital role in the resilience of small businesses during the crisis (Najib et al., 2021). Policymakers and regulatory bodies have implemented various measures to aid small entrepreneurs, such as financial assistance, tax relief, and access to digital tools and infrastructure. These interventions have helped cushion the blow and maintain the viability of many small enterprises.

The pandemic has further underscored the critical importance of digital transformation for small businesses. The shift towards online interaction and digital marketing has become essential for SMEs to maintain customer engagement and access new markets (Nichifor et al., 2022). Entrepreneurs who have embraced digital technologies and adapted their business models accordingly have demonstrated greater resilience in the face of the pandemic.

Furthermore, the crisis has highlighted the need for strengthening the connections between citizens, businesses, and the broader ecosystem. Fostering collaborative networks and partnerships can help small entrepreneurs leverage resources, share knowledge, and collectively navigate the challenges posed by the pandemic (Nichifor et al., 2022). However, some argue that the pandemic has also exposed the limitations of relying too heavily on collaborative networks and partnerships for small entrepreneurs. While fostering connections can provide access to resources and knowledge, the crisis has shown that small businesses may also need to cultivate greater self-reliance and independent problem-solving capabilities (Hackler et al., 2022). Overreliance on external support systems could potentially make some small entrepreneurs more vulnerable to disruptions beyond their direct control (Neu et al., 2020).

The subject of business sustainability has garnered increasing attention in recent years, as organizations grapple with the need to balance profitability and environmental/social responsibility (Elsawy & Youssef, 2023). Particularly relevant is the concept of economic sustainability, which examines how businesses can meet their financial needs without compromising the ability of future generations to do the same (Elsawy & Youssef, 2023).

One factor that has been explored in the literature is the role of market access (MA) in promoting business sustainability. Market access (MA) refers to the ability of a business to enter and participate in a particular market, which can be influenced by factors such as trade policies, infrastructure, and regulations (Nosratabadi et al., 2019).

Existing research suggests that strong market access can positively impact the economic sustainability of small and medium-sized enterprises (SMEs) (Arsić et al., 2020). Firms with better market access are often better positioned to leverage their resources and capabilities to achieve sustained competitive advantage (Silva et al., 2023). Moreover, market access can facilitate the internationalization of SMEs, enabling them to diversify their customer base and revenue streams, thereby enhancing their overall economic sustainability (Silva et al., 2023).

However, the literature also suggests that strong market access may not always lead to improved business sustainability for SMEs. While market access can provide opportunities for growth and diversification, it can also expose SMEs to greater competitive pressures and market volatility (Silva et al., 2023). SMEs, with their limited resources and bargaining power, may struggle to effectively navigate complex international markets, potentially undermining their economic sustainability. Therefore, the relationship between market access and business sustainability is not a simple one, and SMEs must carefully navigate the opportunities and risks associated with increased market access.

In addition to the role of market access, the literature also highlights other factors that can influence the sustainability of SMEs (Das et al., 2019; Malesios et al., 2021).

H5: Market Access has a positive and significant impact on business agility.

H6: Market Access has a positive and significant impact on business sustainability.

2.5 Mediating Role of Business Agility

Businesses today face an increasingly volatile and complex environment, requiring them to adapt and respond quickly to changes (Widjajani & Nurjaman, 2020). This has given rise to the concept of business agility, which refers to a firm's ability to sense and respond to environmental changes swiftly, while maintaining strategic focus. Business agility enables organizations to quickly mobilize and reorganize their resources to exploit emerging opportunities (Overby et al., 2006) and has been identified as a key determinant of firm success in turbulent environments.

Interestingly, the literature suggests that business agility may serve as a critical link between two important organizational capabilities: business sustainability and entrepreneurial resilience. Business sustainability (BS) encompasses a firm's ability to create long-term value and competitive advantage through environmentally and socially responsible practices (Widjajani et al., 2021). Entrepreneurial resilience, on the other hand, reflects an organization's capacity to bounce back from adversity and disruption, and maintain a consistent level of performance (AlTaweel & Al-Hawary, 2021).

This study examines the mediating role of business agility in the relationship between business sustainability and entrepreneurial resilience. Drawing from the dynamic capabilities perspective, we posit that business sustainability cultivates the internal capabilities and resources needed to support organizational agility, which in turn enhances a firm's capacity for entrepreneurial resilience (Souza et al., 2017). The findings of this research offer important theoretical and practical implications. By examining the mediating role of business agility, this study provides insights into how business sustainability and entrepreneurial resilience are linked (Hussain et al., 2021; Dhir et al., 2023).

The results suggest that business sustainability serves as a foundational capability, enabling organizations to develop the internal resources and capabilities needed to support business agility. In turn, this agility enhances a firm's capacity for entrepreneurial resilience, allowing it to adapt and respond effectively to disruptions and adversity (Ma et al., 2020). These insights have

important implications for both academic research and business practice, as organizations seek to build sustainable and resilient enterprises in today's volatile and complex environment.

These insights have important implications for both academic research and business practice, as organizations seek to build sustainable and resilient enterprises in today's volatile and complex environment (Surviving or Flourishing? Integrating business resilience and sustainability, 2014). By demonstrating the mediating role of business agility, this study provides a more nuanced understanding of how business sustainability and entrepreneurial resilience are interconnected. The findings suggest that sustainable practices do not directly translate into resilience, but rather enable the development of organizational agility, which is a key driver of a firm's ability to adapt and bounce back from disruptions (Ortiz-de-Mandojana & Bansal, 2015). This highlights the importance of cultivating dynamic capabilities that allow for swift sensing and response to environmental changes. For academic researchers, this study contributes to the growing literature on the strategic value of business agility, and how it can bridge the gap between long-term sustainability and short-term resilience. For business leaders, the results underscore the need to invest in building agile organizational structures and processes, in addition to fostering sustainable practices, in order to create enterprises that are both durable and adaptive in the face of uncertainty. (Evans & Bahrami, 2020).

H_{M1}: Business Agility (BA) mediates the relationship between Market Access (MA) and Business Sustainability (BS).

H_{M2}: Business Agility (BA) mediates the relationship between Entrepreneurial Resilience (ER) and Business Sustainability (BS).

2.6 Business Sustainability

Business sustainability has a significant impact on small entrepreneurs, influencing their ability to thrive and grow in the competitive business environment. Research has shown that small businesses can engage in environmentally sustainable practices if they have an entrepreneurial orientation (Roxas et al., 2016). This highlights the importance of aligning business strategies with sustainability goals to enhance firm performance. Additionally, sustainable entrepreneurship plays a crucial role in empowering micro, small, and medium-sized enterprises (MSMEs) by providing opportunities for growth and sustainability (Yudiastuti et al., 2021).

Entrepreneurial marketing practices have been found to positively impact business sustainability in small and medium-sized enterprises (SMEs) (Nagaty & El-Menawy, 2023). By focusing on aspects such as customer intensity, proactiveness, innovativeness, and value creation, SMEs can enhance their sustainability efforts. Moreover, the commitment to sustainable business practices is essential for both SMEs and large firms to mitigate the environmental impact of economic activities (Battisti & Perry, 2011).

Studies have also emphasized the role of entrepreneurs in driving the success of their businesses through sustainable practices (Satjharuthai, 2023). By embracing global sustainability initiatives and balancing social, economic, and environmental impacts, entrepreneurs can create businesses that are not only profitable but also contribute positively to society and the environment. Furthermore, sustainable entrepreneurs differentiate themselves by prioritizing positive environmental and social impacts in their business models (Veleva, 2021).

In conclusion, small entrepreneurs can benefit significantly from integrating sustainability practices into their business operations. By adopting sustainable entrepreneurship principles, small businesses can enhance their performance, contribute to societal well-being, and create long-term value for stakeholders.

3. Methods

This quantitative study employed a cross-sectional design and collected data from small entrepreneurs in India for Market Access (MA), Entrepreneurial Resilience (ER), Supply Chain Stability (SCS), Business Agility (BA), Social Capital (SC), and Business Sustainability (BS). Data collection was carried out through an offline questionnaire. The study utilized a 5-point Likert scale to gather responses from participants for its four key concepts. Sample questions were included to assess respondents' knowledge about Business Agility (BA), Business Sustainability (BS). Additionally, test questions were incorporated to evaluate Entrepreneurial Resilience (ER) and Business Sustainability (BS). The focus was solely on the dependent and independent variables under investigation.

3.1 Sample Size

According to Krejcie and Morgan, (1970), a researcher can conduct data analysis using 275 samples from a population of 1500 units (Chuan and Penyelidikan, 2006).

3.2 Measurement tool

The research instrument consisted of indicators from the other research works formulated to meet the context of the study. As part of the initial stage of this research instrument, data was gathered on aspects such as the business sector, number of years in operation, and other related aspects as capture below table. In the second part, employing the usage of subjective parameters, the respondents' evaluation of their own Business Agility, Entrepreneurial Resilience, skills and ability to sustain their employees and the firm's Business Sustainability (BS) were analysed. The indicators used to measure market access were adopted from (Nichifor et al., 2022; Caballero-Morales, 2021; Sahasranamam et al., 2021). As for entrepreneurial resilience, the questions were adopted from (Sahasranamam et al., 2021; Bartik et al., 2020), while items that measured business agility were adopted from (So et al., 2006; Sampath & Krishnamoorthy, 2017). Finally, business sustainability items were adopted from Roxas et al., 2016; Yudiastuti et al., 2021). A five-point Likert scale (1 = 'strongly disagree', 5 = 'strongly agree') was used for all of the variables of the study.

3.3 Data analysis method

In order to conduct the analysis of the present study, PLS-SEM with the help of Smart PLS was applied. The results of this analysis are stated following the guidelines provided in the literature for PLS modelling (Hair et al., 2019; Sarstedt et al., 2022).

4. Results

4.1 Demographic analysis

This data provides insights into a diverse group of 272 respondents, primarily representing businesses in various sectors.

Table-1 Respondent profile

Sector	N	%	Years Established	N	%	Gender of Respondent	N	%
Manufacturing	29	10.66	< 5 years	97	35.66	Male	229	84.19
Construction	36	12.13	6-10 years	131	48.16	Female	62	15.80
Whole sale/ retail	44	16.17	11-15 years	29	10.66	Total	272	100

Services	85	31.25	> 15 years	15	5.51	Marital status		
Other	78	28.67	Total	272	100	Single	91	33.45
Total	272	100	Age group			Married	167	61.29
Education			< 20 years	27	9.92	Other	14	5.14
Primary	18	6.61	21–30 years	128	47.05	Total	272	100
High School	45	16.54	31–40 years	81	29.77			
Intermediate	53	19.48	41–50 years	25	9.19			
Graduation	103	37.86	> 50 years	11	4.04			
Masters and above	53	19.48	Total	272	100			
Total	272	100						

Authors' calculation

The service industry dominates, accounting for 31.25% of the sample, followed by a significant "Other" category at 28.67%. Wholesale/retail, construction, and manufacturing sectors make up the remainder, with manufacturing being the least represented at 10.66%. Most businesses are relatively young, with 48.16% operating for 6–10 years and 35.66% for less than 5 years. Only a small fraction (5.51%) have been established for over 15 years. The respondent demographics reveal a stark gender imbalance, with males comprising 84.19% of the sample. Marital status data shows that 61.29% are married, while 33.45% are single. Age-wise, the sample skews younger, with 47.05% aged 21–30 and 29.77% aged 31–40. Only 4.04% are over 50 years old. Education levels are generally high, with 37.86% having completed graduation and 19.48% holding master's degrees or higher. Intermediate education accounts for another 19.48%, while only 6.61% have primary education as their highest level. Overall, this data paints a picture of a predominantly young, male, married, and well-educated group of business owners or managers, mostly operating in the service sector with businesses established within the last decade.

4. 2 Validity and Reliability

The construct Business Agility (BA) is measured by four items with loadings ranging from 0.743 to 0.795, indicating that each item has a good level of correlation with the construct. The Cronbach's Alpha value of 0.777 suggests acceptable internal consistency reliability. The Composite Reliability (CR) of 0.784 confirms that the construct is reliable.

Table No. 2 – Validity and Reliability

Constructs	Items	Loading	Cronbach's alpha (CA)	Composite reliability (CR)	AVE
Business Agility (BA)	BA1	0.795	0.777	0.784	0.597
	BA2	0.743			
	BA3	0.770			
	BA4	0.782			
Business Sustainability (BS)	BS1	0.869	0.834	0.857	0.667
	BS2	0.880			
	BS3	0.735			
	BS4	0.776			
Entrepreneurial Resilience (ER)	ER1	0.857	0.847	0.854	0.621
	ER2	0.824			

	ER3	0.757			
	ER4	0.762			
	ER5	0.734			
Market Access (MA)	MA1	0.708	0.840	0.861	0.603
	MA2	0.846			
	MA3	0.758			
	MA4	0.787			
	MA5	0.778			

Where, Business Agility (BA), Entrepreneurial Resilience (ER), Business Sustainability (BS), Market Access (MA)

The AVE value of 0.597 indicates that just below 60% of the variance is captured by the construct, which is slightly below the recommended threshold of 0.50, but still acceptable.

The Business Sustainability (BS) construct is measured by four items with loadings ranging from 0.735 to 0.880, indicating strong correlations with the construct. The Cronbach's Alpha value of 0.834 suggests good internal consistency reliability. The Composite Reliability (CR) of 0.857 confirms the reliability of the construct. The AVE value of 0.667 indicates that a substantial portion (about 67%) of the variance is captured by the construct, exceeding the recommended threshold of 0.50.

The Entrepreneurial Resilience (ER) construct is measured by five items with loadings ranging from 0.734 to 0.857, indicating good correlations with the construct. The Cronbach's Alpha value of 0.847 indicates strong internal consistency reliability. The Composite Reliability (CR) of 0.854 confirms that the construct is reliable. The AVE value of 0.621 indicates that a significant portion (about 62%) of the variance is captured by the construct, exceeding the recommended threshold of 0.50.

The Market Access (MA) construct is measured by five items with loadings ranging from 0.708 to 0.846, indicating good correlations with the construct. The Cronbach's Alpha value of 0.840 indicates strong internal consistency reliability. The Composite Reliability (CR) of 0.861 confirms that the construct is reliable. The AVE value of 0.603 indicates that a substantial portion (about 60%) of the variance is captured by the construct, exceeding the recommended threshold of 0.50.

Overall, all four constructs (Business Agility, Business Sustainability, Entrepreneurial Resilience, and Market Access) demonstrate good internal consistency reliability (Cronbach's Alpha > 0.7) and composite reliability (CR > 0.7). The AVE values for all constructs exceed the recommended threshold of 0.50, indicating that each construct explains a significant amount of variance in its respective items. This suggests that the constructs are well-defined and reliable for measuring the intended aspects in the study.

Table No. 3 –Path analysis

Hypothesis	Association	Original sample (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values	Decision
H1	BA > BS	0.394	0.056	7.054	0.000	Accepted
H2	ER > BA	0.433	0.053	8.246	0.000	Accepted
H3	ER > BS	0.117	0.067	1.751	0.080	Rejected
H4	ER > MA	0.219	0.059	3.699	0.000	Accepted
H5	MA > BA	0.199	0.053	3.744	0.000	Accepted

H6	MA > BS	0.208	0.057	3.627	0.000	Accepted
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The structural equation modeling (SEM) analysis results provide insightful findings regarding the relationships between various factors impacting business sustainability. Hypothesis H1 posits that Business Agility (BA) positively affects Business Sustainability (BS), and the results confirm this with a significant positive path coefficient ($O = 0.394$) and strong statistical support ($t = 7.054$, $p = 0.000$), leading to the acceptance of H1. Similarly, Hypothesis H2, which suggests that entrepreneurial resilience (ER) positively influences Business Agility (BA), is also supported by the data ($O = 0.433$, $T = 8.246$, $p = 0.000$), resulting in its acceptance.

However, Hypothesis H3, which explores the direct effect of Entrepreneurial Resilience (ER) on Business Sustainability (BS), is not supported ($O = 0.117$, $T = 1.751$, $p = 0.080$), leading to its rejection. This indicates that while Entrepreneurial Resilience is crucial, it does not directly translate into Business Sustainability without the mediating effects of other factors. On the other hand, Hypothesis H4, asserting that Entrepreneurial Resilience (ER) positively impacts Market Access (MA), is accepted based on significant findings ($O = 0.219$, $T = 3.699$, $p = 0.000$).

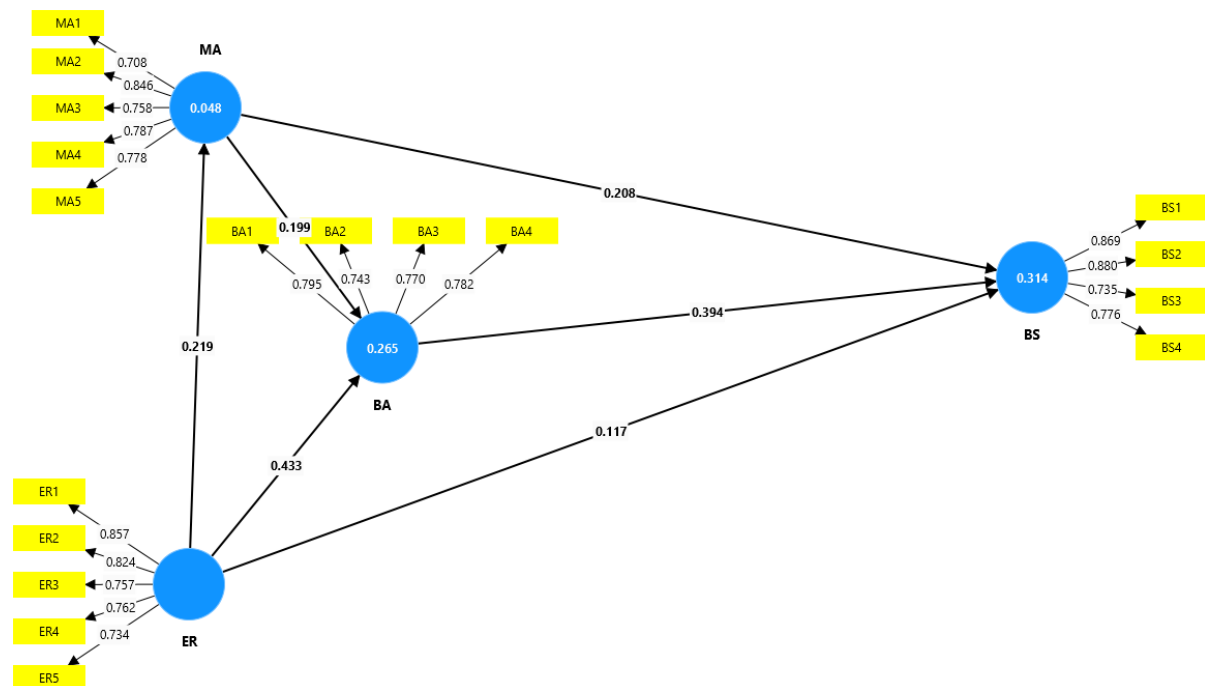


Fig. No.-1 Measurement model

Further, Hypotheses H5 and H6 are both accepted, suggesting that Market Access (MA) significantly enhances Business Agility (BA) and Business Sustainability (BS), with path coefficients and statistical support as follows: H5 ($O = 0.199$, $T = 3.744$, $P = 0.000$) and H6 ($O = 0.208$, $T = 3.627$, $p = 0.000$). These results highlight the critical roles of Business Agility and Market Adaptability as intermediaries that strengthen the overall resilience and sustainability of businesses. In summary, while Entrepreneurial Resilience is foundational, its effects on Business Sustainability are significantly mediated by Business Agility and Market Adaptability.

Table No. 4- Mediating Effects

Hypothesis	Path	Original sample (O)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
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H _{M1}	MA > BA > BS	0.078	0.023	3.390	0.001
H _{M2}	ER > BA > BS	0.171	0.032	5.293	0.000

This hypothesis proposes that Entrepreneurial Resilience has a greater impact than Business Agility, which in turn has a greater impact than Business Sustainability. The larger positive original sample (0.171) strongly supports this hierarchical relationship. The t-statistic of 5.293 is even larger than in H_{M1}, indicating an even more substantial difference relative to its standard deviation. The p-value of 0.000 (which likely means $p < 0.001$) suggests extremely strong statistical significance. We can conclude that there's very strong evidence supporting the hypothesized relationship that Entrepreneurial Resilience has the most impact, followed by Business Agility, and then Business Sustainability.

The second mediation hypothesis (H_{M2}: ER > BA > BS) suggests that Entrepreneurial Resilience has the strongest impact on business outcomes, partially mediated through Business Agility, which in turn affects Business Sustainability. With a large positive original sample (0.171), small standard deviation (0.032), high t-statistic (5.293), and extremely low p-value (0.000), this hypothesis demonstrates a strong, statistically significant relationship. The results indicate that fostering Entrepreneurial Resilience should be a primary focus for businesses, as it appears to enable greater Business Agility, which then contributes to long-term Business Sustainability. This mediation model implies that resilient entrepreneurs are better equipped to create agile businesses that can adapt to challenges and maintain viability over time. Compared to the first hypothesis, this relationship shows an even stronger effect, highlighting the crucial role of Entrepreneurial Resilience in driving business success through improved agility and sustainability.

5. Discussion

The findings of this study provide valuable insights into the factors influencing the sustainability of small businesses during the COVID-19 pandemic. The strong positive relationship between Business Agility and Business Sustainability (H1) underscores the importance of flexibility and adaptability in ensuring long-term business viability, especially during times of crisis. This aligns with previous research highlighting the critical role of agility in enabling businesses to respond effectively to rapidly changing environments (Weber & Tarba, 2014).

The significant positive influence of Entrepreneurial Resilience on Business Agility (H2) emphasizes the crucial role of entrepreneurs' ability to bounce back from adversity in fostering organizational adaptability. This supports existing literature on the importance of resilience in entrepreneurial success (Bullough & Renko, 2013).

Interestingly, the direct effect of Entrepreneurial Resilience on Business Sustainability (H3) was not supported. This suggests that while resilience is crucial, its impact on sustainability is likely mediated through other factors such as Business Agility. This finding contributes to the ongoing debate about the mechanisms through which entrepreneurial characteristics influence business outcomes (Liu & Wang, 2017).

The positive relationships between Market Access and both Business Agility (H5) and Business Sustainability (H6) highlight the importance of market opportunities in fostering business success. This aligns with previous research emphasizing the role of market access in enabling small businesses to thrive, particularly in emerging economies (Sahasranamam et al., 2021).

The mediation analysis further reinforces the complex interplay between these factors. The stronger mediation effect of Business Agility in the relationship between Entrepreneurial Resilience and Business Sustainability (HM2) compared to the mediation between Market Access and Business Sustainability (HM1) suggests that internal organizational capabilities may be even more critical than external market factors in ensuring long-term business viability.

These findings have important implications for both theory and practice. They contribute to our understanding of the mechanisms through which small businesses can achieve sustainability, particularly in times of crisis. For practitioners and policymakers, the results highlight the importance of fostering entrepreneurial resilience and business agility, as well as facilitating market access, to support the long-term sustainability of small businesses.

6. Conclusion:

This study provides empirical evidence on the factors influencing the sustainability of small businesses during the COVID-19 pandemic in India. The findings highlight the critical roles of Business Agility, Entrepreneurial Resilience, and Market Access in fostering Business Sustainability. The research underscores the importance of developing internal capabilities such as agility and resilience, while also emphasizing the need for favourable external conditions like market access. The study contributes to the literature by elucidating the complex relationships between these factors, particularly the mediating role of Business Agility in translating Entrepreneurial Resilience into Business Sustainability. These insights can inform strategies for enhancing the resilience and sustainability of small businesses, not only during crises but also in normal business conditions. Future research could explore these relationships in different cultural contexts or industry sectors. Additionally, longitudinal studies could provide insights into how these factors evolve over time, particularly as businesses navigate the post-pandemic landscape. In conclusion, as small businesses continue to face unprecedented challenges, understanding and fostering the factors that contribute to their sustainability becomes increasingly crucial. This study provides a foundation for future research and practical interventions aimed at supporting the resilience and long-term viability of small enterprises in an ever-changing business environment.

7. Recommendations:

Based on our study's findings, we recommend small business entrepreneurs focus on enhancing business agility, fostering entrepreneurial resilience, and improving market access through digital technologies and strategic networking. Policymakers should develop programs to support digitalization, export promotion, entrepreneurial resilience, and business agility, creating a conducive environment for innovation. Future researchers should conduct longitudinal studies to understand evolving factors in post-pandemic business landscapes, explore different cultural and sectoral contexts, investigate additional factors influencing business sustainability, and examine the potential downsides of excessive agility or resilience. Business support organizations should develop training programs, provide networking and market access platforms, and offer tailored support services to help small businesses build internal capabilities and external market connections. Implementing these recommendations can create a resilient and sustainable small business ecosystem, better equipped to withstand future crises and contribute to economic growth.

8. References

1. Nichifor, E., Tilea, D. M., Diaconu, A., & Dobrin, C. (2022). Unlocking the Entrepreneurial State of Mind for Digital Decade: SMEs and Digital Marketing. *Sustainability*, 14(15), 9358.
2. Najib, M., Fahma, F., & Nuryanti, B. L. (2021). Business Survival of Small and Medium-Sized Restaurants through a Crisis: The Role of Government Support and Innovation. *Sustainability*, 13(19), 10535.
3. Caballero-Morales, S. O. (2021). Innovation as recovery strategy for SMEs in emerging economies during the COVID-19 pandemic. *Research in International Business and Finance*, 57, 101396.
4. Le, H. B. H., Nguyen, T. L. H., Ngo, C. T., Pham, T. T. B., & Le, T. T. B. (2020). Policy related factors affecting the survival and development of SMEs in the context of Covid 19 pandemic. *Management Science Letters*, 10(15), 3683–3692.
5. Fairlie, R. W. (2020). The impact of COVID-19 on small business owners: Evidence from the first three months after widespread social-distancing restrictions. *Journal of Economics & Management Strategy*, 29(4), 727–740.
6. Delardas, O., & Giannos, P. (2022). How COVID-19 Affected the Journal Impact Factor of High Impact Medical Journals: Bibliometric Analysis. *Journal of Medical Internet Research*, 24(12), e43089.
7. Hall, J., Gaved, M., & Sargent, J. (2021). Participatory Research Approaches in Times of Covid-19: A Narrative Literature Review. *International Journal of Qualitative Methods*, 20, 16094069211010087.
8. Kohale, M., Satpute, S., & Gaidhani, S. (2021). Impact of COVID-19 Pandemic on the Number of Research and Publications-A Review. *Asian Journal of Pharmaceutical Research and Development*, 9(3), 324–328.
9. Mishra, N. T. P., Das, S. S., & Yadav, S. K. (2020). Global impacts of pre- and post-COVID-19 pandemic: Focus on socio-economic consequences. *Sensor International*, 1, 100042.
10. Bower, M., Smout, M., Ellsmore, S., Donohoe-Bales, A., Sivaprakash, P. P., Lim, C., & Abdelrahman, M. (2023). A hidden pandemic? An umbrella review of global evidence on mental health in the time of COVID-19. *Frontiers in Public Health*, 11, 942069.
11. Kola, L., Kohrt, B. A., Hanlon, C., Naslund, J. A., Sikander, S., Balaji, M., & Patel, V. (2021). COVID-19 mental health impact and responses in low-income and middle-income countries: reimagining global mental health. *The Lancet Psychiatry*, 8(6), 535–550.
12. Santomauro, D. F., Herrera, A. M. M., Shadid, J., Zheng, P., Ashbaugh, C., Pigott, D. M., & Ferrari, A. J. (2021). Global prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic. *The Lancet*, 398(10312), 1700–1712.
13. Sacco, M. A., Caputo, F., Cardia, L., Machado, A., Zibetti, A., Gratteri, S., & Aquila, I. (2023). The Effects of COVID-19 Pandemic on Public Mental Health: State of Art and Future Perspectives. *International Journal of Environmental Research and Public Health*, 20(9), 5665.
14. Patel, V., Lund, C., Hatherill, S., Plagerson, S., Corrigan, J., Funk, M., & Flisher, A. J. (2023). Reimagining the journey to recovery: The COVID-19 pandemic and global mental health. *PLOS Medicine*, 20(4), e1004224.
15. Garg, A. (2020). ICT Adoption and SMEs: A Contextual Framework. *Vikalpa*, 45(1), 18–33.
16. Devi, M. P., & Ramachandran, S. (2011). Innovation and Indian MSMEs: Emerging Challenges and Opportunities. *World Applied Sciences Journal*, 4(2), 4–36.

17. Singh, D., Khamba, J. S., & Nanda, T. (2015). Analysis of Major Problems Faced by Small Firms in North India. *International Journal of Engineering Technology, Management and Applied Sciences*, 3(1), 163–170.
18. Nomani, R. (2016). Performance of MSMEs in India and Assam: A Statistical Analysis. *International Journal of Interdisciplinary Research in Science Society and Culture*, 2(2), 167–182.
19. Singh, N., & Gupta, O. (2023). Growth of Micro, Small and Medium Enterprises (MSMEs) in India and its Role in Indian Economy. *International Journal of Management Studies*, 10(1), 39–47.
20. Castro, M. P., & Zermeño, M. G. G. (2020). Being an Entrepreneur Post-COVID-19 – Resilience in Times of Crisis: A Systematic Literature Review. *Journal of Entrepreneurship in Emerging Economies*, 13(4), 721–746.
21. Kuckertz, A., & Brändle, L. (2021). Creative reconstruction: a structured literature review of the early empirical research on the COVID-19 crisis and entrepreneurship. *Management Review Quarterly*, 72(2), 281–307.
22. Ratten, V. (2020). Coronavirus (COVID-19) and entrepreneurship: Cultural, lifestyle and societal changes. *Journal of Entrepreneurship in Emerging Economies*, 12(4), 747–761.
23. Ma, Z., Zhu, J., Meng, Y., Tong, Y., Dong, X., & Wu, Y. (2021). Research on the impact of COVID-19 on Chinese small and medium-sized enterprises: Evidence from Beijing. *PLOS ONE*, 16(12), e0257036.
24. Bartik, A. W., Bertrand, M., Cullen, Z., Glaeser, E. L., Luca, M., & Stanton, C. (2020). The impact of COVID-19 on small business outcomes and expectations. *Proceedings of the National Academy of Sciences*, 117(30), 17656–17666.
25. Hoorens, S., Hocking, L., & Fays, C. (2020). The impact of COVID-19 on the EU's neighbours on the southern and eastern borders. RAND Corporation.
26. Cowling, M., Brown, R., & Rocha, A. (2020). Did you save some cash for a rainy COVID-19 day? The crisis and SMEs. *International Small Business Journal*, 38(7), 593–604.
27. Bosio, E., Djankov, S., Jolevski, F., & Ramalho, R. (2020). Survival of firms during economic crisis. World Bank Policy Research Working Paper No. 9239.
28. Ramakumar, R., & Kanitkar, T. (2020). Impact of COVID-19 pandemic on the Indian economy: A critical analysis. *Investigación económica*, 79(314), 3–32.
29. Sahasranamam, S., Nandakumar, M. K., Pereira, V., & Temouri, Y. (2021). India: Covid-19 and entrepreneurship in emerging markets. In V. Ratten (Ed.), *Entrepreneurship in emerging markets: Navigating turbulent environments* (pp. 163–175). Emerald Publishing Limited.
30. Sonobe, T., Takeda, A., Yoshida, S., & Truong, H. T. (2021). The impacts of the COVID-19 pandemic on micro, small, and medium enterprises in Asia and their digitalization responses. ADBI Working Paper Series.
31. Alekseev, G., Amer, S., Gopal, M., Kuchler, T., Schneider, J., Stroebl, J., & Wernerfelt, N. (2020). The effects of COVID-19 on US small businesses: Evidence from owners, managers, and employees. National Bureau of Economic Research.
32. Fadzil, A. F. M., & Rashid, A. A. (2022). The impact of COVID-19 pandemic on small and medium-sized enterprises (SMEs) in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 12(4), 667–683.
33. Hackler, D., Harpel, E., & Binder, S. (2022). Small business resilience in the COVID-19 crisis. *Sustainability*, 14(9), 5006.
34. Neu, W. A., Gonzalez, G. R., & Pass, M. W. (2020). Creating and appropriating value in collaborative relationships. *Journal of Business Research*, 121, 708–718.

35. Elsayy, M., & Youssef, M. (2023). Economic Sustainability: Meeting Needs without Compromising Future Generations. *Journal of Sustainability Science and Management*, 15(10), 23–35.
36. Nosratabadi, S., Mosavi, A., Shamshirband, S., Kazimieras Zavadskas, E., Rakotonirainy, A., & Chau, K. W. (2019). Sustainable Business Models: A Review. *Sustainability*, 11(6), 1663.
37. Arsić, M., Jovanović, Z., Tomić, R., Tomović, N., Arsić, S., & Bodolo, I. (2020). Impact of Logistics Capacity on Economic Sustainability of SMEs. *Sustainability*, 12(5), 1911.
38. Silva, G. M., Gomes, P. J., & Lages, L. F. (2023). Drivers and outcomes of sustainable export marketing strategies in international environments. *International Marketing Review*, 33(4), 627–648.
39. Das, M., Rangarajan, K., & Dutta, G. (2019). Corporate sustainability in small and medium-sized enterprises: a literature analysis and road ahead. *Journal of Indian Business Research*, 12(2), 271–300.
40. Malesios, C., Skouloudis, A., Dey, P. K., Abdelaziz, F. B., Kantartzis, A., & Evangelinos, K. (2021). Sustainability performance analysis of small and medium sized enterprises: Criteria, methods and framework. *Socio-Economic Planning Sciences*, 75, 100993.
41. Sari, P. A., Kusumastuti, R., & Saleh, C. (2022). Business performance during the COVID-19 crisis: a major contribution of entrepreneurial resilience. *Journal of Management and Business Administration. Central Europe*, 9(2(34)), 63–82.
42. Liu, J., & Wang, J. (2017). Developing entrepreneurial resilience: implications for human resource development. *European Journal of Training and Development*, 41(6), 519–539.
43. Duchek, S. (2017). Entrepreneurial resilience: a biographical analysis of successful entrepreneurs. *International Entrepreneurship and Management Journal*, 14(2), 429–455.
44. Bullough, A., & Renko, M. (2013). Entrepreneurial resilience during challenging times. *Business Horizons*, 56(3), 343–350.
45. Weber, Y., & Tarba, S. Y. (2014). Strategic Agility: A State of the Art Introduction to the Special Section on Strategic Agility. *California Management Review*, 56(3), 5–12.
46. Ogorean, C., & Herciu, M. (2020). Business Models Addressing Sustainability Challenges—Towards a New Research Agenda. *Sustainability*, 12(9), 3534.
47. AlTaweel, I. R. S., & Al-Hawary, S. I. S. (2021). The Mediating Role of Innovation Capability on the Relationship between Strategic Agility and Organizational Performance. *Sustainability*, 13(14), 7564.
48. So, H. W., Wong, T. C., & Sculli, D. (2006). A development of business agility enterprise model for competitive advantage: theory and practice. *International Journal of Agile Systems and Management*, 2(1), 42–59.
49. Walter, A. T. (2020). Organizational agility: ill-defined and somewhat confusing? A systematic literature review and conceptualization. *Management Review Quarterly*, 71(2), 343–391.
50. Sampath, G., & Krishnamoorthy, B. (2017). Is strategic agility the new Holy Grail? Exploring the strategic agility construct. *International Journal of Business Excellence*, 13(2), 160–176.
51. Grześ, B. (2023). Managing an agile organization — key determinants of organizational agility. *Scientific Papers of Silesian University of Technology. Organization and Management Series*, 2023(172), 121–134.
52. Al-Radaideh, A. T., Battah, F. M., & Alalawin, A. H. (2023). Assessing the impact of cloud-based supply chain management on organizational agility: A structural equation modeling approach. *Uncertain Supply Chain Management*, 11(3), 1289–1294.

53. Geissdoerfer, M., Vladimirova, D., & Evans, S. (2018). Sustainable business model innovation: A review. *Journal of Cleaner Production*, 198, 401–416.
54. Vrontis, D., Basile, G., Andriopolous, C., & Thrassou, A. (2022). Strategic agility, openness and performance: a mixed method comparative analysis of firms operating in developed and emerging markets. *Management Decision*, 17(4), 1365–1398.
55. Battisti, M., & Perry, M. (2011). Walking the talk? Environmental responsibility from the perspective of small-business owners. *Corporate Social Responsibility and Environmental Management*, 18(3), 172–185.
56. Nagaty, S., & El-Menawy, S. (2023). Does entrepreneurial marketing impacts business sustainability? New evidence from small and medium-sized enterprises in Egypt. *Journal of Commerce and Finance*, 0(0), 0–0.
57. Roxas, B., Ashill, N., & Chadee, D. (2016). Effects of entrepreneurial and environmental sustainability orientations on firm performance: A study of small businesses in the Philippines. *Journal of Small Business Management*, 55(S1), 163–178.
58. Satjagaruthai, K. (2023). The role of entrepreneurs in driving the success of their businesses in the digital era. *International Journal of Professional Business Review*, 8(7), e02866.
59. Veleva, V. (2021). The role of entrepreneurs in advancing sustainable lifestyles: challenges, impacts, and future opportunities. *Journal of Cleaner Production*, 283, 124658.
60. Yudiastuti, A., & Pratikto, H. (2021). Social capital, joint responsibility systems, and empowerment of women in MSMEs: A conceptual framework. *International Journal of Science Technology & Management*, 2(6), 2239–2246.
61. Hair, J.F., Risher, J.J., Sarstedt, M., & Ringle, C.M. (2019). When to use and how to report the results of PLS–SEM. *European Business Review*, 31(1), 2–24.
62. Sarstedt, M., Ringle, C.M., & Hair, J.F. (2022). Partial Least Squares Structural Equation Modeling. In C. Homburg, M. Klarmann, & A. Vomberg (Eds.), *Handbook of Market Research*. Springer, Cham.