RESEARCH ARTICLE:

Detecting Subtle Shifts: Comparing SME Performance Drivers Pre and During the Covid-19 Pandemic

Soza Sydney Simango¹ and Helper Zhou²

Received: 11 February 2024 | Revised: 13 January 2025 | Published: 06 February 2025

Reviewing Editor: Dr. Gustave Kankisingi, Cardiff Metropolitan University

Abstract

Small and Medium Enterprises (SMEs), especially those in the South African tourism sector, were significantly impacted by the Covid-19 pandemic. Many experienced a decline in performance due to decreased consumer demand resulting from travel restrictions. Understanding these enterprises' performance pre and post the pandemic will provide insights into how enterprise development practitioners and policy makers could best respond to crises such as this. The study harnessed the Resource-Based View theory to unveil subtle shifts in SMEs' performance drivers due to the impact of the pandemic. This is important as pre-Covid-19, tourism SMEs with sufficient resources and capabilities were likely to enjoy a competitive advantage and better performance than those lacking such. However, the pandemic disrupted many of these resources and capabilities as travel restrictions and decreased demand made it difficult for SMEs to maintain their customer base or invest in new markets. The Difference in Difference (DID) technique was employed due to its ability to isolate the impact of the pandemic on firm performance by comparing pre- and post-Covid-19 features. As expected, the results showed that the pandemic negatively impacted South African tourism SMEs. This was evident in decreased total asset value, sales volumes, revenue and the number of product offerings. Surprisingly, it was found that having a business plan in place negatively impacted performance before Covid-19. However, post-pandemic, business planning was a crucial positive driver of SME performance. Company age negatively impacted performance post the pandemic, indicating organisational rigidities among tourism SMEs during crises. Despite being home to the popular Garden Route, the Western Cape province suffered more negative effects than other provinces. Lastly, entrepreneur experience and business incubation positively impacted SME performance during the pandemic. Based on these findings, it is recommended that key stakeholders take the evolving performance drivers in the SME sector into account in order to craft support measures that lead to increased, sustainable business performance.

Keywords: Covid-19 in South Africa; SME performance drivers; resource-based view; tourism

Introduction

The travel industry is a diverse sector consisting of millions of companies and employers, from the biggest global travel brands to the smallest tour operators or hostel owners (Sofronov, 2018). The industry is driven by demand for travel by visitors who consume various goods and services offered by operators (Cooper and Hall, 2011). Camilleri (2018) states that tourism products include experiences in urban or city, seaside, rural, ecotourism, wine, culinary, health/ medical and wellness, religious, cultural or heritage, sports, educational, business or meetings, incentives, conferences and events tourism, among others. Over the years, the travel and tourism industry has become a significant global sector. The United National World Tourism Barometer (2019) showed that global international arrivals grew by 3.8 percent to 1.5 billion in 2019. This cemented travel and tourism as a major driver of economic growth and employment. The sector grew by 8.9 percent in 2019, representing a US\$8.9 trillion contribution to global Gross Domestic Product (GDP), US\$1.7 trillion in visitor exports and US\$948 billion in capital

¹Department of Tourism, South Africa <u>ssimango@tourism.gov.za</u> | <u>https://orcid.org/0009-0004-0481-7218</u> ²University of KwaZulu-Natal, <u>helperzhou@gmail.com</u> | <u>https://orcid.org/0000-0002-8492-7844</u>



investment (United Nations Tourism (UN Tourism) Barometer, 2019). The main question the study sought to answer was: what shifts occurred in the business performance of SMEs in the South African tourism sector as a result of Covid-19 pandemic travel bans? This implies that there is a close link between tourism and the flow of business across the economy and highlights the role played by small businesses in facilitating the transactions resulting from travel experiences.

Rogerson and Rogerson (2022) note that globally. SMEs make up 80 percent of all tourism enterprises, with the figure climbing to 95 percent in South Africa. These SMEs have similar traits to small businesses in other sectors and are marked by a high failure rate ranging between 40 and 90 percent (Wang, 2016; Lings, 2014). Access to finance and financial readiness are key impediments to SME growth and development (Wang, 2016; Abbasi et al., 2021). In South Africa, tourism SMEs are largely township and rural-based and thus have poor access to business networks and the linkages required for support, leaving many operators in survivalist mode (Rogerson and Rogerson, 2022; Rogerson, 2005). The smooth functioning of the tourism industry is reliant on free movement of people across the globe. Rogerson and Rogerson (2022) assert that, at its core, tourism is reliant on mobility and sociability which are precisely what the Covid-19 pandemic and the resultant policy measures took away. Tourism as a global system comprises of both social and natural elements and their interactions and when one component is disrupted there are repercussions across the entire system (Lewis et al., 2021). Rogerson and Rogerson (2022) and Surya et al. (2022) argue that the Covid-19 pandemic was a combination of a natural disaster, a socio-political event, and an economic and a tourism demand crisis. It resulted in public health policy that blocked international travel and restricted domestic movement through lock downs and travel restrictions (Wang et al., 2022). It was thus clearly on a collision course with the travel and tourism industry. It is estimated that global GDP dropped by 2 to 3 percent each month of the pandemic (Mckibbin and Fernando, 2021). Lock down restrictions led to reduced production of goods and services and a slump in household demand, the collapse of travel demand and disruption of global production and supply chains which bred uncertainty and a poor business climate (Arndt et al., 2020). On the demand side, there was a sudden drop in visitors and spend which compromised the viability of tourism businesses and led to reduced working hours and employee lay-offs (Barman et al., 2021).

In terms of numbers, the tourism industry was the hardest hit by the Covid-19 pandemic with losses of up to 1.1 billion in international tourism arrivals, equivalent to around US\$1.2 trillion in export revenue and 120 million jobs (World Travel and Tourism Council (WTTC), 2020). South Africa recorded a negative 5.4 percent growth in GDP and the employment rate decreased from 57 percent in 2019/20 to 38 percent in 202/21 (Anakpo and Mishi, 2021). The South African travel industry almost came to a halt save for health/ medical induced travel. The effect of these disruptions is evident in the declining fortunes of South African National Parks (SANParks), the country's largest provider of accommodation (15 000 beds including camping) and eco-tourism activities. Pre-Covid, the agency was 80 percent self-funded, but it suffered significant revenue losses during the pandemic (SANParks, 2022). A joint study by the Department of Tourism, the Tourism Business Council of South Africa (TBCSA) a federation of all tourism associations in South Africa, and the International Finance Corporation (IFC) (2021a), found that the country's tourism sector suffered an 83 percent decline in revenue as a result of the pandemic. It showed that 58 percent of firms struggled to service debt costs, occupancy rates were as low as 47 percent, 54 percent of firms could not cover fixed costs from revenue, bookings were down by 50 percent year on year in March 2020 and about 50 000 tourism businesses closed (Department of Tourism, 2021).

Small and medium enterprises are essential for job creation, poverty reduction, equity and innovation among the youth within an economy (Enwereji, 2022). The lock down regulations and travel restrictions imposed during the Covid-19 pandemic resulted in these businesses suffering decreased income and cash flow, and closure (Klein and Todesco, 2021; Department of Tourism, 2020). Tourism SMEs were particularly hard hit as customers cancelled bookings, pre-paid booking fees had to be refunded and their supply networks were disrupted (Klein and Todesco, 2021).

Literature Review

This review focuses on the Resource-Based View theory (RBV), the performance drivers of tourism SMEs, and existing studies on the Covid-19 pandemic's impact on business operations. The RBV theory is described as the combination of a firm's valuable, rare, inimitable, and non-substitutable resources to ensure growth and achieve a competitive advantage (Hafiz *et al.*, 2022). Its key tenet is recognition of the firm as a bundle of assets and resources (Lockett *et al.*, 2009), which, when managed efficiently, can lead to competitive advantage (Lose, 2021). The RBV approach has several advantages; firstly, it provides a lens through which a firm's internal resources and

capabilities are understood as a source of sustained competitive advantage, illustrated through value-added to customers. Secondly, it can be applied to the introduction of a new product and expanded market share (Hafiz *et al.*, 2022). Small firms rely on these non-transferrable and unsold resources to outperform their rivals (Adnan *et al.*, 2018). The RBV thus proposes that firms should assess their resources and focus on those that have value, are rare, are low in imitability, and cannot be easily substituted. Chan *et al.* (2012, cited in Asamoah and Doe, 2021) contend that firm performance is intrinsically linked to competitiveness. Competitiveness stems from internal and external factors, with the former including the firm's financial resources, managerial skills and education, access to technology, governance structures, and ability to embark on strategic planning (Asamoah and Doe, 2021). External factors encompass the firm's ability to raise finance, mastery of the dynamic business regulatory environment, adaptation to new technology, fluidity to enter new markets, ability to ward off trade costs and possession of enabling infrastructure for business success.

Al Khajeh (2018) views business performance as a complex multidimensional phenomenon that includes outcomes from business activities or an entity's results measured against intended goals and objectives. Financial performance or return on investment and profits, shareholder return, or economic value add market share and sales growth are regarded as measures of progress and success (Mkhonza and Sifolo, 2021). Whilst the RBV has advantages, some scholars, particularly Barney (1991) and Priem and Butler (2001), argue that its assumption that the resources that give firms a competitive advantage are immobile and heterogeneously distributed overlooks the dynamic nature of the milieu in which these firms operate, leading to such resources being obsolete or replicated. It also over emphasises internal resources, leading to a narrow strategic focus (Kraaijenbrink et al., 2010). Newbert (2007) asserts that guantification and accurate assessment of the value and rarity of resources is difficult and. indeed, almost impossible within the SME context, thus rendering the RBV more theoretical than practical. Nonetheless, the theory offers a focused, nuanced approach to appreciate the key factors impacting firm performance. Researchers have used a variety of methods to conduct studies on the Covid-19 pandemic's impact in Iran, South Africa, Vietnam, Europe, Indonesia and other jurisdictions. They found that SMMEs experienced a decrease in sales turnover, job losses, salary reductions and cashflow challenges. The impacts were most severe for the retail and food and beverage sectors which are part of the travel value chain (Saturwa et al., 2021; Boovens et al., 2022). Mkhonza and Sifolo (2021) found that South African SMEs used strategic planning and technology to improve business processes and performance during the pandemic.

Zhou and Zondo (2023) employed Gibrat's random walk theory to show that thousands of South African SMEs ceased operations due to Covid-19, especially those in the tourism sector. A recent study by Zhou et al. (2023) that utilised the Explainable Artificial Intelligence (XAI) technique also revealed that the majority of South African SMEs, especially those owned by women, were severely affected by the pandemic. Wang et al. (2021) study that used a system resilience framework to outline aspects of community behaviour, employees, corporate social responsibility and the environment during the Covid-19 pandemic in Vietnam reached a similar conclusion. A partial least squares structural equation model was used to evaluate a sample of 300 Vietnamese SMEs and travel agencies. The results showed that strategies deployed by business operators to cope positively impacted performance (Wang et al., 2021). Costa et al. (2022) employed the Receiver Operating Characteristics (ROC) methodology to examine the structural robustness of business systems among Italian firms using Covid-19 as an exogenous test event. Solid firms represented a fifth of Italian enterprises and were the lion's share of all firms in terms of employment and value-added benefits. At-risk or fragile firms were responsible for a third of total employment and were smaller size firms. The study showed that firm performance plays a less relevant role than economic size, innovation and digitalisation in determining Italian firms' resilience against exogenous shocks of the magnitude of the Covid-19 pandemic (Costa et al., 2022). Setyoko and Kumiasih (2022) produced similar findings in their analysis of Covid-19's impact on SMEs and survival strategies in Indonesia. Based on a literature review and interviews, their analysis showed that SMEs that managed business cycles, adapted their business models, diversified products and offerings and digitalised their operations survived. The study further revealed that the government's macro strategy response and SME micro strategic planning worked together to help the latter to cope with the challenges imposed by the pandemic.

The main aim of our study is to determine if there were subtle shifts in business performance amongst tourism SMEs pre- and post-Covid-19 in South Africa. Current research shows that enterprises adapted to business disruptions using several techniques. Some implemented staff reductions and wage cuts and adjustments towards the domestic market through price cutting, whilst others changed marketing strategies and adjusted tourism product offerings towards an emerging black middle-class domestic market (Giddy and Rogerson, 2021). Clearly

smaller size firms which struggle with access to technology and do not innovate suffered devastating impacts. The role of government is also highlighted as critical in supporting SMEs during periods of disaster. Estiri *et al.* (2002) contend that the government's policy response plays a significant role in increasing tourism SMEs' resilience during crises. They studied reports on how the pandemic impacted the State of Iran and compared them with the findings on previous disasters. The Z-SWARA was applied to weigh the critical success factors, the Z-MADM method was used to rank and the BORDA technique was employed to compound the results. Like Setyoko and Kumiasih's (2022) study, it was found that disaster management planning capability and marketing management are the core critical success factors (Estiri *et al.*, 2002). The role of government support was also emphasised.

On the empirical side, a study in Europe set a critical theoretical basis for quantifying the impact of disasters such as the Covid-19 pandemic. It compared the effects of the 2002/3 severe acute respiratory syndrome (SARS) health outbreak and Covid-19 on European tourism SMEs (Secinaro *et al.*, 2020). The focus was on the effects of the disasters on SMEs' assets, liabilities, capital and net profit. Based on the Transmission Dynamics Model that examines disease dynamics, transmission dynamics and economic impact (El Turabi, 2018), the study found that SARS had a less severe impact on European SMEs than reports and analysis indicated because the outbreak did not last long and spread over just 25 countries (Secinaro *et al.*, 2020). Lastly, Giddy and Rogerson (2021) examined enterprise adaptation in a nature tourism destination targeting high-end travellers in South Africa. The study revealed that it was difficult to adapt to the Covid-19 crisis due to a lack of government support and high revenue losses. A report on the impact of Covid-19 on micro and informal businesses by the Department of Small Business Development (DSBD) (2021) claims that 49 percent of businesses received financial assistance. However, only 10 percent received funding from state departments and agencies, with the remainder assisted by family and friends in their individual and business capacity, institutional funders and loan sharks (DSBD, 2021; Rogerson and Rogerson, 2022). On average, about ten percent of women and youth were funded through state grants with women and people living with disabilities more likely to receive funding (Rogerson and Rogerson, 2022).

Methodology

The panel data set covering SME factors was accessed via a survey of SMEs in the tourism sector across South Africa. Given that the Small Enterprise Development Agency 2022 report indicated that there are 2 535 238 SMMEs in South Africa, a Raosoft calculator was utilised for sample size calculation. The calculation indicated that a total of 385 SMEs was the minimum recommended size for the survey. The survey instrument was distributed via Survey Monkey Platform leveraging the Department of Tourism database. The overall response across all nine provinces was 173 percent as 669 participants responded. The data covered three years from 2019 to 2021 and amounted to a total of 2 007 observations. The survey instrument covered three main sections. The first section contained 11 questions and covered the demographic characteristics of the business owner such as age, gender, educational level, and years of experience, among others. The second section consisted of 10 questions on business (for example, age, year of registration, revenue, etc.) or were closed-ended, with selection of multiple-choice answers or checkboxes (for example, gender, location, marketing media, among others). The third section covered the company's year of registration, revenue, total assets, and permanent and temporary workers over the three years, among other pertinent questions. Table 1 below shows the respondents' distribution across the provinces.

Province	Percentage
Western Cape	28.55
Gauteng	21.82
KwaZulu-Natal	13
Eastern Cape	9.67
Limpopo	7.92
Mpumalanga	6.88
Northwest	4.68
Northern Cape	3.89
Free State	5.59

Table 1: Provincial distribution of respondents

The distribution by sub-sector is presented in Table 2. It indicates that many of the respondents were in the accommodation sector, followed by tour operators, and food and beverages, with 'other' being the smallest category.

Table 2. Respondents by tourism sub-sector		
Sub-Sector	Percentage	
Accommodation	47.98	
Tour Operators	26.01	
Food and Beverage	15.99	
Other	10.01	

 Table 2: Respondents by tourism sub-sector

The majority of the participants (58.84 percent) were Pty registered whilst the rest had other forms of registration. Female-owned SMEs made up 58.30 percent of the participants, whilst their male counterparts made up the rest. Participants with at least an Honours Degree or higher comprised 40.96 percent and those with below Honours made up the balance. Incubated SMEs made up 16.44 percent of the total.

Firm location was captured by the three biggest provinces in terms of economic contribution, which are Gauteng, KwaZulu-Natal and the Western Cape and these were transformed via one hot encoding. Firm sub-sector was captured by three main sub-sectors, accommodation, tour operator and tourist guide as well as food and beverages which were also transformed via hot encoding. Registration type was indicated by 1 for Pty registered firms and 0 otherwise. Total assets were measured in South Africa Rands (ZAR) as well as sales over the three-year period. The sex of the SME owner was indicated by 1 for female and 0 for male, while SMEs that used the following for marketing purposes: website, social media accounts, brochures and trade shows were indicated 1 for each and 0 otherwise. The SME's age and owner's age were measured as the difference between the company's registration year or owner's birth year and the panel period. The number of new products was measured by the total products or services introduced by the company over the three-year period. For incubation, 1 indicated that the SME was under incubation, otherwise 0. Qualifications were indicated by 1 for those with an Honours or higher level and 0 otherwise. Business planning was indicated by 1 for those with a business plan and 0 otherwise. The post-Covid-19 period was proxied by two years after the official announcement of the pandemic in South Africa, which are 2020 and 2021. All data for the features were log-transformed, except for the categorical variables.

The number of workers which captured the sum of both temporary and permanent workers was used as a proxy for firm performance. This is in line with previous studies which alluded to the impact that the pandemic had on unemployment (Couch *et al.*, 2020, Co-operation and Development, 2021). It was also motivated by the fact that the pandemic resulted in many companies laying off staff in order to cope and avert complete closure (Lambovska *et al.*, 2021). Moreover, governments, especially in developing countries, remain committed to addressing unemployment and its concomitant effects of poverty and inequality via a vibrant SME sector (Francis, 2020; Khambule, 2020). As such, utilisation of workers as a proxy for performance can assist practitioners and policy makers in assessing if there is a shift on the nature of the drivers of SMEs' performance as a result of the Covid-19 pandemic, especially in South Africa.

Finally, Difference-in-Differences (DID) Panel Regression was used as it is a powerful econometric technique that is mainly used to establish the causal effect of a treatment or intervention on an outcome variable over time (Puhani, 2012; Stuart, *et al.*, 2014). It involved comparing the change in the response and other variables of SMEs prior to and during the Covid-19 outbreak and then assessing this change across the control (unaffected which were SMEs before the pandemic) and treatment (affected SMEs after the pandemic) groups. The technique enabled the identification of the causal effect of the pandemic on SMEs' performance, whilst controlling for other drivers that may have influenced the outcome. The technique can be mathematically expressed as below (1):

 $Y_{it} = \alpha + \beta Treat_i + \gamma Post_i + \delta * (Treat_i * Post_t) + \varepsilon_{it}$ (1) Where; Y_{it} is the response variable,

• *Treat_i* is the variable, with 1 indicating the treatment group (SMEs before Covid-19) and 0 for the control group (SMEs after Covid-19),

• $Post_i$ captures the treatment period (pre- and during Covid-19), where 1 represents during Covid-19 period and 0 before the pandemic,

• δ captures the DID effect, thus revealing the causal impact of the treatment (Covid-19) over time.

In the main the concepts involved in the DID technique include fixed effects and time-invariant factors, in which the former control for the differences between both the control and treated groups that are constant over the study period. Time-invariant variables such as SME owner or firm demographics and any other pre-existing conditions can also be incorporated to ensure group comparability at baseline. Previous studies have illustrated the potency

of this panel regression approach in numerous fields, including, *inter alia*, education, health care, and economics (Islam *et al.*, 2017). The following section presents and discusses the results computed utilising the DID.

Results and Discussion

The results that were computed using the DID approach detected and revealed interesting insights on the shift between pre- and during Covid-19 SME performance drivers. Table 3 below shows that the Covid-19 pandemic had a negative impact on the performance of SMEs operating in the South African tourism sector. This is in line with the findings of previous studies (Couch *et al.*, 2020; Lai *et al.*, 2021). As was expected *a priori*, sales had a positive impact at 1 percent level of significance on performance prior to the outbreak of Covid-19. This implies that, for every one-unit increase in sales revenue, *ceteris paribus* there is a 0.048 increase in employment. The same relationship and significance level were noted for assets before the pandemic, with each unit increase in assets on average, resulting in a 0.033 increase in SMEs' employment. The number of product offerings also showed a positive impact effect on performance, with a unit increase in the SMEs' products resulting in a 0.036 increase in employment. Interestingly, it was found that having a business plan had a negative impact on SME performance prior to the pandemic at 5 percent level of significance. These were the only variables that had a significant impact on SME performance prior to the pandemic.

	Coefficient	Std. Error
During_Covid-19	-0.605**	0.278
Reg	-0.381	0.361
Co_age	0.006	0.060
GP	0.216	0.381
KZN	0.046	0.527
Owner_age	-0.070	0.134
Sales	0.048***	0.006
Assets	0.033***	0.008
Products	0.036**	0.011
Business Plan	-1.573**	0.513
during_covid: Reg	-0.01	0.048
during_covid: Logcoage	-0.054**	0.026
during_covid: WC	-0.120**	0.051
during_covid:GP	-0.060	0.056
during_covid: KZN	-0.004	0.065
during_covid: Accom	0.013	0.047
during_covid: Tos_Gs	0.035	0.053
during_covid: Food_Bev	-0.015	0.058
during_covid: Sex	-0.033	0.042
during_covid: Qual	0.001	0.0401
during_covid: Incubated	0.111*	0.057
during_covid: Owner_age	0.118*	0.072
during_covid: Sales	0.001	0.005
during_covid: Assets	-0.006	0.004
during_covid: Products	0.001	0.012
during_covid: Business Plan	0.127***	0.041
during_covid: SocialM	0.044	0.053
during_covid: Web	-0.026	0.047
during_covid: Brochures	-0.009	0.046
during_covid: Trade_shows	-0.015	0.051
	R ² : 0.309	
	F-statistic: 18.925	

Table 3: DID model results

Notes: The response variable is log of employment. ***: coefficient significant at 1% (**): coefficient significant at 5%; (*): coefficient significant at 10%

The analysis points to subtle shifts in the nature and effect of various SME performance drivers during the Covid-19 pandemic. As would have been expected, the coefficient for the during Covid-19 period is negative, confirming the pandemic's adverse impact on South African SMEs' performance. This aligns with the extant literature that observes that Covid-19 had a wide-ranging impact on firm performance, particularly among SMEs which lack adequate resources to withstand such exogenous shocks to their operations (Bartik *et al.*, 2020; Zhou and Zondo, 2023). Whilst pre-pandemic, company age had no effect on performance, this feature had a negative effect on performance during the pandemic in line with pre-Covid-19 outbreak studies (Agostini *et al.*, 2015; Zhou and Gumbo, 2021). It would have been expected that firm age would play a positive role in driving performance in the latter case. The result is indicative of corporate geriatrics problems even within SMEs as argued by Agostini *et al.* (2015). It is thus reasonable to deduce that Covid-19 revealed the reality of senescence problems among SMEs in the tourism sector.

The positive and significant impact exerted by sales revenue and asset base pre-pandemic shows that these two features enabled performance prior to Covid-19, which however was nullified by the pandemic as they had no effect during the pandemic. Interestingly, it was found that the Western Cape province was the most affected during the Covid-19 pandemic. This could have been due to the closure of the main tourist attraction, the Garden Route during the higher lock down levels. The closure of air travel may have also played a major role since the destination relies more on air travellers than land-based ones. As would have been expected and in line with a recent study by Zhou and Zondo (2023), incubation support during the pandemic had a positive effect on performance. This implies that incubated firms were likely to increase their workforce even during the pandemic to a greater extent than those who were not incubated. During the pandemic, entrepreneur experience as proxied by the owner's age had a positive impact on SME performance. This is indicative of the importance of entrepreneurial maturity during disruptive times like the pandemic. Lastly, the role of business planning was more pronounced during the pandemic. Whilst this had a negative impact pre-Covid, it was a crucial positive factor for performance during the pandemic as SMEs developed business plans aligned with its realities. It underscores the critical role of adaptive planning based on real time data. As noted by Kraus *et al.* (2020), it points to the importance of agility in management practices.

The findings offer interesting insights in relation to the RBV theory which in the main regards competitive advantage and thus sustainable performance of a company as a function of internal resources like assets and operational capabilities (Barney, 1991). This was captured by the positive effect of sales revenue, total assets and innovation proxied by new products on SMEs' performance prior to the outbreak of the Covid-19 pandemic. The positive impact of a business plan and the owner's experience captured by age during the pandemic further strengthens the theory's ability to explain performance by focusing on internal factors. However, mainly during the pandemic, the claims of the RBV theory could not be fully satisfied as performance drivers shifted with traditional internal resources and firm-specific capabilities having an insignificant or adverse impact on performance. An example is the negative effect of firm age which, as claimed by Coad et al. (2016) is indicative of firms failing to innovate. This finding is in contrast to the RBV model which emphasises the need for stability and exploitation of internal resources vet fails to account for the need for rapid adaptability during external disruptions like Covid-19. The role of external factors like incubation was also more pronounced during the pandemic than prior to it, possibly due to additional high impact support from incubation compared to reliance on internal resources, which the RBV does not pay much attention to. In general, this study's findings challenge the rigid RBV theoretical model as it only partly explains SME performance before and during disruptive events. Mainly during the pandemic, external factors like operating in the Western Cape province and being part of incubation significantly impacted performance. Thus, contrary to the theory's claim that internal resources are centrally important, their contribution can be moderated by external drivers, especially during disruptive events. This points to a subtle shift in firm drivers before compared to after disruptive events.

Conclusion

This study aimed to establish the drivers of the performance of SMEs in the South African tourism sector pre- and during the Covid-19 pandemic. Overall, our results showed that there were subtle shifts in terms of the drivers and their nature pre- and during the outbreak. In 2019 which is the pre-Covid-19 period, the drivers of performance were sales, assets, number of products and business planning. Of these four main drivers, only the last negatively impacted performance. However, during Covid-19, a unique picture emerged, with sales, assets and products having no significant impact on performance, whilst business planning shifted from being a negative to a positive driver. Furthermore, the owner's age and participation in an incubation programme played a positive role in SME performance. Also notable was that operating in the Western Cape province and the age of the SME negatively impacted performance. Based on these findings, it is important that the government crafts policies that strengthen

the factors which contribute towards sustainable SME performance. Firstly, incubation programmes can be harnessed to assist SMEs with business plans in order to continue driving performance. Secondly, there is need for customised training programmes targeting older SMEs to address the challenge of corporate geriatrics which is indicative of failure to innovate as the business grows older. Thirdly, cross-mentorship programmes among SMEs should be encouraged with older entrepreneurs assisting their younger counterparts with robust ideas and thus reducing the learning curve which tends to adversely impact their businesses' performance. Lastly, the findings show that a mechanistic approach to harnessing the RBV theory is inadequate as not only internal factors impact firm performance, especially during rapid environmental changes. This important insight highlights the need to incorporate external factors such as geographic location and incubation support into the RBV framework in the context of black swan events like Covid-19, particularly for SMMEs in developing countries like South Africa. It is, however, important to note that the Covid-19 pandemic is not limited to 2020 and 2021 but extends to 2023. As such, further research should incorporate more recent data to determine if these features are confirmed as the environment remains unstable.

Declarations

Interdisciplinary scope: The article demonstrates an interdisciplinary approach by integrating insights from business management, economics, and policy studies to analyse the COVID-19 pandemic impact on small and medium enterprises' performance in the tourism sector South Africa.

Author Contributions: Conceptualisation (Simango and Zhou); literature review (Simango); methodology (Simango); data cleaning (Simango and Zhou); (data analysis (Zhou); drafting and preparation (Simango); review and editing (Simango and Zhou). Both authors have read and approved the published version of the article.

Funding: This study did not receive any financial support.

Acknowledgement: There are no acknowledgements to report.

Conflict of interest: The authors have no conflicts of interest to disclose.

Data availability: The data utilised in this study with additional details available upon reasonable request from the corresponding author.

References

Abbasi, K. Alam, A. Brohi, N. A. Brohi, I. A. and Nasim, S. 2021. P2P Lending Fintechs and SMEs' Access to Finance. Available: <u>https://www.sciencedirect.com/science/article/pii/S0165176521001671?via%3Dihub</u> (Accessed 22 May 2022).

Adnan, M., Abdulhamid, T. and Sohail, B. 2018. Predicting Firm Performance through Resource Based Framework. *European Journal of Business and Management*, 10(1): 31-36.

Agostini, L., Filippini, R. and Nosella, A. 2015. Brand-Building Efforts and their Association with SME Sales Performance. *Journal of Small Business Management*, 53: 161-173.

Al Khajeh, E. H. 2018. Impact of Leadership Styles on Organizational Performance. Available: <u>https://ibimapublishing.com/uploads/articles/JHRMR/2018/687849/687849-1.pdf</u> (Accessed 18 May 2022).

Anakpo, G. and Mishi, S. 2021. Business Response to COVID-19 Impact: Effectiveness Analysis in South Africa. *The Southern African Journal of Entrepreneurship and Small Business Management*, 13(1): 1-7.

Arndt, C., Davies, R., Gabriel, S., Harris, L., Makrelov, K., Robinson, S., Levy, S., Simbanegavi, W., Van Seventer, D. and Anderson, L. 2020. Covid-19 Lockdowns, Income Distribution, and Food Security: An Analysis for South Africa. *Global Food Security*, 26: 1-5.

Asamoah, E. S. and Doe, F. 2021. Determinants of Competitiveness of Small and Medium Scale Enterprises in the Trading Sector in Sub-Sahara Africa. *International Journal of Business Competition and Growth*, 7(4): 288-309.

Barman, A., Das, R. and De, P. K. 2021. Impact of COVID-19 in Food Supply Chain: Disruptions and Recovery Strategy. *Current Research in Behavioural Sciences*, 2: 1-5.

Barney, J. B. and Tyler, B. 1991. The Prescriptive Limits and Potential for Applying Strategic Management Theory. *Managerial and Decision Economics*, 17(1): 99-120.

Bartik, A. W., Bertrand, M., Cullen, Z. B., Glaeser, E. L., Luca, M. and Stanton, C. T. 2020. How are Small Businesses Adjusting to COVID-19? Early Evidence from a Survey (No. w26989). Available: <u>https://www.nber.org/system/files/working_papers/w26989/w26989.pdf</u> (Accessed 23 August 2022).

Booyens, I., Rogerson, C. M., Rogerson, J. M. and Baum, T. 2022. Covid-19 Crisis Management Responses of Small Tourism Firms in South Africa. *Tourism Review International*, 26(1): 121-137.

Camilleri, M. A. 2018. The Tourism Industry: An Overview. In: Camilleri, M. A. ed. *Travel Marketing, Tourism Economics and the Airline Product: An Introduction to Theory and Practice*. Switzerland: Springer Nature, 3-27.

Coad, A., Segarra, A. and Teruel, M. 2016. Innovation and Firm Growth: Does Firm Age Play a Role? *Research Policy*, 45(2): 387-400.

Cooper, C. and Hall, M. 2011. Contemporary Tourism: An International Approach. London and New York: Routledge.

OECD 2021. An Assessment of the Impact of COVID-19 on Job and Skills Demand Using Online Job Vacancy Data. Available: <u>https://www.oecd.org/en/publications/2021/04/an-assessment-of-the-impact-of-covid-19-on-job-and-skills-demand-using-online-job-vacancy-data_ad47b7c3.html</u> (Accessed 22 May 2023).

Costa, S., Sallusti, F., Vicarelli, C. and Zurlo, D. 2022. Firms' Solidity Before an Exogenous Shock: Covid-19 Pandemic in Italy. Available: <u>https://pubmed.ncbi.nlm.nih.gov/36277035/</u> (Accessed 18 March 2023).

Couch, K. A., Fairlie, R. W. and Xu, H. 2020. Early Evidence of the Impacts of COVID-19 on Minority Unemployment. *Journal of Public Economics*, 192: 1-11.

Department of Small Business Development. 2021. Micro and Small Business South Africa: 2021 Report. Available: <u>https://www.tourism.gov.za/ResourceCentre/Pages/Reports.aspx</u> (Accessed 27 May 2022).

Department of Tourism. 2020a. Tourism Industry Survey of South Africa: COVID-19: Impact, Mitigation and the Future. Available: <u>https://www.tourism.gov.za/ResourceCentre/Pages/Reports.aspx</u> (Accessed 12 January 2023).

Department of Tourism. 2020b. Tourism Industry Survey of South Africa: COVID-19: Preparedness for Reopening. Available: <u>https://www.tourism.gov.za/ResourceCentre/Pages/Reports.aspx</u> (Accessed 15 October 2022).

Department of Tourism. 2020c. Tourism Industry Survey of South Africa: COVID-19: Reopening. Available: <u>https://www.tourism.gov.za/ResourceCentre/Pages/Reports.aspx</u> (Accessed 15 November 2022).

Department of Tourism. 2021. Final Report - Re-Examining Perspectives on the Recovery of South Africa'sDomesticTourisminaCovid-19Environment.Available:https://www.tourism.gov.za/ResourceCentre/Pages/Reports.aspx(Accessed 18 June 2022).

Department of Tourism. 2021. Tourism Sector Recovery Plan: COVID-19 Response. Available: <u>https://www.tourism.gov.za/AboutNDT/Documents/Tourism%20Sector%20Recovery%20Plan.pdf</u> (Accessed 28 July 2023).

El Turabi, A. 2018. Assessing Economic Vulnerability to Emerging Infectious Disease Outbreaks: Ebola versus Zika. Available: <u>https://www.hbs.edu/faculty/Pages/item.aspx?num=52795</u> (Accessed 18 June 2022).

Enwereji, P. C. 2022. Impact of Covid-19 on SMMEs and the Future Sustainability Measures: A Systematic Review. *Holistica Journal of Business and Public Administration*, 13(2): 111-131.

Estiri, M., Dahooie, J. H. and Skare, M. 2022. COVID-19 Crisis and Resilience of Tourism SME's: A Focus on Policy Responses. *Economic Research – Ekonomska Istraživanja*, 35(1): 5556-5580.

Francis, D. 2020. Unemployment and the Gendered Economy in South Africa after Covid-19. *Transformation: Critical Perspectives on Southern Africa*, 104(1): 103-112.

Giddy, J. K. and Rogerson, M. J. 2021. Nature-Based Tourism Enterprise Adaptive Responses to Covid-19 in South Africa. *Geo Journal of Tourism and Geosites*, 36: 698-707.

Hafiz, N., Latiff, A. S. A., Islam, M. A., Saif, A. N. M. and Wahab, S. A. 2022. Towards the Underlying Theories of Small Firm Growth: A Literature Review. *FIIB Business Review*, 11(1): 36-51.

Islam, N. S. Yi, S. and Trinh- Shervin, C. 2017. The Impact of the Affordable Care Act on Health Insurance Coverage for Asian Americans. Available: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5308174/pdf/AJPH.2016.303530.pdf (Accessed 16 June 2023).

Khambule, I. 2020. The Effects of COVID-19 on the South African Informal Economy: Limits and Pitfalls of Government's Response. *Loyola Journal of Social Sciences*, 34(1): 95-109.

Klein, V. B. and Todesco, J. L. 2021. Covid-19 Crisis and SMMEs Responses: The Role of Digital Transformation. *Knowledge Process Management*, 28: 117-133.

Kraaijenbrink, J., Spender, J. C. and Groen, A. J. 2010. The Resource-Based View: A Review and Assessment of Its Critiques. *Journal of Management*, 36(1): 349-372.

Kraus, S., Clauss, T., Breier, M., Gast, J., Zardini, A. and Tiberius, V. 2020. The Economics of Covid–19: Initial Empirical Evidence on How Family Firms in Fine European Countries Cope with Corona Crisis. *International Journal of Entrepreneurial Behaviour and Research*, 26(5): 1067-1092.

Lai, S., Ruktanonchai, N. W., Carioli, A., Ruktanonchai, C. W., Floyd, J. R., Prosper, O., Zhang, C., Du, X., Yang, W. and Tatem, A. J. 2021. Assessing the Effect of Global Travel and Contact Restrictions on Mitigating the COVID-19 Pandemic. *Engineering*, 7(7): 914-923.

Lambovska, M., Sardinha, B. and Belas Jr, J. 2021. Impact of the COVID-19 Pandemic on Youth Unemployment in the European Union. *Ekonomicko-Manazerske Spektrum*, 15(1): 55-63.

Lewis, F., Browne, M. and Houdet, J. 2021. Covid-19 – What is the Impact for Tourism as a Vehicle of SMME Development and Incentivising Environmental Management in South Africa. *African Journal of Hospitality, Tourism and Leisure*, 10(3): 987-998.

Lings, K. 2014. The Missing Piece: Solving South Africa's Economic Puzzle. Pan MacMillan: Johannesburg.

Lockett, A., Thompson, S. and Morgenstern, U. 2009. The Development of the Resource-Based View of the Firm: A Critical Appraisal. *International Journal of Management Reviews*, 11(1): 9-28.

Lose, T. 2021. Business Incubators in South Africa: A Resource-Based View Perspective. Academy of *Entrepreneurship Journal*, 27: 1-11.

McKibbin, W. and Fernando, R. 2021. The Global Macroeconomic Impacts of COVID-19: Seven Scenarios. *Asian Economic Papers*, 20(2): 1-30.

Mkhonza, V. M. and Sifolo, P. P. S. 2021. COVID-19 Effect on Business Performance SMMEs Perspectives in a South African Context. *International Journal of Entrepreneurship and Business Development*, 4(5): 727-743.

Newbert, S. L. 2007. Empirical Research on Resource based View of the Firm: An Assessment and Suggestions for Future Research. *Strategic Management Journal*, 28: 121-146.

Priem, R. L. and Butler, J. E. 2001. Is the Resource-Based "View" a Useful Perspective for Strategic Management Research? *Academy of Management Review*, 26(1): 22-40.

Puhani, P. A. 2012. The Treatment Effect, the Cross Difference, and the Interaction Term in Nonlinear "Differencein-Differences" Models. *Economics Letters*, 115(1): 85-87.

Rogerson, C. M. 2005. Unpacking Tourism SMMEs in South Africa: Structure, Support Needs and Policy Response. *Development Southern Africa*, 22(5): 623-642.

Rogerson, C. M. and Rogerson, J. M. 2022. COVID-19 and Changing Tourism Demand: Research Review and Policy Implications for South Africa. *African Journal of Hospitality, Tourism and Leisure*, 10(1): 1-21.

Rogerson, J. M. 2022. Tourism Business Responses to South Africa's COVID-19 Pandemic Emergency. *Geo Journal of Tourism and Geosites*, 35(2): 279-281.

Saturwa, H. N., Suharno, S. and Ahmad, A. A. 2021. The Impact of Covid-19 Pandemic on MSMEs. *Jurnal Ekonomi Dan Bisnis*, 24(1): 65-82.

Secinaro, S., Calandra, D. and Biancone, P. 2020. Reflection on Coronavirus Accounting Impact on Small and Medium Sized Enterprises (SMEs) in Europe. *International Journal of Business and Management*, 15(7): 48-56.

Setyoko, P. I. and Kurniasih, D. 2022. Impact of the Covid 19 Pandemic on Small and Medium Enterprises (SMEs) Performance: A Qualitative Study in Indonesia. *Journal of Industrial Engineering and Management Research*, 3(3): 315-324.

Sifolo, N. and Sifolo, P. P. S. 2015. The Tourism Inconvenience of the Ebola Epidemic: Lessons for the South African Tourism Sector. *African Journal of Hospitality, Tourism and Leisure*, 4(1): 1-11.

Sofronov, B. 2018. The Development of the Travel and Tourism Industry in the World. Annals of Spiru Haret University. *Economic Series*, 18(4): 123-137.

South African National Parks (SANParks). 2022. Presentation at Tourism Investment Summit. Available: <u>https://www.gov.za/news/speeches/minister-barbara-creecy-sanparks-tourism-investment-summit-31-mar-2022</u> (Accessed 18 March 2023).

Stuart, E. A., Huskamp, H. A., Duckworth, K., Simmons, J., Song, Z., Chernew, M. E., and Barry, C. L. 2014. Using Propensity Scores in Difference-in-Differences Models to Estimate the Effects of a Policy Change. *Health Services and Outcomes Research Methodology*, 14: 166-182.

Surya, B., Hernita, H., Salim, A., Suriani, S., Perwira, I., Yulia, Y., Ruslan, M. and Yunus, K. 2022. Travel-Business Stagnation and SME Business Turbulence in the Tourism Sector in the Era of the COVID-19 Pandemic. *Sustainability*, 14(4): 1-37.

Wang, C., Meng, X., Siriwardana, M. and Pham, T. 2022. The Impact of COVID-19 on the Chinese Tourism Industry. *Tourism Economics*, 28(1): 131-152.

Wang, C., Tee, M., Roy, A. E., Fardin, M. A., Srichokchatchawan, W., Habib, H. A., Tran, B. X., Hussain, S., Hoang, M. T., Le, X. T. and Ma, W. 2021. The Impact of COVID-19 Pandemic on Physical and Mental Health of Asians: A Study of Seven Middle-Income Countries in Asia. *PloS One*, 16(2): 1-20.

Wang, Y. 2016. What are the Biggest Obstacles to Growth of SMEs in Developing Countries? An Empirical Evidence from an Enterprise Survey. *Borsa Istanbul Review*, 16(3): 167-176.

World Travel and Tourism Council (WTTC). 2020. 174m Travel and Tourism Jobs could be Lost due to COVID-19andTravelRestrictions,SaysWTTC.Available:https://www.scirp.org/reference/referencespapers?referenceid=3036756 (Accessed 16 May 2022).

Zhou, H. and Zondo, R. W. D. 2023. The Role of Business Incubation Programmes on the Performance of Small and Medium Enterprises in South Africa. *The Seybold Report*, 18(05): 2517-2533.

Zhou, H. and Gumbo, V. 2021. Key Performance Drivers of Small Enterprises in the Manufacturing Sector in KwaZulu-Natal Province, South Africa. *International Journal of Entrepreneurship*, 25(3): 1-12.

Zhou, H., Chamba, L. T. and Zondo, R. W. 2023. Application of Explainable Artificial Intelligence Technique to Model the Predictors of South African SMMEs Resilient Performance during the Covid-19 Pandemic. *International Journal of Research in Business and Social Science*, 13(1): 64-74.