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Unveiling the Impact of Strategic Sensitivity and Strategic Response on SME Performance Amidst COVID-19: Examining the Mediating Role of Innovation Capacity

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Abstract

Scholars have highlighted the pivotal role that Small and Medium Enterprises (SMEs) play in fostering economic sustainable development across nations. However, the SME sector has been significantly challenged by the repercussions of the COVID-19 pandemic and shifts in the global competitive landscape, resulting in decreased profits. This study explores the mediating role of innovation capacity in the relationship between strategic sensitivity, strategic response, and the performance of SMEs. Data were collected using a structured questionnaire from 405 participants and analyzed using Path Analysis - Structured Equation Modeling (PA-SEM). The findings confirm that strategic sensitivity significantly and positively affects SME performance and innovation capacity. Similarly, strategic response shows a positive and significant correlation with SME performance. Among the studied variables, innovation capacity has the most robust positive impact on SME performance. The research also indicates that innovation capacity serves as a partial mediator in the relationships between strategic sensitivity and SME performance, as well as between strategic response and SME performance. This implies that the beneficial effects of strategic sensitivity and strategic response on SME performance are partly due to their impact on innovation capacity. The study recommends that SMEs invest in research and development, foster creativity, and adopt new technologies as crucial strategies for achieving long-term success.

1. Introduction

Scholars and researchers worldwide have acknowledged the significant role played by Small and Medium Enterprises (SMEs) in fostering economic sustainable development for nations (Adekoya, 2021; Asseraf, & Gnizy, 2022; Azhar, Muduli, 2017; Nawaz, & Hameed, 2022). However, the SME sector has been severely impacted by the

COVID-19 pandemic, stemming from the novel coronavirus SARS-CoV-2, which emerged in late 2019 and swiftly spread globally, triggering widespread health, social, and economic disruptions (Müceldili et al., 2020; Sajuiygbe et al., 2021). This contagious disease outbreak has wreaked havoc on the growth of businesses, particularly SMEs. Evidence from the Organisation for Economic Co-operation and Development (OECD) in 2020 highlights the setbacks faced by SMEs in developed nations such as the United States of America, France, Canada, and the United Kingdom due to the surge in COVID-19. Approximately 70% of these enterprises experienced financial difficulties, struggling to meet their financial obligations. Similarly, Bretas and Alon (2020) lament that about 90% of SMEs in developing nations suffer from financial exclusion syndrome as a direct consequence of the COVID-19 pandemic. Baba and Nwuche (2021) further attest that over 75% of SMEs encountered challenges in distributing manufactured goods, resulting in a significant reduction in production and temporary halting of manufacturing processes.

The challenging circumstances at hand have compelled managers, researchers, and scholars to formulate strategies that fortify the resilience of the sector amidst the pandemic and the ever-evolving global environment (Sajuyigbe et al., 2021; Onyokoko, & Needorn, 2021). Essential among these strategies are strategic sensitivity and strategic response, pivotal approaches that propel the Small and Medium Enterprises (SMEs) sector into global prominence (Deshati, 2023; Bartik et al., 2020). Strategic sensitivity holds immense significance for SMEs, directly influencing their performance, particularly when confronted with a pandemic and the complexities of a global competitive landscape (Arokodare et al., 2020). As Adekoya (2021) asserts, strategic sensitivity empowers SMEs to be adaptive and resilient in the face of unforeseen challenges, such as the unprecedented impact of the COVID-19 pandemic. Building on this notion, Deshati (2023) emphasizes that a well-defined strategy enables organizations to pivot swiftly in response to external shocks, ensuring their survival and long-term sustainability. Extensive research affirms that when grappling with challenges like a pandemic and navigating an unpredictable business environment, a strategic response becomes imperative for SMEs to overcome obstacles and enhance their performance (Björkdahl, Fallahi, & Holmén, 2022). Asseraf, and Gnizy (2022) elaborate that strategic response is the organization's ability to adapt its capabilities to meet the demands of the dynamic business environment. Moreover, beyond strategic sensitivity and strategic response, innovation capacity emerges as a strategic asset for SMEs (Ogunleye et al., 2021). This capacity furnishes SMEs with the agility, resilience, and competitiveness required to navigate the intricacies of challenging business dynamics, encompassing pandemics and rapid shifts in the business environment (Azhar, Nawaz, & Hameed, 2022). In essence, the triad of strategic sensitivity, strategic response, and innovation capacity positions SMEs to not only weather uncertainties but also to thrive in the face of adversity (Björkdahl, Fallahi, & Holmén, 2022).

Earlier research has explored the relationship between strategic sensitivity and strategic response concerning SME performance (Deshati, 2023; Björkdahl, Fallahi, & Holmén, 2022; Bartik et al., 2020; Adekoya, 2021; Asseraf, & Gnizy, 2022; Azhar, Nawaz, & Hameed, 2022; Chan, & Muthuveloo, 2022; Cheng, & Shiu, 2020; Bojica et al., 2017). However, there is a notable absence of studies delving into the impact of strategic sensitivity and strategic response on SME performance, particularly when innovation capacity is introduced, especially in the aftermath of the COVID-19 surge. The objective of this study is to address the gap in the current literature by exploring how innovation capacity mediates the connection between strategic sensitivity, strategic response, and SME performance. This study is anticipated to play a crucial role in bolstering the long-term sustainability of SMEs. By unraveling the mediating role of innovation capacity in the relationship between strategic sensitivity, strategic response, and performance, managers and policymakers can forge a collaborative effort. This collaboration aims not only to ensure the survival of SMEs but also to facilitate their thriving amidst the challenges of dynamic and uncertain business landscapes.

2. Theoretical Framework

In-depth exploration has identified correlations between resource-based and dynamic capacity theories and dimensions of strategic agility, such as strategic sensitivity and strategic response, as well as innovation capacity. Consequently, these theories were incorporated in this study to establish a theoretical framework for elucidating the research variables.

2.1 Resource-Based Theory (RBT)

Resource-Based Theory (RBT) asserts that a firm's competitive advantage stems from possessing distinctive, valuable, and challenging-to-replicate resources and capabilities. These resources encompass tangible assets like technology, human capital, and brand equity, as well as intangible assets such as organizational culture and knowledge (Barney, 1991). The theory implies that Small and Medium-sized Enterprises (SMEs) endowed with superior resources can attain a lasting competitive edge even in dynamic environments (Denning, 2017; Cunha et al., 2020; Caldeira & Ward, 2003; Chigara, 2021). According to Sajuyigbe et al. (2023), Resource-Based Theory (RBT) enhances strategic sensitivity by underscoring the significance of recognizing and leveraging distinctive resources that align with market opportunities. A profound comprehension of a firm's internal strengths enables

a more nuanced grasp of external market dynamics. Additionally, Salder et al. (2020) reinforce that RBT prompts Small and Medium-sized Enterprises (SMEs) to customize their strategies based on unique resources. SMEs equipped with a discerning understanding of their resource base can formulate strategic responses in harmony with their internal capabilities, fostering more potent and enduring competitive strategies. Correspondingly, Ruben (2019) observes that RBT acknowledges SMEs possessing resources such as skilled employees, proprietary technologies, and robust organizational culture are better positioned for innovation. This indicates that sustained innovation is rooted in the ability to cultivate and safeguard valuable resources. A study by Ali and Anwar (2021) affirms that Resource-Based Theory establishes a platform for SMEs to attain competitive advantages by leveraging their specific resources. For SMEs, often confronted with resource constraints, the theory underscores the strategic importance of identifying and maximizing the utilization of their unique resources. de lasHeras-Rosas, and Herrera's (2021) findings indicate that the utilization of strategic sensitivity, strategic response, and innovation capacity empowers Small and Medium-sized Enterprises (SMEs) to secure a competitive advantage, particularly in the face of a pandemic and dynamic business environment. Consequently, this theory plays a pivotal role in enabling SMEs to acquire internal resources through strategic sensitivity, strategic response, and innovation capacity, thereby furnishing them with a competitive edge amidst the challenges posed by a pandemic and dynamic business landscape.

2.2 Dynamic Capacity Theory

Dynamic Capacity Theory also referred to as dynamic capabilities, emerged as an extension of Resource-Based Theory (RBT), focusing on a firm's capacity to adapt, integrate, and reconfigure internal resources and capabilities in response to changes in the external environment. This theory underscores a company's agility in adjusting to dynamic market conditions (Teece, 2007). According to recent research, dynamic capacity theory enriches strategic sensitivity by highlighting a firm's ability to perceive alterations in the business environment, enabling the identification of emerging opportunities and threats. This emphasis on adaptability encourages firms to maintain awareness of market dynamics, fostering a proactive approach (Collings., 2019; Cunha, 2020; Amaeshi et al., 2021; Jasim et al., 2020; Nte et al., 2020). A study conducted by Ober, and Kochma (2022) demonstrates that dynamic capabilities involve the proficiency to respond effectively to changes. Small and Medium-sized Enterprises (SMEs) equipped with robust dynamic capabilities can flexibly adjust their strategies and operations to seize opportunities or mitigate risks, thereby enhancing their strategic response. Additionally, Deshati (2023) emphasizes that dynamic capacity theory provides a framework for SMEs to dynamically reconfigure their resources, positioning them favorably for innovation. This adaptability enables SMEs to integrate novel technologies, processes, or business models, thereby improving their innovation capacity. The implications of dynamic capabilities are particularly advantageous for SMEs operating in dynamic and resource-constrained environments (Nimeshi, & Rodrigo, 2024; Christofi et al., 2023; Arbussa et al., 2017; Jasim et al., 2020). The theory advocates that SME managers can leverage dynamic capabilities to augment strategic sensitivity, response, and innovation. Cultivating a culture of adaptability and investing in learning processes become instrumental in developing and reinforcing dynamic capabilities within SMEs (Onyokoko & Onuoha, 2021).

2.3 Literature Review and Hypotheses Development

2.3.1 Strategic Sensitivity

Strategic sensitivity refers to an organization's keen awareness and responsiveness to changes, trends, and disruptions in its external environment (Teece, 2007; Esposito De Falco et al., 2021; Fourné et al., 2014). Sajuyigbe et al. (2023) argue that strategic sensitivity involves the ability to detect and interpret signals from the business environment, enabling timely and informed decision-making. Therefore, SMEs with high strategic sensitivity are adept at recognizing emerging opportunities and threats, allowing them to proactively adjust their strategies and operations to stay competitive and adaptive in dynamic markets (Onyokoko, & Needorn, 2021). According to Jasim et al. (2020), strategic sensitivity is a crucial aspect of strategic management, emphasizing the importance of vigilance and responsiveness to external factors that can impact an organization's innovation capacity and performance.

Recent research has established a strong connection between Strategic Sensitivity, innovation capacity, and SME performance. In an investigation by Sajuyigbe et al. (2021), where strategic agility was measured through components like strategic sensitivity, strategic response, and collective commitment, the results demonstrated a positive correlation between strategic sensitivity and the organizational performance of multinational companies in Nigeria. Similarly, a study conducted by Ogunleye et al. (2021) and Hendratama, and Huang (2021) delved into the influence of strategic sensitivity on the performance of SMEs in Nigeria, revealing that strategic sensitivity is a key determinant of SME performance. Building on this, Deshati's study (2023) emphasizes that strategic sensitivity stands out as a robust predictor of firms' performance. Supporting these findings, Arokodare, Makinde, and Fakunmoju (2020) affirm that strategic sensitivity is among the crucial parameters of strategic agility

influencing the performance of the Nigerian Oil and Gas industry. Furthermore, a study in Jordan by Nte et al. (2020) reiterates that strategic sensitivity, on its own, exhibits a positive linear association with an organization's success. These results are consistent with the research conducted by de las Heras-Rosas, and Herrera (2021), confirming that strategic sensitivity maintains a positive linear relationship with a firm's success.

Furthermore, Akhigbe and Onuoha (2019) also argue that SMEs with strong strategic sensitivity are better positioned to recognize opportunities for innovation and align their efforts with market demands. This indicates that in the context of innovation capacity, strategic sensitivity plays a crucial role in identifying emerging trends, technological advancements, and market shifts that could potentially drive innovation. Hence, the following hypotheses emerged:

H1: Strategic sensitivity is positively and significantly associated with SMEs' performance.
H2: Strategic sensitivity is positively and significantly associated with innovation capacity.

2.3.2 Strategic Response

The strategic response denotes an organization's capacity to collaborate across all functional areas, including innovation capacity, in promptly addressing changes in the business environment (Adekoya, 2021; Akhigbe, & Onuoha, 2019). According to Akpan et al. (2021), strategic response involves an organization's ability to adapt its organizational capabilities to navigate the dynamic business environment and subsequently improve business performance. Adekoya (2021) also attests that strategic response serves as a platform for SMEs competitiveness and performance. Similarly, the dynamic capabilities theory emphasizes that strategic response empowers SMEs to leverage their strategic agility and innovation capacity in addressing the dynamic environment for competitive advantage (Teece, 2007; Hamdi et al., 2016). In another study, Onyokoko, and Onuoha (2021) argue that strategic response is one of strategic agility parameters that have a strong association with SMEs' performance and competitiveness. Akhigbe, and Onuoha (2019) also advocate that strategic response is a road map to SMEs' competitiveness and growth. Similarly, a study by Sajuyigbe et al. (2021) demonstrates that strategic response is a pathway to SMEs' competitiveness and success. Consistent with this perspective, previous studies have established a positive association between strategic response and SMEs' competitiveness and performance (Harsch & Festing, 2020; Ogunleye et al., 2021; Deshati, 2023; Nte et al., 2020; Ortiz et al., 2016).

Moreover, according to Teece (2007), there is a close interconnection between strategic response and innovation capacity in the context of SME performance. This suggests that strategic response entails the capability of SMEs to adjust to environmental changes, while innovation capacity pertains to the organization's ability to create and implement inventive solutions. Hence, a strategic response that harmonizes with market dynamics fosters an environment favourable to innovation. This implies that adopting strategic response practices can substantially enhance both innovation capacity and the overall success and resilience of SMEs in dynamic business environments.

Therefore, the following hypotheses are formulated:

H3: There is a positive and significant correlation between strategic response and SMEs' performance.
H4: There is a positive and significant correlation between strategic response and innovation capacity.

2.3.3 Innovation Capacity as a Mediator

Innovation capacity denotes an organization's proficiency in generating and executing inventive ideas, processes, products, or services. It involves cultivating a culture of creativity, adapting to changes, and utilizing resources effectively for innovation (Oliva et al., 2019; Osita-Ejikeme, & Amah, 2021). A heightened innovation capacity signifies an organization's consistent ability to deliver valuable and pioneering solutions, thereby contributing to overall competitiveness and sustained success. Specifically, within Small and Medium-sized Enterprises (SMEs), innovation capacity reflects their capability to perceive, interpret, and respond to changes, enabling continuous innovation ahead of competitors (Ober, & Kochma, 2022; Ong et al., 2022; Ivory, & Brooks, 2018; Jiao et al., 2021). As highlighted by Jasim et al. (2020), innovation capacity encompasses both strategic sensitivity and strategic response, enabling firms to maintain long-term innovativeness. This capacity empowers SMEs to adjust their operations, processes, and strategies, leveraging changes for innovation, ultimately leading to improved performance (de las Heras-Rosas, & Herrera, 2021; Junni et al., 2015; Nyamrunda, & Freeman, 2021; Hughes et al., 2021). This underscores the role of innovation capacity as a driving force behind strategic sensitivity and strategic response, especially in the context of SMEs navigating through the challenges of a dynamic business environment, including the complexities brought about by the pandemic.

Current research demonstrates that innovation capacity serves as a foundation through which both strategic sensitivity and strategic response impact the performance of Small and Medium-sized Enterprises (SMEs) amid dynamic business environments (Björkdahl et al., 2022; Baba, & Nwuche, 2021; Nejatian et al., 2019; Amaeshi et al., 2021; Lyu et al., 2020). A study conducted by Azhar et al. (2022) underscores a direct connection between innovation capacity and SMEs performance. Additionally, in another study, innovation capacity is found to assist strategic sensitivity in enhancing SME performance within a globally competitive environment. Likewise, a study

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by Ali, and Anwar (2021) illustrates that innovation capacity provides a robust framework for strategic response, enabling SMEs to perceive, interpret, and effectively respond to changes, thereby improving their performance amidst challenges such as the pandemic and the global competitive business environment. Thus, the following hypotheses are formulated:

H5: Innovation capacity has a significant relationship with SMEs' performance.
H6: Innovation capacity mediates between strategic sensitivity and SMEs' performance.
H7: Innovation capacity mediates between strategic response and SMEs' performance

2.4 Conceptual Framework for the Study

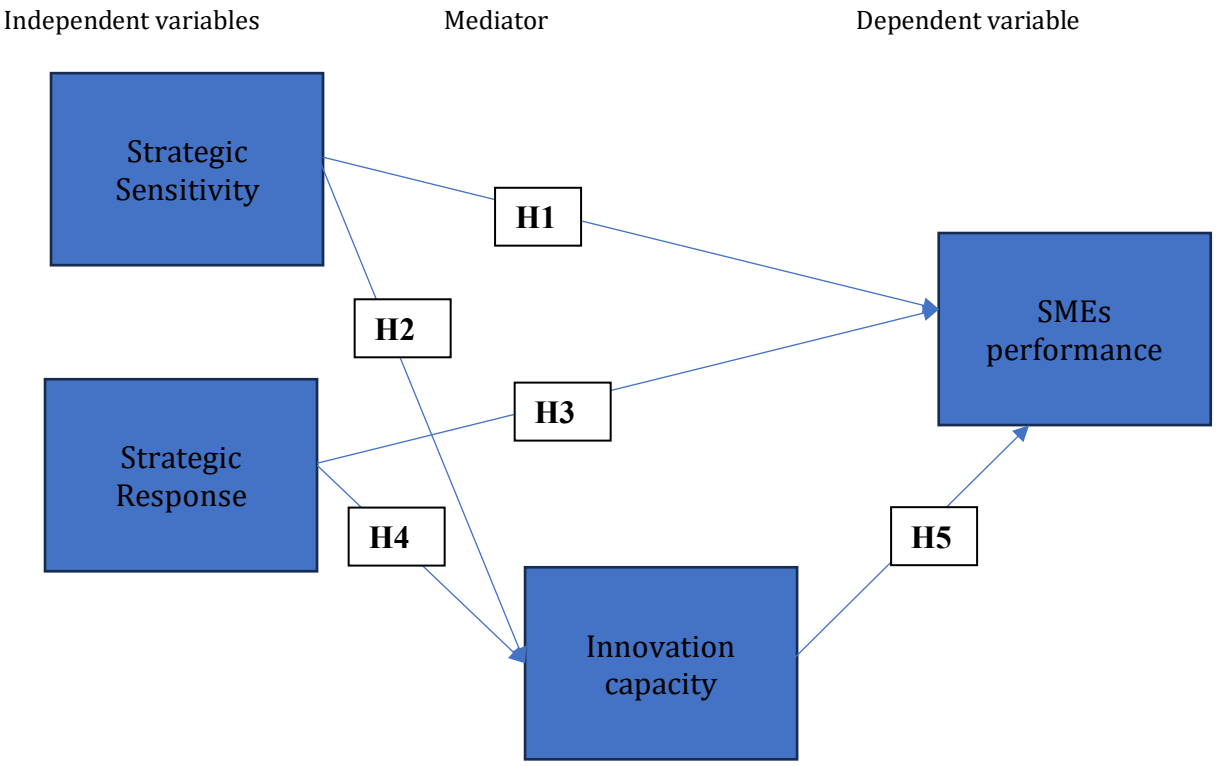

Fig. 1 *Conceptual model*

Figure 1 presents an overview of the conceptual model designed to predict SMEs' performance based on strategic sensitivity and strategic response. This model underscores the mediating role of innovation capacity in the relationship between strategic sensitivity, strategic response, and SMEs' performance. This section introduces the foundation of the conceptual framework and outlines the hypotheses regarding the interrelations among these variables. It is critical to understand that the effective application of strategic sensitivity and strategic response can significantly elevate SMEs' performance. These factors are essential for SMEs to navigate the dynamic business environment and achieve sustainable success. Additionally, by developing strong innovation capacity, SMEs can unlock significant performance improvements, gain a competitive edge, and achieve sustainable growth. Therefore, it is expected that strategic sensitivity and strategic response have a direct link to SMEs' performance. It is also expected that innovation capacity will have an indirect link with strategic sensitivity, strategic response, and SMEs' performance.

3. Methodology

The research adopted a cross-sectional research design, concentrating on Lagos State, acknowledged as Nigeria's most commercialized state. The target group encompassed all Small and Medium-sized Enterprises (SMEs) registered with the Lagos State Ministry for Commerce, Industry, and Cooperatives, with a minimum operational history of 5 years. Using non-probability sampling techniques, 452 questionnaire copies were distributed to SME owners or CEOs. The selection of participants for the study involved a convenience sampling approach. From December 15, 2023, to January 5, 2024, researchers, aided by two research assistants, administered questionnaires to willing participants. By the end of this period, 405 completed questionnaires were received, resulting in a response rate of 89.6%. The selection of Lagos State as the research locale is justified by its status

as the region with the highest number of registered SMEs in Nigeria. Additionally, the rich cultural diversity and complex social dynamics prevalent in Lagos make convenience sampling a particularly effective method. This approach facilitates direct interaction with SME operators open to discussing their experiences, enhancing accessibility to participants. Such close interactions often yield richer qualitative data, offering deeper insights and a nuanced understanding that more rigid sampling techniques may overlook. The respondents were provided with structured questionnaires incorporating scales such as the strategic sensitivity scale, strategic response scale, innovation capacity scale, and SME performance scale. These scales were originally developed and validated by Sajuyigbe et al. (2021), Onyokoko, and Onuoha (2021), and Osita-Ejikeme and Amah (2021). Reliability values of 0.799, 0.810, 0.802, and 0.841 were respectively reported for the scales measuring strategic sensitivity (SS), strategic response (SR), innovation capacity (IC), and SMEs performance (SMP). The instruments underwent additional validation (see Table 1)

Table 1 *Summary of results of the measurement instruments validation*

Code	Details	ER	EE	OA	
Strategic Sensitivity – Cronbach Alpha – (SS = 0.852)					
SS1	Our organization regularly monitors changes in the market environment.	.790			
SS2	The organization promptly adjusts strategies to comply with new regulatory requirements.	.799			
SS 3	There is a systematic process in place to track shifts in customer preferences.	.810			
SS 4	The organization stays informed about the strengths and weaknesses of key competitors.	.814			
SS 5	The organization invests in upgrading technological infrastructure to stay competitive.	.802			
Strategic Response – Cronbach Alpha – (SR = 0.823)					
SR1	Our SME is quick to adapt its strategies in response to changes in the business environment.		.809		
SR 2	Our SME anticipates potential risks and develops proactive strategies to mitigate them.		.804		
SR 3	The SME efficiently reallocates resources in response to shifts in market demands.		.821		
SR 4	Our SME has a streamlined decision-making process that allows for swift responses to market dynamics.		.797		
SR 5	The organization demonstrates flexibility in adjusting plans based on unforeseen challenges.		.802		
Innovation Capacity – Cronbach Alpha (IC = 0.839)					
IC1	Our SME fosters a culture that encourages employees to think creatively and propose innovative ideas.			.806	
IC2	The organization actively explores and integrates cutting-edge technologies relevant to the industry.			.816	
IC3	There are mechanisms in place to facilitate the exchange of ideas and expertise among employees.			.807	
IC4	Management actively supports and values creative thinking as a driver of innovation.			.817	
IC5	Our SME allocates resources for research and development activities to enhance innovation.			.811	
SMEs Performance – Cronbach Alpha (SMP = 0.827)					
SMP1	The financial performance of our SME is consistently strong.				.819
SMP2	The organization adapts strategies to stay relevant and competitive in the marketplace.				.808
SMP3	Our SME operates efficiently, minimizing wastage and maximizing productivity.				.819
SMP4	Customers are generally satisfied with the products/services offered by our SME.				.798
	Eigenvalue	2.992	2.530		3.623

Percentage of Variance	55.642	59.799	59.842
KMO	.809	.788	.817
Bartlett's Test of Sphericity	396.98	275.18	661.32
Reliability Test (Cronbach Alpha)	.820	.802	.831
Significance	.000	.000	.000

Source: own elaboration

Based on the information presented in Table 1, it is observed that the factor weight of each indicator exceeds 0.5. This suggests that the questions effectively capture the variability of their respective variables. Consequently, it can be inferred that the measurement model is appropriate for further analysis.

4. Result and Discussion

Table 2 reveals that the largest age group within the population is 20-35 years, constituting a relatively young demographic. As age increases, the percentage of the population decreases, suggesting a trend where younger individuals dominate. This trend implies that policies or products aimed at this demographic should cater to the needs and preferences of younger people, potentially emphasizing technology, innovation, and career development resources. In terms of gender distribution, males represent a larger fraction of the sample at 56.5%, compared to females at 43.5%. This indicates a moderate gender imbalance, with more males than females. Regarding marital status, nearly 70% of the individuals are married, and 30.4% are single, with no data available for divorced individuals. Educationally, over half of the respondents (50.3%) hold an HND/BSc degree, indicating a relatively high educational attainment. Additionally, 25.2% possess a National Diploma (ND), while a smaller proportion hold general school certificates (17.1%) or professional certifications (7.4%). The data does not include information on individuals with MBA/MSc/MA degrees or other qualifications.

Table 2 *Description of demographic factors*

S /N	Demographic variables	Grouping	Frequency	Percentage
1.	Age	20 -35 years	122	30.2
		36-45 years	108	266
		46 – 55 years	95	23.4
		56 and above	80	19.7
2.	Sex	Male	229	56.5
		Female	176	43.5
3	Marital Status	Married	282	69.6
		Single	123	30.4
		Divorce	-	-
4	Academic Qualification	General school cert.		
		ND	69	17.1
		HND/ BSC Degree	102	25.2
		MBA/ MSC/ MA	204	50.3
		Professional cert.		
		Others	30	7.4
			-	
				-
5	Establishment	Manufacturing	152	37.5
		Service	131	32.5
		Construction	87	21.4
		Agro – Allied	35	8.6
6	Years of experience	1to 5 years	87	21.5
		6-10 yrs	129	31.9
		Above 10 yrs	189	46.6

From an industry perspective, manufacturing emerges as the most common sector, employing 37.5% of the sample, followed by the service industry at 32.5%. Construction and Agro-Allied industries account for smaller segments at 21.4% and 8.6%, respectively. In terms of work experience, nearly half (46.6%) of the respondents have more than 10 years of experience, about 32% have between 6 to 10 years, and 21.5% have between 1 to 5 years of experience.

Table 3 *Path analysis (direct effect)*

Path	Beta-value	t-value	p-value	Hypothesis	Remark
SMP <-SS	.283	4.06	0.000	H1	Supported
IC <-SS	.257	3.46	0.001	H2	Supported
SMP <-SR	.227	2.99	0.003	H3	Supported
IC <-SR	.577	8.23	0.000	H4	Supported
SMP <-IC	.333	4.60	0.000	H5	Supported

Note: SMP= SMEs performance, SS = strategic sensitivity, SR = strategic response, IC = innovation capacity

Table 3 illustrates that strategic sensitivity significantly and positively impacts the performance of SMEs, as evidenced by a Beta value of 0.283 and a p-value of 0.000. This underscores the importance of comprehending market trends, customer needs, and competitive landscapes. It implies that strategic sensitivity serves as a robust predictor of SMEs' performance, aligning with Deshati's (2023) findings and supporting Arokodare, Makinde, and Fakunmoju's (2020) assertion that it is a crucial parameter of strategic agility. Hence, H1 is confirmed. Moreover, the results indicate that strategic sensitivity has a positive influence on Innovation Capacity (IC) (β = 0.257, p = 0.001). This suggests that SMEs attuned to their environment are more likely to generate innovative ideas and solutions. This finding resonates with Makadok (2001), affirming that SMEs with strong strategic. Thus, H2 is supported

The findings further highlight a positive and significant correlation between strategic response (SR) and SME performance, indicated by a Beta value of 0.227 and a significance level of P<.05. This implies that the adeptness in responding effectively to threats and opportunities, including adjusting strategies, products, or services, contributes to enhancing SMEs' performance. This observation aligns with Akpan et al.'s (2021) research, supporting the notion that strategic response positively influences business performance. Similarly, studies by Onyokoko and Onuoha (2021), Akhigbe, and Onuoha (2019), as well as Sajuyigbe et al. (2021) underscore the role of strategic response as a vital parameter of strategic agility associated with SMEs' performance and competitiveness. Consequently, H3 is substantiated.

The study reveals that strategic response has a positive impact on SMEs' performance (β = 0.227, p = 0.003), indicating that SMEs effectively adapting their strategies, products, or services in response to external factors can enhance their overall performance. This finding resonates with Teece's (2007) assertion that a close interconnection exists between strategic response and innovation capacity in the context of SME performance. Thus, H4 is affirmed.

Moreover, the evidence underscores that Innovation Capacity (IC) demonstrates the most robust positive relationship with SME performance, boasting the highest Beta value of 0.333. The associated p-value further emphasizes the significance of this relationship. This underscores the crucial importance of innovation for SMEs to flourish. The study advocates for investments in research and development, the cultivation of creativity, and the embrace of new technologies as key drivers to significantly boost SMEs' performance. Therefore, H5 is supported.

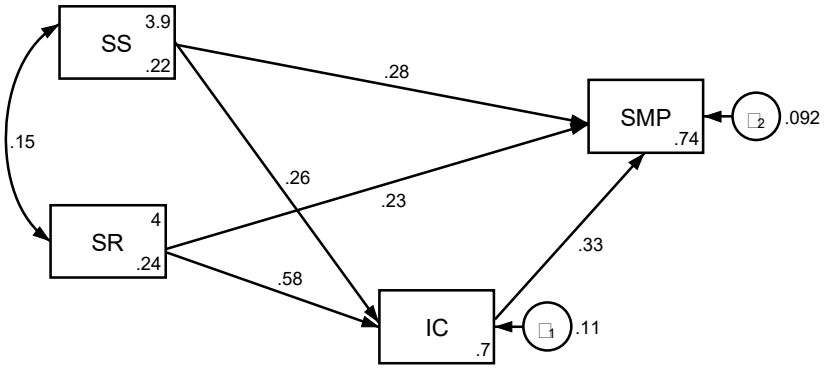

Fig. 2 *SEM*

Table 4 *Structured equation modelling (indirect effect)*

Path	Beta-value	t-value	p-value	Hypothesis	Remark
SMP <- IC <-SS	.857	2.77	0.006	H6	Partially Supported
SMP<-IC <-SR	.192	4.01	0.000	H7	Partially Supported

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Table 4 shows the mediating role of innovation capacity between strategic sensitivity, strategic response, and SME performance (see Fig. 1). The result depicts that Strategic Sensitivity (SS) has an indirect effect on SME Performance (SMP) through Innovation Capacity (IC) ($\beta = 0.857$, $p = 0.006$). This connotes that SS indirectly influences SMP via its positive effect on IC, also, SMEs with higher strategic Sensitivity are more likely to develop stronger innovation capacity, which in turn leads to better SME performance. This suggests that strategic Sensitivity's impact on performance is partially mediated by innovation capacity. Hence, H6 is partially confirmed.

Furthermore, evidence reveals that strategic Response (SR) has an indirect effect on SMEs' performance through innovation capacity ($\beta = 0.192$, $p < 0.001$). This indicates that strategic response indirectly affects SMEs' performance positively through its influence on innovation capacity. Also, SMEs that are more responsive to strategic threats and opportunities tend to have higher IC, which positively impacts SMP. This suggests that strategic response's contribution to performance is partially mediated by innovation capacity. Thus, H7 is partially supported.

These findings highlight the importance of considering both direct and indirect effects when examining the factors influencing SME performance. Innovation capacity serves as a key mediator, and strategies to enhance SS and SR should be integrated with efforts to foster innovation to achieve optimal outcomes.

5. Conclusion

The research explores the mediating role of innovation capacity in the relationships between strategic sensitivity, strategic response, and the performance of small and medium-sized enterprises (SMEs). The findings confirm that strategic sensitivity positively influences both SME performance and innovation capacity. This implies that SMEs possessing a heightened awareness of their environment are more likely to generate innovative ideas, leading to enhanced overall performance. Similarly, there is a positive and significant correlation between strategic response and SME performance, indicating that SMEs proficient in responding to threats and opportunities can improve their overall performance.

Notably, innovation capacity emerges as the variable with the most robust positive relationship with SME performance, emphasizing the pivotal role of innovation in SME success (World Bank, 2020). The study further uncovers that innovation capacity acts as a partial mediator in the relationships between strategic sensitivity and SME performance, as well as between strategic response and SME performance. This suggests that the positive impact of strategic sensitivity and strategic response on SME performance is, in part, driven by their influence on innovation capacity.

The research advocates for strategic initiatives such as investments in research and development, the fostering of a culture of creativity, and the adoption of new technologies as essential strategies for SMEs to attain sustainable success. These actions can contribute to the development of innovation capacity, thereby positively impacting SME performance in the dynamic business environment.

6. Theoretical Implications

This study illustrates the relevance of Resource-Based Theory and Dynamic Capacity Theory to SME managers. Specifically, RBT underscores the significance of recognizing and leveraging distinctive, valuable, and challenging-to-replicate resources. SME managers should focus on identifying and maximizing the utilization of their unique resources, including tangible assets like technology and human capital, and intangible assets such as organizational culture and knowledge. Also, the RBT prompts SMEs to customize their strategies based on their unique resource base. Managers should align their strategic responses with internal capabilities, fostering more potent and enduring competitive strategies. This involves a deep understanding of internal strengths and how they can be strategically employed in response to market opportunities. Similarly, RBT acknowledges that SMEs possessing resources such as skilled employees, proprietary technologies, and a robust organizational culture are better positioned for innovation. SME managers should focus on cultivating and safeguarding valuable resources as a foundation for sustained innovation, recognizing the role of internal capabilities in driving the innovation process.

In terms of Dynamic Capacity Theory (DCT), it emphasizes a firm's ability to adapt, integrate, and reconfigure internal resources in response to changes in the external environment. SME managers should foster adaptability within their organizations, enabling a proactive approach to dynamic market conditions, and maintaining awareness of emerging opportunities and threats. DCT also equipped SMEs with robust dynamic capabilities can flexibly adjust their strategies and operations. Managers should focus on cultivating dynamic capabilities to enhance strategic response, allowing the organization to effectively seize opportunities or mitigate risks in a changing business environment. Similarly, DCT provides a framework for SMEs to dynamically reconfigure resources, positioning them favourably for innovation. Managers should leverage dynamic capabilities to integrate novel technologies, processes, or business models, thereby improving innovation capacity within the organization.

7. Practical Implications

This research holds practical implications for both SME managers and policymakers. The findings underscore the significant and positive impact of strategic sensitivity on SME performance. In light of this, SME managers are advised to prioritize activities aimed at enhancing strategic sensitivity within their organizations. This entails maintaining awareness of the external environment, understanding market dynamics, and identifying emerging opportunities and threats. Such heightened awareness can stimulate the generation of innovative ideas, ultimately positively influencing overall SME performance.

Furthermore, recognizing the positive correlation between strategic response and SME performance, managers should concentrate on fostering a responsive organizational culture. This involves cultivating the ability to adapt swiftly to changes, capitalize on opportunities, and effectively address threats. Proactive responses are identified as key contributors to enhanced overall performance.

Additionally, acknowledging the robust positive relationship between innovation capacity and SME performance, managers are encouraged to prioritize the development of innovation capabilities. This may encompass investments in training programs, the creation of an environment conducive to creativity, and the encouragement of employees to contribute innovative ideas. The strengthening of innovation capacity is highlighted as a pathway to achieving sustainable success for SMEs. In summary, SME managers are urged to concentrate on cultivating strategic sensitivity, innovation capacity, and effective strategic response. Concurrently, policymakers should focus on creating an enabling environment that supports these aspects, fostering the overall growth and success of SMEs.

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Conflict of Interest

The authors affirm that there are no conflicts of interest concerning the publication of this paper.

Author Contribution

Wrote the introduction, and conducted the analysis: *A. S. Sajuyigbe;* ***Identified research gaps and developed the theoretical framework:*** *I. O. Ladokun;* ***Wrote the literature review and formulated the hypotheses:*** *J. N. Obi;* ***Conducted data collection and validated measurement instruments:*** *A. A. Oladeji;* ***Interpreted the results and wrote the conclusion and recommendations:*** *M. A. Adeyemi.*

References

Adekoya, F. (2021). Leveraging backward integration for resilience in pandemic, The Guardian, https://m.guardian.ng/business-services/leveraging-backward-integration-forresilience-in-pandemic/amp/

Akhigbe, E. A., & Onuoha, B. C. (2019). Strategic agility and organizational resilience of food and everages firms in Rivers state, Nigeria. International Journal of Business Systems and Economics, 12(2), 80-93.

Akpan, E. E., Johnny, E., & Sylva, W. (2022). Dynamic capabilities and organizational resilience of manufacturing firms in Nigeria. *Vision*, *26*(1), 48-64. https://doi.org/10.1177/0972262920984545

Ali, B.J and Anwar, G. (2021). Measuring competitive intelligence Network and its role on Business Performance. *International Journal of English Literature and Social Sciences. 6(2); 329-345.*

Amaeshi, U.F., Asiabaka, I.P., & Okoye, U.C. (2021). Enhancing Competitive Intelligence Innovation for Competitive Performance of SMEs in Nigeria.*PM World Journal*, 10(8); 1-24.

Asseraf, Y., & Gnizy, I. (2022). Translating strategy into action: The importance of an agile mindset and agile slack in international business. International Business Review, 31(6), 102036. https://doi.org/10.1016/j.ibusrev.2022.102036.

Arbussa, A., Bikfalvi, A., & Marquès, P. (2017). Strategic agility-driven business model renewal: the case of an SME. Management Decision, 55(2), 271-293. . https://doi.org/10.1108/MD-05-2016-0355

Baba, S.A & Nwuche, C.A. (2021). Proactiveness and organizational resilience of food and beverage manufacturing firms in South-South Nigeria. *Journal of International Business and Management*, 4(5), 01-13.

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. https://doi.org/10.1073/pnas.2006991117

Björkdahl, J., Fallahi, S., & Holmén, M. (2022). Explaining business model innovation processes: A problem formulation and problem-solving perspective. *Industrial Marketing Management, 105* (105), 223–239. https://doi.org/10.1016/j.indmarman.2022.05.012

Bojica, A. M., Del Mar Fuentes-Fuentes, M., & Fernández Pérez, V. (2017). Corporate entrepreneurship and codification of the knowl- edge acquired from strategic partners in SMEs. *Journal of Small Business Management*, 55, 205–230. https://doi.org/10.1111/jsbm.12310

Caldeira, M. M., & Ward J. M. (2003). Using Resource-Based Theory to Interpret the Successful Adoption and Use of Information Systems and Technology in Manufacturing Small and Medium-Sized Enterprises. *European Journal of Information Systems*, 12, 127-141. https://doi.org/10.1057/palgrave.ejis.3000454

Chan, J. I. L., & Muthuveloo, R. (2022). Strategic agility: Linking people and organisational performance of private higher learning institutions in Malaysia. *International Journal of Business and Society*, 23(1), 342–358. https://doi.org/10.33736/ijbs.4616.2022

Cheng, C. C. J., & Shiu, E. C. (2020). Leveraging open innovation strategies for fueling eco-innovation performance in dynamic environments. *Sustainability Accounting, Management and Policy Journal*, 11(7), 1245–1270. https://doi.org/10.1108/SAMPJ-04-2018-0103

Chigara, H (2021). Resource Based View and competitiveness: An empirical study of the Hadjira Chigara. *International. Journal of economic Performance (IJEP)*, université m'hamed Bougara Boumerdes Algerie, 2021.

Christofi, K., Chourides, P., & Papageorgiou, G. (2023). Revealing a non-linear relationship between knowledge assets and firm's value. *Electronic Journal of Knowledge Management*, 21(1), 01–12. https://doi.org/10.34190/ejkm.21.1.2889

Collings, D. G., Mellahi, K., & Cascio, W. F. (2019). Global talent management and performance in multinational enterprises: A multilevel perspective. *Journal of Management*, 45(2), 540–566. https://doi.org/10.1177/0149206318757018.

Cunha, M. P. E., Gomes, E., Mellahi, K., Miner, A. S., & Rego, A. (2020). Strategic agility through improvisational capabilities: Implications for a paradox-sensitive HRM. *Human Resource Management Review*, 30(1), 100695. https://doi.org/10.1016/j.hrmr.2019.100695

De las Heras-Rosas, C, and Herrera, J.(2021). Innovation and Competitive Intelligence in Business. A Bibliometric Analysis. International Journal of Financial Studies 9: 31. https://doi.org/ 10.3390/ijfs9020031.

Denning, S. (2017). The next frontier for Agile: Strategic management. *Strategy & Leadership*, 45(2), 12–18. https://doi.org/10.1108/SL-02-2017-0021

Deshati E. (2023). Staying Ahead of the Curve: An Analysis of Strategic Agility and its Role in Ensuring Firm Survival in a Dynamic Business Environment. *European Scientific Journal*, ESJ, 19 (13), 28. https://doi.org/10.19044/esj.2023.v19n13p28

Esposito De Falco, S., Scandurra, G., & Thomas, A. (2021). How stakeholders affect the pursuit of the Environmental, Social, and Governance. Evidence from innovative small and medium enterprises. *Corporate Social Responsibility and Environmental Management*, 28(5), 1528–1539. https://doi.org/10.1002/csr.2183.

Fourné, S. P. L., Jansen, J. J. P., & Mom, T. J. M. (2014). Strategic agility in MNEs: Managing tensions to capture opportunities across emerging and established markets. *California Management Review,* 56(3), 13–38. https://doi.org/10.1525/cmr.2014.56.3.13.

Hamdi, S., Silong, A. D., Binti Omar, Z., & Mohd Rasdi, R. (2016). Impact of T-shaped skill and top management support on innovation speed; the moderating role of technology uncertainty. *Cogent Business & Management*, 3(1), 1153768. https://doi.org/10.1080/23311975.2016.1153768

Harsch, K., & Festing, M. (2020). Dynamic talent management capabilities and organizational agility—A qualitative exploration. *Human Resource Management*, 59(1), 43–61. https://doi.org/10.1002/hrm.21972.

Hendratama, T. D., & Huang, Y.-C. (2021). Corporate social responsibility, firm value and life cycle: Evidence from Southeast Asian countries. *Journal of Applied Accounting Research*, 22(4), 577–597. https://doi.org/10.1108/JAAR-09-2020-0194.

Hughes, J., Martin, K., Brad, P O and Sneha, R (2021).'Organizational Strategy and Its Implications for Strategic Studies: A Review Essay'. Journal of Strategic Studies. 10.1080/01402390.2021. 1994950

Ivory, S. B., & Brooks, S. B. (2018). Managing corporate sustainability with a paradoxical lens: Lessons from strategic agility. *Journal of Business Ethics*, 148(2), 363–363. https://doi.org/10.1007/s10551-017-3648-6

Jasim, H, Sulaiman, Z., & Zakuan, N. (2020). Influence of Competitive Intelligence Success on Business Competitive Advantage: A Conceptual Framework. International Journal of Innovation, Creativity and Change. 11(12); 795-807

Jiao, M., Du, D., Shi, W., Hou, C., & Gui, Q. (2021). Dynamic absorptive capability and innovation performance: Evidence from Chinese cities. *Sustainability*, 13(20), 11460. https://doi.org/10.3390/su132011460

Junni, P., Sarala, R. M., Tarba, S. Y., & Weber, Y. (2015). The role of strategic agility in acquisitions: Strategic agility in acquisitions. *British Journal of Management*, 26(4), 596–616. https://doi.org/10.1111/1467-8551.12115.

Lyu, C., Yang, J., Zhang, F., Teo, T. S. H., & Guo, W. (2020). Antecedents and consequence of organizational unlearning: Evidence from China. *Industrial Marketing Management*, 84, 261–270. https://doi.org/10.1016/j.indmarman.2019.07.013

Müceldili, B., Tatar, B., & Erdil, O. (2020). Can curious employees be more agile? The role of cognitive style and creative process engagement in agility performance. *Global Business and Organizational Excellence*, 39(6), 39–52. https://doi.org/10.1002/joe.22056

Muduli, A. (2017). Workforce agility: Examining the role of organizational practices and psychological empowerment: MUDULI. *Global Business and Organizational Excellence*, 36(5), 46–56. https://doi.org/10.1002/joe.21800.

Nejatian, M., Zarei, M. H., Rajabzadeh, A., Azar, A., & Khadivar, A. (2019). Paving the path toward strategic agility: A methodological perspective and an empirical investigation. *Journal of Enterprise Information Management*, 32(4), 538–562. https://doi.org/10.1108/JEIM-10-2018-0233

Nimeshi G. K. S. 1, Rodrigo M. (2024). Barriers for Women Entrepreneurship Operating in the SME Sector Sri Lanka. *Journal of Business and Technology*. 8(1), 1-13; DOI: https://doi.org/10.4038/jbt.v8i1.95

Nte, N. D., Omede, K. N., Enokie, B. K., & Bienose, O. (2020). Competitive Intelligence And Competitive Advantage In Pharmaceutical Firms In Developing Economies: A Review Of Lagos State, Nigeria. *Journal of Management, Economics, and Industrial Organization*, *4*(1), 76–99.

Nyamrunda, F. C., & Freeman, S. (2021). Strategic agility, dynamic relational capability and trust among SMEs in transitional economies. *Journal of World Business*, 56(3), 101175. https://doi.org/10.1016/j.jwb.2020.101175

Ober, J. & Kochma, A. (2022). Adaptation of Innovations in the IT Industry in Poland: The Impact of Selected Internal Communication Factors. Sustainability, 14, 140.

OECD. (2020). OECD Policy Responses to Coronavirus (COVID-19): SME Policy Responses. https://www.oecd.org/coronavirus/policy-responses/sme-policy-responses-04440101/.

Ogunleye, P.O Adeyemo, S.A Adesola, M.A and Yakubu, Y. (2021). Strategic Agility and Small and Medium Enterprises' Performance: Evidence from Osun State, Nigeria. *South Asian Journal of Social Studies and Economics. 11(1): 26-36.*

Oliva, F. L., Couto, M. H. G., Santos, R. F., & Bresciani, S. (2019). The integration between knowledge management and dynamic capabilities in agile organizations. *Management Decision*, 57(8), 1960–1979. https://doi.org/10.1108/MD-06-2018-0670

Ong, E. C., & Tan, C. L. (2022). Soft TQM, agility, and knowledge management deliver organizational performance: A study of Malaysian manufacturing organizations in the electrical and electronics sector. *Global Business and Organizational Excellence*, 41(4), 28–47. https://doi.org/10.1002/joe.22155

Onyokoko, I.O. & Needorn, R.S. (2021). Operational flexibility and adaptive capability of manufacturing firms in south-south, Nigeria.*African Journal of Business and Economic Development*, 1(6), 27-48. Available at https://www.arcnjournals.org.

Ortiz, B., Donate, M. J., & Guadamillas, F. (2016). Relational and cognitive social capital: Their influence on strategies of external knowledge acquisition. *Procedia Computer Science,* 99, 91–100. https://doi.org/10.1016/j.procs.2016.09.103

Osita-Ejikeme, U.E. & Amah, E. (2021). Globalisation and survival of small and medium scale enterprises in Rivers State. *African Journal of Business and Economic Development*, 1(11), 1-14

Ruben, B. (2019). An Overview of the Leadership Competency Framework. In R. Gigliotti(Ed.), *Competencies for Effective Leadership* (pp. 19-28). Bingley: Emerald Publishing Limited. https://doi.org/10.1108/978-1-78973-255-920191001

Salder, J., Gilman, M., Raby, S., & Gkikas, A. (2020). Beyond linearity and resource-based perspectives of SME growth. *Journal of Small Business Strategy, 30*(1), 1-17.

Sajuyigbe, A.S, Eniola A.A, Ayeni, A, & Obi J. N (2023). Employee Relationship Management and Organizational Agility: Mediating Role of Employee Empowerment in Consumer Goods Sector. *Journal of Evolutionary Studies in Business;* 8(2):50-76. DOI:10.1344/jesb2023.8.2.36938

Sajuyigbe, A.S, Ayeni, A & Inegbedion, H. E (2021). Strategic Agility and Organizational Competitiveness of Multinational Companies. *International Journal of Information Management Sciences,* 5, 38-52.

Teece, D. J. (2007). Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance. *Strategic Management Journal*, 28(13), 1319–1350.

World Bank. (2020). Global Economic Prospects, June 2020. Washington, DC: World Bank. doi:10.1596/978-1-4648-1553-9.