

# Uncertain Supply Chain Management

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## The impact of procurement agility and procurement sustainability on organizational performance in UAE's entities: The mediating role of corporate governance

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### ABSTRACT

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Today, there is a need to develop businesses procurement activities through adopting agile and sustainable procurement practices. The key aim of this research is to identify the influence of both procurement agility and sustainability on organizational performance. The study creates a relationship between the procurement agility and procurement sustainability in the organizational performance with the mediating role of corporate governance. The research framework involves two critical predictors including procurement agility and procurement sustainability. The data was collected with a quantitative cross-sectional methodology within UAE's business entities context through adaptation of a well-designed questionnaire that was distributed to different businesses like Aviation, Hospitality and Telecommunication (320 responses). The study findings supported a hypothesized model with a significant influence of procurement agility and procurement sustainability on organizational performance. In addition, corporate governance mediated the relationship between procurement agility and organizational performance. The study concluded with the growing non-traditional procurement activities for better organizational outcomes.

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### 1. Introduction

The contemporary companies with the procurement functions that are characterized with high-performing senses are consistently outperform among the competition and their rivals with a wide range of indicators. Also, the effective companies build the advanced talented strategies and procedures into the heart of their procurement functions (Al Awadhi & Alshurideh, 2022). The leading organizations have already formulated a protection to gain benefits from the volatility rising (Al Awadhi & Alshurideh, 2023). The distinguishing between companies when recognizing the procurement are keeping the company's resources and access to the market is considered a priority for the management decisions. Regarding the product's design and development, identifying the processes and the sophisticated tools to leverage financial and risk management motivate the companies to make their procurement related functions more flexible (Rane et al., 2020). This would also increase the production processes during the peak time with their key suppliers. The global sourcing market has become deeper with network operations to gain foresights into the business volatility (Omwoyo et al., 2019).

The industries that are highly dependent on products already have considerable experiences that deal with extreme volatilities. Responding to the changes and uncertainties in the volatile business markets encourage the management to adopt agile procurement systems (Anane, 2020). But for others, the changes are not a new aspect particularly for consuming goods. The costs of the raw material present a large percentage of the sales growth. Therefore, the procurement operations executives face fierce changes timely due to the main disruptions and non-normal operations variability (Alabdali & Salam, 2022). The companies inadequately prepare to effectively manage their risks at high-priority criteria. The major volatilities become new

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normal, and for the procurement functions to be agile, it should have measurable benefits as well as entails the decision-making process at different management levels e.g. operational (Althabatah et al., 2023).

Reducing the high costs remains the most critical business concern, and the agility becomes more ambiguous with synonymous practices to improve the accurate forecasting. As the forecasting alone is not enough, the agile indicates the procurement has to expand its methods with considering other elements of the agility (Rane & Narvel, 2021). This is highly required for performance development as well as sustainability, thus the organizations have to develop sustainable processes that involve effective procedures like materials procurement, production, storage and product distribution and sufficient customer service (DeCandia, 2020). As a significant result, the sustainable procurement including green procurement management becomes a competitive mark that causes the organizations to identify the best approach to integrate and carry out the better sustainable practices (Dewick et al., 2021). The practices could generate the growing needs that enable organizations to understand the methods of organizations that can manage their operations and systems to participate with the key suppliers to increase the procurement sustainability and improve the performance (Bag et al., 2020).

From a management perspective, agility has a key role in the procurement process since it provides the methods which the company procurement process can operate (Malacina et al., 2022). Further, sustainable procurement also supports the overall organizational business strategies when the management drives the important operations into sustainable policies and motivates to successfully adopt the procurement specifications (Herold et al., 2023). This could encourage several benefits e.g. social, environmental and economic. Highlighting the importance of sustainable performance focuses on the procurement aspects to be more agile. The literature undertakes some theoretical perspectives applied in the sustainable procurement discussions and concentrates on the procurement management with various sustainability dimensions (Waithaka & Kimani, 2021). And the discussion of the present procurement policies and strategies indicate them as a source of competitive advantage for the business.

In light of research significance and knowledge gaps, the motivation of this research anchored to trigger a question or the issue that has not been answered in the existing studies which pointed out and formulated to examine the effects of procurement agility and procurement sustainability on the organizational performance at market and operational levels within the developing business entities field. The research gap continues to be fulfilled to cover some concepts and new ideas that haven't been addressed together with a theoretical base or practical evidence. Moreover, the topic of procurement agility and procurement sustainability linked with the organizational performance not adequately covered among the recent literature which can contribute to fulfil research knowledge gaps in this field which showed little research attempts in this topic (Boruchowitch & Fritz, 2022; Omwoyo et al., 2019). The current study aims to highlight on the dimensions of procurement agility and procurement sustainability through procurement process and green procurement, and how they influence the organizational performance with examination of the corporate governance as a mediator in the UAEs enterprises.

## 2. Literature review & hypotheses development

Generally, the organizational environment is stated more dynamic and changeable due to the continuous changes among the customers' preferences and their attitudes. Current organizations require highly to be survived to adapt into these changes to mitigate and reduce the potential risks once they occur as well as invest the real opportunities (Hallikas et al., 2021). The literature looks at the driving forces that can motivate the adaptability of being an agile procurement organization and address some factors that are able to manage, understand and implement effectively (Santos & Cabral, 2022). The procurement agility showed various insights and meanings within different organizations. Being agile means being restricted to make quick right decisions and have appropriate grasp of markets' needs. This also indicates to make the decisions based on the valid and reliable information sources with further collaboration (Idrees et al., 2022). The procurement processes to be agile were found among specific behaviors that include actions-oriented and cooperative. Making a visibility of the procurement through the supply chain for example is a critical for businesses to ensure the significant factors like meeting the regulatory requirements and risks planning. In the same way, improving the transparency of the pricing and supplier requirements also help the procurement agility functions and procurement management to deliver a great value (Tinali, 2021). On the other hand, this also enables avoiding potential significant regulator and operational risks, since the procurement functions of the organizations need to have knowledge along with its capabilities to carry out the needs without delay. Accordingly, the present study would formulate its H1 as: the procurement agility has a significant effect on the organizational performance among UAEs enterprises.

The factor of procurement sustainability not simply refers to being a green entity, but also considering the social responsibility aspects within the purchasing processes. As the social responsibilities focus on protecting the environment and making a balance of procurement processes, it also carries sets of economic solutions with noble procurement practices (Ghadge et al., 2019). In the same way, the concept of procurement sustainability has developed to state the processes that the companies can meet their needs for purchasing the goods, services, materials and utilities to maintain the value of environment and societal aspects (Karikari et al., 2022). In that way this enables the companies to sustain the life issues in light of increasing the benefits not only for the company but also for the whole society and economy. However, procurement sustainability plays a role in minimizing the damages of the environment and beautifying the corporate's image (Islam et al., 2017).

However, the indicators of performance can be measured by how the sustainability issues of the organizations are really considered among their essential activities. Since organizational performance is a common aim of the organization, the procurement sustainability varies across the different contexts (Rainville, 2022). Examining the effect of the procurement sustainability on the organizational performance since the procurement sustainability emerged to be a powerful mechanism into the economic and social contribution to achieve the sustainable goals by stimulating further sustainable insights of production consumption. Generally, the policies of procurement sustainability focus on the issues related to the environment, social and economy that can integrate into the essential procurement processes to improve the desirable performance (Singh & Chan, 2022). Accordingly, the study formulates its H2 as: the procurement sustainability has a significant effect on the organizational performance among UAEs enterprises.

The performance measures in the current study involve both operational measure and market measure. They consider the key metrics that are used to measure organizational performance. The different performance metrics used by the organizations for this issue may include customer and employee satisfaction, sales volume, revenues generation, customer retention, productivity and gross profit (S. Singh et al., 2016). Generally, the organizations are evaluated by sets of indicators of the operational performance. The marketing literature provides a wide varied range of possible market and operational performance measures, both are addressed from theoretical and practical perspectives (Rubenstein et al., 2003). They are often considered the essential marketing department work basis of the performance measures that require significantly key resources to keep updated which significantly contribute to the effect of marketing investments. The literature suggests the organizations are immersed with these measures that commonly represent most performance measures and few measures with more careful selection the measures would be more required (Gomes et al., 2004). The literature stated that corporate governance has an important role in building effective frameworks and can encourage the cooperation between all individuals in the organization. It also raises the organizational performance through the policies and standards associated with the performance improvement and accountability (Usendok, 2022). Through this factor, the organizations can easily manage the activities while adopting the corporate governance and put a close look at the development of the performance indicators (Sarhan et al., 2019). The findings of Van Hoang et al. (2021) confirmed that the organizations with full compliance of corporate governance principles are more likely to experience high-level performance. Khatib & Nour (2021) indicated the association between corporate governance and organizational performance and confirmed the vulnerability that influences the principles of corporate governance at different levels whether financial or non-financial level. Corporate governance has witnessed particularly in the contexts of competitive markets, great concern with the role of ownership in different aspects to follow the managerial-board procedures to support effective implementation of the corporate governance to raise the organizational performance (Bhagat & Bolton, 2019).

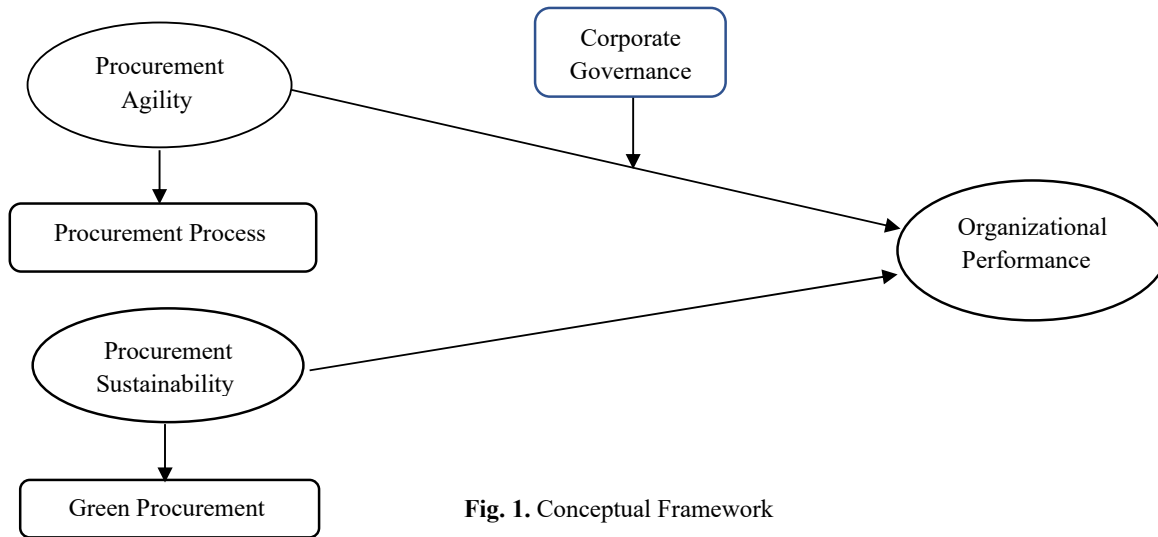
Moreover, Puni & Anlesinya (2020) revealed that organizational performance is influenced by the principles of corporate governance, specifically the financial level that includes the issue of cost reduction. Furthermore, it is evidenced that the independence of the board of directors while formulating the corporate governance principles of the actions, the effectiveness of the organizational performance can be positively influenced with innovation senses and rapid adoption of the financial disclosure and social responsibility practices (Chandrakant & Rajesh, 2023). However, the results in this association clarified the corporate governance implementation allowing the organizations to reach higher levels of desirable performance characterized with innovation, agility, efficiency, and market results. Accordingly, the study formulates its H3 as: the corporate governance mediates the effect between procurement agility and organizational performance among UAEs enterprises. On the other hand, the digitalization is emerging as a result of the large usage of the digital technologies across different industries responding to the changes of the business models. It ultimately helps to provide new revenues with a value-producing opportunity. It is seen as a process of integrating the technologies into the major business activities to become a digital business (Broccardo et al., 2023). However, the green procurement concept indicates the process of purchasing the goods and services that mainly reduce the negative effects with minimal impact on the social and environmental aspects. Currently, the customers' preferences with growing demands from the companies to recycle processing of the products with efficient energy systems as well clean technologies (Rejeb et al., 2023).

They drive the adoption of an ecological responsibility of the enterprise's practices. On other hand, the model of study addressed the green procurement which refers to the ability to quickly respond to the disruptions occurring among the operations by using flexible contingency plans and forecasts from the materials sourcing into the logistics and final delivery (Shishodia et al., 2023). Having a resilient procurement process chain within the organization means a great capacity for characteristics of resistance and changes recovery. And this also means how your capability as an organization to control and manage the disruptions and decrease the effects once occur with low operational risks and interruptions that may threaten various areas of the procurement practices (Zhao et al., 2023).

#### *UAE's Context*

The United Arab Emirates UAE is considered a base for Middle East and North African business operations by the large numbers of corporates and enterprises that are attracted by an efficient investment environment and facility. For example the developed infrastructure and connections with efficient tax systems with friendly and legal environments shape an umbrella to incubate the emerging different businesses (Khan et al., 2018). The various available business options set up the businesses with appropriate dependent operations and activities to expect the duration with all needs for residency in UAE with free zone,

licensing requirement and tax effects. These set up the local entities to joint ventures and mergers or acquisition of the entities even appoint an agent (Khan, 2019). And the organizational performance in this context is addressed by several factors such as culture, leadership styles, logistics systems, HRM practices, etc. The UAE's business environment provides a favorable investment setting through the excellence in establishing the infrastructural facilities supported by the professional experience and customized services that enable the UAE to reach the competitive edge over the region. Moreover, UAE is seen as a logistics hub of the supply chain and shifts to be a primary center for Asia, Middle East and North African. This shifting has resulted due to the economic diversifications and effective implementations of the national logistic plans coupled with the outstanding digital transformation of private and public sectors across the country. And the investments in the logistic industry are critical factors that contribute to developing UAE's procurement sustainability practices (Alshurideh et al., 2023). This leads to center nerve in the procurement operations by owing efficient infrastructure, legislative laws, and social political stability.



**Fig. 1.** Conceptual Framework

### 3. Method

To achieve the present research objectives, it used a research design with a quantitative descriptive approach and analytical procedures. Further, the study concerns conducting cross-sectional research through an instrument of survey questionnaire for the purpose of data collection. The study population and sample related to the business entities operating in the UAE including aviation, hospitality, and telecommunication enterprises as they have some related procurement practices. The study sample participating in the study reached 320 responses including different management levels of staff. The research data collection tools had been validated through experts and professionals in the present study subject. Content validity was conducted related to the wordings of the measures to make sure they are understandable with no ambiguity or confusion. The arbitrariness gave significant suggestions with modifications to enhance the study measures with drafting them prior the distribution process. English edition was distributed to the participants which is the research language and the most business workforces with adequate knowledge of English. The questionnaire was divided into various parts including participants' demographics and latent variables items which they were built based on the relevant literature (i.e., Al Awadhi & Alshurideh, 2023; Islam et al., 2017; Singh & Chan, 2022; Usendok, 2022). The suggestions of using and conducting research with an approach of structural equation modeling trigger this study to consider it during the analysis process. The debates of determining the minimum sample size with at least 200 responses confirmed it as a good option to carry out this research based on the maximum likelihood estimation approach. The research work interests will analyze the data using the software of SmartPLS3 that provides several statistics and analyses outputs. Hence, the data analysis process related to this method generally is given with the latent constructs that are drawn with their measuring items and interrelate with the outcome constructs to represent the shape of relationship between the study variables. As the SEM analysis interests analyzing the associations between many functional latent constructs, there are two known types of models in this approach called measurement and structural model. Each type of model has a unique analysis and was conducted to test validity and testing the hypotheses. As the research variables are drawn and converted to different measures or indicators that gauge the items using five interval scale 1= strongly disagree to 5= strongly agree. The research illustrated the respective interested causal relationship of the variables based on a theoretical base with path analysis of the model to appropriately test the study hypotheses.

### 4. Results

A total of 320 valid and complete responses were considered in the analysis with a response rate about (78%) of the overall distributed questionnaire (410). The demographics results found the majority of the study responses were male 65.9% but the females represent about 34.0%. The aging group of the sample showed around 34.0% aged between 46-55 years old (109),

followed by those aged between 36-45 years old (89) with a percentage of 27.8%, the results of educational level found most of the participants hold a bachelor's degree 63.7% (204), followed by those graduates' level (62) with a percentage of 19.4%. The results of sectors showed most of the responses were working in the manufacturing industry (73) with a percentage of 22.8% as presented in Table 1 below.

**Table 1**  
Sample Demographic

Variable	Frequency	Percentage
Gender		
Male	211	65.9
Female	109	34
Age		
25-35 years	67	20
36-45 years	89	27.8
46-55 years	109	34
Above 55	55	17.2
Educational level		
Diploma and less	54	16.8
Bachelor degree	204	63.7
Graduates	62	19.4
Sectors		
Aviation	73	22.8
Telecommunication	66	20.6
Hospitality	41	12.8
Fuel	30	0.9
Financial services	42	13.1
Government services	68	21.2

The study conducted the key analysis procedures including examining both reliability and validity of the conceptual model through the common tests of composite reliability CR, average variance extracted AVE and Cronbach's Alpha. The following sections are presented with those important analysis results for further understanding the major aspects in the research study.

#### Measurement model

The analysis starts with the results of the measurement study which are illustrated in this part. The important aspects of this analysis are confirmatory factor analysis that is generally conducted using an approach of structural equation modeling SEM to assess the measurements' reliability and validity. The key findings confirmed valid and reliable variables based on the values of reliability measures include both of CR and Cronbach's Alpha, the results were more than 0.70, as suggested by the reliable studies (e.g., Price et al., 2015). The instrument measures were ranked by five-point Likert scale. The discriminant validity of the present research is also determined by the values of AVE which represent the correlations between the variables, and the recommended threshold of the measurement model to have this type of validity should not exceed a value of 0.85. Further, the results of AVE indicate another kind of validity, namely convergent validity which should be greater than 0.50 as given in Table 2 and Fig. 1.

**Table 2**  
Constructs' Validity

Variable	Factor Loading	CR	AVE	Cronbach's	
Procurement Agility	PA1	0.808	0.911	0.672	0.878
	PA2	0.818			
	PA3	0.796			
	PA4	0.83			
	PA5	0.846			
Procurement Sustainability	PS1	0.846	0.912	0.674	0.879
	PS2	0.823			
	PS3	0.814			
	PS4	0.822			
	PS5	0.8			
Organizational Performance	OP1	0.833	0.931	0.693	0.911
	OP2	0.832			
	OP3	0.823			
	OP4	0.849			
	OP5	0.83			
	OP6	0.828			
Corporate Governance	CG1	0.848	0.932	0.733	0.909
	CG2	0.866			
	CG3	0.862			
	CG4	0.868			
	CG5	0.835			

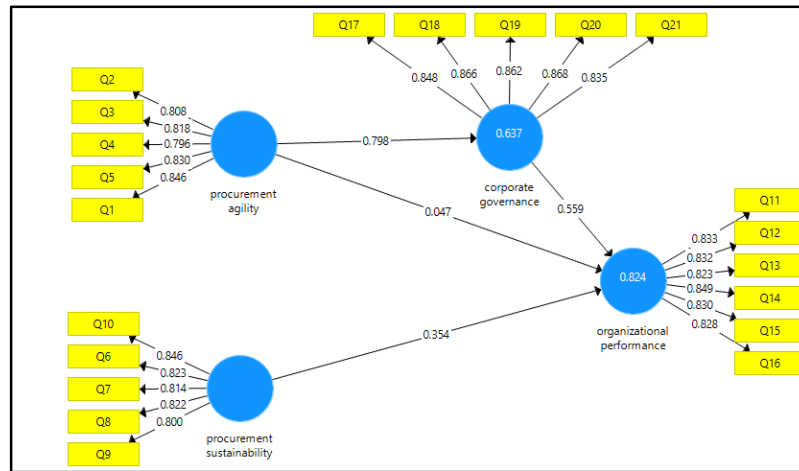


Fig. 2. Measurement Model

Structural model

A prior prerequisite analytical procedure should be aware before running the path analysis and test the hypotheses is checking the multicollinearity among study variables. It is conducted to ensure that the model and data didn't violate the assumptions of the regression analysis. With regard of the assumption, the current study conducted the analysis to assess the correlation issues using one of the common criteria in this aspect known as Variance Inflation Factor VIF associated with the value of Tolerance for all variables. The results confirmed the acceptable values of this examination for the respective variable which got less than (5.0) indicates this analysis has no high correlation between model variables, thus this indicates no problematic issue with multicollinearity of the variables and range (3.452 - 3.790). Moreover, this confirmed that the model had a normal distribution of the data since the coefficients of the skewness and kurtosis are lower than (1), the model validity is asserted in the analysis of testing the research hypotheses.

Table 3  
Multicollinearity Test

Variable	VIF	Tolerance	Skewness	Kurtosis
Procurement agility	3.452	0.289	0.675	0.770
Procurement sustainability	3.790	0.263	0.896	0.576

The study also evaluated the structural model through PLS-SEM analysis to check the interested model paths and the relations between the variables and test the study hypotheses. The conceptual model (Fig. 1) was examined and tested using SEM analysis with the approach of the maximum likelihood estimate. The results include the weights of the standardized regression ( $\beta$ ) and the significance level (p-value) of all model paths. The results as given in Table 4 and Fig. 3 revealed the standardized regression and coefficients interpret the direct association between the study variables, hence confirming the hypothesized relations. Based on the results, Procurement agility is positively associated with the organizational performance ( $\beta = 0.27$ ,  $t = 2.460$ ,  $p = 0.000$ ), and this supports H1. Procurement sustainability is also positively associated with organizational performance ( $\beta = 0.39$ ,  $t = 3.093$ ,  $p = 0.000$ ), and this supports H2. Corporate governance also positively mediates the effect of procurement agility on the organizational performance ( $\beta = 0.32$ ,  $t = 2.088$ ,  $p = 0.001$ ), and this supports H3.

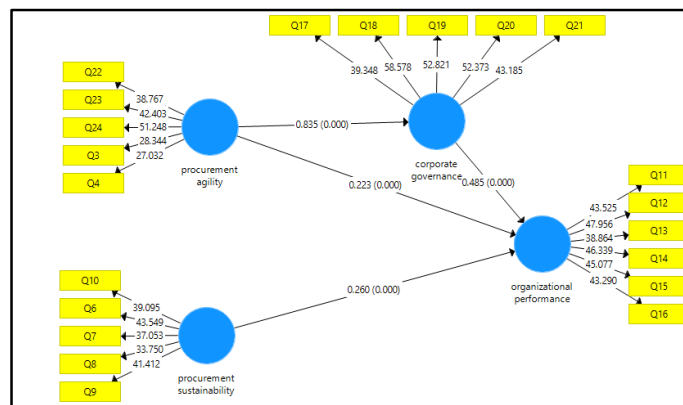


Fig. 3. Structural Model

**Table 4**  
Testing Hypotheses

Hypotheses	Estimates ( $\beta$ )	t-statistic	P-value	Decision
Procurement agility $\rightarrow$ organizational performance	0.223	6.564	0.000	Supported
Procurement sustainability $\rightarrow$ organizational performance	0.260	7.877	0.000	Supported
Procurement agility $\rightarrow$ corporate governance $\rightarrow$ organizational performance	0.405	4.254	0.000	Supported

## 5. Discussion

The study findings confirmed the effect of procurement agility and procurement sustainability on the organizational performance among business entities in UAE. The study stated the agile procurement processes of the business organizations was a way adapted to address the emerging challenges and establish more flexible processes of the working. A more agile entity with the procurement functions an agile procurement outcome which this led to a capable leverage of the various competences and skills within the competitive market. The results stand in line with the literature (e.g Rane et al., 2020) that stated the customer centric is the core of the business entities and having a resilient procurement system can effectively respond to the changing customer demands as well able to quickly evolve to the competition. Furthermore, the findings matched with the notions which address the characteristic of agile to have a procurement delivery framework to enhance working speed, flexibility, creativity and collaborative functional of the activities.

Moreover, the results asserted that procurement agility has become a prominent factor in the recent years but increase the agility of the organizational procurement itself is not a goal which this means achieving specific business outcomes. In the same way, the added value from procurement agility with its relationship with the organizational performance enable the business transformation to strengthen the organization's marketing positioning and improve its readiness in term to handle with the potential risks like supply chain disruption. The sustainability of the procurement as given in the results confirmed its effect on the organizational performance and allows dealing with the emerging business demands. This also consistent with the literature evidences (e.g. Islam et al., 2017) that asserted the effect of having sustainable procurement to establish transactional business activities with strategic progress toward the operations standardization and digital transformation. Similarly, the findings examined the sustainability issues among the business to respond to the technological revolution and adopt it as a tool in the procurement outsourcing to decrease the demands on the business. The traditional procurement outsourcing involved the activity of purchase-to-pay but currently includes another different tool such as contact source to achieve the business maturity (Karikari et al., 2022).

In light of the challenges that emerge while identify the major activities of the procurement operations, today's organizations pursue to evaluate maturity levels of their operations including transactional efficiency-based operations to gain agility. This leads to establish high efficiency and reduce the efforts that required becoming agile and progressive and improving the development to add business value. Based on the findings, the corporate governance effect as stated in the relevant literature, is deduced a scant attention that given to the factor of corporate governance with the procurement aspect (MANPAYA et al., 2023). The thoughts of this topic indicated and evidenced that the procurement can't address or taken as separate operation away from the corporate governance. Considering the role of corporate governance within the procurement and performance, it showed essential and to clearly state the procurement functions at independent level for a sake of maintain and developing trust with the procurement agility to achieve the better performance of the business entities.

The study while exploring the green procurement as an aspect of the procurement sustainability indicates the environmental initiatives of the purchasing operations that the organizations attempt to sure the products materials respect the environmental goals. Predetermined procurement purchasing operations including decrease the wastage source and promoting reuse or recycle the resources for a reduction and material substitution. The factor of green procurement supports the related operations of the supply chain purchasing with regard to the sustainability issues of the purchasing inputs to not violate the traditional criteria of purchasing quality products and delivery costs. The benefits of green procurement encompass the natural conservations as the green product is produced basically within a way that low usage of the energy and natural resource to utilize them more sustainably. The process of gaining these resources for the process of transferring them into final product encourage the managers while make a transaction of purchasing the raw materials or parts of the manufacturing to put into their eyes the green organizational behavior to transfer the ecological vision into reality and contribute to the efforts of waste reduction because the green products generally designed to accomplish the purpose of decreasing the waste quantity (Acquah et al., 2023).

Because of rapid environmental concerns of the organization and interests with this aspect, the sustainable procurement through the green practice has addressed in this study. The findings supported the dimension of the sustainability of the procurement including green procurement. Thus, the literature investigated how the organizations through their procurement practices can influence non-financial organizational performance. Although the growing interest of this area, the evidence of the organizational performance while implementing the sustainable procurement practices remain lack. Also, the effect of sustainability related practices on financial performance not been widely addressed with a focus on the context of emerging economies and countries. Though the research expansion in the procurement field linked with significant variables is admirable, the extant significant topic gap is highlighted in the present work, and the need to largely address this subject

within unique model and factors that may trigger the studies to examine and cover determinants associated with the green aspects than procurement or supply purchasing issues.

## 5. Conclusion & Implications

The study showed that although good governance principles differ across the economies and business industries, the stated known standards such as accountability and transparency still have integrated aims. The procurement activities still within the businesses attempt to integrate these shared aims with a respect to the procurement practices to demonstrate the shifting impeded through principles of corporate governance. To pressure the businesses competing objectives particularly with the limited resources, the study highlighted the need to satisfy various or may conflict business capabilities to meet the different stakeholders' expectations. This can raise the issues of achievement levels of good corporate governance to give ways of to the management with a cost-efficiency goal and discover the effective procurement activities. As keen to improve the procurement operations and contribute to overall sustainability and agility aspects, the business entities need ecological and economic reform, and the working should present the successful cases. And the procurement's functions are pillars of good governance that appear to remain common rhetoric and mainstream practices.

### *Theoretical implication*

The present study found that procurement agility and corporate governance can integrate the major human activities and hence, it is not rigid to limit changes under conditions. Moreover, theories like Principal-Agent Theory require a critical examination while looking at these concepts as they may engender the holistic approach of procurement activities to ensure great organizational performance. The principal-agent theory of the organization accordingly conceptualizes the ideas that the business performance can improve if the incentive-based negotiation and contracts with the suppliers for example and other different actors are carried out. The principals in the organizations can be more likely to achieve the desired organizational outcomes; meanwhile the agents have a clarity of the workplace practices, goals, and methods. So, the implication of Agency theory had provided some considerable effects on the theory of the entities' management. The theoretical implications of this study related to the gained findings connecting to the theory and ideas in the discussed field and broadening the extant theoretical explanation.

### *Practical implication*

At the level of practical, in-depth general procurement knowledge to understand the corporate governance practices of business entities, it is important to improve sufficient use of the limited resources. The literature in this line supported the views that have been established to identify some shortfalls in procurement and corporate governance thus, the management and practitioners because of research findings generalizability call for further research in this area. To inform the policies and practices, the research implicates the decision and policy makers to establish their procurement practice and related decisions based on the provided evidence-based interaction within the different procurement actions that should be considered to address the possible emerging issues that are identified in the current research. Also, this would lead to developing more effective purchasing related policies and practices that are grounded in the empirical evidence. In addition, the implication of practices would foster the sense of collaboration and engagement of the procurement department of the company to increase in return the collaboration between policymakers and other stakeholders and provide a common language and understand the practical outcomes of this factor.

### *Recommendation and limitation*

Therefore, the study recommends for a clear corporate governance guideline and procurement strategies make a link with the procurement agility and sustainability and show how improvement can be done by the general procurement performance. In addition, the procurement strategies should significantly standardize the common procurement entities and bind the duty to identify the works that have been done in the corporate governance and procurement area. The limited literature that discusses the corporate governance practices and procurement particularly in the developing economies are desired to be addressed within the national developments. The study findings also showed a line between corporate governance and procurement practices that was clearly defined to promote independent procurement practices in this area. Significantly, for more education of the best practices and legal systems enactment, it should integrate these variables into the emerging markets and the suggestions of consider new several thematic areas in the future research investigations to be conducted by the researchers in the domain of corporate governance and procurement with a specific professionalism of the procurement activities and governance principles.

## References

- Acquah, I. S. K., Baah, C., Agyabeng-Mensah, Y., & Afum, E. (2023). Green procurement and green innovation for green organizational legitimacy and access to green finance: The mediating role of total quality management. *Global Business and Organizational Excellence*, 42(3), 24–41.
- Al Awadhi, N., & Alshurideh, M. (2022). The Impact of Procurement Agility and Procurement Sustainability on



- Organizational Performance in UAE'S Semi-government Entities: The Mediating Role of Procurement Centralization. *International Conference on Advanced Intelligent Systems and Informatics*, 558–569.
- Al Awadhi, N., & Alshurideh, M. T. (2023). Exploring the Relationship Between Open Innovation, Procurement Sustainability and Organisational Performance: The Mediating Role of Procurement Agility. In *The Effect of Information Technology on Business and Marketing Intelligence Systems* (pp. 1585–1608). Springer.
- Alabdali, M. A., & Salam, M. A. (2022). The impact of digital transformation on supply chain procurement for creating competitive advantage: An empirical study. *Sustainability*, 14(19), 1–17.
- Alshurideh, M. T., Al Kurdi, B., Haitham, M. A., Akour, I., Obeidat, Z. M., & Hamadneh, S. (2023). Factors Affecting Employee Social Relations and Happiness: SM-PLUS Approach. *Journal of Open Innovation: Technology, Market, and Complexity*, 100033.
- Alhabatah, A., Yaqot, M., Menezes, B., & Kerbache, L. (2023). Transformative Procurement Trends: Integrating Industry 4.0 Technologies for Enhanced Procurement Processes. *Logistics*, 7(3), 63.
- Anane, A. (2020). The influence of green procurement practice on organisational performance. Ghana Water Company Ltd. and bayport savings and loans plc as point of convergence. *Journal of Economics, Management and Trade*, 26(2), 43–63.
- Bag, S., Wood, L. C., Mangla, S. K., & Luthra, S. (2020). Procurement 4.0 and its implications on business process performance in a circular economy. *Resources, Conservation and Recycling*, 152, 104502. <https://doi.org/https://doi.org/10.1016/j.resconrec.2019.104502>
- Bhagat, S., & Bolton, B. (2019). Corporate governance and firm performance: The sequel. *Journal of Corporate Finance*, 58, 142–168. <https://doi.org/https://doi.org/10.1016/j.jcorpfin.2019.04.006>
- Boruchowitch, F., & Fritz, M. M. C. (2022). Who in the firm can create sustainable value and for whom? A single case-study on sustainable procurement and supply chain stakeholders. *Journal of Cleaner Production*, 363, 132619. <https://doi.org/https://doi.org/10.1016/j.jclepro.2022.132619>
- Broccardo, L., Zicari, A., Jabeen, F., & Bhatti, Z. A. (2023). How digitalization supports a sustainable business model: A literature review. *Technological Forecasting and Social Change*, 187, 122146. <https://doi.org/https://doi.org/10.1016/j.techfore.2022.122146>
- Chandrakant, R., & Rajesh, R. (2023). Social sustainability, corporate governance, and sustainability performances: an empirical study of the effects. *Journal of Ambient Intelligence and Humanized Computing*, 14(7), 9131–9143.
- DeCandia, L. L. (2020). Building a future-ready procurement organization. *Rutgers Business Review*, 5(1), 1–12.
- Dewick, P., Hofstetter, J. S., & Schröder, P. (2021). From panic to dispassionate rationality—Organizational responses in procurement after the initial COVID-19 pandemic peak. *IEEE Engineering Management Review*, 49(2), 45–56.
- Ghadge, A., Kidd, E., Bhattacharjee, A., & Tiwari, M. K. (2019). Sustainable procurement performance of large enterprises across supply chain tiers and geographic regions. *International Journal of Production Research*, 57(3), 764–778.
- Gomes, C. F., Yasin, M. M., & Lisboa, J. V. (2004). A literature review of manufacturing performance measures and measurement in an organizational context: a framework and direction for future research. *Journal of Manufacturing Technology Management*, 15(6), 511–530.
- Hallikas, J., Immonen, M., & Brax, S. (2021). Digitalizing procurement: the impact of data analytics on supply chain performance. *Supply Chain Management: An International Journal*, 26(5), 629–646.
- Herold, S., Heller, J., Rozemeijer, F., & Mahr, D. (2023). Dynamic capabilities for digital procurement transformation: a systematic literature review. *International Journal of Physical Distribution & Logistics Management*, 53(4), 424–447.
- Idrees, M. A., Abbas, M., Ali, S. Q., & Khan, A. (2022). Journal of ISOSS 2022 Vol. 8 (3), 235-250 IMPACT OF E-PROCUREMENT ON PROCUREMENT PRACTICES AND PERFORMANCE EFFICIENCY-A STRUCTURAL EQUATION MODELING APPROACH. *Journal of ISOSS*, 8(3), 235–250.
- Islam, M. M., Turki, A., Murad, M. W., & Karim, A. (2017). Do sustainable procurement practices improve organizational performance? *Sustainability*, 9(12), 1–17.
- Karikari, A. M., Tettevi, P. K., Amaning, N., Opoku Ware, E., & Kwarteng, C. (2022). Modeling the implications of internal audit effectiveness on value for money and sustainable procurement performance: An application of structural equation modeling. *Cogent Business & Management*, 9(1), 1–26.
- Khan, M. (2019). Challenges with big data analytics in service supply chains in the UAE. *Management Decision*, 57(8), 2124–2147.
- Khatib, S. F. A., & Nour, A. (2021). The impact of corporate governance on firm performance during the COVID-19 pandemic: Evidence from Malaysia. *Journal of Asian Finance, Economics and Business*, 8(2), 943–952.
- Malacina, I., Karttunen, E., Jääskeläinen, A., Lintukangas, K., Heikkilä, J., & Kähkönen, A.-K. (2022). Capturing the value creation in public procurement: A practice-based view. *Journal of Purchasing and Supply Management*, 28(2), 100745. <https://doi.org/https://doi.org/10.1016/j.pursup.2021.100745>
- MANPAYA, M. W., De-Graft, O.-M., Baiden, P., Kofi, B., Edwards, D., & Ashayeri, P. (2023). A systematic review of the linkages between corporate governance systems and procurement practices in public procurement entities. *Ilnaz, A Systematic Review of the Linkages between Corporate Governance Systems and Procurement Practices in Public Procurement Entities*. <https://doi.org/https://doi.org/10.30574/wjarr.2023.18.3.1173>
- Omwoyo, J. N., Wanyoike, D. M., & Mbeche, W. (2019). Influence of lean procurement initiatives on supply chain agility in manufacturing firms in Nakuru county, Kenya. *Int. J. Bus. Manag. Technol*, 3(5), 150–157.
- Price, P. C., Jhangiani, R. S., & Chiang, I.-C. A. (2015). Reliability and validity of measurement. *Research Methods in Psychology*.

- Puni, A., & Anlesinya, A. (2020). Corporate governance mechanisms and firm performance in a developing country. *International Journal of Law and Management*, 62(2), 147–169.
- Rainville, A. (2022). Green Public Procurement in Mission-Orientated Innovation Systems: Leveraging Voluntary Standards to Improve Sustainability Performance of Municipalities. *Sustainability*, 14(14), 1–22.
- Rane, S. B., & Narvel, Y. A. M. (2021). Leveraging the industry 4.0 technologies for improving agility of project procurement management processes. *International Journal of System Assurance Engineering and Management*, 12, 1146–1172. <https://doi.org/https://doi.org/10.1007/s13198-021-01331-4>
- Rane, S. B., Narvel, Y. A. M., & Bhandarkar, B. M. (2020). Developing strategies to improve agility in the project procurement management (PPM) process: Perspective of business intelligence (BI). *Business Process Management Journal*, 26(1), 257–286.
- Rejeb, A., Rejeb, K., Simske, S. J., & Treiblmaier, H. (2023). Drones for supply chain management and logistics: a review and research agenda. *International Journal of Logistics Research and Applications*, 26(6), 708–731.
- Rubenstein, R., Schwartz, A. E., & Stiefel, L. (2003). Better than raw: A guide to measuring organizational performance with adjusted performance measures. *Public Administration Review*, 63(5), 607–615.
- Santos, J. B., & Cabral, S. (2022). Public procurement capabilities as engines for collaboration and enhanced performance in complex projects. *International Journal of Operations & Production Management*, 42(1), 32–58.
- Sarhan, A. A., Ntim, C. G., & Al-Najjar, B. (2019). Board diversity, corporate governance, corporate performance, and executive pay. *International Journal of Finance & Economics*, 24(2), 761–786.
- Shishodia, A., Sharma, R., Rajesh, R., & Munim, Z. H. (2023). Supply chain resilience: A review, conceptual framework and future research. *The International Journal of Logistics Management*, 34(4), 879–908.
- Singh, P. K., & Chan, S. W. (2022). The impact of electronic procurement adoption on green procurement towards sustainable supply chain performance-evidence from Malaysian ISO organizations. *Journal of Open Innovation: Technology, Market, and Complexity*, 8(2), 61.
- Singh, S., Darwish, T. K., & Potočník, K. (2016). Measuring organizational performance: A case for subjective measures. *British Journal of Management*, 27(1), 214–224.
- Tinali, G. Z. P. (2021). The mediation effect of procurement competence on the relationship between practices and performance of the public sector procurement in Tanzania using higher-order constructs in SmartPLS. *ORSEA JOURNAL*, 11(1).
- Usendok, I. G. (2022). Corporate Governance and Organizational Performance: A Study of Selected Banks in Nigeria. *International Journal of Business and Management Review*, 10(4), 59–74.
- Van Hoang, T. H., Przychodzen, W., Przychodzen, J., & Segbotangni, E. A. (2021). Environmental transparency and performance: does the corporate governance matter? *Environmental and Sustainability Indicators*, 10, 100123. <https://doi.org/https://doi.org/10.1016/j.indic.2021.100123>
- Waithaka, R. K., & Kimani, J. G. (2021). Effect of e-procurement practices on supply chain performance. *Global Journal of Purchasing and Procurement Management*, 1(1), 32–42.
- Zhao, N., Hong, J., & Lau, K. H. (2023). Impact of supply chain digitalization on supply chain resilience and performance: A multi-mediation model. *International Journal of Production Economics*, 259, 108817. <https://doi.org/https://doi.org/10.1016/j.ijpe.2023.108817>



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