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Ghana Local Government Procurement: A Path Towards Fairness, Efficiency and Transparency

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Abstract

The development of fashion trends has undergone major changes performance in Ghana's local government procurement, taking into account government regulations, supplier capacity and capability, procurement transparency, and supplier diversity. The ordinary least squares regression technique was employed to statistically evaluate data from procurement stakeholders. Our research demonstrates that transparent tools enhance supplier satisfaction and performance without affecting perceptions of justice. Conversely, strict government procurement regulations significantly improve perceptions of fairness as well as supplier satisfaction and performance. Supplier capacity and capability disparities adversely affect the results, while diversity programs do not significantly impact either outcome. The results indicate that suppliers are more content and perform better when strict restrictions and transparency mechanisms are in place. However, inadequate execution of diversity policies and competence discrepancies undermine fairness and engagement. This research supports the resource-based view theory, which contends that robust procurement regulations are essential for achieving long-term success. Legislators should prioritize capacity-building programs and diversity initiatives to ensure successful and equitable procurement procedures. This research is distinctive in that it surpasses the conventional compartmentalized approach by conducting a comprehensive and concurrent analysis of a multitude of procurement aspects. This comprehensive approach, which illuminates the interplay between numerous factors, has the potential to enhance public procurement policy and strategy.

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1. INTRODUCTION

Globally, public procurement is crucial for the delivery of infrastructure development and public services. It is the primary method by which governments obtain items such as software licenses, building materials, medical equipment, and education supplies. Governments worldwide allocate a significant portion of their funding to this procedure,

demonstrating its considerable significance (OECD, 2016). It is imperative to implement procurement processes that are both transparent and efficient to optimize the effectiveness of these investments (Smith et al., 2020). Underdeveloped nations, already grappling with insufficient funding, underscore the significance of robust procurement. In this context, public procurement is even more critical to meeting the demands for infrastructure and service delivery. Ghana recognizes that efficient public procurement is the catalyst for economic development and good governance (Gidigah et al., 2022). Ghana has avidly adopted reforms to enhance its procurement practices, which are consistent with global trends. The efficient supervision of these activities is essential for the realization of national development objectives, not just as a bureaucratic formality. Raj et al. (2020) argue that the promotion of transparency and efficiency in the procurement practices of developing countries can alleviate poverty, stimulate the economy, and benefit all residents.

Ghana's government's operations are significantly dependent on public procurement, which accounts for more than 70% of the national budget. In 2016, Ghana enacted Act 914 to amend Act 663 of 2003, its procurement legislation, to eliminate corrupt practices and boost efficiency, transparency, and equity. Amoako-Gyampah et al. (2020) state that these laws aim to judiciously utilize public funds and establish equitable procurement procedures, which will impact MMDAs. Despite the existence of a legal framework, issues such as lack of diversity among suppliers, accusations of inequity, and lack of transparency plague Ghanaian local government procurement processes (Amoako-Gyampah et al., 2020; Bullock & Jenkins, 2022). The local government continues to face significant challenges in implementing and enforcing procurement reforms, intended to address systemic issues and foster a culture of accountability.

To procure essential products and services, governments must participate in public procurement, which is the primary factor in the global development of public services and infrastructure. The necessity of public procurement in developing nations with limited resources to satisfy infrastructure and service requirements further emphasizes the importance of openness and efficiency in maximizing value (Malacina et al., 2022). In response, Ghana is progressing in its efforts to improve its purchasing practices (Ofosu-Boateng, 2020). This study addresses a gap in the existing literature by concentrating on the local government level in Ghana. Previous research has predominantly concentrated on national or sectoral levels, thereby restricting our understanding of the impact of local government procurement methods on stakeholders (Nsiah Asare & Prempeh, 2016). Our research provides a novel perspective by examining the specific dynamics and obstacles that affect public trust and supplier satisfaction in developing nations, exclusively focusing on Metropolitan, municipal, and District Assemblies (MMDAs) in Ghana.

Transparency issues impede anti-corruption and confidence-building initiatives in local government procurement procedures. Ghana's government contracts should be more transparent and open, as the country received a score of 43 out of 100 on Transparency International's Corruption Perceptions Index according to Forson (2024). Additionally, there are challenges associated with supplier diversity policies, including public ignorance, red tape, and insufficient local supplier capacity (Donkor et al., 2021). To address this informational gap, this study examines the impact of supplier diversity policies, procurement transparency, supplier capacity and capability, and government procurement legislation on Ghanaian local governments' procurement procedures. Additionally, it is interested in understanding how these factors affect suppliers' perspectives on procurement fairness, performance, and satisfaction. We can further the struggle against corruption and promote an inclusive, competitive procurement environment by diversifying suppliers and enhancing transparency.

The primary goal of this investigation is to identify the factors that influence Ghanaian local government officials' perspectives on procurement impartiality and supplier satisfaction. The quantitative research approach was employed to collect and analyze the survey responses of a variety of stakeholders involved in the procurement process. The overarching goal is to improve Ghana's public procurement practices by providing concrete

recommendations for more equitable and efficient procurement processes in the country's local governments. It is possible to implement more equitable and effective procurement practices by gaining a more comprehensive understanding of the specific obstacles and facilitators in the local government procurement system. This investigation aims to impact capacity-building initiatives and policy modifications in this area.

2. METHODS

2.1 Data Sampling Technique

This study employs a quantitative research methodology to examine the factors that influence the procurement processes in Ghana's MMDAs a second tier of the local government in Ghana. This method is essential for consistently quantifying perceptions and attitudes to obtain statistically significant findings on procurement fairness and supplier satisfaction (Pan et al., 2020). This is the reason we selected this approach. Structured questionnaires were implemented to accumulate data in a survey format. This method is particularly effective for gathering substantial quantities of data and assessing individuals' attitudes toward various procurement processes, as per Changalima et al. (2021) and Aithal and Aithal (2020). The validity and reliability of the study were contingent upon the consistent capture of data through questionnaires (Sekaran & Bougie, 2016). A stratified sample technique was implemented (Singh & Mangat, 1996) to ensure that a diverse array of professional positions were represented. Representatives from procurement departments, budget analysts, planning officers, and local supplier and contractor communities comprised this group. We selected a sample of 486 individuals to ensure a comprehensive representation of various perspectives on procurement processes. Our objective in employing this methodology was to enhance the generalizability of the research by ensuring that our findings were pertinent to a diverse array of stakeholders in the local government procurement system (Dimand, 2022).

2.2 Variable Measurement

This study examines some critical factors that are relevant to different aspects of the procurement processes employed by local administrations. Seven-point Likert scales are employed to evaluate two critical dependent variables: Supplier Satisfaction and performance (SSP) and Perceptions of Procurement Fairness (PPF). Their objective is to convey stakeholders' assessments of the framework's overall effectiveness. Pan et al. (2020) discovered that higher scores on the supplier performance scale indicated a more favorable perception of equity in procurement methods, while higher scores on the fairness measure indicated a greater overall level of satisfaction. Government Procurement Regulations (GPR), Supplier Capacity and Capability (SCC), Procurement Transparency (PTT), and Supplier Diversity Policies (SDP) are independent variables that influence these outcomes. Government Procurement Regulations (GPR), Supplier Capacity and Capability (SCC), Procurement Transparency (PTT), and Supplier Diversity Policies (SDP) are independent variables that influence these outcomes. We evaluated all the variables using the 7-point Likert scale, with higher scores indicating a more robust perception of regulations, stronger supplier capabilities, increased transparency, and a more robust agreement with the efficacy of diversity policies (Morgan et al., 2018). Additionally, the study incorporates control variables, including the Political Environment (PLE) and Local Economic Conditions (LEC), which are evaluated on a binary scale with 1 representing favorable and 0 representing unfavorable, to account for external factors that could potentially impact procurement performance. This study implements a comprehensive variable-measurement methodology that integrates binary measurements with Likert scales to precisely document the fundamental components of local government procurement and their perceived impacts.

2.3 Model of Specification

The analysis employs Ordinary Least Squares (OLS) regression to examine the relationships between the independent variables (SDP, PTT, SCC, and GPR) and the dependent variables (PPF, SSP). The empirical model is stated as follows:

$PPF=\alpha+\sigma_1 SDP+\sigma_2 PTT+\sigma_3 SCC+\sigma_4 GPR+\alpha_5 LEC+\alpha_6 PLE+\varepsilon$ (1)

$SSP=\alpha+\sigma_1 SDP+\sigma_2 PTT+\sigma_3 SCC+\sigma_4 GPR+\alpha_5 LEC+\alpha_6 PLE+\varepsilon$ (2)

Where PPF and SSP are dependent variables: Perception of Procurement Fairness and Supplier Satisfaction and Performance, Supplier Diversity Policies (SDP); Procurement Transparency (PTT); Supplier Capacity and Capability (SCC); and Government Procurement Regulations (GPR) are independent variables: Control variables include Local Economic Conditions (LEC) and Political Environment (PLE) to account for external influences. ε_{it} is the error term and $\sigma_1 - \alpha_6$ are the coefficients of the variables in the model.

3. RESULT AND DISCUSSION

3.1 Demographics

According to the demographic data, the respondent pool was only 11.32% female and 86.68% male. The workforce's age distribution indicates that it is significantly juvenile, with 49.18% falling within the age bracket of 31 to 40, 20.99% falling within the age bracket of 41 to 50, 18.31% falling within the age bracket of 50 and above, and 11.52% falling under the age of 30. Nearly half of the population holds a bachelor's degree or higher, while 39% hold a master's, 3.9% hold professional degrees, and 2.67 percent hold an HND. Budget analysts (25.93%) and procurement officers (31.69%) comprise the two largest occupational categories. Planning officers (18.93%), local suppliers and contractors (16.46%), and representatives from civil society organizations (CSOs) (7.00%) comprise additional categories. The majority of individuals maintain a favorable impression of the local economic conditions (97.12%) and political environment (98.56%), which may influence their assessment of procurement procedures and outcomes.

Table 1: Demographic Information on Respondents

		Frequency	%
Gender	Female	55	11.32
	Male	431	88.68
Age (Years)	Below 30 Years	56	11.52
	31-40 Years	239	49.18
	41-50 Years	102	20.99
	50 Years and Above	89	18.31
Qualifications	HND	13	2.67
	First Degree	268	55.14
	Masters Degree	190	39.09
	Professional Qualification	15	3.09
Profession	Budget Analyst	126	25.93
	Civil Society Organisations (CSOs)	34	7.00
	Local Suppliers and Contractors	80	16.46
	Planning Officers	92	18.93
	Procurement Officers	154	31.69
Local Economic Conditions	Favorable	472	97.12
	Unfavorable	14	2.88
Political Environment	Favorable	479	98.56
	Unfavorable	7	1.44

Source: Field Survey (2024)

3.2 Descriptive Statistics

The descriptive statistics of this study illuminate the distributional properties, central tendency, and variability of the data. The PPF scale has an average score of 5.607, a standard deviation of 0.904, and a range of 2.75 to 7.00. This implies that there was minimal variation in the respondents' assessments of the procurement processes. According to the SSP survey, suppliers were generally satisfied with their work; however, there was a significant degree of variation in the performance ratings they provided. The standard deviation was 0.854, which is marginally lower, and the results ranged from 3.00 to 6.50 on the mean scale.

Table 2: Descriptive Statistics

	Minimum	Maximum	Mean	Std. Dev.	Skewness	Kurtosis
PPF	2.75	7.00	5.607	0.904	-1.231	0.880
SSP	3.00	6.50	5.168	0.854	-0.812	-0.076
SDP	3.00	7.00	5.314	0.947	-0.740	-0.032
PTT	2.25	7.00	5.177	1.066	-1.139	0.500
SCC	1.50	6.75	5.331	1.109	-1.733	2.838
GPR	1.00	6.75	5.259	1.108	-1.412	1.876

Source: Field Survey (2024)

PTT and SDP exhibit mean scores of 5.177 and 5.314, respectively, with standard deviations of approximately 1.066 and 0.947. These values demonstrate a modest degree of variation in perceptions of the efficiency of diversity policies and transparency in procurement procedures. The distributions' skewness and kurtosis values differ, with skewness ranging from -1.231 to -0.032 and kurtosis from -0.076 to 2.838, respectively. This is indicative of the varying degrees of asymmetry and tail burden. SCC measure exhibits a broader range of 1.50 to 6.75 and a greater standard deviation of 1.109, indicating that respondents' perceptions of suppliers' capabilities are more variable, with an average score of 5.331. According to the higher skewness and kurtosis values (-1.733 and 2.838, respectively), the distribution of responses on SSC perceptions appears to be more asymmetrical and has heavier ends. This could be due to non-normality or outliers. These descriptive statistics provide a comprehensive overview of how respondents perceive critical components of procurement practices within the context of the study, thereby establishing the foundation for further inferential analysis and interpretation.

3.3 Factor Analysis (Principal Component Analysis)

Table 3: Results of Factor Analysis

Factor Name	Variables	Factor loading	% of Variance explained	Cronbach's alpha
Perceptions of Procurement Fairness	PPF1	0.651	61.802	0.712
	PPF2	0.664		
	PPF3	0.643		
	PPF4	0.745		
	PPF5	0.754		
	KMO = 0.679 Bartlett's test of sphericity	Chi-squared = 591.378	p-value = 0.000	
Supplier Satisfaction and Performance	SSP1	0.511	47.564	0.677
	SSP2	0.521		
	SSP3	0.556		
	SSP4	0.678		
	SSP5	0.734		
	KMO = 0.657 Bartlett's test of sphericity	Chi-squared = 463.112	p-value = 0.000	
Supplier Diversity Policies	SDP1	0.450	68.354	0.734
	SDP2	0.564		

	SDP3	0.653		
	SDP4	0.622		
	SDP5	0.723		
	KMO = 0.783 Bartlett's test of sphericity	Chi-squared = 745.453	p-value = 0.000	
Procurement Transparency	PTT1	0.846	84.784	0.823
	PTT2	0.674		
	PTT3	0.720		
	PTT4	0.654		
	PTT5	0.747		
	KMO = 0.825 Bartlett's test of sphericity	Chi-squared = 783.766	p-value = 0.000	
Supplier Capacity and Capability	SCC1	O.879	85.204	0.712
	SCC2	0.753		
	SCC3	0.567		
	SCC4	0.675		
	SCC5	0.567		
	KMO = 0.725 Bartlett's test of sphericity	Chi-squared = 722.116	p-value = 0.000	
Government Procurement Regulations	GPR1	0.739	66.78	0.629
	GPR2	0.895		
	GPR3	0.654		
	GPR4	0.867		
	GPR5	0.677		
	KMO = 0.794 Bartlett's test of sphericity	Chi-squared = 939.079	p-value = 0.000	

Note: P-values significant at 5% and 10%
Source: Field Survey (2024)

We used principal component analysis (PCA) to identify the factors that influence the perceptions of procurement fairness, supplier satisfaction and performance, and various procurement strategies of MMDAs. The research showed that views of procurement fairness, which are made up of variables PPF1 to PPF5 and have loadings between 0.643 and 0.754, explained 61.802% of the variation, as shown by a Cronbach's alpha of 0.712. It is imperative to guarantee that procurement processes are equitable to establish trust and legitimacy within MMDAs. A Cronbach's alpha of 0.677 shows that the variables SSP1–SSP5 (with loadings between 0.511 and 0.734) that measure supplier performance and satisfaction explained 47.564% of the total variation. This discovery underscores the importance of implementing measures to increase supplier engagement and satisfaction. The supplier diversity policies (SDP1 to SDP5) explained 68.354% of the variation and showed how important it is to include and empower practitioners in the procurement process, as shown by a Cronbach's alpha of 0.734 and loadings ranging from 0.450 to 0.723. Furthermore, the report underscored the significance of procurement methods that are both transparent and effective. Procurement transparency was instrumental in the establishment of trust and accountability in public sector procurement, as evidenced by a Cronbach's alpha of 0.823 and variables PTT1 to PTT5 with loadings ranging from 0.654 to 0.846. This accounted for 84.784% of the variation. The loadings of the variables SCC1–SCC5, which assess supplier capacity and competency, ranged from 0.567 to 0.879. These factors accounted for 85.204% of the variance and had a Cronbach's alpha of 0.712, suggesting that it is essential to enhance supplier capacity to achieve effective procurement outcomes. The fact that stringent regulations accounted for 66.78% of the variance with a Cronbach's alpha of 0.629 underscores the importance of ensuring compliance and integrity within procurement operations. These regulations affected variables GPR1 to GPR5, with loadings ranging from 0.654 to 0.895. The findings provide MMDAs with practical guidance on how to enhance their governance and procurement outcomes, as well as a solid foundation for improving procurement procedures in Ghanaian local governments.

3.4 Regression Analysis using OLS

The OLS demonstrates a positive correlation between GPR and PPF (coefficient = 0.309, p = 0.000) and SSP (coefficient = 0.220, p = 0.000) is significant. This demonstrates that stakeholders are content with their performance and believe that procurement procedures are fair when rules are explicit and strict. The positive correlation between GPR and PPF underscores the significance of transparent and rigorous procurement regulations in fostering a sense of fairness among stakeholders. Rokkan and Haugland (2022) posit that regulations are a critical instrument for public procurement due to its systematic approach, which enhances the perception of transparency and fairness and reduces the likelihood of corruption and favoritism. The strong positive correlation between GPR and SSP indicates that suppliers are more productive and content in an environment with procurement laws. Suppliers demonstrate enhanced levels of contentment and efficiency when procurement procedures are transparent (Fazekas & Blum, 2021; Johnson et al., 2021) Barney (1991) introduced the RBV theory. It asserts that organizations may gain an advantage over their competitors by effectively utilizing their VRIN resources, which are defined as valuable, uncommon, inimitable, and non-substitutable (Barney, 1991). GPR functions as a VRIN resource in public procurement by establishing the foundation for transparent expectations and equitable competition. Adherence to these regulations accurately contributes to the leveling of the playing field by minimizing the potential for malfeasance and confusion (Adjei-Bamfo et al., 2023). The RBV theory validity in public procurement is substantiated by the positive correlations observed between GPR, PPF, and SSP. They demonstrate that procurement laws that are well-designed and executed are valuable organizational assets that enhance procurement as a whole. To foster trust among stakeholders, procurement procedures must be transparent. According to Mackey and Cuomo (2020), the procurement process's legitimacy is enhanced by guaranteeing that all parties are accountable and transparent. Public and supplier confidence is enhanced by this transparency, which reduces the probability of corruption and prejudice. Septianto et al. (2021) demonstrate that transparent and accountable procurement procedures significantly increase public confidence in government expenditures.

SCC has a negative effect on PPF and SSP. The negative correlations are (coefficient = -0.179, p = 0.003) and (coefficient = -0.146, p = 0.012), respectively. This research indicates that consumers' perceptions of fairness and contentment may decrease as suppliers' capabilities and competency increase. The negative correlation between SCC and PPF suggests that stakeholders may perceive a lack of impartiality as a result of increased supplier capacity and capability. In his 1990 work The Competitive Advantage of Nations, Porter (1990) posited that when there are significant disparities in the talents of adversaries, emotions of inequity and dissatisfaction may arise. Suppliers with lower competencies may perceive the procurement process as biased when competing against vendors with significantly greater capabilities, as they may feel unjustly disadvantaged. In the same vein, the inverse relationship between SCC and SSP suggests that larger disparities in supplier skills can lead to decreased performance and satisfaction. Suppliers who have limited resources may perceive that they are unable to compete, which could affect their satisfaction levels, engagement, and bid quality (Kelly et al., 2021). If there are discernible disparities in the capabilities of rival businesses, a competitive disadvantage may occur, as per Michael Porter's Competitive Advantage of Nations. In the context of public procurement, less capable suppliers may experience feelings of unjust disadvantage and dissatisfaction due to their perception that the process is biased in favor of more capable providers (Porter, 1990). This concept posits that procurement frameworks should target and reduce these inequalities to guarantee that all suppliers are treated fairly and are satisfied (Bai et al., 2021). The theory is valid for government contracts due to the inverse relationships between SCC, PPF, and SSP. They demonstrate that procurement outcomes may be adversely affected by perceptions of injustice and dissatisfaction that are a result of discrepancies in supplier capabilities.

Suppliers who believe they are less competent may experience feelings of disenfranchisement, as per Harland (2024), who examined the supply process which included the concept of perceived distinctions in competence and capacity. This attitude may lead to a decline in faith in the system as a whole, a decrease in the quality of proposals, and a decrease in participation in procurement procedures. This is because public procurement may experience a diminished pool of prospective vendors and a lack of innovation when there are significant disparities in supplier skills (Harland, 2024). Reduced participation from less capable providers may result in a smaller pool of competent vendors, which in turn restricts innovation and competition. To substantiate this assertion, Denny-Smith et al. (2020) found that procurement groups may receive inferior proposals from underprivileged suppliers as a result of prejudices and inequity. To prevent decreased participation and lower-quality proposals, procurement procedures must establish a level playing field in which all suppliers, regardless of their abilities, perceive that they have an equal opportunity to compete. Fourie and Malan (2020) assert that the persistence of the perception that the procurement process is unjust can result in a decrease in trust, which can subsequently lead to delays, legal challenges, and a general decrease in efficiency. Successful procurement necessitates the cultivation of trust with suppliers, as it encourages their engagement and cooperation. Suppliers are motivated to improve their abilities and submit high-quality submissions when they have confidence in the procurement process, which leads to improved procurement outcomes.

Table 4. OLS Results of SDP, PTT, SCC, GPR, PPF, and SSP

	PPF			SSP		
Variable	**Coeff.**	**Std. Err.**	**P-value**	**Coeff.**	**Std. Err.**	**P-value**
Constant	4.682	0.273	0.000	4.222	0.259	0.000
SDP	0.024	0.048	0.625	-0.029	0.046	0.515
PTT	0.025	0.059	0.625	0.139	0.055	0.012
SCC	-0.179	0.061	0.003	-0.146	0.058	0.012
GPR	0.309	0.049	0.000	0.220	0.046	0.000
R^2	0.0827			0.0750		
Adjusted R^2	0.0750			0.0673		
F-Statistics	10.84			9.75		
Prob>F	0.0000			0.0000		

Note: P-values significant at 5% and 10% (Procurement Perception and Fairness (PPF), Supplier Satisfaction and Performance (SSP), Supplier Diversity Policies (SDP), Procurement Transparency (PTT), Supplier Capacity and Capability (SCC) and Government Procurement Regulations (GPR)
Source: Field Survey (2024)

Surprisingly, the SDP did not have a statistically significant effect on either PPF or SSP (p-values > 0.5). This implies a more intricate connection, notwithstanding the growing recognition of diversity and inclusion as critical components of effective procurement. The lack of a statistically significant effect of SDP on PPF indicates that the presence of diversity programs alone is insufficient to alter stakeholders' perceptions of fairness in the procurement process. This discovery suggests that the success of these programs in influencing perceptions of fairness relies on additional elements, such as the efficient execution of the programs, good communication, and active involvement of stakeholders. Similarly, the lack of a substantial SDP impact on SSP indicates that diversity initiatives by themselves do not directly improve supplier satisfaction and performance. Efficient diversity initiatives require not only policies but also proactive actions that involve diverse suppliers and enable them to effectively compete. The successful implementation of supplier diversity programs determines their effectiveness. Ruel and Fritz (2021), stress that the presence of diversity policies alone is insufficient. Successful implementation necessitates the concise and explicit transmission of the program's objectives, advantages, and procedures to all parties participating in the procurement process. In the absence of

this, diversity programs may not be able to effectively impact attitudes and performance. Obtaining stakeholder support and agreement is critical for the effectiveness and success of diversity programs. This requires dedication from top management, proactive engagement from suppliers, and ongoing assistance throughout the execution phase. The SHRM theory emphasizes the significance of leadership dedication in cultivating a culture of inclusivity (Karman, 2020). Leaders who actively endorse and advance diversity efforts effectively communicate to all stakeholders the significance and worth of these programs, ultimately improving views of equity and inclusivity. The effectiveness of diversity programs relies heavily on the implementation of efficient processes. According to Bauhr and Grimes (2021), bureaucratic obstacles can hinder the efficiency of any program. Streamlining and improving the application procedures for a wide range of vendors helps increase the accessibility and efficiency of these programs. This entails reducing superfluous paperwork, providing explicit instructions, and offering assistance throughout the procurement process. Procurement officers must undergo training and development programs to properly identify and utilize a wide range of suppliers. Moshtari et al. (2021) propose that it may be necessary to provide training for procurement officers to enable them to recognize a wide range of suppliers and utilize equitable evaluation techniques. In addition, mentoring and sponsorship programs, as emphasized by the SHRM, can facilitate the connection between different suppliers and established vendors, fostering knowledge sharing and cooperation (Phaladi, 2021). The presence of mentorship and networking opportunities may greatly amplify the effectiveness of diversity programs. Facilitating the connection between different suppliers and more experienced vendors may enhance information transfer, capacity building, and performance. This approach is consistent with the findings of Huo et al. (2021), who demonstrated that such collaborations may result in improved outcomes for all parties involved. Optimizing the onboarding process for a wide range of providers may help improve the efficiency of diversity programs. Bauhr and Grimes (2021) posit the need for streamlining these procedures to decrease obstacles for new participants and foster more involvement from a wider range of providers. This can lead to a more comprehensive procurement environment and better overall results.

PTT had a significant positive effect on SSP (coefficient = 0.139, p = 0.012). There was no significant relationship between PTT and PPF, as indicated by the statistical analysis (coefficient = 0.025, p = 0.625). Therefore, transparency tools appear to have minimal influence on the perception of fairness in the procurement process, despite their ability to enhance supplier performance and satisfaction. It appears that transparency tools are insufficient to alter stakeholders' perceptions of fairness, as PTT did not have a statistically significant effect on PPF. This discovery suggests that the fairness of the process is more significantly determined by other factors, such as the strictness with which laws are enforced and the reliability of the procurement procedure. The considerable positive impact of PTT on SSP is indicative of the importance of transparency in enhancing supplier satisfaction and performance. Transparency solutions can be implemented to enhance supplier engagement and performance by facilitating the easy accessibility and transparency of information, thereby reducing uncertainty and promoting trust. Stakeholders can only be satisfied and trusted when information is readily available to them, according to Transparency Theory (Tye, 2002). Transparency technologies facilitate the accessibility of critical information in public procurement, such as tender documents, assessment criteria, and decision-making procedures (Mavidis & Folinas, 2022). The procurement process's transparency has enabled vendors to gain a more comprehensive comprehension of the process, which has resulted in increased trust and reduced uncertainty. Cheng et al. (2020) emphasize suppliers appreciate an environment of predictability and stability when procurement procedures are transparent and fair. The procurement process can be more efficiently navigated and bids from suppliers can be more competitive when they have a clear understanding of the needs and assessment criteria. Supplier satisfaction and performance are both enhanced by this predictability, which is a consequence of increased self-assurance and enthusiasm. It is imperative to establish trust

to ensure a seamless procurement process (Cheng et al., 2020). Vendors are more likely to invest in the development of their capabilities and submit competitive proposals when they have confidence in the tendering process. Transparency tools are essential for establishing trust with suppliers, as they provide them with consistent and unambiguous information. The procurement process is more credible and trustworthy for suppliers when it is conducted openly and honestly, as evidenced by Andhov et al. (2020) study, which supports this assertion. Even though PTT has a positive impact on SSP, there is a dearth of evidence suggesting that it may affect stakeholders' attitudes toward fairness. Distributive justice (the fairness of the outcomes) and procedural justice (the fairness of the procedures leading to outcomes) both influence perceptions of fairness, as per the theory of organizational justice, such as Folger (1987) work. Although transparency technologies enhance procedural characteristics, perceptions of fairness may still be influenced by broader variables such as the integrity of the procurement system and the regularity and fairness of rule enforcement. The results of this research have significant practical and theoretical implications. The substantial beneficial impact of PTT on SSP underscores the critical role of readily accessible information in enhancing supplier satisfaction and performance, thereby supporting Transparency Theory. As indicated by the absence of a substantial impact on PPF, perceptions of fairness are influenced by a broader range of criteria, which are under theories of organizational justice.

These findings suggest that the consistent and equitable enforcement of procurement legislation and the implementation of transparency tools should be the primary focus of legislators and procurement authorities. Procurement authorities that integrate transparency with ethical standards and robust regulatory frameworks can improve supplier satisfaction and perceptions of equity.

3.4.1 Robustness testing and sensitivity analysis

Table 5: Ordered Logistics Results of PPF, SSP, SDP, PTT, SCC, GPR with Control variables of LEC and PLE

		PPF			SSP	
Variable	**Coeff.**	**Std. Err.**	**P-value**	**Coeff.**	**Std. Err.**	**P-value**
SDP	0.098	0.098	0.312	-0.016	0.098	0.867
PTT	-0.098	0.123	0.429	0.259	0.122	0.034
SCC	-0.374	0.130	0.004	-0.298	0.122	0.014
GPR	0.602	0.113	0.000	0.366	0.102	0.000
LEC	-0.472	0.141	0.001	0.576	0.134	0.000
PLE	0.532	0.105	0.000	0.093	0.112	0.406
/cut1	-4.144			1.807		
/cut2	-2.235			1.903		
/cut3	-1.589			2.446		
/cut4	-1.344			3.032		
/cut5	-0.594			3.715		
/cut6	-0.397			3.769		
/cut7	-0.361			4.304		
/cut7	-0.195			4.964		
LR chi^2	63.60			65.56		
Pseudo R2	0.0284			0.0296		
Prob > chi^2	0.0000			0.0000		
Log-likelihood	-1088.262			-1074.168		

Note: P-values significant at 5% and 10% (Procurement Perception and Fairness (PPF), Supplier Satisfaction and Performance (SSP), Supplier Diversity Policies (SDP), Procurement Transparency (PTT), Supplier Capacity and Capability (SCC), Government Procurement Regulations (GPR), Local Economic Conditions (LEC), and Political Environment (PLE)
Source: Field Survey (2024)

An ordered logistic regression analysis was conducted to verify the reliability of our initial findings from the OLS regression. To evaluate the sensitivity of our findings, this analysis includes supplementary control variables, including LEC and PLE. The findings of the ordered logistic regression are in agreement with the results of the OLS. This confirms our initial conclusion that GPR and PTT significantly impact PPF and SSP, even though we recorded the other variables differently. The positive and statistically significant coefficients for GPR and PTT further emphasize the significance of these factors in achieving positive procurement outcomes. The Government Procurement Regulations (GPR) demonstrate a robust positive correlation with both PPF and SSP (p-value = 0.000), suggesting that these regulations have a substantial positive effect on both supplier performance and equitable perceptions. Procurement Transparency (PTT) has a substantial positive impact on SSP (p-value = 0.034), indicating that straightforward communication channels are essential for improving supplier satisfaction. These findings, consistent with the OLS results, underscore the significance of transparent and robust regulations in cultivating a successful public procurement environment.

The control variables incorporated in the ordered logistic regression provide additional insights into the factors that influence procurement perceptions. LEC exhibits a substantial negative impact on PPF (coefficient = -0.472, p-value = 0.001) and a positive impact on SSP (coefficient = 0.576, p-value = 0.000). This suggests that favorable economic conditions enhance supplier satisfaction, while unfavorable economic conditions intensify perceptions of injustice in procurement processes. This discovery aligns with the Resource Dependence Theory, which posits that external economic conditions significantly influence outcomes and organizational behavior (Pfeffer, 1987). Klein and Pettis (2020) have provided recent literature that corroborates this perspective, emphasizing the potential for economic downturns to result in increased competition and perceived inequity among suppliers. Our analysis demonstrates that LEC has particularly intriguing effects. As the results of PPF suggest adverse economic conditions can make people feel even more unfairly treated in the procurement process. Conversely, favorable economic conditions positively influence SSP leading to a rise in supplier satisfaction. Resource Dependence Theory posits that external economic conditions substantially influence organizational behavior and outcomes, which is consistent with this discovery (Sutton et al., 2021). In times of economic hardship, suppliers may perceive procurement processes as biased or manipulated due to increased competition. In contrast, suppliers may experience increased gratification as a result of the perceived accessibility and transparency of procurement processes during periods of economic prosperity. Weller et al. (2021) support this perspective by highlighting the potential for economic downturns to intensify competition and heighten supplier concerns about the integrity of procurement practices.

Additionally, PLE has a substantial positive impact on PPF (coefficient = 0.532, p-value = 0.000), and is insignificant to SSP (coefficient = 0.093, p-value = 0.406), which is a critical factor. This is consistent with institutional theory, which underscores the importance of stable political environments in the development of positive stakeholder perceptions and effective governance (Scott, 2001). A favorable political environment can enhance trust in procurement processes, leading to improved perceptions of impartiality (Fazekas & Blum, 2021). In our analysis, the PLE also revealed a substantial positive effect on PPF. This is consistent with the institutional theory of Zucker (1987), which underscores the significance of stable political environments for effective governance and favorable stakeholder perceptions. A more favorable perception of impartiality among suppliers is the result of a stable political climate that fosters trust in public institutions, including the procurement process. Gnoffo (2021) recent research further supports this connection by illustrating that a stable political environment with robust legal frameworks fosters transparency and accountability in public procurement, thereby increasing supplier trust and confidence in the impartiality of the process.

Furthermore, the robustness and sensitivity analysis indicated the LR chi-squared statistic, which evaluates the overall model fit, is statistically significant, indicating that the

model adequately explains the variations in the dependent variables. The Pseudo R-squared value is a measure of the model's ability to explain a proportion of the variance, with higher values indicating a more satisfactory model fit. The model's statistical significance is confirmed by the Prob > chi-squared value, while the log-likelihood value quantifies the probability that the predicted values correspond to the observed data. These statistics collectively emphasize the robustness and reliability of our findings, while also confirming the critical roles of economic and political conditions in shaping procurement outcomes.

4. CONCLUSION

This investigation emphasizes the critical roles of GPR, SDP, SSC, PTT, LEC, and PLE in determining PPF and SSP in Ghana's local administration procurement processes. Robust GPR and PTT positively impacted PPF and SSP, as confirmed by the ordered logistic regression study. The study also discovered that PPF is adversely affected by poor economic conditions, whereas SSP is positively impacted by favorable ones, aligning with resource dependency theory. A politically stable environment is essential for fostering confidence in procurement procedures, as evidenced by the robust positive correlation between PLE and PPF. This lends credibility to institutional theory. Our research contributes to the existing literature regarding the relationship between the efficacy and impartiality of local government procurement methods and the perceptions of these policies by stakeholders. The majority of previous research has focused on procurement methods at the national or sector level; this study addresses a void in the literature by providing a more comprehensive analysis of procurement at the local government level. Upon incorporating control variables such as LEC and PLE, we acquire a more profound understanding of the influence of external factors on procurement outcomes. This research effectiveness is attributed to its comprehensive assessment, robust methodology, and practical recommendations for optimizing procurement procedures. Enhancing procurement impartiality and supplier satisfaction can lead to a more transparent and effective public procurement environment. This study is essential because it provides policymakers and procurement officials with actionable insights by addressing economic and political conditions.

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