

Influences of Integrated Capabilities on Public Procurement Participation of Special Groups: The Moderating Role of Regulatory Framework

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Abstract

This paper presents the findings of a study that had examined the effect of tendering capabilities, financial literacy, and government support programmes on special groups' participation in public procurement, focusing on the regulatory framework's moderating role. A pilot study validated the research instruments subsequently deployed to collect data from 210 public procurement special group members via online self-administered questionnaires. The study applied Partial Least Squares Structural Equation Modelling (PLS-SEM) to analyse the resultant data. The results show that financial literacy, government support, and tendering capabilities positively influence public procurement participation. Even though the regulatory framework significantly moderates financial literacy (positive effect) and government support (negative effect), it does not necessarily influence the relationship between tendering capabilities and participation. The results highlight the need for targeted improvements in financial literacy, government support, and tendering skills to enhance participation, while considering the regulatory framework's role in shaping eventual outcomes.

Keywords: Tendering capabilities, financial literacy, government support, public procurement, regulatory framework

Introduction

Public procurement helps government operations and economic development by allocating resources efficiently and ensuring transparency and accountability in public spending (Di Mauro, Ancarani, & Hartley, 2020; Israel & Kazungu, 2019). It boosts competition and economic growth, which benefits women, youth, elders and people with disabilities. These groups gain economic opportunities and public procurement participation, improving social equity and sustainable development (Lagat, Namusonge, & Berut, 2016; Leticia, 2018). Public procurement has recently become more inclusive, with governments and organisations including special groups, which includes US affirmative action and set-aside programmes, global Women Economic Empowerment programmes, and World Bank and UN-recommended inclusive procurement practices (McCrudden, 2007; OECD, 2023). Korea and Mexico have implemented financial incentives, capacity-building programmes, and procedural relaxations to increase special group participation (Kuenzel, 2019).

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Special groups' public procurement participation depends on tendering capabilities, financial literacy, and government support within a regulatory framework. Effective regulatory frameworks align regulations with inclusive practices to ensure fair and equitable participation and successful procurement outcomes (Cancino, Bonilla, & Vergara, 2015; Flynn & Davis, 2017b; Micheni, Were, & Namusonge, 2023). In fact, many governments worldwide have acknowledged the importance of special groups and their crucial socioeconomic contributions to promoting inclusivity measures in their public procurement policies (Georghiou, Edler, Uyarra, & Yeow, 2014; Hoekman & Taş, 2020; Patil, 2017). Regardless of the potential benefits of promoting inclusivity in public procurement, challenges persist that hinder the effective participation of special groups in the procurement process (Akenroye, Owens, Elbaz, & Durowoju, 2020; Tesha & Nsimbila, 2022). These challenges may include limited access to information, lack of capabilities and resources, lack of knowledge. Additionally, discriminatory practices, institutional biases, and government support programmes also present significant barriers (Di Mauro et al., 2020; Disi, 2021; Hossain, 2020; Nielsen, 2017). Multifaceted approaches are essential in addressing those challenges, which may include policy intervention, capacity-building initiatives, stakeholder engagement, and establishment of a supportive framework that promotes fair and transparent procurement practices (Hoekman & Taş, 2020; Kondo, Shibatsuji, & Yasuda, 2019).

Studies on government tendering capabilities, government support programmes and financial literacy have shown inconclusive and conflicting results (Akenroye et al., 2020; Disi, 2021; Flynn & Davis, 2017a; Namagembe, Mpeera, & Kalid, 2021; Nkundabanyanga, Kasozi, Nalukenge, & Tauringana, 2014). The role of tendering capabilities in improving participation by Flynn and Davis (2017b), for example, indicated positive results whereas a study by Namagembe et al. (2021) indicated negative significance. Researchers discuss extensively the concept of government support programmes (Kondo et al., 2019; Park, Lee, & Kim, 2020; Wang, 2016) and emphasised the rationale of government support programmes in supporting special groups. That support to special groups lacks ample proven evidence regarding the positive effects of special groups (Fadic, 2020; Potter & Storey, 2007). This lack of vigorous and comparable evidence has resulted in uncertainty regarding the modality the government can best use to support the special groups (Nakku, Agbola, Miles, & Mahmood, 2020; OECD 2018). Such inconsistencies in government support programmes may be attributable to examining the government support programme solely without considering the external pressure of the special groups (Di Mauro et al., 2020; Nakku et al., 2020; Teece, 2018). Because previous studies had focused on the public procurement participation of special groups have paid little attention to the external pressure such as laws and regulations (Israel, 2022; Israel & Kazungu, 2019; Manase & Dismas, 2022; Tesha & Nsimbila, 2022).

In the context of performances in public procurement, recent studies have highlighted the importance of the Regulatory Framework as a moderating role in enhancing their performance (Mutangili, Awuor, & Cheluget, 2020). These studies emphasised the supportive regulatory framework enhances participation and performance in tendering activities in public procurement. Moreover, many of these studies have adopted a resource-based view (RBV) to examine the resources available and public procurement participation in public procurement (Federico, Rabetino, & Kantis, 2012; Morris & Stevens, 2010). In truth, few studies have integrated dynamic capabilities and institutional theories in examining public procurement performance (Flynn & Davis, 2017a; Tinali, 2021). Such studies, however, have yet to consider

the interaction among tendering capabilities, financial literacy, government support, and regulatory framework.

Addressing these gaps in knowledge is crucial for policymakers and stakeholders in fostering inclusivity and diversity in public procurement processes. The lack of research on moderating variables in public procurement participation studies signals that policymakers and practitioners could overlook critical factors that influence the effectiveness of interventions. Without understanding how regulatory frameworks or other external conditions shape the impact of financial literacy, government support, and tendering capabilities, policies may not be so effective in addressing barriers special groups face. This study fills that gap by highlighting the regulatory framework's role in enhancing or constraining participation, offering insights for more targeted policy interventions and capacity-building initiatives. As such, the study set out to determine the influence of tendering capabilities on public procurement participation of special groups, the influence of financial literacy on public procurement participation of special groups, the influence of government support programmes on public procurement participation of special groups, and, subsequently, the moderating role of the regulatory framework on the relationship between integrated capabilities and public procurement participation of special groups.

Literature Review and Conceptual Framework

Dynamic Capability and Institutional theories

The study applied the integration of the dynamic capability and institutional theories in Tanzania's special procurement process. Teece, Pisano, and Shuen (1997) seminal paper introduced dynamic capabilities theory (DTC), which focuses on an organisation's ability to develop and reconfigure its resources to adapt to changing conditions. Based on this premise, in the procurement context, special groups must continuously enhance their tendering capabilities, financial literacy, and strategic decision-making to compete effectively (Flynn & Davis, 2017a; Leonard-Barton, 1992). The ability to learn from previous experiences, acquire new skills, and leverage available government support programmes aligns with the principles of the Institutional Theory and Dynamic Capability Theory [DCT] (Flynn & Davis, 2017b; Hossain, 2020). On the other hand, the Institutional Theory explicates how formal regulations, norms, and social expectations shape the behaviour of organisations (Meyer & Rowan, 1977; Selznick, 1953). It also highlights the role of regulatory frameworks, policies, and institutional biases in either enabling or restricting access to public procurement opportunities for special groups (DiMaggio & Powell, 1983). For instance, government policies mandating preferential treatment for disadvantaged businesses create an enabling institutional environment for their participation.

The DCT interact and complement one another in public procurement by addressing both external constraints and internal adaptability, which are crucial for special groups' participation in government tenders (DiMaggio & Powell, 1983; Teece, 2007). Generally, institutional and dynamic capabilities theories complement each other by bridging external constraints and internal adaptation. Whereas the Institutional Theory highlights external pressures such as regulatory frameworks (DiMaggio & Powell, 1983), the DCT explains how organisations navigate these pressures through capability building (Teece et al., 1997). For example, financial literacy training (a dynamic capability) helps businesses comply with procurement financial requirements and make an informed decision—an institutional constraint (Flynn & Davis, 2017b; Grohmann & Menkhoff, 2017; Hossain, 2020). Institutional factors can either strengthen or weaken the effect

of dynamic capabilities. For instance, an effective regulatory framework can enhance the benefits of financial literacy and tendering capabilities whereas restrictive policies can limit their effectiveness (Nielsen, 2017; Scott, 2013). Thus, special groups that effectively develop dynamic capabilities can better exploit opportunities such as set-asides or preference programmes that institutional arrangements provide to ensure sustained participation in public procurement (Flynn, McKevitt, & Davis, 2015).

Funding and training programmes help organisations adapt to market and technological changes (Disi, 2021; Park et al., 2020). Sociologists and management scholars such as DiMaggio and Powell (1983) have integrated normative, cognitive, regulatory, political, and historical perspectives to provide a multifaceted understanding of how institutions affect organisational practices and behaviours. In public procurement, the regulatory framework guides organisations' compliance, legitimacy, and strategic adaptation to institutional pressures (Iossa & Martimort, 2016; Patil, 2017). Therefore, this study applied the capability-based and institutional theories to examine how regulatory frameworks affect special group public procurement participation. The study examined these dynamics to reveal how external and internal pressure affect public procurement outcomes of special groups.

Tendering capabilities and public procurement participation

Tendering capabilities in a procurement context refers to the ability of a firm to marshal its organisational resources to identify contract opportunities and poise itself to be competitive and win (Flynn & Davis, 2017b). Organisational resources include the ability to mobilise and use human, technological, financial, administrative, network and reputation for attaining success in contract competition (Flynn & Davis, 2017b). In this regard, firms, including special groups, need tendering skills to navigate public procurement, such as understanding and responding to tender criteria, managing contracts, and developing new products. Also, these skills include adapting to procurement procedures, communicating and promoting products, and handling the bureaucracy inherent in tendering, which special groups often treat as barriers (Tesha & Nsimbila, 2021). The skills are also essential for contract management and ensuring compliance after tendering. In addition, networking and relationship building with public procuring entities tend to raise visibility and trust, which opens up more business opportunities besides positively affecting tendering participation. Due to geographic and political contexts, however, Flynn and Davis (2017b) and Namagembe et al. (2021) found mixed results on how these capabilities affect SME public procurement performance.

Significantly, special groups should receive targeted training and mentorship in procurement requirements, bidding strategies, and contract management to enhance public procurement participation (Flynn & Davis, 2017b; Makena, 2016). Such intervention can help these special groups meet qualifications standards and work with public procuring entities. This approach supports the implication that improving tendering capabilities will increase special groups' bid frequency and success. Thus, based on the evidence from literature reviewed, we hypothesise:

H1. Tendering capabilities positively influence the participation of special groups in public procurement.

Financial literacy and public procurement participation

Financial literacy usually refers the ability of an individual to make informed judgments and take effective decisions on the use and management of financial resources (Hossain, 2020). In fact, lack of knowledge and firm understanding of the existence of financial institutions, confidence in financial services tend to stem from financial literacy (Srisusilawati et al., 2021). Accordingly, poor financial literacy could result in the preparation of a wrong and biased financial plan (Hossain, 2020). After all, firm performance and public procurement require financial literacy (Mabula & Ping, 2018). Thus, financial literacy boosts public procurement firms' competitiveness. Moreover, financial activity predicts firm performance, and banking knowledge, savings interest, and loan interest, which are all contributory to business success (Zirabamuzale, 2021). Because special groups need access to capital, loans, and grants, they often fail to participate in public business opportunities due to financial illiteracy. Such financial literacy includes knowledge, skills, attitudes, and experiences essential for sound financial decision-making, which helps firms survive and grow (Almenberg & Dreber, 2015; Hussain, Salia, & Karim, 2018). Thus, financial knowledge helps manage efficient financial resource acquisition, ensures optimal payment terms and improves budget management and planning, which are crucial for effective procurement management (Hussain et al., 2018). Financial education also helps firms manage risks, make informed decisions, and negotiate better procurement contract terms (Gosal & Kamase, 2021; Makena, 2016). In other words, financial literacy is essential for owner-managers to make informed public procurement decisions, which also signals a strong link between the two. Based on the literature review, we hypothesise:

H2. Financial literacy positively influences public procurement participation of special groups.

Government support and public procurement participation

Government support programmes refer to initiatives, policies, and interventions the government implements to provide assistance, resources, and support to special groups in a bid to enhance their participation in public procurement processes (Nakku et al., 2020). Government support programmes provide financial and non-financial aid to special groups to boost public procurement participation (Ameyaw, 2021). Business startup loans, working capital, and grants are financial supports whereas advisory, training, marketing, networking, and research development are non-financial (Hossain, 2020). Studies indicate that financial literacy training and capacity-building initiatives significantly improve tendering success rates among special groups (Ambe & Badenhorst-Weiss, 2012; Hossain, 2020). Furthermore, government-backed networking programmes facilitate partnerships, knowledge sharing, and market access, which are crucial in fostering procurement participation (Loader, 2015; Nielsen, 2017). Regardless of their intended benefits, these support mechanisms have had mixed effects on business performance and procurement success (Joo & Suh, 2017; Makena, 2016; Wang, 2016).

Usually, financial assistance programmes cater to special groups for the youth, women, elders, and people with disabilities, primarily to address issues like lack of collateral and high-interest rates that make it difficult for them to get loans and compete in tender processes. These programmes provide capital for bidding and procurement, thus helping financially-distressed groups compete for tenders (Di Mauro et al., 2020). Significantly, networking and relationship-building initiatives help them connect with government agencies, industry stakeholders, and potential partners, improving their procurement capabilities (Park et al., 2020). In this regard,

studies on integrating non-monetary support services with financial aid demonstrate government support's effectiveness (Ameyaw, 2021). In South Korea, Park et al. (2020) found that government-sponsored diagnostic and support services and loan financing help the country's SMEs survive and grow. Therefore, the study hypothesises:

H3: Government support programmes positively influence public procurement participation by special groups

Moderation role of regulatory framework

Regulatory framework refers to a comprehensive collection of legal mechanisms (laws, edicts, seculars, regulations and bulletins) all of which offer additional and more in-depth procedures for the application of administrative type tasks (OECD 2018). In procurement, a respective context regulatory framework provides a legal basis for guaranteeing the privileges of attendees and determining the scope of their accountabilities, which sets out the system's rules in the context of public procurement (Grandia & Meehan, 2017; Patil, 2017). In the context of this study, the regulatory framework represents the formal rules and regulations that govern public procurement processes in Tanzania.

Laws, policies, and regulations that allow or restrict special groups' participation in public procurement are crucial. These frameworks moderate the relationship between tendering capabilities, financial literacy, government support programmes, and special group procurement participation (Di Mauro et al., 2020; Patil, 2017). Set-aside contracts and preferential treatment help special groups compete for public sector contracts much more fairly (Normanyo, Ansah, & Boakye, 2016) than without such support. Studies like Flynn and Davis (Flynn & Davis, 2016) show that SME-friendly policies boost public procurement participation and success. Research shows that regulatory frameworks can have positive or negative effects depending on their design and how they are implemented (Micheni et al., 2023; Oluoch, K'Aol, & Kosha, 2021). High-quality procurement regulations increase SME participation and contract wins in the European Market, according to (Hoekman & Taş, 2020). In contrast, Monari, Iravo, and Kibet (2017) found low performance and high corruption under preference reservation policies, which highlights the difficulties inherent in enforcing and monitoring them. These findings expose the necessity to evaluate and adapt procurement laws continually to meet the needs of all the participants, especially vulnerable groups.

Effective procurement regulations should also promote transparency, fairness, and accessibility by, for example, simplifying procedures, lowering financial thresholds, and providing training and information aimed to improve firms' public procurement capabilities (Hoekman & Taş, 2020; Patil, 2017). Moreover, streamlining documentation requirements and exempting specific pre-qualification criteria can help special groups navigate the procurement landscape. In this connection, procurement system integrity and effectiveness require mandatory regular audits and penalties for non-compliance (Oluoka, Okoche, & Mugurusi, 2020). In essence, the regulatory framework aligns government support programmes with economic inclusivity and sustainable development, which enhances their effects. Micheni et al. (2023) found that regulatory frameworks moderate donor-funded health projects in Kenya, hence improving strategic leadership and financial sustainability. Apparently, regulatory frameworks must adapt to market needs and ensure that special groups have the requisite resources and skills to participate in public

procurement (Kondo et al., 2019). Regulation and support programmes must work together to empower special groups and make public procurement more inclusive and competitive. Based on the empirical arguments on the role of the moderating effects, we thus hypothesise:

H4a: Regulatory frameworks moderate between tendering capabilities and special groups' public procurement participation.

H4b: Regulatory frameworks moderate between financial literacy and special groups' public procurement participation.

H4c: Regulatory frameworks moderate between government support programmes and special groups' public procurement participation.

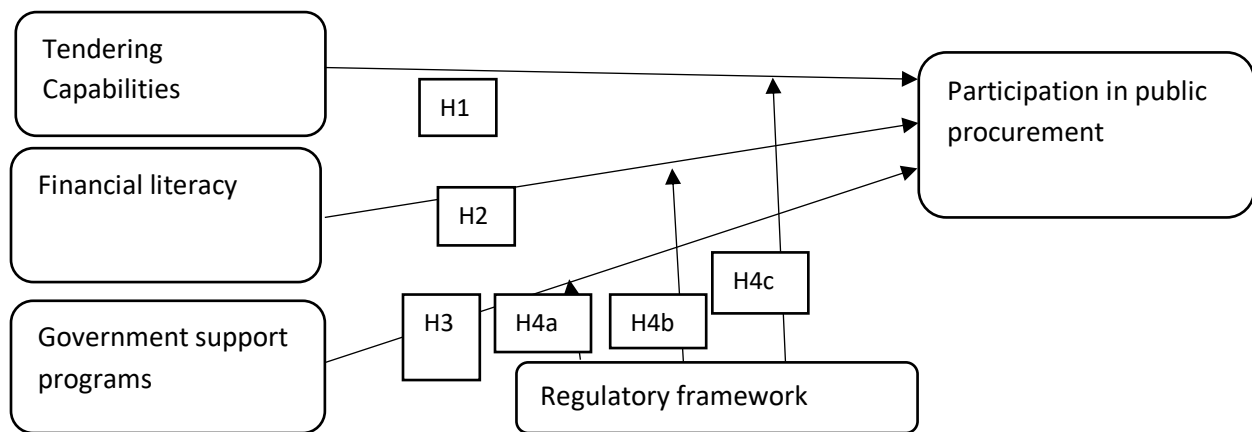


Figure 1. Conceptual Framework

Research methodology

Philosophy and Design of the Study

Positivism is a philosophical and scientific approach that uses empirical evidence, observation, and scientific methods to study and understand natural and social phenomena (Antwi & Hamza, 2015). (Kumar, 2018), (Žukauskas, Vveinhardt, & Andriukaitienė, 2018), and (Robson, 2016) further illuminate on how the positivist approach, emphasises the use of empirical evidence and scientific methods to understand natural and social phenomena. They advocate for formulating hypotheses, conducting experiments, collecting data, analysing results, and drawing conclusions based on empirical evidence. Their work in this study aims to explain the influence of integrated capabilities and public procurement participation of special groups, ensuring its findings are generalizable.

The study, which aimed to explore the connections between tendering capabilities, financial literacy, government support programmes, regulatory framework, and public procurement participation of special groups, employed an explanatory research design, focusing on causal relationships and underlying mechanisms (Creswell & Creswell, 2018; Saunders, 2019; Yin, 2018). Moreover, the study adopted a cross-sectional design to capture data at a specific point in time in addition to allowing researchers to explain relationships, patterns, and characteristics

within a population or sample (Kumar, 2018). The cross-section design is a research strategy that saves time, costs, and reduces difficulties in collecting information from the field (Saunders, 2019). It is based on various research strategies such as experiment, survey, archival research, case study, ethnography, action research, grounded theory, and narrative inquiry. The research design can be classified into cross-sectional, comparative, longitudinal, and case-study designs (Bell, Bryman, and Harley (2022), with cross-sectional and longitudinal being time horizon strategies (Saunders (2019).

Data collection procedures

The study focused on Tanzania Mainland's special groups comprising women, youth, elders, and people with disabilities, whose procurements were registered in various public procurement categories. The application of the census method ensured comprehensive data collection, enhancement of the generalizability of the findings, and reduction of sampling bias (Kumar, 2018; Taherdoost, 2016). Tanzania suited the study because of its progress in empowering special groups in public procurement (PPA, 2023). The population included all special groups of businesses registered by the Public Procurement Regulatory Authority in Tanzania Mainland, with 222 registered as of November 2022. Within five months, the researcher received 215 questionnaires, or 97 percent of the total. The researchers collected data via WhatsApp and email to get a high response rate. Also, to promote participation, the researchers used mobile-friendly surveys, frequent follow-ups, and personalised invites. Subsequently, a sample size of 210 respondents was obtained as five of the 215 returned questionnaires were incomplete. The entire population, comprising 222 special groups, was studied due to its size and data accessibility. This method is suitable for small, homogeneous, or heterogeneous populations, as it allows for intensive study to produce accurate results (Jeje, 2017).

Operationalization of the survey items

The study employed Likert scales that are widely used in research to quantify subjective assessments into objective data for statistical analysis (Wadhwa, Chen, Li, & Durrett, 2023). We chose items from previous studies for each variable to ground the measures in established scholarly work, hence improve the validity and reliability of the current study. Thus the study measures 'Financial literacy' with eight items from Nkundabanyanga et al. (2014) to assess financial knowledge and skills that affect business performance. Namagembe et al. (2021) measure of 'tendering capabilities' with nine items helped assess skills such as tender response, contract management, and procurement processes. The seven items used to measure 'Government Support' were adopted from Disi (2021) to determine show how financial aid, training, and advisory services affect special groups' public procurement capabilities. Furthermore, five items from Hoekman and Taş (2022) helped assess the 'Regulatory framework,' a moderating variable, to determine whether procurement regulations and policies help or hinder these groups. Finally, we adopted Flynn and Davis (2017b); Namagembe et al. (2021)'s measure of the effectiveness and frequency of 'Participation of special groups' in public procurement using seven items. Likert scales facilitate an analysis of how these variables interact and influence one another, hence providing comprehensive insights into public procurement dynamics (Tanujaya, 2022). Overall, this study applied the 7-point Likert scale in data collection.

Data analysis

The study utilised Smart PLS 3.0 for data analysis, assessing construct validity, reliability, and hypotheses. The software was chosen due to its ability to handle complex structural models with small-to-medium sample sizes without strict normality assumptions (Hair, Risher, Sarstedt, & Ringle, 2019). It facilitated the examination of the moderating role of the regulatory framework and the relationships between tendering capabilities, financial literacy, and government support programmes in public procurement participation. Smart PLS 3.0 was effective in handling reflective and formative measurement models, hence making it suitable for evaluating latent constructs related to procurement capabilities and institutional influences. Moreover, the software provided robust bootstrapping techniques for hypothesis testing, ensuring reliable and interpretable results (Hair et al., 2019). Smart PLS analysed measurement models (for construct validity and reliability) and structural models (for hypothesis testing). Factor loadings, AVE, and the Fornell-Larcker criterion assessed the constructs' convergent and discriminant validity (Crocetta et al., 2021). Cronbach's alpha and composite reliability measured reliability. Path coefficients and significance levels tested the hypotheses, revealing meaningful relationships between variables.

Pilot study

The pilot study aimed to test feasibility, refine research instruments, assess data collection procedures, and estimate sample size (Zikmund, Babin, Carr, & Griffin, 2013). According to Chin (1998) for this study, a sample of 27 respondents was representative enough from a population of similar characteristics since it represented 10% of the population. Considering the possibility of non-response, 50 questionnaires were distributed to a population of the same nature as the special groups, with 35 collected but with 5 incomplete questionnaires, hence 30 qualified for analysis. The pilot study results confirmed the feasibility and practicality of the planned study coupled with an adequate and efficient design and methodology. The researchers also confirmed that the measurement instruments were reliable and valid and observed that the constructs were accurate and consistent. Data cleaning and examination were conducted to identify errors and inconsistencies, using Likert scales to classify responses. Crosschecking responses with SPSS data entries and descriptive statistics confirmed no missing data or outliers above acceptable thresholds, as recommended by Hair Jr, Howard, and Nitzl (2020). This thorough examination found and fixed unmarked variables and typing errors, improving data quality for analysis. Bakker and Wicherts (2014) advised identifying extreme observations using Mahalanobis distance and retaining only representative outliers to preserve dataset integrity. The study further carefully designed questionnaires and conducted pilot testing to minimise common method bias and ensure data reflected true construct relationships without measurement method bias.

Results

Assessment of measurement model

Assessment of measurement model included convergent validity and reliability. Convergent validity was assessed using three key indicators: factor loadings, Average Variance Extracted (AVE), and Composite Reliability (CR). Ideally, factor loadings should be above 0.7 for adequate item reliability (Hair et al., 2019). However, loadings between 0.4 and 0.7 can still be retained if AVE and CR are acceptable. Items FL4 (0.468) and GS3 (0.553) have weak loadings and were, thus, removed. AVE value of 0.5 or higher indicates that the construct explains at least 50% of the variance in its indicators (Fornell & Larcker, 1981). Before removal of items with weak

loading the AVE for financial literacy was 0.48 and 0.495 for government support programmes. After the removal all the constructs that had met this threshold financial literacy (AVE = 0.519), government support (AVE = 0.535), participation (AVE = 0.629), tendering capabilities (AVE = 0.559), and regulatory framework (AVE = 0.535), indicate acceptable convergent validity, as Table 1 illustrates:

Table 1. Convergent validity and reliability

Constructs	Items	Factor Loadings	Cronbach's Alpha	Composite Reliability	AVE
Financial Literacy	FL1	0.730	0.847	0.883	0.519
	FL2	0.677			
	FL3	0.686			
	FL5	0.664			
	FL6	0.761			
	FL7	0.776			
	FL8	0.733			
	Government Support	GS1			
GS2		0.667			
GS4		0.797			
GS5		0.763			
GS6		0.710			
GS7		0.679			
Participation		PT1	0.814	0.901	0.922
	PT2	0.845			
	PT3	0.773			
	PT4	0.778			
	PT5	0.678			
	PT6	0.825			
	PT7	0.829			
	Tendering Capabilities	TC1	0.749		
TC2		0.830			
TC3		0.728			
TC4		0.794			
TC5		0.749			
TC6		0.728			
TC7		0.737			
TC8		0.694			
TC9		0.712			
Regulatory framework	RF1	0.691	0.766	0.842	0.535
	RF2	0.775			
	FR3	0.638			
	RF4	0.706			
	RF5	0.777			

Accordingly, reliability was evaluated using Cronbach’s Alpha and Composite Reliability (CR). Cronbach’s Alpha (CA): Values of above 0.7 indicate good internal consistency (Sarstedt et al.,

2020). All the constructs met this requirement, with values ranging from 0.766 (Regulatory Framework) to 0.901 (Participation and Tendering Capabilities), thus demonstrating high reliability. Composite Reliability (CR) values above 0.7 confirm construct reliability (Hair et al., 2019). All the constructs exceeded this threshold, further supporting internal consistency. Overall, the constructs exhibit acceptable convergent validity and strong reliability. Cross-loadings show how much each item loads on its intended construct relative to others, which reveals the constructs' discriminant validity (Sarstedt & Cheah, 2019). Hair et al. (2019) define *discriminant validity* as higher loadings on a construct than on others. In this study, cross-loadings show that items load on their intended constructs, signalling discriminant validity. The Financial Literacy construct has higher loadings on financial literacy factors than other constructs. government support, participation, tendering capabilities, and regulatory framework follow similar patterns. Hair et al. (2019) suggest that these findings support the measurement model's discriminant validity by showing that each construct captures unique variance, as Table 2 demonstrates:

Table 2. Cross-loadings

Variables	Financial Literacy	Government Support	Regulatory Framework	Participation	Tendering Capabilities
FL1	0.721	0.326	0.263	0.346	0.277
FL2	0.673	0.424	0.228	0.294	0.365
FL3	0.691	0.43	0.313	0.547	0.471
FL5	0.664	0.339	0.238	0.51	0.251
FL6	0.756	0.466	0.295	0.513	0.327
FL7	0.779	0.408	0.252	0.361	0.363
FL8	0.749	0.44	0.243	0.436	0.397
GS1	0.351	0.727	0.264	0.476	0.291
GS2	0.383	0.68	0.221	0.441	0.219
GS4	0.354	0.795	0.139	0.518	0.352
GS5	0.44	0.767	0.233	0.516	0.391
GS6	0.547	0.726	0.201	0.469	0.347
GS7	0.426	0.688	0.238	0.39	0.314
PT1	0.491	0.523	0.456	0.817	0.498
PT2	0.546	0.564	0.392	0.844	0.515
PT3	0.445	0.465	0.314	0.772	0.4
PT4	0.447	0.453	0.39	0.78	0.478
PT5	0.536	0.518	0.308	0.673	0.356
PT6	0.534	0.574	0.387	0.823	0.435
PT7	0.453	0.456	0.415	0.832	0.367
RF1	0.252	0.187	0.691	0.319	0.225
RF2	0.289	0.208	0.775	0.409	0.238
RF3	0.231	0.189	0.638	0.286	0.241
RF4	0.251	0.237	0.706	0.358	0.247

RF5	0.302	0.229	0.777	0.343	0.204
TC1	0.466	0.419	0.205	0.46	0.749
TC2	0.446	0.368	0.3	0.466	0.829
TC3	0.346	0.333	0.193	0.41	0.728
TC4	0.348	0.361	0.33	0.46	0.794
TC5	0.366	0.319	0.25	0.443	0.749
TC6	0.482	0.337	0.332	0.422	0.728
TC7	0.285	0.267	0.178	0.358	0.737
TC8	0.224	0.206	0.159	0.313	0.694
TC9	0.272	0.285	0.154	0.338	0.712

Fornell-Larcker was also considered when measuring the discriminant validity. The rule of thumb is that the AVE for each construct should be greater than the squared correlation between that construct and all others (Ab Hamid, Sami, & Sidek, 2017). AVE values that are smaller than the squared correlations imply a lack of discriminant validity, and further analysis or modifications may be necessary (Ab Hamid et al., 2017; Hair et al., 2019). Table 3 presents Fornell-Larcker Criterion AVE results, which reveal that diagonal values such as 0.720 are a square-root of financial literacy; 0.731 are results for AVE representing government support; public procurement participation results have AVE results of 0.793; and tendering capabilities AVE results amount to 0.748. These values are more significant than the corresponding column and row. Since all the correlations are smaller than the square-root of AVE, the Fornell-Larcker test results support the discriminant validity of the current study.

Table 3. Fornell-Larcker criteria

Variables	Financial literacy	Government support	Regulatory framework	Public procurement Participation	Tendering capabilities
Financial literacy	0.72				
Government support	0.567	0.732			
Regulatory framework	0.37	0.292	0.719		
Public procurement Participation	0.624	0.644	0.482	0.794	
Tendering capabilities	0.491	0.438	0.32	0.553	0.748

Note: square roots of AVE are > the underneath values indicating discriminant validity was established (Benitez et al., 2023). Source: Field Data extracted from Smart-PLS3 (2023)

Model fitness

R² in PLS-SEM represents the extent to which exogenous constructs explain the variance in an endogenous construct, according to Hair et al. (2019). It quantifies the proportion of variability in the dependent variable attributable to the predictor variables. In this study, the R² value of 0.559 indicates that tendering capabilities, financial literacy, government support programmes, and the regulatory framework collectively explain 55.9 percent of the variation in public procurement participation among special groups in Tanzania. According to Hair et al. (2019), R² values of 0.75, 0.50, and 0.25 signify substantial, moderate, and weak explanatory power, respectively. The

resulting R^2 suggests that the model has moderate predictive strength, which indicates a reasonable ability to account for public procurement participation while acknowledging that other unexamined factors may also influence participation. However, Raithel, Sarstedt, Scharf, and Schwaiger (2012) further emphasise that though excessively high R^2 values may indicate over fitting, even an R^2 as low as 0.1 can be acceptable depending on the research context.

Assessing effect sizes (f^2) in PLS-SEM is also crucial for determining the practical significance of relationships among latent constructs. Effect size measures the specific contribution of an independent variable in explaining the variance of the dependent variable while considering the impact of other predictors. Cohen (1988) provides benchmarks for interpretation: 0.02 (small effect), 0.15 (moderate effect), and 0.35 (large effect). The findings of this study indicate varying effect sizes. Even though some predictors have a stronger impact on public procurement participation, others are not so impactful. Moreover, predictive relevance (Q^2) assesses the model's ability to predict the endogenous construct (Hair et al., 2019). Q^2 values range from 0 to 1, with higher values indicating stronger predictive relevance. A Q^2 of 0 suggests no predictive capability, whereas 1 represents perfect predictability. In this study, the Q^2 for participation is 0.338, confirming that the model has adequate predictive power. Collectively, the model fit indices confirm that the proposed framework is well-structured and provides meaningful insights into the factors influencing public procurement participation.

Table 4. Model fit indices

Model Fitness Indices	Public Procurement Participation
R Square	0.559
R Square Adjusted	0.553
<i>Effect Size (f^2)</i>	
Financial Literacy	0.12
Government Support	0.20
Tendering Capabilities	0.099
<i>Predictive Relevance (Q^2)</i>	
Financial Literacy	-
Government Support	-
Participation	0.338
Tendering Capabilities	-

The findings show that government support is the strongest predictor, suggesting that policies, grants, or other forms of assistance are crucial in enhancing participation of special groups. Financial literacy and tendering capabilities, on the other hand, have smaller effects, which highlights the need for capacity-building programmes designed to improve their impact. As the model explains more than half of the variance in participation, it reinforces the importance of internal capabilities and external support structures. Also, the strong predictive relevance (Q^2) suggests that the model is not just statistically significant but also practically applicable in forecasting public procurement participation trends. To further strengthen the model, additional factors such as regulatory framework, market access, or networking opportunities could be explored in future research.

Assessment of path model

PLS-SEM path coefficients represent the relationships between latent constructs and indicators. Evaluating these path coefficients entails assessing their significance, direction, and magnitude. PLS-SEM typically uses bootstrapping to generate t-values or p-values to assess significance. The path coefficient is statistically significant if the t-value is greater than 1.96 (for a 95% confidence level) or the p-value is less than 0.05 (Hair et al., 2019; Sarstedt & Cheah, 2019). The statistical analysis evaluated three hypotheses on the relationships between variables, with the results showing statistically significant effects (See Table 5). A positive path coefficient with a low standard deviation supports the first hypothesis that financial literacy influences public procurement participation. The strong t-value confirms the statistical significance of this relationship. Additionally, the p-value indicates a highly significant direct effect. The effect size and confidence interval further underline the substantial impact of financial literacy on public procurement participation.

Similarly, the findings support the influence of government support and tendering capabilities on public procurement participation. Government support demonstrates a stronger positive effect, with a higher path coefficient and a relatively low standard deviation, leading to a highly significant t-value. The corresponding p-value confirms its statistical significance. Moreover, the effect size for government support is considerably larger than that of financial literacy, with a confidence interval that underscores its strong predictive capacity and substantial impact on participation. For tendering capabilities, the positive path coefficient, combined with a low standard deviation, results in a statistically significant t-value. The p-value confirms the strength of this relationship. The effect size and confidence interval further validate the hypothesis that tendering capabilities play a meaningful role in influencing public procurement participation. This finding confirms the hypothesised direct relationships and emphasises the robustness of the tested model and the significant role of financial literacy, government support, and tendering capabilities in shaping public procurement participation.

Table 5. Direct effects

Hypotheses	Beta value	Standard Deviation	t-value	p-value	f ²	95% CI	Status
Financial literacy -> Public procurement participation	0.295	0.075	3.937	0.000	0.120	[0.187-0.443]	Supported
Government support -> Public procurement participation	0.370	0.079	4.684	0.000	0.200	[0.227-0.487]	Supported
Tendering capabilities -> Public procurement participation	0.246	0.067	3.666	0.000	0.099	[0.143-0.362]	Supported

Notes: $\beta > 0$, $p < 0.05$, $t > 1.65$ at 5% significant level, 1-tail test, indicating that the three hypotheses are positive and statistically significant, $f^2 > 0.02$ constructs are significant and

relevant, OS-original sample, SD-standard deviation, T-values, P-values, 95% CI-confidence interval. **Source:** Field data (2023) as extracted from Smart-PLS3

Assessment of moderation effect

Analysing the moderating effects of the Regulatory Framework (RF) on the relationships between Financial Literacy (FL), Government Support (GS), and Tendering Capabilities (TC) in influencing special group’s Participation (PT) in public procurement yields interesting insights. The Moderating Effect of RF on Financial Literacy (FL → PT) shows that the regulatory framework significantly moderates the relationship between financial literacy and participation in public procurement. The positive beta value (0.126) suggests that as the regulatory framework strengthens, the impact of financial literacy on participation increases. Impliedly, regulatory policies, guidelines, and legal structures enhance the ability of financially literate special groups to engage in public procurement.

Moreover, the Moderating effect of RF on Government Support (GS → PT) indicates that the regulatory framework significantly moderates the relationship between government support and participation, albeit in a negative direction (-0.175). In other words, as regulatory requirements strengthen, the positive effect of government support programmes on participation weakens. A possible explanation is that excessive regulatory constraints or bureaucratic procedures tend to limit the effectiveness of government support, hence making it harder for special groups to benefit from financial assistance, training, or capacity-building programmes in public procurement. Furthermore, the Moderating Effect of RF on Tendering Capabilities (TC → PT) reveals that the regulatory framework does not significantly moderate the relationship between tendering capabilities and participation. This result suggests that changes in regulatory conditions do not substantially influence how tendering capabilities influence participation. Simply put, whether regulations are strict or flexible, tendering capabilities remain a key factor in participation, likely because tendering skills, knowledge of bid preparation, and compliance procedures are essential regardless of regulatory adjustments, as Table 6 results explicate:

Table 6. Moderating effects

Relationships	Beta value	S.D	t-value	p-value	Status	Remarks
FL*RF>PT	0.126	0.055	2.311	0.010	Significant	Moderation
GS*RF>PT	-0.175	0.049	3.564	< 0.001	Significant	Moderation
TC*RF>PT	0.005	0.057	0.085	0.466	Not Significant	Moderation

Note FL= Financial Literacy’ GS= Government Support’ TC= Tendering Capabilities
RF= Regulatory framework. Source: Field data extracted from Smart-PLS3 (2023)

These findings emphasise that regulatory frameworks do not operate in isolation but interact with financial literacy and government support in complex ways. Though financial literacy benefits from stronger regulations, excessive regulatory constraints can undermine the effectiveness of government support programmes, tendering capabilities remain consistently important, suggesting that building internal capabilities is a more reliable strategy for improving participation.

Discussion of findings

This study has determined the influence of tendering capabilities, financial literacy, and government support programmes on public procurement participation among special groups in Tanzania. The findings indicate that all three factors positively impact participation, with financial literacy and government support accounting for particularly strong effects. The study confirms that financial literacy significantly influences public procurement participation, with empirical evidence demonstrating a positive and statistically significant relationship. This outcome aligns with previous research emphasising financial literacy's role in economic activities, business success, and resource management. Studies by Acquah and Agyapong (2015), Akenroye et al. (2020), and Hossain (2020), for example, support the notion that financial literacy enhances decision-making and participation in economic activities, including public procurement. Overall, the findings suggest that improving financial literacy among special groups can enhance their ability to navigate procurement processes effectively.

Government support plays a crucial role in enhancing public procurement participation, with the study confirming a strong positive relationship. Similarly research by Cancino et al. (2015), Kaya (2019), and Park et al. (2020) highlight how government interventions aid SMEs and special groups in overcoming procurement barriers. However, the effectiveness of government support depends on implementation strategies and regulatory conditions. As such, the current study underscores the need for well-designed support programmes aimed to maximise their impact on procurement participation. The findings further affirm that tendering capabilities significantly influence public procurement participation. This finding aligns with studies by (Flynn & Davis, 2017a, 2017b) and Akenroye et al. (2020), who all stress the importance of firms' ability to understand procurement documents and submit competitive bids. The literature suggests that enhancing tendering capabilities can help special groups overcome barriers to procurement participation, reinforcing the importance of training and capacity-building initiatives.

Furthermore, the study found that regulatory framework enhances the positive impact of financial literacy on public procurement participation. This aligns with DiMaggio and Powell (1983) the institutional theory, which suggests that external environments shape organisational behaviour. Studies by Flynn (2018) and Gatere and Shale (2014) support the finding that regulatory frameworks can either facilitate or hinder procurement participation. The study highlights the need for an enabling regulatory environment that maximises the benefits of financial literacy. Although government support directly enhances procurement participation, the regulatory framework negatively moderates this relationship. Implicitly, strict regulations may diminish the effectiveness of government programmes regardless of the good intentions. Hoekman and Taş (2020) and Loader (2015) support this finding since they emphasise the need for balanced regulatory policies that complement government interventions. Policymakers should, thus, consider regulatory reforms to enhance the effectiveness of government support in public procurement. On the whole, unlike financial literacy and government support, the regulatory framework does not significantly moderate the effect of tendering capabilities on procurement participation. This finding suggests that tendering capabilities independently influence participation, regardless of the prevailing regulatory conditions. Studies by (Flynn & Davis, 2017a, 2017b), on the one hand, and Helfat and Raubitschek (2018), on the other, reinforce this view and highlight how firms with strong tendering capabilities can navigate procurement processes effectively, irrespective of regulatory variations. As such, the study suggests that

strengthening tendering capabilities may be more effective in increasing procurement participation than regulatory reforms alone.

Conclusion and Implications

As the study has demonstrated, financial literacy, government support, and tendering capabilities significantly influence public procurement participation among special groups in Tanzania. Even though the regulatory framework moderates the effects of financial literacy and government support, it does not significantly impact tendering capabilities. Cumulatively, these findings align with and extend prior research by offering a more comprehensive understanding of how internal capabilities and external regulatory influences shape procurement participation. By demonstrating the crucial role tendering capabilities and financial literacy play in navigating procurement complexities, the study fills some of the existing research gaps and enriches discussions on capability-building strategies. This study also highlights the benefits of integrating the Dynamic Capabilities Theory and the Institutional Theory in explaining how tendering capabilities influence procurement participation. The Dynamic Capabilities Theory underscores the role of internal competencies in adapting to market demands whereas Institutional Theory reveals how regulatory environments shape participation outcomes. Their integration provides a more holistic perspective, showing that though special groups must develop internal competencies to compete effectively, institutional frameworks can either enable or constrain these efforts. This combined approach enhances understanding of how regulatory structures influence the strategic actions of special groups in public procurement.

From a policy perspective, the study underscores the need for targeted interventions, including financial management training, tender preparation mentorship, and inclusive government support programmes. Simplifying procurement regulations and enhancing transparency can further strengthen special groups' ability to compete effectively. These insights can guide policymakers, procurement authorities, and training institutions in optimizing regulatory frameworks and capacity-building initiatives. Even though the study provides valuable contributions, its focus on PPRA-registered special groups in Tanzania limits its broader applicability. Future research, therefore, could explore how regulatory, economic, and cultural contexts influence procurement participation in different regions. Integrating qualitative methods, digitalisation, and social capital perspectives could offer deeper insights into the evolving procurement landscape. Longitudinal studies would further assess policy sustainability and market dynamics over time, enabling more effective interventions for inclusive economic growth.

References

- Ab Hamid, M., Sami, W., & Sidek, M. M. (2017). *Discriminant validity assessment: Use of Fornell & Larcker criterion versus HTMT criterion*. Paper presented at the Journal of Physics: Conference Series.
- Acquaah, M., & Agyapong, A. (2015). The relationship between competitive strategy and firm performance in micro and small businesses in Ghana: The moderating role of managerial and marketing capabilities. *Africa Journal of Management*, 1(2), 172-193.
- Akenroye, T. O., Owens, J. D., Elbaz, J., & Durowoju, O. A. (2020). Dynamic capabilities for SME participation in public procurement. *Business Process Management Journal*, 857-888

- Almenberg, J., & Dreber, A. (2015). Gender, stock market participation and financial literacy. *Economics Letters*, 137, 140-142.
- Ambe, I. M., & Badenhorst-Weiss, J. A. (2012). Procurement challenges in the South African public sector. *Journal of transport and supply chain management*, 6(1), 242-261.
- Ameyaw, C., Mensah, S., & Osei-Tutu, E. . (2021). SME participation in public procurement: The role of financial and technical support. . *Journal of Public Procurement*, 21(3), , 355-376.
- Antwi, S. K., & Hamza, K. (2015). Qualitative and quantitative research paradigms in business research: A philosophical reflection. *European journal of business and management*, 7(3), 217-225.
- Bakker, M., & Wicherts, J. M. (2014). Outlier removal and the relation with reporting errors and quality of psychological research. *PloS one*, 9(7), e103360.
- Bell, E., Bryman, A., & Harley, B. (2022). *Business research methods*: Oxford university press.
- Cancino, C. A., Bonilla, C. A., & Vergara, M. (2015). The impact of government support programs for the development of businesses in Chile. *Management Decision*, 53(8), 1736-1754.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* New York. NY: Academic, 54, 77-155
- Creswell, J. W., & Creswell, J. D. (2018). Mixed methods procedures. *Research Defign: Qualitative, Quantitative, and Mixed M ethods Approaches*.
- Crocetta, C., Antonucci, L., Cataldo, R., Galasso, R., Grassia, M. G., Lauro, C. N., & Marino, M. (2021). Higher-order PLS-PM approach for different types of constructs. *Social Indicators Research*, 154, 725-754.
- Di Mauro, C., Ancarani, A., & Hartley, T. (2020). Unravelling SMEs' participation and success in public procurement. *Journal of public procurement*, 20(4), 377-401.
- DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American sociological review*, 147-160.
- Disi, E. O. (2021). An Empirical Investigation of the Impact of Government Support Programs on Small and Medium Enterprises Performance in Dubai: The Role of Tendering Capabilities and Tendering Activity, 28-47
- Fadic, M. (2020). Letting luck decide: Government procurement and the growth of small firms. *The Journal of Development Studies*, 56(7), 1263-1276.
- Federico, J., Rabetino, R., & Kantis, H. (2012). Comparing young SMEs' growth determinants across regions. *Journal of Small Business and Enterprise Development*, 19(4), 575-588.
- Flynn, A. (2018). Investigating the implementation of SME-friendly policy in public procurement. *Policy Studies*, 39(4), 422-443.
- Flynn, A., & Davis, P. (2016). Firms' experience of SME-friendly policy and their participation and success in public procurement. *Journal of Small Business and Enterprise Development*, 23(3), 616-635.
- Flynn, A., & Davis, P. (2017a). Explaining SME participation and success in public procurement using a capability-based model of tendering. *Journal of Public Procurement*, 17(3), 337-372

- Flynn, A., & Davis, P. (2017b). Investigating the effect of tendering capabilities on SME activity and performance in public contract competitions. *International Small Business Journal*, 35(4), 449-469.
- Flynn, A., McKeivitt, D., & Davis, P. (2015). The impact of size on small and medium-sized enterprise public sector tendering. *International Small Business Journal*, 33(4), 443-461.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.
- Gatere, B., & Shale, N. (2014). Challenges affecting the implementation of access to government procurement opportunities for special interest groups in Kenya: A case of Nairobi County. *International Journal of Social Sciences and Entrepreneurship*, 1(12), 831-847.
- Georghiou, L., Edler, J., Uyarra, E., & Yeow, J. (2014). Policy instruments for public procurement of innovation: Choice, design and assessment. *Technological Forecasting and Social Change*, 86, 1-12.
- Gosal, B., & Kamase, R. (2021). Identification of financial literacy level—case study of small business owner or manager in gowa regency. *Journal of management, E-Business and Entrepreneurship Research*, 1(1), 87-98.
- Grandia, J., & Meehan, J. (2017). Public procurement as a policy tool: using procurement to reach desired outcomes in society. *International Journal of Public Sector Management*, 30(4), 302-309.
- Grohmann, A., & Menkhoff, L. (2017). Financial literacy promotes financial inclusion in both poor and rich countries. *DIW Economic Bulletin*, 7(41), 399-407.
- Hair, J.F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2-24.
- Hair Jr, Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of business research*, 109, 101-110.
- Helfat, C. E., & Raubitschek, R. S. (2018). Dynamic and integrative capabilities for profiting from innovation in digital platform-based ecosystems. *Research policy*, 47(8), 1391-1399.
- Hoekman, B., & Taş, B. K. O. (2020). Procurement policy and SME participation in public purchasing. *Small Business Economics*, 1-20.
- Hoekman, B., & Taş, B. K. O. (2022). Procurement policy and SME participation in public purchasing. *Small Business Economics*, 58(1), 383-402.
- Hossain, M. M. (2020). Financial resources, financial literacy and small firm growth: Does private organizations support matter? *Journal of Small Business Strategy*, 30(2), 35-58.
- Hussain, J., Salia, S., & Karim, A. (2018). Is knowledge that powerful? Financial literacy and access to finance: An analysis of enterprises in the UK. *Journal of Small Business and Enterprise Development*, 25(6), 985-1003.
- Iossa, E., & Martimort, D. (2016). Corruption in PPPs, incentives and contract incompleteness. *International journal of industrial organization*, 44, 85-100.
- Israel, B. (2022). Joint ventures for SMEs competitiveness and inclusive growth: A comparative analysis of SMEs in Mbeya, Tanzania, 3(8)337-353.
- Israel, B., & Kazungu, I. (2019). The role of public procurement in enhancing growth of small and medium sized-enterprises: experince from Mbeya Tanzania, 2(2), 75-110.
- Jeje, K. (2017). Envisaging Business Ethics in Future Workplaces based on the Sources of Ethical Norms among University Students (Prospective Employees) in Tanzania: An Ordinal Logistic Regression Analysis. *The International Journal Of Business & Management*, 5(7), 306-321.

- Joo, H.-Y., & Suh, H. (2017). The effects of government support on corporate performance hedging against international environmental regulation. *Sustainability*, 9(11), 1980.
- Kaya, H. D. (2019). Government Support and the Characteristics of Small Firms. *Journal of Management Research*, 19(2), 120-130.
- Kondo, H., Shibatsuji, M., & Yasuda, N. (2019). Regulatory/scientific supports for micro-, small-, and medium-sized enterprises (SMEs) with medicinal products provided by the PMDA and EMA. *Therapeutic Innovation & Regulatory Science*, 53(2), 193-198.
- Kuenzel, D. J. (2019). Do trade flows respond to nudges? Evidence from the WTO's Trade Policy Review Mechanism. *Review of International Economics*, 27(3), 735-764.
- Kumar. (2018). Research methodology: A step-by-step guide for beginners. *Research methodology*, 1-528.
- Lagat, M. K., Namusonge, G., & Berut, Z. (2016). Factors Affecting Youths, Women and Persons with Disabilities in Accessing Procurement Opportunities in Transzoia County Government. *International Journal of Recent Research in Commerce Economics and Management (IJRRCEM)*, 3(2), 42-66.
- Leonard-Barton, D. (1992). Core capabilities and core rigidities: A paradox in managing new product development. *Strategic management journal*, 13(S1), 111-125.
- Leticia, M. L., (2018). *Women Participation in public procurement: the role of international fora and transnational networks. Crossing Borders: Re-mapping Women's Movements at the Turn of the 21st Century*, 17(3), 74-103.
- Loader, K. (2015). SME suppliers and the challenge of public procurement: Evidence revealed by a UK government online feedback facility. *Journal of Purchasing and Supply Management*, 21(2), 103-112.
- Mabula, J. B., & Ping, H. D. (2018). *Use of Technology and SME Managers' Financial Literacy in Developing Economies*. Paper presented at the Proceedings of the 2018 2nd International Conference on E-Education, E-Business and E-Technology.
- Makena, S. M. (2016). *Factors Influencing Women Participation In Government Procurement: A Case Of Nyeri Central Sub-county, Kenya*. University of Nairobi, 75-98.
- Manase, R., & Dismas, A. (2022). The Influence of Awareness Creation Campaigns on Special Groups' Participation in Public Procurement Opportunities in Tabora Region, Tanzania. *East Africa Journal of Social and Applied Sciences (EAJ-SAS)*, 4(1), 19-29.
- McCrudden, C. (2007). *Buying social justice: Equality, government procurement, & legal change*: OUP Oxford.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American journal of sociology*, 83(2), 340-363.
- Micheni, A. K., Were, S., & Namusonge, G. (2023). Moderating Influence of the Legal and Regulatory Framework on Precursors of Sustainability of Donor Funded Projects in the Health Sector in Kenya. *International Journal of Health Sciences*, 6(4), 38-55.
- Monari, V., Iravo, M., & Kibet, Y. (2017). Analysis of the factors influencing performance of the preference and reservation policy among persons with disabilities at Moi Teaching and Referral Hospital, Kenya. *International Academic Journal of Procurement and Supply Chain Management*, 2(1), 1-15.
- Morris, M., & Stevens, P. (2010). Evaluation of a New Zealand business support programme using firm performance micro-data. *Small Enterprise Research*, 17(1), 30-42.
- Mutangili, S. K., Awuor, E., & Cheluget, J. (2020). The Joint Intervening Effect of Planning Functions of Management and Moderating effect of Regulatory Framework on the

- Relationship between International Procurement Practices and Supply Chain Performance of Energy Development Agencies in Kenya *African Journal of Emerging Issues*, 2(3), 20-40.
- Nakku, V. B., Agbola, F. W., Miles, M. P., & Mahmood, A. (2020). The interrelationship between SME government support programs, entrepreneurial orientation, and performance: A developing economy perspective. *Journal of Small Business Management*, 58(1), 2-31.
- Namagembe, S., Mpeera, J. N., & Kalid, A. (2021). An examination of SME involvement in public procurement under bid lot sizing. *Journal of Public Procurement*, 21(4), 370-397.
- Nielsen, W. (2017). Technical report: Policies that promote SME participation in public procurement. *Business Environment Working Group (Donor Committee for Enterprise Development)*. <https://www.enterprise-development.org/wp-content/uploads/DCED-BEWG-SME-Procurement-Report.pdf>.
- Nkundabanyanga, S. K., Kasozi, D., Nalukenge, I., & Tauringana, V. (2014). Lending terms, financial literacy and formal credit accessibility. *International Journal of Social Economics*, 41(5), 342-360.
- Normanyo, S. S., Ansah, J., & Boakye, H. M. (2016). The role of legal/regulatory framework of the Ghana public procurement policy on SME participation in public procurement. *Journal of Advance Management and Accounting Research*, 3(4), 19-35.
- OECD (2018). OECD public governance reviews SMEs in public procurement practices and strategies for shared benefits, OECD Publishing, Paris.
- OECD. (2023). Framework for the Evaluation of SME and Entrepreneurship Policies and Programmes 2023. *OECD Studies on SMEs and Entrepreneurship*, OECD Publishing, Paris.
- Oluka, P. N., Okoche, M., & Mugurusi, G. (2020). Public procurement and competitiveness of women-owned businesses: a structural equation model (SEM) for gender-responsive procurement in Uganda. *World Journal of Entrepreneurship, Management and Sustainable Development*, 17(2) 209-226.
- Oluoch, F. O., K'Aol, G., & Kosha, J. (2021). Moderating influence of regulatory framework on the relationship between strategic leadership and financial sustainability of NGOs in Kenya. *The University Journal*, 3(2), 1-24.
- Park, S., Lee, I. H., & Kim, J. E. (2020). Government support and small-and medium-sized enterprise (SME) performance: The moderating effects of diagnostic and support services. *Asian Business & Management*, 19, 213-238.
- Patil, K. (2017). Public procurement policy for small and medium enterprises in developing countries: Evidence from India. *International Journal of Public Sector Management*, 30(4), 391-410.
- Potter, J., & Storey, D. J. (2007). OECD framework for the evaluation of SME and entrepreneurship policies and programmes. (*No Title*), 22-94.
- Procurement Act 2023 (Repealed), (2023).
- Raithel, S., Sarstedt, M., Scharf, S., & Schwaiger, M. (2012). On the value relevance of customer satisfaction. Multiple drivers and multiple markets. *Journal of the academy of marketing science*, 40, 509-525.
- Robson, C. (2016). Real world research. (Colin Robson, Kieran McCartan. ed.).
- Sarstedt, M., & Cheah, J.-H. (2019). Partial least squares structural equation modeling using SmartPLS: a software review. In: Springer. 7, 196-202

- Sarstedt, M., Ringle, C. M., Cheah, J.-H., Ting, H., Moisescu, O. I., & Radomir, L. (2020). Structural model robustness checks in PLS-SEM. *Tourism Economics*, 26(4), 531-554.
- Saunders, M. L., P. & Thornhill, A. (2019). *Research Methods for Business Students*. United Kingdom: Pearson Education Limited.
- Scott, W. R. (2013). *Institutions and organizations: Ideas, interests, and identities*: Sage publications.
- Selznick, P. (1953). *TVA and the grass roots: A study in the sociology of formal organization* (Vol. 3): Univ of California Press.
- Srisusilawati, P., Fasa, M. I., Nurhayat, S., Anugrahwanto, R. B., Hidayat, A. W., Sulaimawan, D., . . . Zahra, D. N. (2021). *The Nexus Between Dynamic Capability and Islamic Financial Literacy Towards Innovation of Small Medium Enterprises (SMEs) in Indonesia*. Paper presented at the 1st Paris Van Java International Seminar on Health, Economics, Social Science and Humanities (PVJ-ISHESSH 2020).
- Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. *International journal of academic research in management (IJARM)*, 5, 1-27.
- Tanujaya, B., Maulana, A., & Sari, R. (2022). Using Likert Scale in Attitude Measurement: A Review of Recent Applications in Social Science Research. *International Journal of Social Science Studies*, 10(3), 45-56.
- Teece, D. J. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic management journal*, 28(13), 1319-1350.
- Teece, D. J. (2018). Business models and dynamic capabilities. *Long range planning*, 51(1), 40-49.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic management journal*, 18(7), 509-533.
- Tesha, A., & Nsimbila, P. (2021). Determining The Participation of The Special Groups in Public Procurement Opportunities in Tanzania. *African Journal of Applied Research*, 7(1), 1-16.
- Tesha, A., & Nsimbila, P. (2022). Determinants of The Special Groups Participation in Government Procurement Opportunity in Tanzania. *African Journal of Applied Research*, 8(1), 213-227.
- 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), 1-21.
- Wadhwa, M., Chen, J., Li, J. J., & Durrett, G. (2023). Using natural language explanations to rescale human judgments. *arXiv preprint arXiv:2305.14770*, 1-25
- Wang, Y. (2016). What are the biggest obstacles to growth of SMEs in developing countries?—An empirical evidence from an enterprise survey. *Borsa Istanbul Review*, 16(3), 167-176.
- Yin, R. K. (2018). Case study research and applications. In: Sage Thousand Oaks, CA.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2013). *Business research methods: Cengage learning*.
- Zirabamuzale, S. (2021). *Financial literacy and financial performance of micro and small sized enterprises in Kira municipality*. Kyambogo University,
- Žukauskas, P., Vveinhardt, J., & Andriukaitienė, R. (2018). Philosophy and paradigm of scientific research. *Management culture and corporate social responsibility*, 121, 139.