MITIGATING PROCUREMENT RISKS: A FRAMEWORK FOR GOOD GOVERNANCE IN PUBLIC CONTRACTING

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Abstract

This paper seeks to explore internal and emerging limitations set within the public procurement system. It suggests institutional structures to oversee such a process, more than just technical fixes (Enayati & Özaltin, 2024). It also aims to move beyond the technologies themselves by bringing governance, standards, and principles into public procurement. The present paper is descriptive-analytic and was conducted based on a review of literature and research reports. It also employs a qualitative interpretive methodology for analysis of international organization reports and identifies various types of public procurements, such as procedural and contextual systemic risks. The paper draws a number of inferences, and the most important among them is that risks are not single but multidimensional. This means that we cannot tackle these risks effectively simply by tackling technical reform. The paper promotes the principles of transparency, integrity, accountability, and the rule of law as core requirements and benchmarks for the reduction of risks in public procurement.

Keywords: Risk Management, Governance, Public Procurement, Accountability

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1. INTRODUCTION

Government procurement is an important government function, but it depends on the financial and governance environment. It accounts for a significant share of public spending, generally between 10% and 20% of gross domestic product (Liu et al., 2024; Ying et al., 2025), and is crucial in the way resources are directed towards infrastructure, goods, and services which serve citizens (Lisciandra et al., 2022; Wang et al., 2024). But procurement is also the most prone to inefficiency, favoritism, and corruption (Barbosa & Fiuza, 2025; Tang, Zhao, et al., 2025). Politicized allocation decisions, bidding of contracts, and inflated contract prices have been documented in almost every part of the world. The risks of these outcomes are not only resources wasted, public trust in government

damaged, the market perverse, and democratic legitimacy treated casually (Barbosa & Fiuza, 2025; Farr & D'Alessandro, 2025).

Success in managing procurement risk is, therefore, inextricably bound to good governance more generally (Vörösmarty et al., 2024; Xia & Wei, 2025). Risks in public procurement can take many forms, such as non-competitiveness, the presence of conflicts of interest (Nicolas et al., 2025), a lack of transparency and oversight, or poor contract management. Some risks are systemic, indicative of institutional constraints or political capture, while others are procedural, tied to the conception and implementation of specific tenders (Zhang & Zhu, 2025). To the extent that these risks are unmitigated, they can seriously jeopardise value for money and integrity of procurement (Varghese & Pradhan, 2025; Zhang et al., 2025).

Procurement risks have been recognized by governments and intergovernmental organizations since long time (Siciliani et al., 2023). Initiatives like the Organization for Economic Co-operation and Development (OECD) guidelines on public integrity agree that risk management is "at the heart of" reform. Digital solutions such as e-procurement systems and open contracting initiatives have also been suggested to reduce the possibilities for corruption and improve accountability (Åslund & Pettersson-Löfstedt, 2025; Varghese & Pradhan, 2025). Yet, despite offering useful tools, technical solutions, and legal reform, alone cannot solve the issue of procurement risks (Adjei-Bamfo et al., 2025). The required governance systems that incorporate transparency, accountability, participation, and capacity building as an integrated whole.

This paper also claims that the management of procurement risk can be effectively achieved through embedding in good governance (Taheriruh, Payande, et al., 2025; Wang et al., 2025). The key aspects of good governance — i.e., transparency, accountability, participation, efficiency, and rule of law establish normative and practical benchmarks for risk management in public contracting (Myeza et al., 2021; Selviaridis & Uyarra, 2025). Linking procurement reform to these principles will enable governments to progress from fragmented and reactive risk management approaches towards robust systems that are resilient, sustainable, and development-oriented (Stek et al., 2025; Wang et al., 2022).

Existing public procurement governance frameworks developed by the OECD, United Nations Commission on International Trade Law (UNCITRAL), and the World Bank provide important normative guidance but remain largely compliance-driven and analytically fragmented (OECD, 2015; UNCITRAL, 2011, 2012; World Bank, 2016). Transparency is predominantly framed as disclosure, accountability as formal oversight, and the rule of law as legal alignment, while capacity building and participation are often treated as secondary or enabling conditions (OECD, 2015; World Bank, 2016). This study advances existing work by repositioning all five dimensions — transparency, accountability, capacity building, rule of law, and participation — as interdependent mechanisms of procurement risk mitigation. Unlike OECD and World Bank models, which address capacity building mainly as an implementation concern, the proposed framework conceptualizes it as a core risk-control function influencing decision quality and institutional resilience (World Bank, 2016). Similarly, while UNCITRAL frameworks emphasize procedural legality, they offer limited integration of participation and institutional learning in mitigating governance failures (UNCITRAL, 2011, 2012). By explicitly linking each governance dimension to specific risk-mitigation functions across the procurement lifecycle, the framework moves beyond principle-based approaches toward an integrated, impact-oriented analytical model.

This study advances existing public procurement governance frameworks by explicitly integrating core governance dimensions — transparency, accountability, capacity building, rule of law, and participation — into a unified, risk-mitigation-oriented model that spans the entire procurement lifecycle. While prior frameworks typically examine these dimensions in isolation or emphasize compliance and procedural control, the proposed model uniquely conceptualizes governance as an interdependent system in which each dimension actively contributes to mitigating procurement risks such as corruption, inefficiency, and weak performance. In particular, the model highlights the dynamic role of participation and capacity building as enabling mechanisms that strengthen transparency and accountability, rather than treating them as peripheral institutional conditions. Moreover, by explicitly linking governance dimensions to risk mitigation outcomes, the framework provides a more actionable analytical tool for policymakers and practitioners, moving beyond descriptive governance principles toward a performance- and resilience-focused approach to public procurement governance.

The structure of this paper will be presented in the following sections. The literature review is overviewed in Section 2. The methodology is described in Section 3. The results are presented in Section 4. The discussion is given in Section 5. And, finally, the conclusions and recommendations are specified in Section 6.

2. LITERATURE REVIEW

2.1. Types and categories of procurement risks

Risks in procurement must be identified and understood to create effective strategies for their mitigation (Althabatah et al., 2025). The risks of public contracting are heterogeneous, involving institutional, procedural, and contextual elements (Felizzola et al., 2024; Zheng & Wen, 2024). Such risks occur in all processes of the procurement cycle, including planning, tendering, execution of contract, and monitoring (Tang, Zhao, et al., 2025; Zhu et al., 2025). Through classifying these risks, decision makers, managers, and regulatory agencies can be guided to uncover weaknesses, prioritize remedial measures, and align their responses with governance principles (Zhu et al., 2025). In the light of analytical expediency, procurement risk can be categorised into three broad-spectrum groups of systemic risks, procedural risks, and contextual risks (Sun et al., 2024). Table 1 presents the difference between the three risk categories, as follows in Table 1.

Table 1. Typology of public procurement risks

Risk category	*Defining characteristics*	*Illustrative examples*
Systemic risks	Structural, institution-wide risks rooted in governance, legal, and political systems affect all procurement activities.	Political capture and corruption; weak enforcement of procurement law; low institutional capacity of procurement authorities.
Procedural risks	Risks arising from how procurement rules and processes are applied within specific tenders or contracts.	Non-competitive bidding, conflicts of interest in bid evaluation, poor contract management, and weak performance monitoring.
Contextual risks	External risks shaped by economic, social, technological, or crisis conditions influence risk exposure and mitigation capacity.	Limited supplier markets; emergency procurement during crises; low digital literacy affecting access to e-procurement systems.

Source: Authors' elaboration.

2.1.1. Systemic risks

Systemic risks are, in essence, derived from the wider institutional and political system in which procurement takes place. Such risks are not isolated to individual contracts, but they indicate more systemic governance failures. One big systemic risk is corruption and political capture. The entire system becomes perverted when acquisition is used to reward friends, finance campaigns, or benefit entrenched elites (Chase et al., 2025). Political interference in the award of contracts depresses competition by scaring away honest suppliers and shunting public resources from public purpose to private wealth (Ying et al., 2025).

Another systemic risk is the low level of institutional capacity (Liu et al., 2024). In many countries, procurement authorities are normally under-resourced, unstaffed, or lack technical ability. This incapability impairs their capacity either to prepare successful tenders or accurately assess bids, or efficiently control contracts (Lisciandra et al., 2022). Even where rules are well designed, in the absence of professionalized procurement staff, for instance, they may not be effectively enforced (Enayati & Özaltin 2024).

Systemic risk also includes insufficient legal and regulatory systems (Wang et al., 2024). When the procurement laws are obsolete, vague, or not well-aligned to international standards, such represent loopholes that can be exploited (Myeza et al., 2021). Conversely, if institutions can check those powers (i.e., audit offices or anti-corruption agencies) that are weak or politically influenced, systemic risks will pass untamed (Barbosa & Fiuza, 2025).

2.1.2. Procedural risks

Procedural risks arise in the procurement process. They are related to the planning, implementation, or monitoring of selected tenders and specific contracts (Farr & D'Alessandro, 2025). One of the common procedural risks is non-competitive bidding (Fu et al., 2025). Single-supplier contracts, overly-prescriptive tender specifications, or external "frictions" result in less rigorous competition; this represents a worse value for money since it tends to inflate prices (Tang, Zhao, et al., 2025). In the bidding process, collusion among bidders, which is sometimes connived at by authorities who are involved as clients, also destroys competition and forms cartels that raise prices (Harju et al., 2024).

Information asymmetry and opacity. Another procedural risk is information asymmetry and opacity. Without available tender opportunities, evaluation criteria, and contract awards, suppliers are not able to compete on equal terms; it is impossible to trace whether resources are used as we want (Akhavantaheri et al., 2025). Limited transparency leads to public allegations of favoritism and corruption, reducing the population's trust (Fu et al., 2025).

Conflict of interest is a significant procedural risk as well (Wang et al., 2024; Myeza et al., 2021). Those officials involved in procurement are likely to also have strong personal or financial connections with suppliers, which places undue influence on the selection processes of such vehicles (Liu et al., 2024). Difficulties with declaration and management of conflicts. There is a potential for misuse because of a poor process of declaring and managing conflicts (Akhavantaheri et al., 2025).

Finally, poor contract management is a key procedural risk (Myeza et al., 2021). Even when tenders are awarded fairly, ineffective monitoring of contract implementation can result in low-quality delivery, escalated prices, or unfinished projects (Liu et al., 2024). Ineffective performance appraisal and enforcement mechanisms allow contractors to underperform with impunity (Enayati & Özaltin, 2024; Myeza et al., 2021).

2.1.3. Contextual risks

Other language risk factors are determined by environmental (economic, social, or technological) settings. These risk exposures are not embedded in the procurement systems but rather affect how risks manifest and the means of mitigation (Stek et al., 2025). A major contextual risk is the market structure in some sectors, especially for small economies, where there may be only a few capable suppliers and limited competition (Felizzola et al., 2024; Zheng & Wen, 2024). This reliance on a limited supplier base increases the risk of collusion or monopoly (Wang et al., 2022).

One other decisive contextual risk in the preceding order occurs during emergency or crisis procurement processes due to natural disasters, pandemics, or armed conflicts, when governments only control normal procedures but are forced to procure in a non-normal way because it is urgently needed to purchase goods and services (Størkersen et al., 2024; Sun et al., 2024). While emergency procurement is often justified, it can result in inflated costs, a lack of quality, and corruption (Del Sarto et al., 2024; Lisciandra et al., 2022). The COVID-19 pandemic also underlined that risks in procurement could be aggravated during crises when oversight mechanisms are weakened (Wang et al., 2025).

Technology change consists of both prospects and perils (Tang, Zhao, et al., 2025). Information

technology, e.g., the use of an online procurement site, serves as a potential corruption deterrent by fostering transparency (Akhavantaheri et al., 2025; Åslund & Pettersson-Löfstedt, 2025). However, these technologies face some challenges related to cybersecurity and require significant infrastructure and training investment (Varghese & Pradhan, 2025). In environments of low digital literacy, attempts to reform technology might create new patterns of exclusion instead of inclusion (Taheriruh, Jääskeläinen, et al., 2025).

Lastly, social-cultural norms may play an important role in procurement risks. In some contexts, where patronage networks or informal practices are prevalent (Myeza et al., 2021), procurement activities may be impacted by the anticipated giving back of an equivalent return (of favor) — common normative behavior in the form of favoritism/nepotism (Althabatah et al., 2025; Zhu et al., 2025). These cultural dynamics intersect with formality and, therefore, pose challenges to neutrality (Taheriruh, Payande, et al., 2025).

2.1.4. Cross-cutting consequences

Although they are classified into different types, other risk factors are often combined with systemic, procedural, and contextual risks (Sun et al., 2024). For example, when institutions are weak in the consolidated level (systemic), non-competitive bidding occurs more easily (procedural), especially in a crisis period (contextual) (Hu et al., 2025). These risks have the following impacts, which are linked to each other (Ying et al., 2025; Zou et al., 2025):

- Efficiency losses: Inflated prices, delays, and substandard delivery waste scarce public resources.
- Equity distortions: Contracts may disproportionately benefit politically connected firms, excluding small and medium enterprises.
- Legitimacy erosion: Public trust in government declines when procurement scandals dominate headlines.
- Developmental setbacks: Projects meant to deliver health, education, or infrastructure may fail, undermining social and economic goals.

2.1.5. The governance imperative

Categorisation of risks is necessary, but to manage risk effectively, it is essential to deploy solutions as part of a broader governance framework (Cao et al., 2025; Nikou, 2025). Though technical fixes, i.e., new norms or online platforms, are necessary, they often are not enough if employees witness unaccounted systemic corruption or oversee institutions unable to protect them. Therefore, risk management of procuring practices should not be seen as a "compliance-driven exercise" (Hua, 2025) but as a challenge in governance aimed at the improvement of openness (He et al., 2025), accountability, participation, and building of institutions' capacity (Karttunen et al., 2025).

This background lays the base for the following section, where we introduce an architectural view of how procurement risks could be managed (Eklund, 2025; Naeini et al., 2024). Governance can become reliable, fair, and trustworthy if risk management is in accordance with good governance principles, so as to move further beyond the reactive models, considering more robust procurement systems.

2.2. A governance-based framework for mitigating procurement risks

The risk of public procurement cannot be avoided by technical reform only (Fountoukidis et al., 2025). Digital platforms, audit systems, and regulatory reform are necessary but not sufficient without the overarching governance system (Jiang et al., 2025). Procurement risks, typical risks found in procurement, exist where transparency is low, accountability is fragmented, participation level is low, capacity is weaker, and the rule of law is undermined. The inclusion of procurement reform into the framework of governance promotes legitimacy through effectiveness. The framework is based on five interrelated pillars: transparency, accountability, participation, capacity development (CD), and the rule of law (Similä & Mwesiumo, 2024). Figure 1 presents all the dimensions of governance in public procurement.

Figure 1. The role of governance in public procurement risks

Source: Authors' elaboration.

2.2.1. Transparency

One challenge in what may be an accumulating pile of garbage is the need for transparency; this will mitigate risk during procurement. Open processes and availability of information reduce the likelihood that corruption, favoritism, and ineffectiveness will take place (Harju et al., 2024). Transparency could be accomplished by the provision of an open framework that automatically makes procurement information available during all stages — from planning and tender through contract award and, for example, implementation (Liu, Jiang, et al., 2025). Open contractual standards are a project that has been implemented to provide promising employment (Wang & Shen, 2025). Journalists, non-governmental organizations (NGOs), businesses, and citizens can hold open procurement data governments to account for deviance from standard formats (Dimand et al., 2026; Selviaridis & Uyarra, 2025). The lack of trust in power itself underlines the importance of transparency and accountability from a democratic perspective, since they not only prevent negative behaviors but also serve as a message that the governments do not hide anything (Gaitán-Cremaschi & Valbuena, 2024; Gao & Lu, 2025).

The possibilities for transparency have been improved to a large extent due to digitalization (Cao et al., 2024). E-procurement systems cut down on face-to-face interactions, so the process becomes less susceptible to underhand dealings, such as junctioning, whilst online dashboards make data available in real time for public consumption, which is becoming (Changalima & Mchopa, 2024; Zhang & Zhu, 2024). However, transparency should have certain content (Pyun, 2025). Partial, late, or overly technical disclosure that meets formal requirements too often does little to empower stakeholders (Åslund & Pettersson-Löfstedt, 2025; Castellani et al., 2025). It is, therefore, of upmost Importance to pay attention for user friendly formats, multilingual access, and inclusive dissemination strategies (Fu et al., 2025).

2.2.2. Accountability

Transparency without accountability is a symbolic barrier (Fontana & d'Agostino, 2025; Tang, Wang, et al., 2025). Accountability requires procurement officials, suppliers, and oversight bodies to be able to account for their actions and be held responsible for any misbehaviour or misconduct (Lisciandra et al., 2022). Accountability should work both up (governments and citizens) and sideways (government institutions) (Dzhusupova et al., 2025; Liu, Ma, et al., 2025).

Internal accountability requires strong institutional mechanisms (Fazekas et al., 2024; Khorana et al., 2024). Procurement officials must be internally audited and performance appraised, as well as report clearly structured (Khorana et al., 2024). There is a need for sufficient resources and high levels of political independence to institutions of horizontal accountability, including audit offices and anti-corruption agencies (Auteri & Cremaschini, 2024; Lindfors et al., 2025).

Outward accountability is primarily rooted in the involvement of civil society, media, and ordinary citizens (Farr & D'Alessandro, 2025; Srivastava, 2025). Vent mechanisms, whistle-blower protection systems, and complaints, as well as stakeholders' audits, enable addressing the problem and finding possible solutions (Flynn, 2025; Guo & Liang, 2025). Furthermore, international accountability mechanisms do play a role; the conditions imposed by donors, peer pressure, and global benchmarks provide reputation-based incentives to engage in reform (Enayati & Özaltin, 2024; Nai et al., 2025).

Ultimately, the willingness of states to be held accountable depends on a reliable enforcement mechanism (Caserta et al., 2025). It is not enough to make laws; the laws must be in reality enforced (Fu et al., 2025; Tang, Wang, et al., 2025). Offenders and offenders of malpractice bear sanctions from fines to debarment (Changalima & Mchopa, 2024). Without the institutions to enforce contracts and without mechanisms of accountability, procurement risks remain (Akhavantaheri et al., 2025).

2.2.3. Capacity building

In concrete terms, the risk of procurement can be reduced through the implementation of certain rules and supervision, as well as the ability for institutions and individuals to carry them out successfully (Jia et al., 2025). This brings a systematic risk which can thwart the most ambitious and well-designed reform (Nicolas et al., 2025). The formation of such a foundation requires capacity building for procurement staff (Jia et al., 2025; Ying et al., 2025). Bureaucrats must also be trained in ethics, managing risks, and the use of digital tools as well as other fields (Selviaridis & Uyarra, 2025; Taheriruh, Jääskeläinen, et al., 2025; Wang et al., 2025). The development of professional standards and accreditation systems can be used as a tool for building a well — trained cadre of procurement professionals who may be more resistant to manipulation (Aboelazm, 2025; Stek et al., 2025).

However, institutional capacity is also key (Aboelazm et al., 2025; Taheriruh, Jääskeläinen, et al., 2025). Budgets, modern infrastructure, and reliable data forms are required by procurement bodies (Aboelazm & Dganni, 2025). Oversight bodies must have sufficient resources to carry out timely reviews and audits. In addition to strengthening government agencies' capacity, there should also be a focus on helping supply-side stakeholders, civil society groups, and citizens to play an effective part in procurement governance (Althabatah et al., 2025).

International cooperation can play a major supportive part. Numerous attempts to examine its basic theoretical basis have all failed, arguing that theory verbalisation needs fresh perspectives in undertaking analysis. The sharing of knowledge, peer learning, and even technical assistance programs allows countries to adapt global best practices for their own unique situations (Hu et al., 2025; Sun et al., 2024). However, it is important to ensure that capacity-building leads to continued benefit; it should not be reliant on donor-driven initiatives that are cut off once funding ceases. Moreover, the long-term resilience requires that capacity has been integrated into the national system over a protracted process (Naeini et al., 2024; Varghese & Pradhan, 2025).

2.2.4. Rule of law

In sum, such risks of procurement are inevitable and inescapable altogether; however, they can be at the most reduced through determined conformity to best practices (as long as your operational policy involves not only rule-based actions, but is also a manner) (Wang, 2024). Laws should be transparent, intelligible, and consistently applied. Contradictions in the procurement law, ambiguity caused by uneven enforcement — anything can become a potential weak point (Cao et al., 2024). For example, they can involve themselves in due diligence through factory operations streamlining, specification tuning, and standard setting. The progression to this stage often demands prolonged commitment and considerable effort, yet the associated benefits outweigh the challenges involved. The above benchmarks are transparent and objective for all the stakeholders with respect to making future transactions more predictable (Castellani et al., 2025).

The judicial review is also important; courts should be enabled to settle procurement disputes fairly and expeditiously (Fontana & d'Agostino, 2025; Tang, Wang, et al., 2025). It is assumed that the judge has the capability to take an independent decision based on her/his knowledge and experience (Wilkinson et al., 2024). The absence of judicial authorities may increase the risk in public procurement, as individuals do not fear sanctions and penalties (Farr & D'Alessandro, 2025; Srivastava, 2025).

The legal system also protects rights (Nai et al., 2025). Whistle-blowers need to be safeguarded from retaliation; bidders should be given equal chances to compete, and the public should have access to information (Enayati & Özaltin, 2024; Tang, Wang, et al., 2025). Embedding procurement within the rule of law helps to institutionalize instead of discretionary risk mitigation (Gaitán-Cremaschi & Valbuena, 2024).

Table 2. Mapping of public procurement governance frameworks

Governance dimension	*OECD*	*UNCITRAL*	*World Bank*	*Proposed framework*
Transparency	Emphasized through disclosure, open data, and reporting standards	Focuses on procedural transparency and publication of procurement information	Promotes transparency mainly to deter fraud and corruption	Conceptualized as a continuous risk-mitigation mechanism across the procurement lifecycle, enabling real-time oversight and informed participation.
Accountability	Relies on institutional oversight, audits, and control mechanisms	Anchored in legal remedies and complaint mechanisms	Emphasizes fiduciary controls and ex-post accountability	Treated as an interactive process linking oversight, responsibility, and performance outcomes to reduce governance failures.
Capacity building	Addressed as an implementation and reform-support issue	Limited focus, mainly related to institutional readiness	Considered a prerequisite for effective system implementation	Reframed as a core governance dimension and proactive risk-control mechanism influencing decision quality and compliance.
Rule of law	Emphasizes regulatory coherence and enforcement	Central pillar focusing on legal certainty, fairness, and harmonization	Focuses on legal frameworks to ensure compliance and integrity	Integrated with other dimensions to balance legal compliance with adaptive governance and risk responsiveness.
Participation	Encouraged mainly through stakeholder consultation	Largely implicit, limited to bidder rights and complaints	Promoted selectively through social accountability tools	Positioned as a central governance mechanism enhancing transparency, accountability, and trust, thereby mitigating corruption and inefficiency.
Analytical focus	Normative and principle-based	Legal-procedural	Compliance and fiduciary risk	Integrated, impact-oriented, and explicitly linked to procurement risk mitigation.

Source: Authors' elaboration.

3. METHODOLOGY

This paper adopts a qualitative and conceptual research design to explore procurement risks and propose a governance-based framework for mitigating them. The purpose is not to generate statistical findings but to synthesize existing knowledge and develop a normative model grounded in principles of good governance.

3.1. Research design

The study is structured in three stages:

1. *Conceptual mapping*: Identification and categorization of procurement risks into systemic, procedural, and contextual dimensions. This was achieved through an extensive review of academic, institutional, and policy literature on procurement vulnerabilities.

2. *Framework development*: Analysis of governance principles (transparency, accountability, participation, capacity, and rule of law) and their relevance to procurement. This stage involved interpreting how these principles interact with identified risks to form a holistic risk-mitigation framework.

3. *Interpretive synthesis*: Integration of insights from diverse sources to develop practical implications. This stage linked conceptual categories of risk with governance mechanisms, resulting in a framework designed for cross-contextual applicability.

3.2. Literature search strategy and source selection

A structured literature search was conducted to ensure transparency and replicability. Academic sources were identified through databases including Scopus, Web of Science, and Google Scholar, while institutional and policy documents were obtained from organizations such as the World Bank, OECD, UNCITRAL, and Transparency International.

The search covered publications from 2020 to 2024, reflecting the period during which governance-based procurement reforms gained prominence globally.

Search strings combined key terms related to procurement risk and governance, including:

- "public procurement risk", "procurement vulnerabilities", "procurement corruption", "governance in public procurement", "procurement accountability", "procurement transparency", "public sector procurement reform", and "institutional risk in procurement";
- Boolean operators were used to refine results (e.g., "public procurement" *and* "risk" *and* "governance").

3.3. Inclusion and selection logic

Approximately 50 sources were included in the final analysis. Selection followed a purposive and relevance-based logic rather than statistical sampling.

Sources were included if they:

- directly addressed procurement risks, vulnerabilities, corruption, or governance mechanisms in public procurement;
- provided theoretical, conceptual, or policy-relevant insights;
- were published in peer-reviewed journals or by reputable international organizations;
- offered cross-national or comparative relevance.

Sources were excluded if they:

- focused exclusively on private-sector procurement without public governance implications;
- addressed procurement only tangentially;
- lacked analytical or conceptual depth.

The final corpus was selected based on conceptual richness, frequency of citation in the field, diversity of institutional contexts, and contribution to either risk typology or governance mechanisms.

3.4. Justification of the approach

The qualitative and conceptual approach adopted in this study is particularly suited to the research objective, which is to develop an integrative governance-based framework rather than to test predefined hypotheses. Procurement risks are complex, context-dependent, and often embedded in institutional and regulatory arrangements, making them difficult to capture through purely quantitative techniques. A conceptual synthesis allows for the integration of diverse theoretical perspectives and practical experiences drawn from multiple jurisdictions.

Alternative methodological approaches could also be suitable for examining procurement risks. For example, quantitative methods such as surveys or econometric analysis could be employed to measure the prevalence or impact of specific risks across sectors or countries. Similarly, qualitative empirical methods, including interviews with procurement officials, auditors, and suppliers, or in-depth case studies of procurement reforms, could provide richer, context-specific insights into how risks materialize and are managed in practice. While such approaches can generate valuable empirical evidence, they typically focus on particular settings and may limit generalizability. By contrast, the conceptual methodology used in this study enables the development of a normative framework that is adaptable across different institutional environments and can serve as a foundation for future empirical research.

3.5. Limitations

The study is limited by its reliance on secondary data. It does not include primary empirical research such as surveys, interviews, or direct observations of procurement processes. Consequently, its conclusions are interpretive rather than predictive. Additionally, the dynamic nature of procurement risks — especially in crisis contexts such as pandemics — means that the framework may require adaptation over time.

4. RESULTS

The first finding is that systemic risks are the most difficult to address, while being the most serious (Tang, Zhao, et al., 2025). Week institutions, political interference, and corruption all contribute to distorting procurement (Farr & D'Alessandro, 2025). Although procedural reform mechanisms like e-procurement and improved contract management can mitigate these inefficiencies, it is ultimately futile when the system as a whole is corrupt (Barbosa & Fiuza, 2025). This finding underscores the imperative to connect procurement reform with wider governance efforts such as enhancing audit institutions, safeguarding civic space, and civil service professionalization (Lisciandra et al., 2022).

The second finding highlights that procedural risks are the most apparent and, therefore, also often addressed in reform attempts (Farr & D'Alessandro, 2025). Problems related to lack of competition in bidding, information asymmetry, and weaknesses in follow-up and contract management are issues that a government might decide to tackle through simple interventions (Barbosa & Fiuza, 2025; Myeza et al., 2021). Such interventions may involve posting tender adverts online, developing standardization of bidding documents, or setting up performance monitoring (Enayati & Özaltin, 2024; Liu et al., 2024). Although these reforms lead to measurable beneficial changes, they also risk being superficial if the systemic deficiencies are not resolved (Ying et al., 2025).

The third outcome shows that contextual belief influences are highly divergent and play an increasingly vital role. Various factors such as market structure, crisis conditions, technology development, and socio-cultural norms affect the emergence of procurement risks (Del Sarto et al., 2024; Vederhus et al., 2025). The COVID-19 emergencies have shown how risks can grow when the normal procedures are bypassed in view of urgency, as governments do (Gaitán-Cremaschi & Valbuena, 2024; Wang et al., 2022). Also, digitalization can create opportunities for more transparency, at the same time as it creates vulnerabilities when it comes to cybersecurity (Stek et al., 2025; Wang et al., 2022). The heterogeneity of contextual risks emphasises the importance to keep procurement risk management flexible and adaptable to different conditions (Del Sarto et al., 2024; Vederhus et al., 2025).

Fourth, the five building blocks of governance (transparency, accountability, participation, capacity building, and rule of law) work best when taken together (Felizzola et al., 2024; Fountoukidis et al., 2025). They are all in some way interconnected, some more strongly than others. Transparency is effective as a means to reduce information asymmetry, but in the absence of accountable sanctions can only be symbolic (Khorana et al., 2024). Accountability enforces sanctions, but there is little enforcement without institutional capability. Participating is inspirational of citizen action, but taken without transparency, it could become tokenism. The rule of law provides the reforms with legitimacy, but to ensure that the laws are not only words on paper, capacity and participation also need to be present.

Finally, the evidence shows that risk reduction is more than a technical exercise and becomes a legitimate part of an ongoing process. Fairness and trust of citizens in the government are determined not only by the lack of corruption, but also by the visibility of transparency instruments. As a result, public procurement systems that incorporate governance principles are not only more effective but also legitimate, which in turn strengthens the social contract between citizens and the state (Felizzola et al., 2024; Myeza et al., 2021).

5. DISCUSSION

These findings should encourage a re-evaluation of the possibilities and limitations in connecting risk reduction to systems of governance (Tang, Zhao, et al., 2025; Zhu et al., 2025). The debate concentrates on how to balance the development of technology with that of improving governance (Nicolas et al., 2025). Other tech-based interventions, such as e-procurement, standardization of bidding procedures, and integrity pacts, may be easier to introduce/adopt and will bring immediate results (Akhavantaheri et al., 2025). Yet, unless the systemic drivers change, these technology fixes could be for naught. Disseminating publicly available procurement data without sufficient mechanisms to enforce accountability could, in fact, not ensure transparency, and even encourage wrongdoings (Stek et al., 2025; Wang et al., 2022). This narrative points to the need for reforms that are compatible with technical and governance provisions, deep-rooted practices in a culture of accountability and integrity.

Another concern is political will (Fontana & d'Agostino, 2025; Wang et al., 2024). A lot of the systemic risk could be described as "garden variety" and remains in place not because we lack workable solutions, but because powerful interests continue to prop up the incumbents (Lisciandra et al., 2022). Ultimately, governance-based paradigms fail in the absence of political will to bring about change (Taheriruh, Jääskeläinen, et al., 2025; Tang, Zhao, et al., 2025). This brings us to the central question of incentives: what should motivate the government not only to introduce measures that limit the scope for rent seeking.

Furthermore, transparency and accountability work best with diverse interests from business, media, and civil society. Recorded evidence demonstrated that public engagement in the monitoring of procurement, including through community audit or digital platforms, increases oversight and reduces collusion (Tang, Zhao, et al., 2025). Nevertheless, digital divides, literacy gaps, and political barriers may have different impacts on participation in various contexts (Wang & Shen, 2025). And participation will be different everywhere.

Moreover, certain dialogues highlight capacity as an antecedent and a constraint (Naeini et al., 2024). Creation of competent purchase teams, establishment of supervising organizations, and digitalization construction are key to mitigating the risks effectively (Fountoukidis et al., 2025; Liu, Jiang, et al., 2025). CD is a continuous investment dilemma for many states that face conflicting expectations (Harju et al., 2024; Jiang et al., 2025). International aid can be only temporary if donor-driven reforms are not integrated into national systems (Del Sarto et al., 2024). Two recent studies highlight the importance of treating capacity-building as requiring a long-term financial investment and political prioritization.

The findings support earlier studies of changing contextual risks (Dimand et al., 2026; Similä & Mwesiumo, 2024). Emergencies arise, technology advances, and markets change structure with changing vulnerabilities (Gaitán-Cremaschi & Valbuena, 2024). With the growing intertwining of procurement processes with digital technology, the risk of cyberattacks and data manipulation increases (Cao et al., 2024; Changalima & Mchopa, 2024). When global supply chains develop, governments can become more dependent on a few suppliers and be prone to collusion or the exercise of monopoly power (Pyun, 2025). The power of governance models lies in the ability to accommodate newly identified threats while retaining basic integrity principles over time (Åslund & Pettersson-Löfstedt, 2025; Fu et al., 2025).

6. CONCLUSION

Public procurement is a vital instrument for governments to deliver services efficiently, build infrastructure, and promote development. Yet the sector is still highly susceptible and tends to be inefficient, rent-seeking, and corrupt. The paper suggests that successfully addressing procurement risk is about more than just institutional tinkering; it is part of an integrated architecture of good governance. The study offers a comprehensive view of enhancing procurement systems by categorizing risks within the system, procedure, and context. It also incorporates risk reduction measures in line with fundamental principles, including transparency, accountability, participation, CD, and the rule of law.

The study produced several conclusions. Systemic risks, such as political capture and poor institutional frameworks, present significant hurdles that, due to their systemic reach, have far-reaching consequences, as they essentially define the entire procurement environment. Second, procedural risks such as non-transparent procurement or a lack of contract management are more visible and typically easier to reform without significantly upsetting the political economy. However, they remain susceptible to systemic deficiencies in the absence of comprehensive governance reforms. Third, contextual hazards exhibit both variation and

dynamics due to emergencies, technological changes, and market conditions. The pillars of governance must be combined for optimal results; transparency without accountability or participation without capacity lead to suboptimal solutions.

This study contributes to future research by offering a structured, governance-based framework that can serve as a conceptual foundation for empirical investigation into procurement risks. By systematically linking categories of procurement vulnerabilities with core principles of good governance, the framework provides a basis for hypothesis development, comparative studies across jurisdictions, and sector-specific empirical testing. Future research may operationalize the proposed governance dimensions into measurable indicators and assess their effectiveness using quantitative methods or mixed-methods designs. Moreover, the framework can be extended through longitudinal case studies to examine how governance reforms influence procurement risk over time and under crisis conditions.

Despite these contributions, the study has limitations that should be acknowledged. Its conceptual nature and reliance on secondary sources mean that findings are interpretive rather than empirically validated, and contextual variations may affect the applicability of the framework in specific institutional settings. Nevertheless, these limitations do not diminish the value of the study; rather, they highlight its role as a normative and analytical reference point. The results offer practical implications for policymakers, regulators, and procurement authorities by emphasizing governance reforms as a central mechanism for risk mitigation, while also providing scholars with a coherent analytical structure to guide future empirical and policy-oriented research.

Effective mitigation of procurement risks requires transparency and accountability mechanisms that are both substantive and enforceable. Transparency should move beyond formal disclosure to ensure timely, comprehensive, and accessible publication of procurement data across the contracting cycle. The adoption of standardized tools such as the Open Contracting Data Standard can enhance consistency and usability, provided that technical information is communicated in clear and understandable formats. At the same time, accountability must shift from rhetorical commitment to practical enforcement. Procurement authorities, audit institutions, and anti-corruption agencies should be adequately resourced and institutionally independent, with credible and consistently applied sanctions, including supplier blacklisting, prosecution of complicit officials, and recovery of misappropriated funds.

In parallel, procurement governance should actively incorporate citizen engagement and adaptive risk management. Institutionalizing mechanisms such as integrity pacts, community monitoring, and participatory audits can strengthen oversight and increase public trust. Inclusive participation is essential to ensure that small businesses and marginalized groups are meaningfully involved in both procurement processes and monitoring activities. Risk mitigation strategies must also remain flexible and context-sensitive, particularly in emergency procurement situations where speed must be balanced with safeguards such as post-crisis audits. Digital reforms require attention to cybersecurity and targeted capacity-building in low digital-literacy environments, while market risks can be reduced by promoting competition, diversifying suppliers, and addressing collusive practices.

Finally, sustained political commitment, supported by robust monitoring and evaluation systems, is critical to the long-term effectiveness of procurement reforms. Political leadership plays a central role in embedding integrity within procurement systems and aligning reform efforts with broader governance objectives. International organizations, donors, and civil society can reinforce these efforts through incentives and reputational or financial pressure. Continuous monitoring using measurable performance indicators — such as competition levels, contract completion rates, and citizen satisfaction — combined with independent evaluation, enables the identification of weaknesses and supports adaptive, evidence-based reform over time.

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