

Integrating Circular Procurement Practices in Banking Supply Chains: A Sustainability and Cost-Efficiency Perspective

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Abstract: Purpose: This study investigates the integration of circular procurement practices within the banking supply chains of Kenya, examining their role in enhancing sustainability and cost-efficiency. It aims to define the relationship between sustainability and circular procurement, assess the impact on cost-efficiency, and evaluate the degree of integration in the banking sector.

Design/Methodology/Approach: The research employed a qualitative systematic review methodology, analyzing 25 secondary sources—including peer-reviewed journals, institutional reports, and government publications—published between 2022 and 2025. Data were subjected to qualitative content and thematic analysis, framed by the Triple Bottom Line (TBL), Resource-Based View (RBV), and Institutional Theory.

Findings: The analysis reveals a strong positive relationship between circular procurement and sustainability performance, with practices like green sourcing and waste reduction significantly improving ESG outcomes. Circular procurement was found to enhance cost-efficiency through digitalization, resource optimization, and supplier collaboration. However, integration within Kenyan banks remains nascent and largely compliance-driven, hindered by fragmented policy frameworks and a lack of standardized metrics. Institutional pressures are a primary driver, yet strategic, internalized adoption is limited.

Originality/Value: This study addresses a critical gap in literature by focusing on circular procurement within the financial services sector of a developing economy. It provides a synthesized theoretical framework (TBL, RBV, Institutional Theory) to explain the dynamics of adoption and offers evidence-based insights for policymakers and bank managers. The findings underscore the need to transition circular procurement from a regulatory obligation to a strategic capability for competitive advantage.

Keywords: Circular Procurement, Sustainability, Cost-Efficiency, Banking Supply Chains, Sustainable Finance, Kenya, Triple Bottom Line, Resource-Based View.

I. Introduction

The global imperative for sustainable business practices has compelled industries worldwide to re-evaluate their operational models, with procurement emerging as a strategic lever for environmental stewardship and long-term value creation (Popa et al., 2025). Within this context, circular procurement has gained prominence, shifting the focus from linear "take-make-dispose" models to circular systems that prioritize waste reduction, resource efficiency, and extended product lifecycles. This paradigm is particularly relevant for the banking sector, which is increasingly expected to not only finance sustainability but also embody it within its own operations (Wołek, 2025).

In Africa, the discourse on circular economy is intrinsically linked to sustainable finance and developmental goals. As noted by Taera (2025), aligning financial systems with circular economy objectives unlocks holistic growth by integrating social, environmental, and economic performance indicators. In Kenya, banks face mounting regulatory and market pressure to align their procurement practices with national green-growth agendas and the sustainability framework of

the Central Bank (Njoroge et al., 2024). This evolution positions circular procurement not merely as an environmental strategy but as a core governance requirement for financial sector stability and reputation.

Despite this global momentum, the integration of circular procurement in banking supply chains remains fragmented, especially in developing economies. While Kenyan banks have advanced in sustainable finance frameworks, procurement decisions often prioritize short-term cost reduction over long-term lifecycle value (Mwendwa, 2024). This gap is compounded by a scarcity of empirical research on the impact of circular procurement on sustainability and cost-efficiency in the sub-Saharan African banking context. This study therefore seeks to answer the following research questions:

1. What is the relationship between sustainability and circular procurement practices in the Kenyan banking sector?
2. How do circular procurement practices influence cost efficiency within banking operations?
3. How are circular procurement practices integrated into banking supply chains, and what impact do they have on overall performance?

This paper contributes to the theoretical and practical discourse on sustainable finance by providing a synthesized analysis of the Kenyan banking industry. It offers valuable insights for policymakers, bank managers, and procurement officers seeking to implement the Sustainable Banking Principles effectively.

II. Literature Review

2.1 Theoretical Framework

This research is anchored by three complementary theoretical lenses:

- **Triple Bottom Line (TBL):** Elkington's TBL theory posits that organizational performance should be evaluated across three dimensions: economic, environmental, and social (Santos & Reis, 2024). This framework is used to analyze how circular procurement enables Kenyan banks to create balanced value, moving beyond mere financial metrics to include environmental and social outcomes.
- **Resource-Based View (RBV):** RBV theory contends that firms achieve a sustained competitive advantage by developing valuable, rare, inimitable, and non-substitutable resources and capabilities (Barney, 1991). In this study, RBV helps explain how circular procurement—as a strategic capability involving resource optimization and supplier collaboration—enhances cost-efficiency and creates internal competitive strengths for banks (Mailani et al., 2024).
- **Institutional Theory:** This theory, advanced by DiMaggio and Powell (1983), argues that organizational behavior is shaped by external institutional pressures—coercive (regulatory), mimetic (imitation), and normative (social expectations). It provides the lens to understand why and how Kenyan banks adopt circular procurement practices, often in response to regulatory mandates and stakeholder pressures rather than purely strategic intent (Pasamar, 2023).

2.2 Empirical Review

Sustainability and Circular Procurement: Empirical studies in Kenya affirm a positive relationship. Mutio and Machoka (2025) found that ethical procurement and waste reduction significantly enhanced ESG performance in manufacturing firms. Similarly, Wambui (2024) reported a strong correlation ($R=0.793$) between sustainable procurement practices and supply chain efficiency. In the banking sector, reports from the Kenya Bankers Association (2024) and Co-operative Bank (2023) indicate a growing adoption of sustainability guidelines, though often limited to basic measures like paperless operations and e-waste recycling, falling short of systematic, lifecycle-based circular models.

Circular Procurement and Cost-Efficiency: Evidence suggests that circular practices drive significant cost savings. Mwendwa (2024) documented that Kenyan commercial banks implementing green sourcing and digital procurement achieved 15-20% reductions in operational costs. The Co-operative Bank (2023) ESG report highlighted decreased procurement expenses through asset reuse and digitalization. These findings align with RBV, positioning circular procurement as an internal capability that directly contributes to the economic pillar of the TBL.

Integration in Banking Supply Chains: The integration of circular procurement in Kenyan banks is at an early stage. A report by KBA and WWF-Kenya (2024) revealed that while 83% of banks employ environmental risk assessments in

lending, few have extended these principles deeply into their internal procurement. This partial integration is characterized by a compliance-based approach, as explained by Institutional Theory, where banks respond to coercive pressures from regulators but lack the internal drive for innovative, strategic adoption (KIPPRA, 2023).

2.3 Research Gap

Existing research on circular procurement in Kenya has predominantly focused on manufacturing and state corporations, creating a void in understanding its application within financial institutions. Furthermore, studies often describe sustainability reporting without quantitatively linking circular practices to financial outcomes like cost-efficiency. There is also limited exploration of the integration processes and the institutional forces that either enable or hinder the deep embedding of circularity into banking supply chains. This study aims to fill these gaps.

III. Methodology

This research adopted a qualitative systematic review design, following the rigorous protocols outlined by Kolaski et al. (2023). This approach was deemed appropriate for synthesizing existing empirical and theoretical knowledge to provide new insights and identify overarching trends.

Data Sources and Collection: The study relied exclusively on secondary data. Sources included peer-reviewed academic journals, reports from key institutions (Kenya Bankers Association, Co-operative Bank, KIPPRA), and government publications. Databases such as Google Scholar, ScienceDirect, and SpringerLink were searched using keywords including "circular procurement," "sustainability in banking," and "cost efficiency." The inclusion criteria mandated that documents be published between 2022 and 2025, focus on Kenya or comparable African contexts, and address at least one of the study's core variables.

Data Analysis: A purposive sample of 25 documents was selected for depth and relevance. Data were extracted using a structured document review guide and analyzed through qualitative content and thematic analysis (Ozkan, 2023). This involved coding the data according to the research objectives, identifying recurring themes, patterns, and contradictions, and synthesizing the findings to draw comprehensive conclusions.

IV. Findings and Discussion

4.1 The Symbiotic Relationship between Sustainability and Circular Procurement

The analysis confirms a positive, reinforcing relationship between sustainability and circular procurement. Kenyan banks that have implemented elements of sustainable procurement, such as green supplier selection and waste reduction, demonstrate improved ESG performance. This aligns with the TBL framework, where circular practices operationalize the balance between economic, environmental, and social goals. However, the adoption is often superficial. For instance, while banks report on paperless transactions, few have integrated core circular principles like supplier-enabled refurbishment or closed-loop supply chains for assets like IT equipment. This suggests that sustainability is often viewed as a compliance and reputational issue rather than a strategic opportunity for circular transformation, a gap more fully addressed by leading European banks (Popa et al., 2025).

4.2 Circular Procurement as a Driver of Cost-Efficiency

The evidence strongly indicates that circular procurement enhances cost-efficiency. Practices such as digitalizing procurement processes, reusing assets, and collaborating with suppliers on resource optimization lead to significant reductions in operational and procurement expenses (Mwendwa, 2024; Co-operative Bank, 2023). This finding is powerfully explained through the RBV lens: circular procurement represents a valuable internal capability that allows banks to optimize resource utilization, reduce waste (and thus costs), and build resilient supplier relationships. The shift from short-term price focus to long-term lifecycle value is a key mechanism through which cost-efficiency is achieved, directly contributing to the economic dimension of the TBL.

4.3 The State of Integration: Nascent and Compliance-Driven

The integration of circular procurement into Kenyan banking supply chains is partial and evolving. Institutional reports highlight that banks are beginning to incorporate environmental standards into supplier contracts and policies, but this is not yet a standardized or widespread practice (KBA & WWF-Kenya, 2024). Institutional Theory provides a compelling explanation for this state: adoption is primarily driven by coercive pressures from regulators like the Central Bank and normative pressures from global sustainability standards. The lack of mimetic pressure—due to the absence of clear, successful local models—and the perceived high cost of innovation further inhibit deep, strategic integration. This results in a tick-box approach to compliance rather than a genuine internalization of circular principles as a source of competitive advantage.

V. Conclusion and Recommendations

5.1 Conclusion

This study concludes that circular procurement presents a transformative pathway for Kenyan banks to achieve enhanced sustainability and cost-efficiency. The research affirms a positive relationship between circular practices and ESG performance, demonstrates tangible cost benefits from resource optimization, and identifies an early, compliance-driven stage of integration. The complementary nature of TBL, RBV, and Institutional Theory provides a robust explanation for these findings: circular procurement enables balanced value creation (TBL) through the development of strategic internal capabilities (RBV), yet its adoption is significantly influenced by external institutional pressures.

The overarching conclusion is that for circular procurement to evolve from a regulatory obligation to a core strategic function, concerted efforts are needed in policy development, managerial commitment, and capacity building within the Kenyan banking sector.

5.2 Recommendations

- **Policy Implications:** Regulatory bodies, including the Central Bank of Kenya, should develop and enforce standardized circular procurement guidelines for the banking industry. These should include quantifiable metrics for sustainability and cost-efficiency to ensure accountability and comparability.
- **Practical Implications:** Banking institutions should proactively integrate circularity into their procurement strategies. This can be achieved by adopting lifecycle costing, developing supplier sustainability scorecards, investing in digital traceability systems (e.g., blockchain), and training procurement staff on circular economy principles.
- **Theoretical Implications:** Future research should quantitatively test the integrated TBL-RBV-Institutional framework proposed here. Scholars should explore the intersections of these theories to build more nuanced models of sustainable adoption in African contexts.

5.3 Limitations and Future Research

This study is limited by its reliance on secondary data, which may vary in conceptual consistency and depth. Future research should employ primary data collection through case studies and surveys to quantify the financial returns on circular procurement investments. Longitudinal studies tracking adoption over time and comparative research across East African nations would yield valuable insights. Further exploration into the role of emerging technologies like AI in facilitating circular procurement is also recommended.

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