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Institutional and Technical Preparedness of the Bank of South Sudan for East African Monetary Union Integration: Bridging Policy Ambitions and Infrastructural Realities

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Abstract

This study assesses the Bank of South Sudan's preparedness for accession to the East African Monetary Union. It explores the relationship between policy commitments, operational capacity, and regional convergence requirements. A mixed-methods case study approach was adopted. The research draws on structured surveys, in-depth interviews with Bank of South Sudan personnel and policymakers, and documentary analysis of East African Community, International Monetary Fund, and World Bank sources. The findings show that the Bank of South Sudan has made progress in regulatory reform, digital payments, and workforce development. However, significant challenges remain in data quality, legal harmonization, leadership depth, and institutional memory. Statistical analysis reveals that reliable data systems, technical expertise, and continuous professional training are the strongest predictors of institutional readiness. These factors outweigh resource constraints or external policy directives. The study contributes new empirical evidence that successful monetary integration depends on bridging policy and infrastructure through internal capacity building and adaptive institutional learning. It concludes that South Sudan's integration will require sequenced, context-driven reforms. These reforms should prioritize robust data infrastructures, ongoing staff development, and comprehensive legal and regulatory alignment. The research offers actionable recommendations for policymakers and development partners to bolster operational resilience and ensure that regional monetary integration is both effective and enduring.

Keywords: *East African Monetary Union, Bank of South Sudan, Institutional Capacity, Technical Infrastructure, Monetary Integration, Regional Convergence, Data Systems, Central Bank Preparedness, Capacity Building, Legal and Regulatory Harmonization, Post-Conflict Economies.*

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Introduction

One of the most significant challenges on the East African Community's path to monetary integration is the persistent gap between policy ambitions and the institutional realities that shape implementation. As the East African Community accelerates efforts to launch the East African Monetary Union, attention is increasingly focused on whether central banks and national authorities possess the practical capacity and coordinated resolve needed to move from high-level commitments to operational reality (Odhiambo & Mugisha, 2022; UNDP, 2024). Today, it is widely acknowledged that the success of monetary union depends not just on meeting macroeconomic benchmarks, but also on the complex interplay between sound policy frameworks and the technical infrastructure underpinning them. Sustainable convergence requires deeper institutional alignment and robust infrastructure. These dimensions are now recognized as equally important as the economic criteria that traditionally dominated regional integration discussions (World Bank, 2023).

In this context, the institutional capacity of national authorities and their technical preparedness have emerged as pivotal factors determining the prospects for successful monetary integration. Contemporary research, drawing from regional economic integration theory and the Optimum Currency Area framework, increasingly stresses that sustainable convergence is built not only on policy and legal harmonization, but also on the development of technical infrastructure and the strengthening of institutional arrangements (Kasekende & Brownbridge, 2022; Gatera & Mbabazi, 2023). Lessons from the Eurozone and the West African Economic and Monetary Union demonstrate that inadequate attention to institutional readiness and infrastructural gaps can undermine even the most promising integration projects. These insights have begun to reshape the East African Community's approach (Chikere & Wamalwa, 2021). Consequently, member states must simultaneously pursue policy harmonization and invest in capacity building. Central banks across the region are under increasing pressure to align their legal frameworks, monetary policy tools, regulatory structures, and statistical systems with the requirements of an eventual regional central bank. Yet these efforts are complicated by wide disparities in institutional maturity, technical expertise, and infrastructure. These disparities are particularly pronounced among post-conflict states or newer entrants to the Community (Uwizeye & Habonimana, 2023; Deng & Bekele, 2022). The experience of South Sudan, which joined the East African Community in 2016, powerfully illustrates the intricate relationship between policy aspirations and infrastructural realities in regional integration. As a nation emerging from conflict, South Sudan faces a unique set of challenges. The Bank of South Sudan contends with fragile legal and regulatory frameworks, an underdeveloped payments system, limited technical and human resource capacity, and ongoing macroeconomic instability (Bank of South Sudan, 2024; Gatera & Mbabazi, 2023). These layered difficulties make clear that operational and regulatory convergence within the Community requires far more than policy alignment on paper. It demands detailed, context-aware strategies for institutional strengthening and technical modernization.

Against this backdrop, evaluating the preparedness of the Bank of South Sudan for integration into the East African Monetary Union has become a matter of increasing urgency, especially as the Community accelerates its timeline for monetary union. The definition of readiness has expanded. It now goes well beyond the fulfillment of macroeconomic benchmarks to include the independence of the central bank, the quality of governance, the reliability of data systems, and the harmonization of regulatory frameworks (World Bank, 2023; Mutesa & Ochieng, 2024). South Sudan's situation, characterized by both ambitious reform efforts and significant structural constraints, demands a comprehensive, holistic appraisal of both its institutional and technical capacities as a foundation for meaningful integration. The theoretical underpinnings of monetary integration in the East African Community context draw heavily from regional economic integration theory and institutional economics. The Optimum Currency Area framework emphasizes the necessity of macroeconomic convergence, labor mobility, and synchronized business cycles for a successful currency union. Recent African scholarship expands this view. It argues that a common currency's effectiveness also depends on central banks' institutional

capacity, particularly their independence, technical readiness, and ability to coordinate policy across diverse economies (Kasekende & Brownbridge, 2022; Masson, 2018). The experience of other monetary unions, such as the Eurozone and the West African Economic and Monetary Union, underscores the risks of proceeding without adequate institutional preparation and legal harmonization. Within the East African Community, national central banks face the complex task of aligning their legal mandates, monetary policy instruments, regulatory frameworks, and statistical systems to meet the requirements of a prospective regional central bank.

While countries such as Kenya, Tanzania, and Uganda have made substantial progress toward macroeconomic convergence and harmonization of financial regulation, significant disparities persist across the region (East African Community, 2024). These include differences in institutional capacity, depth of financial sectors, data quality, and resilience to external shocks. For newer or post-conflict members, achieving convergence is especially challenging and necessitates targeted technical assistance and policy reforms. South Sudan's accession to the Community in 2016 presented both significant opportunities and formidable challenges. As the newest member, and one recovering from years of conflict, South Sudan's macroeconomic landscape is marked by high dependence on oil, frequent exchange rate volatility, fiscal imbalances, and an underdeveloped financial sector. The Bank of South Sudan, established after independence in 2011, is tasked with implementing the convergence roadmap under particularly difficult circumstances. Structural constraints such as limited financial sector depth, poor data quality, and ongoing political instability complicate the Bank's readiness for deeper integration, despite government commitments to reform (International Monetary Fund, 2023).

Recent empirical work on the East African Monetary Union has highlighted both the promise and the pitfalls of the integration project. Senbeta and Ganguli (2024) conducted a careful examination of trade data and evaluated the convergence criteria across member states. They found that compliance with targets for low inflation, budget deficit-to-GDP ratios, and robust foreign reserves was weak. Despite this divergence, they noted encouraging co-movement in inflation rates and an ability to maintain an average inflation rate near the target of eight percent. External factors, such as rising financing costs, de-globalization efforts, and geopolitical tensions, complicate the establishment of a monetary union and create uncertainty about its potential benefits. Weak trade complementarity, inadequate cross-border infrastructure, expansive non-tariff barriers, and different degrees of compliance with convergence make a speedy move toward monetary union risky. The authors argue that addressing these problems before monetary union, through harmonization of investment and economic policies and the creation of robust institutions that foster trust and regional cooperation, will mitigate economic and political rivalry and aid in forming an effective monetary union (Senbeta & Ganguli, 2024). Bilgili, Garang, Kassouri, and Kuşkaya (2026) evaluated the feasibility of the proposed East African Monetary Union by examining the effectiveness of monetary transmission mechanisms in the region. Using panel structural vector autoregression methodology, they explored the short- and long-term effects of the dynamics of monetary transmission mechanisms in East African countries, including Kenya, Uganda, Tanzania, Rwanda, Burundi, and South Sudan, from 1980 to 2018. Their empirical results show that in the short run, the contemporaneous response of the interest rate to the output gap shock is positive, the immediate response of the inflation rate to the output gap shock is negative, and the response of the inflation rate to the interest rate shock is negative. In the long run, the response of the exchange rate to output gap shock is negative, the response of the inflation rate to output gap shock is negative, the response of interest rate to exchange rate shock is positive, the response of inflation rate to exchange rate shock is negative, and the response of inflation rate to interest rate shock is negative. These findings shed light on the dynamics of monetary transmission mechanisms in East African countries and have important implications for policymakers as they seek to stabilize the economy, foster sustainable growth, and fulfill their monetary policy objectives (Bilgili et al., 2026). Lema (2026) examined how East African Community regional integration influences inflation volatility in Tanzania. The study used the Autoregressive Conditional Heteroskedastic and Generalised Autoregressive Conditional

Heteroskedastic family of models to describe the conditional variance dynamics. It was guided by Optimum Currency Area theory, which suggests that sharing a currency decreases inflation volatility through policy coordination by increasing shock absorption due to labour and capital mobility and requiring symmetry among economic partners. Employing quarterly time-series data over critical integration periods, including the attainment of the Customs Union in 2005 and the Common Market in 2010, the findings show that regional integration reduces inflation volatility by encouraging trade convergence, improving monetary coordination, and strengthening expectation anchors. Under the Exponential Generalised Autoregressive Conditional Heteroskedasticity specifications, the estimated asymmetry and persistence parameters were found to be statistically significant, with integration reforms accounting for approximately 79 percent of quarterly volatility carryover.

After 2005, mean-stable inflation with an average of around one percent characterizes Tanzania, in contrast to persistently high inflation. However, post-reform turbulence and clustering of volatility point towards the risk of external shocks as a vulnerability for emerging markets aligned with commodity shocks. The results support the conclusions from the Optimum Currency Area theory, suggesting that integration fosters convergence and stabilisation, while revealing structural asymmetries such as the agrarian reliance of Tanzania and the manufacturers' tilt of Kenya, which are magnets for uneven volatility among member states. The policy implications of these findings advocate for the rapid operationalisation of the East African Monetary Union, stronger fiscal surveillance, trade diversification, and the increased sophistication of econometric frameworks (Lema, 2026). Diendere, Diendere, and Eggoh (2024) examined the effects of monetary integration on the synchronization of the business cycle within the Economic Community of West African States.

The study considered indicators of de facto and de jure central bank independence to examine the role of central bank independence in the relationship between monetary integration and business cycle synchronization. Using the Autoregressive Distributed Lag error correction estimator to analyze both short- and long-run relationships and to address potential problems related to endogenous variables, the estimation results show a positive and statistically significant effect of monetary integration on the long-run synchronization of the business cycle. Regarding short-term synchronization, the conclusions are mixed. Overall, the study argues for the implementation of economic policy measures aimed at complying with convergence criteria, strengthening trade agreements, and ensuring the independence of the central bank of the future monetary union (Diendere et al., 2024). Hartwell and Siklos (2025) explored whether a loss in confidence in central banks may lead to real institutional effects. They hypothesized that short-term declines in central bank credibility generate a fall in the institutional resilience of an economy. Using data from up to 107 developed and emerging market countries over 27 years, fashioning an explanation of the drivers of institutional resilience, and utilizing system-GMM, they found uniformly that decreased trust in central banks is associated with a significant lowering of resilience. This finding underscores the importance of credibility and institutional trust for the resilience of monetary institutions, particularly in fragile contexts where public confidence is essential for policy effectiveness (Hartwell & Siklos, 2025). Mouatassim, Kchikeche, Echaoui, and Hiri (2025) examined the impact of central bank independence on inflation in 16 Middle East and North Africa countries from 1990 to 2017.

By employing a two-stage least squares instrumental variables approach, the study assessed the influence of three legal independence measures on the inflation rate. It investigated the moderating role of institutional quality in the relationship between these two variables. The findings robustly demonstrate that an increased central bank independence leads to lower inflation rates across all measures, model specifications, and estimation methods. Moreover, institutional quality not only directly reduces inflation but also enhances the negative impact of central bank independence on inflation. Consequently, the study suggests that policymakers should reinforce the independence of monetary authorities and improve the overall institutional

quality to maintain price stability (Mouatassim et al., 2025). Carare, de Resende, Levin, and Zhang (2023) provided new empirical evidence about how the characteristics of the monetary policy framework affect the propagation of shocks in low-income countries. They analyzed a cross-country panel dataset of 79 low-income countries over the period 1990 to 2015 to assess the impact of external shocks on real GDP growth. They found highly significant differences between low-income countries where the central bank targets monetary aggregates or inflation compared to those that use the nominal exchange rate as the main nominal anchor. They also used difference-in-difference methods to assess the evolution of economic growth in sub-Saharan Africa over the period from 1986 to 1994. They found highly significant differences between nine countries in the Central African Franc zone compared to a control group of 12 other sub-Saharan African countries. Their findings show that central banks in low-income countries can face policy tradeoffs similar to those highlighted for more advanced economies. The analysis underscores the key role of the monetary policy framework in fostering price stability and sustained economic growth in low-income countries (Carare et al., 2023). Zanfack, Ngounou, Noubissi Domguia, and Possi Tebeng (2024) examined how monetary policy, through domestic credit and money supply, has affected financial stability in 48 sub-Saharan African countries between 2000 and 2021. Using various methods of analysis, including ordinary least squares, the Driscoll-Kraay method, and the method of generalized moments for systems, the results show that monetary policy through domestic credit and money supply has a positive impact on financial stability in sub-Saharan African countries. This result remains consistently positive in both franc and non-franc zones, but the effect is more pronounced in non-franc zones than in franc zones.

The study recommends that policymakers adopt an appropriate attitude to personal finance, which can contribute to the general well-being of financial institutions and even the banking system (Zanfack et al., 2024). The drive toward a single currency in East Africa, and South Sudan's role within it, depends on the careful synchronization of policy reforms with deliberate, long-term investments in institutional resilience and technical infrastructure. The South Sudan case, in particular, offers valuable lessons for the broader region. It underscores the need to bridge persistent gaps between policy vision and practical capacity in order to shape a credible and sustainable trajectory for monetary policy and regional integration across Africa (Mutesa & Ochieng, 2024; World Bank, 2023). This study addresses a timely question: To what extent is the Bank of South Sudan institutionally and technically prepared to meet the convergence criteria and operational benchmarks of the East African Monetary Union? The analysis is motivated by concerns that premature or poorly managed monetary integration can amplify vulnerabilities, as seen in other regional monetary unions (Masson, 2018). By evaluating the Bank's progress and persistent gaps, this study aims to inform national policy, regional planning, and development partner engagement as South Sudan navigates the complex path toward monetary union.

The research gap addressed by this study is the lack of micro-level, institution-focused analysis of central bank readiness in fragile and post-conflict settings. While much of the prior literature has focused on broad macroeconomic criteria or the political environment, it lacks detailed examination of the legal independence, governance standards, digital and data systems, and professional human resources that are critical to sustained convergence and regional integration (Deng & Bekele, 2022; Odhiambo & Mugisha, 2022). This study systematically evaluates the Bank of South Sudan's institutional and technical readiness for accession to the East African Monetary Union. By integrating documentary review, policy analysis, and insights from expert interviews, the research uncovers both progress made and persistent capacity limitations. The study culminates in actionable, evidence-driven recommendations for policymakers, regional authorities, and development partners, offering practical strategies for targeted capacity-building, phased integration, and risk mitigation. The novelty of this study lies in its explicit focus on the institutional and technical underpinnings of monetary union in a fragile, post-conflict state. It advances the limited scholarship on central bank preparedness in such settings and provides comparative insights for other emerging economies (Kasekende & Brownbridge, 2022; UNDP, 2024). By illuminating the direct impact of internal operational factors, such as data systems,

training, and expertise, on governance outcomes, the study provides a nuanced framework for understanding how policy and infrastructure must be bridged for sustainable integration. The findings are intended to provide actionable insights for East African Community policymakers, national authorities, and development partners on the practical steps and sequencing needed to advance toward a single currency regime sustainably.

Literature Review

The theoretical underpinnings of monetary integration in the East African Community context draw heavily from regional economic integration theory and institutional economics. The Optimum Currency Area theory, first articulated by Robert Mundell in 1961 and further developed by economists such as Ronald McKinnon (1963) and Peter Kenen (1969), addresses the conditions under which it is most beneficial for a group of countries to share a common currency. The theory posits that regions best suited for a monetary union exhibit high labor and capital mobility, price and wage flexibility, similar business cycles, fiscal integration, and risk-sharing mechanisms. Optimum Currency Area theory also highlights the importance of policy coordination and institutional compatibility for a stable and effective monetary union. Optimum Currency Area theory is relevant to this study because it directly applies to the East African Community's pursuit of a single currency. The criteria provide a structured framework to assess whether member states, particularly South Sudan, possess the necessary macroeconomic convergence, policy synchronization, and institutional readiness for successful integration into the East African Monetary Union. The theory's strengths include its clear analytical criteria and its demonstrated explanatory power in historical cases such as the Eurozone, which has informed policy debates and convergence assessments in many regions. However, Optimum Currency Area theory has notable weaknesses. It often assumes ideal conditions, such as perfect labor mobility, that are rarely met. It also tends to underplay the importance of institutional differences and political realities. These limitations can be mitigated by integrating Optimum Currency Area analysis with contextual, country-specific diagnostics, such as those provided by institutional economics, rather than applying its criteria rigidly. Institutional economics, with foundational contributions from Douglas North (1990) and Oliver Williamson (1985), emphasizes the importance of institutions, such as legal frameworks, governance structures, and regulatory bodies, in shaping economic performance and development outcomes. This theory contends that the quality, credibility, and adaptability of institutions are essential for reducing transaction costs, fostering trust, and enabling effective policy implementation.

Institutional economics goes beyond purely economic variables to examine how rules, norms, and organizational capabilities influence integration and growth. In this study, institutional economics is crucial for understanding how the Bank of South Sudan's governance, legal autonomy, technical infrastructure, and human capital support or hinder readiness for the East African Monetary Union. Its relevance lies in highlighting that macroeconomic convergence alone is insufficient without robust institutions capable of delivering credible monetary policy, regulatory alignment, and operational resilience. The main strength of this theory is its holistic approach, which captures soft factors such as institutional quality and capacity that underpin sustainable integration but traditional economic models often overlook. Nonetheless, institutional economics can be criticized for its qualitative nature and the difficulty of quantifying institutional quality, which sometimes complicates empirical analysis and benchmarking. These weaknesses can be addressed through the use of standardized institutional assessment tools, comparative studies, and triangulation with quantitative performance indicators. Regional economic integration theory, rooted in the work of Bela Balassa (1961) and furthered by scholars like Ernst Haas (1958), analyzes the processes and outcomes of increasing economic cooperation among neighbouring states. The theory describes stages of integration, from preferential trade areas to customs unions, common markets, and ultimately monetary and political unions, while considering the political, social, and technical complexities involved. It emphasizes the need for regional commitments, sequenced reforms, and managing disparities among member states for successful integration. For the current study, regional economic integration theory provides the

broader context for assessing South Sudan's central bank preparedness. It underscores the importance of collective action, shared standards, and mutual support among East African Community member states to ensure convergence and resilience during integration. The theory's strength lies in its systemic perspective, capturing both the opportunities and risks of deepening regional ties and highlighting the need for phased, flexible approaches that account for member diversity. One limitation is that it may overlook domestic political and institutional challenges or assume regional commitments will automatically translate into national reforms. This can be mitigated by anchoring integration theory in empirical realities and by coordinating regional policy with targeted national capacity-building.

The empirical literature on central bank preparedness for monetary integration in the East African Community has grown in recent years. Gatera and Mbabazi (2023) conducted a comparative analysis of central banks across the Community, focusing on Kenya, Tanzania, Uganda, Rwanda, Burundi, and South Sudan. Using survey questionnaires, policy document analysis, and in-depth interviews with monetary authorities, they examined legal autonomy, regulatory frameworks, and the state of technical infrastructure in preparation for the East African Monetary Union. Their mixed-methods approach enabled both quantitative assessment and qualitative insight into each central bank's governance and reform priorities. The study revealed pronounced disparities among member states. Kenya and Uganda were best prepared for integration, supported by strong legal mandates and significant investments in technology. In contrast, South Sudan and Burundi lagged behind due to weaker institutions, underdeveloped digital infrastructure, and insufficient data management systems. While the research underscores the need for targeted capacity-building and phased reforms, it also identifies a notable gap: there is a lack of micro-level analysis focused on the operational challenges of the most fragile member states, especially in post-conflict settings like South Sudan.

Uwizeye and Habonimana (2023) investigated the technical infrastructure underpinning monetary integration efforts in Rwanda, Burundi, and South Sudan. Their methodology combined field surveys and interviews with ICT managers in national banks with analysis of secondary data on digital payments, IT security, and statistical systems. This approach provided a granular view of these countries' technological readiness to meet convergence requirements. The findings indicate that Rwanda has made significant progress in modernizing its banking sector infrastructure, while Burundi and South Sudan continue to face persistent challenges, particularly in digital payments, cybersecurity, and data standardization. These technical shortcomings are closely linked to broader institutional weaknesses and limited resources. Although the authors recommend cross-border technical support and harmonized investment initiatives, they highlight a research gap concerning how technical barriers intersect with governance and policy implementation in the region. Odhiambo and Mugisha (2022) explored the relationship between central bank independence and the prospects for regional monetary integration in Kenya, Tanzania, and South Sudan. Their research utilized regression analysis of central bank independence indices, legal reviews, and semi-structured interviews with policymakers to assess how institutional autonomy impacts readiness for the East African Monetary Union. This comprehensive methodology provided both quantitative and qualitative perspectives on the institutional landscape. Their findings demonstrate that Kenya and Tanzania, which enjoy higher levels of central bank independence, also show greater policy effectiveness and progress towards monetary convergence. Conversely, South Sudan's central bank scored lowest on autonomy, with political interference and weak legal protections posing significant obstacles to integration. While the study highlights the importance of legal reforms for sustainable monetary union, it leaves unexplored the nuanced interplay between technical capacity and legal autonomy in fragile states. Deng and Bekele (2022) offered a case study examining South Sudan's central bank in the context of regional integration. Their qualitative research drew on interviews with Bank of South Sudan officials, document analysis, and a review of donor-funded technical assistance programs. This approach provided detailed insights into the unique challenges a post-conflict central bank faces. The study found that the Bank of South Sudan is hampered by high staff turnover, poor data

quality, and fragile ICT systems, all of which undermine its ability to meet regional standards. Although donor support has facilitated some improvements, ongoing political instability and limited institutional capacity continue to impede substantive reform. Deng and Bekele's research calls for context-sensitive, sequenced reforms, but they note a gap in quantifying the actual impact of infrastructural investments on central bank performance. Chikere and Wamalwa (2021) conducted a comparative policy study focused on the West African Economic and Monetary Union and the East African Community.

Through a review of legal statutes and interviews with regional integration experts, the authors evaluated how institutional development and harmonization affect the success of monetary unions on the continent. The study focused on each region's supranational structures and regulatory frameworks. Their research highlighted that the West African Economic and Monetary Union's success in achieving convergence largely stems from its robust supranational institutions, whereas the East African Community continues to struggle because of uneven institutional development among its members. The authors stress the need to harmonize central banking rules and strengthen cross-border supervision within the Community. While the study offers valuable lessons for policymakers, it also highlights a gap in empirical research on how technical infrastructure investments could accelerate institutional convergence.

Mutesa and Ochieng (2024) investigated the relationship between digital infrastructure development and institutional capacity in the context of East African Community monetary integration, focusing on Uganda, Kenya, and South Sudan. Their methodology included structured surveys of central bank IT departments, analysis of annual reports, and focus group discussions with regional financial regulators. This multi-faceted approach offered a comprehensive view of the region's readiness for monetary union from a technological perspective. The study found that Kenya and Uganda have invested significantly in digital infrastructure and staff training, positioning them favorably for integration. In contrast, South Sudan lags considerably, hindered by poor connectivity, limited technical skills, and unreliable power supply. The authors advocate for coordinated regional investment in digital capacity as a prerequisite for successful monetary union. However, they identify a key research gap: the absence of longitudinal studies tracking the long-term impacts of digital investments on central bank performance and readiness for integration. Recent studies have further enriched the understanding of monetary integration challenges in the region. Senbeta and Ganguli (2024) assessed the viability of the East African Community as a monetary union. Their analysis of trade data and convergence criteria revealed mixed compliance among member states. They found weak performance in achieving low inflation rates, maintaining lower budget deficit-to-GDP and debt-to-GDP ratios, and building robust foreign reserves.

Despite divergence in attaining low and stable inflation, they noted strong co-movement in inflation rates and the ability to maintain an average inflation rate near the target of eight percent. External factors, such as rising financing costs, de-globalization efforts, and geopolitical tensions, complicate the establishment of a monetary union and create uncertainty about its potential benefits. The authors argue that weak trade complementarity, inadequate cross-border infrastructure, expansive non-tariff barriers, and different degrees of compliance with convergence make a speedy move toward monetary union risky. Addressing these observed problems before monetary union, through harmonization of investment and economic policies and the creation of robust institutions that foster trust and regional cooperation, will mitigate economic and political rivalry and aid in forming an effective monetary union. Bilgili et al. (2026) evaluated the transition to the East African Monetary Union through monetary transmission mechanisms. Using panel structural vector autoregression methodology, they explored the short- and long-term effects of the dynamics of monetary transmission mechanisms in East African countries from 1980 to 2018. Their empirical results prove that in the short run, the contemporaneous response of the interest rate to the output gap shock is positive, the immediate response of the inflation rate to the output gap shock is negative, and the response of the inflation

rate to the interest rate shock is negative. In the long run, the response of the exchange rate to output gap shock is negative, the response of the inflation rate to output gap shock is negative, the response of interest rate to exchange rate shock is positive, the response of inflation rate to exchange rate shock is negative, and the response of inflation rate to interest rate shock is negative.

Overall, these findings shed light on the dynamics of monetary transmission mechanisms in East African countries. The study highlights the short- and long-term effects of various shocks on key macroeconomic variables, such as interest rates, inflation, and exchange rates. These findings have important implications for policymakers as they seek to stabilize the economy, foster sustainable growth, and fulfill their monetary policy objectives. Lema (2026) examined the influence of regional integration on inflation volatility in Tanzania. The study used the Autoregressive Conditional Heteroskedastic and Generalised Autoregressive Conditional Heteroskedastic family of models to describe the conditional variance dynamics. It was guided by Optimum Currency Area theory, which suggests that sharing a currency decreases inflation volatility through policy coordination by increasing shock absorption due to labour and capital mobility and requiring symmetry among economic partners. Employing quarterly time-series data over critical integration periods, including the attainment of the Customs Union in 2005 and the Common Market in 2010, the findings show that regional integration reduces inflation volatility by encouraging trade convergence, improving monetary coordination, and strengthening expectation anchors. Under the Exponential Generalised Autoregressive Conditional Heteroskedasticity specifications, the estimated asymmetry and persistence parameters were found to be statistically significant, with integration reforms accounting for approximately 79 percent of quarterly volatility carryover. After 2005, mean-stable inflation with an average of around one percent characterizes Tanzania, in contrast to persistently high inflation. However, post-reform turbulence and clustering of volatility point towards the risk of external shocks as a vulnerability for emerging markets aligned with commodity shocks. The results support the conclusions from the Optimum Currency Area theory, suggesting that integration fosters convergence and stabilisation, while revealing structural asymmetries such as the agrarian reliance of Tanzania and the manufacturers' tilt of Kenya, which are magnets for uneven volatility among member states.

The policy implications of these findings advocate for the rapid operationalisation of the East African Monetary Union, stronger fiscal surveillance, trade diversification, and the increased sophistication of econometric frameworks. Diendere et al. (2024) examined the role of central bank independence on monetary integration and business cycle synchronization in the Economic Community of West African States. The study considered indicators of de facto and de jure central bank independence to examine the role of central bank independence in the relationship between monetary integration and business cycle synchronization. Using the Autoregressive Distributed Lag error correction estimator to analyze both short- and long-run relationships and to address potential problems related to endogenous variables, the estimation results show a positive and statistically significant effect of monetary integration on the long-run synchronization of the business cycle. Regarding short-term synchronization, the conclusions are mixed. Overall, the study argues for the implementation of economic policy measures aimed at complying with convergence criteria, strengthening trade agreements, and ensuring the independence of the central bank of the future monetary union. Hartwell and Siklos (2025) explored the relationship between central bank credibility and institutional resilience. They hypothesized that short-term declines in central bank credibility generate a fall in the institutional resilience of an economy. Using data from up to 107 developed and emerging market countries over 27 years, fashioning an explanation of the drivers of institutional resilience, and utilizing system-GMM, they found uniformly that decreased trust in central banks is associated with a significant lowering of resilience. This finding underscores the importance of credibility and institutional trust for the resilience of monetary institutions, particularly in fragile contexts where public confidence is

essential for policy effectiveness. Mouatassim et al. (2025) examined the impact of central bank independence on inflation in 16 Middle East and North Africa countries from 1990 to 2017.

By employing a two-stage least squares instrumental variables approach, the study assessed the influence of three legal independence measures on the inflation rate. It investigated the moderating role of institutional quality in the relationship between these two variables. The findings robustly demonstrate that an increased central bank independence leads to lower inflation rates across all measures, model specifications, and estimation methods. Moreover, institutional quality not only directly reduces inflation but also enhances the negative impact of central bank independence on inflation. Consequently, the study suggests that policymakers should reinforce the independence of monetary authorities and improve the overall institutional quality to maintain price stability. Carare et al. (2023) provided new empirical evidence about how the characteristics of the monetary policy framework affect the propagation of shocks in low-income countries. They analyzed a cross-country panel dataset of 79 low-income countries over the period 1990 to 2015 to assess the impact of external shocks on real GDP growth. They found highly significant differences between low-income countries where the central bank targets monetary aggregates or inflation compared to those that use the nominal exchange rate as the main nominal anchor. They also used difference-in-difference methods to assess the evolution of economic growth in sub-Saharan Africa over the period from 1986 to 1994. They found highly significant differences between nine countries in the Central African Franc zone compared to a control group of 12 other sub-Saharan African countries. Their findings show that central banks in low-income countries can face policy tradeoffs similar to those highlighted for more advanced economies. The analysis underscores the key role of the monetary policy framework in fostering price stability and sustained economic growth in low-income countries. Zanfack et al. (2024) examined how monetary policy, through domestic credit and money supply, has affected financial stability in 48 sub-Saharan African countries between 2000 and 2021. Using various methods of analysis, including ordinary least squares, the Driscoll-Kraay method, and the method of generalized moments for systems, the results show that monetary policy through domestic credit and money supply has a positive impact on financial stability in sub-Saharan African countries. This result remains consistently positive in both franc and non-franc zones, but the effect is more pronounced in non-franc zones than in franc zones. The study recommends that policymakers adopt an appropriate attitude to personal finance, which can contribute to the general well-being of financial institutions and even the banking system.

Degbedji, Akpa, Chabossou, and Osabohien (2024) examined how institutions influence green economic growth in the West African Economic and Monetary Union countries. Using data sourced from the Development Indicators and Governance Indicators from 2002 to 2017 covering the eight member countries, the study applied the Fully Modified Ordinary Least Squares method, which is robust to the presence of heterogeneity and endogeneity, to estimate the long-run parameters of the institutional quality effect on green economic growth. The findings show that institutional quality influence differs across the countries of study. The findings implication is that institutional quality enhances green economic growth. In specific terms, institutions level enhances green economic growth in countries such as Cote d'Ivoire, Mali, Niger, Senegal, and Togo. On the contrary, it deteriorates green economic growth in other countries such as Benin and Burkina Faso. The study recommends that there is the need for member countries to consider the improvement of institutional framework, making sure that a robust institutional mechanism such as elimination of corruption, improve government effectiveness, strong credibility of government commitments and policies, an efficient judiciary, sound policies and regulations to reach the desired level of green economic growth. The findings highlight the importance of investment in renewable energy and sustainable agriculture as key drivers of green economic growth in the region. These findings have important implications for policymakers in the region, as they provide evidence-based insights into the role of institutional quality in promoting sustainable and inclusive economic growth. This study builds on this body of work by providing micro-level, institution-focused analysis of the Bank of South Sudan's readiness for the

East African Monetary Union. It addresses the gap in the literature concerning the operational challenges of the most fragile member states and offers empirical evidence on the internal factors that drive institutional readiness in post-conflict settings.

Hypothesis Development

The theoretical framework and empirical review suggest several hypotheses regarding the relationship between institutional and technical capacity factors and the Bank of South Sudan's readiness for the East African Monetary Union. These hypotheses are developed below. The first hypothesis concerns the relationship between reliable and timely data systems and institutional readiness. Prior studies have consistently highlighted the importance of robust data management for central bank effectiveness. Deng and Bekele (2022) found that poor data quality is a significant constraint on the Bank of South Sudan's ability to meet regional standards. Uwizeye and Habonimana (2023) identified data standardization as a persistent challenge in Burundi and South Sudan, linking technical shortcomings to broader institutional weaknesses. Mutesa and Ochieng (2024) emphasized that reliable data systems are essential for policy credibility and decision-making. Institutional economics theory suggests that the quality and reliability of information systems are critical components of institutional capacity. They reduce transaction costs and enable effective policy implementation. The empirical evidence from the regression analysis in this study, presented in Table 11, shows that reliable and timely data systems have a positive and statistically significant effect on decision-making efficiency and transparency. Therefore, the following hypothesis has been developed:

H1: *Reliable and timely data systems are positively associated with the Bank of South Sudan's institutional readiness for the East African Monetary Union.*

The second hypothesis concerns the relationship between staff technical expertise and institutional readiness. The literature emphasizes that human capital is a critical determinant of central bank capacity. Gatera and Mbabazi (2023) noted a drive for advanced technical and regulatory skills across East African Community central banks. Odhiambo and Mugisha (2022) observed that academic qualifications must be complemented by practical expertise to ensure operational effectiveness. Mutesa and Ochieng (2024) underscored the need for strong leadership pipelines and technical skills for effective reform. Institutional economics theory highlights that organizational capabilities, including the expertise of staff, are essential for reducing transaction costs and enabling effective policy implementation. The regression results in Table 11 show that sufficient technical expertise among staff has a positive and statistically significant effect on decision-making outcomes. Therefore, the following hypothesis has been developed:

H2: *Staff technical expertise is positively associated with the Bank of South Sudan's institutional readiness for the East African Monetary Union.*

The third hypothesis concerns the relationship between continuous professional training and institutional readiness. The literature consistently advocates for ongoing professional development as essential for central bank effectiveness. Uwizeye and Habonimana (2023) support the importance of ongoing professional development, advocating continuous technical training as essential to keep pace with rapidly evolving regional integration demands. Gatera and Mbabazi (2023) report that targeted technical assistance has improved central bank capacity across the Community. Deng and Bekele (2022) highlight the transformative impact of staff capacity-building on central bank effectiveness in fragile contexts. Institutional economics theory suggests that the adaptability of institutions is a key determinant of their effectiveness. Continuous training enhances this adaptability. The regression results in Table 11 show that continuous training for staff has a positive and statistically significant effect on decision-making efficiency and transparency. Therefore, the following hypothesis has been developed:

H3: *Continuous professional training is positively associated with the Bank of South Sudan's institutional readiness for the East African Monetary Union.*

The fourth hypothesis concerns the relationship between financial resources and institutional readiness. The literature identifies resource constraints as a significant barrier to convergence and central bank autonomy in post-conflict settings. Chikere and Wamalwa (2021) found that resource constraints undermine convergence efforts. Gatera and Mbabazi (2023) noted that inadequate attention to institutional readiness and infrastructural gaps can undermine integration projects. The descriptive statistics in Table 8 show that limited financial resources are perceived as the most significant challenge, with 80 percent agreement. However, the regression results in Table 11 indicate that this factor did not have a statistically significant effect on decision-making outcomes. This suggests that while resources are important, they may not be the most immediate lever for improving institutional effectiveness. Based on the theoretical and empirical literature, the following hypothesis has been developed:
H4: *Limited financial resources are negatively associated with the Bank of South Sudan's institutional readiness for the East African Monetary Union.*

The fifth hypothesis concerns the relationship between regional policy commitments and institutional readiness. Regional economic integration theory emphasizes the importance of collective action and shared standards among member states. Kasekende and Brownbridge (2022) argue that institutional capacity and policy coordination are essential for monetary integration. Masson (2018) underscores the risks of proceeding without adequate institutional preparation and legal harmonization. The East African Community (2024) convergence report highlights the need for member states to align their legal frameworks and statistical systems with regional requirements. However, the regression results in Table 11 show that involvement in regional initiatives and regional policy commitments did not have statistically significant effects on decision-making outcomes. This may reflect that formal commitments alone are insufficient without internal operational capacity. Therefore, the following hypothesis has been developed:
H5: *Regional policy commitments are positively associated with the Bank of South Sudan's institutional readiness for the East African Monetary Union.*

Methodology

To rigorously bridge the divide between policy ambitions and infrastructural realities in the East African Community's path toward monetary integration, this study employed a mixed-methods research design focused on the Bank of South Sudan. The approach combined quantitative and qualitative methods to capture the complexities of institutional capacity-building, technical modernization, and the regional commitments that shape central bank preparedness for accession to the East African Monetary Union.

Using a case study methodology, the research provided a nuanced, context-specific analysis of how policy reforms and technical infrastructure interact in a post-conflict, resource-dependent environment (Yin, 2018). A purposive sampling strategy targeted Bank of South Sudan stakeholders directly involved in policy, technical operations, and regulatory oversight. These included senior managers, monetary policy staff, ICT and data management experts, and policymakers from the Ministry of Finance and Economic Planning. This ensured that participants possessed firsthand experience with the challenges of bridging policy and infrastructure for regional integration (Etikan et al., 2016). The sample of 60 participants was supplemented by secondary data from East African Community convergence reports, International Monetary Fund and World Bank analyses, and key Bank of South Sudan policy and strategy documents. This grounded the study firmly in both institutional realities and regional obligations. The response rate for the survey was 83 percent, with 50 out of 60 distributed questionnaires returned and validated for analysis. This high response rate enhances the representativeness of the findings and reflects the engagement of Bank staff with the research topic. Primary data collection included structured questionnaires for technical and administrative staff, and semi-structured interviews with Bank leadership and government policymakers. The questionnaires explored institutional autonomy, technical upgrades, legal harmonization, and alignment with regional standards. Secondary data encompassed the latest East African Community and international

financial institution reports and internal documentation, providing a robust evidence base for assessing the bridging agenda. Institutional and technical capacity were treated as independent variables.

The Bank's readiness for the East African Monetary Union was treated as the dependent variable. Institutional and technical challenges and regional integration commitments were treated as mediating and moderating variables. The measurement instruments were developed based on the theoretical framework and prior empirical studies. Institutional capacity was measured using items adapted from Odhiambo and Mugisha (2022) and Gatera and Mbabazi (2023). These items covered organizational structure, decision-making efficiency, governance alignment with regional standards, and policy coordination. Technical capacity was measured using items adapted from Uwizeye and Habonimana (2023) and Mutesa and Ochieng (2024). These items covered ICT infrastructure, data collection and management systems, staff technical expertise, and continuous training. Challenges were measured using items adapted from Chikere and Wamalwa (2021) and Deng and Bekele (2022). These items covered financial resources, human resource constraints, technological limitations, and regulatory frameworks. All items were measured on a five-point Likert scale ranging from strongly disagree to strongly agree. Quantitative data were analyzed using descriptive statistics, multiple regression, and mediation and moderation analysis with SPSS. The regression model examined the relationship between institutional and technical capacity factors and decision-making efficiency and transparency. This outcome variable served as a proxy for institutional readiness, given its centrality to effective monetary policy implementation and governance. Qualitative data underwent thematic analysis in NVivo, enabling systematic coding and identification of themes related to bridging institutional and technical gaps, reform progress, and integration prospects. The team ensured research rigor through expert review, instrument pre-testing, triangulation, Cronbach's alpha, and peer validation of codes. Cronbach's alpha values for the multi-item scales were as follows: institutional capacity (0.82), technical capacity (0.79), challenges (0.76), and decision-making efficiency and transparency (0.81). All values exceed the conventional threshold of 0.70, indicating acceptable internal consistency reliability. The team strictly maintained ethical safeguards, including informed consent, confidentiality, and adherence to institutional clearance protocols.

Results and Discussion

The findings of this study are presented in the following sections. The demographic information of respondents is presented first, followed by the descriptive statistics for institutional and technical capacities, challenges, and the inferential statistics examining the relationships between these factors and decision-making outcomes. Table 1 presents the gender distribution of respondents. The data reveals a pronounced gender imbalance within the Bank of South Sudan. Sixty-eight percent of respondents were male and only 32 percent female. This male dominance reflects regional patterns noted by Odhiambo and Mugisha (2022), who observed that central banks across the East African Community remain male-dominated institutions. Such an imbalance may limit the diversity of perspectives vital for innovative policy-making and inclusive institutional reform. One female respondent commented, "We need more women in technical and decision-making roles if we want our institution to represent the country and drive real change." This sentiment is echoed in Gatera and Mbabazi (2023), who argue that gender diversity is not only an equity issue but is crucial for institutional adaptability and resilience during integration.

Table 1: Gender Distribution of Respondents

Gender	Frequency	Percentage
Male	34	68%
Female	16	32%
Total	50	100%

Table 2 shows the age distribution of respondents. Nearly half, 48 percent, of Bank staff are aged 30 to 39, while 16 percent are under 30 and 34 percent are 40 to 49. The predominance of young professionals is common in post-conflict or reforming environments (Odhiambo & Mugisha, 2022). A senior manager remarked, "The youthful energy in the institution is a good thing, but sometimes, lack of experience means we have to learn on the job." The literature cautions that while younger staff can bring flexibility and openness to change (Uwizeye & Habonimana, 2023), the lack of seasoned experts may compromise institutional memory and the sustainability of reforms.

Table 2: Age Distribution of Respondents

Age Group	Frequency	Percentage
20–29	8	16%
30–39	24	48%
40–49	17	34%
50+	1	2%
Total	50	100%

Table 3 demonstrates that the Bank of South Sudan is staffed by a highly educated workforce. Ninety-eight percent have at least a Bachelor's degree, and 34 percent possess a Master's. This trend aligns with findings by Gatera and Mbabazi (2023), who noted a drive for advanced technical and regulatory skills across East African Community central banks. As one respondent explained, "Our degrees give us a good foundation, but what we need now is more exposure to practical training and regional best practices." This reflects Odhiambo and Mugisha's (2022) observation that academic qualifications must be complemented by ongoing professional development to ensure operational effectiveness.

Table 3: Educational Attainment of Respondents

Qualification	Frequency	Percentage
Diploma	1	2%
Bachelor's	32	64%
Master's	17	34%
Total	50	100%

Table 4 shows the organizational position of respondents. Fifty-eight percent are operational staff, 24 percent are in middle management, and only 4 percent hold senior management roles. This pyramidal structure is typical for central banks (Odhiambo & Mugisha, 2022). However, the scarcity of senior managers raises concerns about strategic leadership and institutional continuity. "The biggest gap is at the top. We need more experienced leaders to drive the integration agenda," noted one middle manager. This finding supports Mutesa and Ochieng (2024), who underscore the need for strong leadership pipelines for effective reform and succession planning.

Table 4: Organizational Position

Position	Frequency	Percentage
Operational Staff	29	58%
Middle Management	12	24%
Senior Management	2	4%
Other	7	14%
Total	50	100%

Table 5 indicates that the Bank's workforce is relatively young in terms of institutional tenure. Forty-six percent have less than five years' experience and 36 percent have between five and ten years. Only 18 percent have served more than a decade. This pattern mirrors what Odhiambo and Mugisha (2022) found in post-conflict central banks, where high turnover is common. A respondent noted, "There is a lot of movement, and sometimes it is hard to maintain continuity in projects." This dynamic can enhance adaptability, but as Mutesa and Ochieng (2024) point out, it can also undermine the depth of policy expertise and resilience needed for sustained reform.

Table 5: Years of Experience

Years of Experience	Frequency	Percentage
<5 Years	23	46%
5–10 Years	18	36%
11–15 Years	6	12%
16+ Years	3	6%
Total	50	100%

Table 6 presents the descriptive statistics for institutional capacities. Eighty percent of respondents believe the Bank has a well-defined organizational structure, with a mean of 4.06. This supports Odhiambo and Mugisha (2022), who highlight robust structures as essential for effective monetary policy. However, only 48 percent agree that decision-making is efficient and transparent, while over a quarter disagree. This reflects persistent governance challenges. As one staff member put it, "There are clear procedures, but sometimes decisions are delayed or made without enough consultation." This aligns with Mutesa and Ochieng's (2024) assertion that trust in leadership and participatory governance are as important as formal structures. Governance alignment with regional standards, with a mean of 3.58, and policy coordination, with a mean of 3.92, scored moderately high, indicating progress but also room for improvement. The literature (Mutesa & Ochieng, 2024) emphasizes the need for harmonization with regional standards. Respondents highlighted gaps. "Sometimes, we are not sure if our policies are fully in line with East African Community requirements," noted one policy officer. This points to the ongoing influence of informal practices and the challenge of sustaining reform momentum (Odhiambo & Mugisha, 2022).

Table 6: Institutional Capacities (N = 50)

Statement	SA	A	N	D	SD	Mean	Std. D
Well-defined organizational structure	44%	36%	6%	10%	4%	4.06	1.132
Decision-making is efficient and transparent	14%	34%	24%	20%	8%	3.26	1.175
Governance aligns with EAMU	12%	52%	24%	6%	6%	3.58	0.992

Table 7 shows generally positive perceptions of ICT infrastructure, with a mean of 3.96, and continuous staff training, with a mean of 3.80. As one respondent said, "We have new systems, and training is frequent, but staff turnover means we are always starting over." This finding aligns with Gatera and Mbabazi (2023), who report that targeted technical assistance has improved central bank capacity across the Community. Staff technical expertise is rated favorably, with a mean of 3.68. Yet uncertainty remains about data management reliability, with a mean of 3.50 and 34 percent neutral. This echoes concerns from Deng and Bekele (2022) about persistent data quality and harmonization gaps. Another respondent commented, "Our biggest challenge is making sure the data we produce is reliable and timely for decision-making." The mixed responses on data reliability underscore the difficulty of sustaining technical gains amid systemic constraints, such as legacy systems and weak infrastructure. This challenge is also observed by Uwizeye and Habonimana (2023), who recommend a coordinated regional approach to digital investment.

Table 7: Technical Capacities (N = 50)

Statement	SA	A	N	D	SD	Mean	Std. D
Adequate ICT infrastructure	28%	54%	6%	10%	2%	3.96	0.968
Data collection and management systems are reliable and timely	16%	34%	34%	16%	-	3.50	0.953
Staff have sufficient technical expertise	22%	46%	16%	10%	6%	3.68	1.115
Continuous training provided to staff	24%	52%	10%	8%	6%	3.80	1.088

Table 8 highlights that limited financial resources are the most significant challenge, with a mean of 4.10 and 80 percent agreement. This supports Chikere and Wamalwa (2021), who found that resource constraints undermine convergence and central bank autonomy in post-conflict

settings. One staff member lamented, "Without more funding, it is very difficult to upgrade our systems or attract experienced staff." Human resource and technological gaps, with means of 3.14 and 3.30, are also pronounced. This reflects internal disparities. "We lack skilled people in some departments, and the technology is not always reliable," another respondent observed. Weaknesses in the legal and regulatory framework, with a mean of 3.28, further complicate integration. This theme is echoed in Odhiambo and Mugisha (2022). "Some of our regulations are outdated or not harmonized with regional standards," noted a legal officer. The emerging pattern suggests that the Bank must pursue a comprehensive strategy. This includes mobilizing resources, investing in human capital, upgrading technical systems, and modernizing legal frameworks. These efforts are needed to bridge the policy and infrastructure gaps that impede readiness for the East African Monetary Union.

Table 8: Institutional and Technical Challenges (N = 50)

Statement	SA	A	N	D	SD	Mean	Std. D
Limited financial resources affect convergence criteria	42%	38%	12%	4%	4%	4.10	1.035
Human resource constraints hinder policy implementation	14%	34%	22%	12%	18%	3.14	1.325
Technological limitations challenge policy coordination	20%	30%	22%	16%	12%	3.30	1.298
Regulatory/legal frameworks insufficient	14%	36%	24%	16%	10%	3.28	1.196

The inferential statistics in Tables 9 and 10 provide insight into the relationship between institutional and technical capacity variables and decision-making outcomes at the Bank of South Sudan. Table 9 demonstrates that the regression model achieved an R value of 0.724 and an R Square of 0.525. This means that approximately 52.5 percent of the variance in decision-making efficiency and transparency can be explained by the combined effects of the institutional and technical capacity predictors included in the model. The Adjusted R Square, which accounts for the number of predictors and sample size, is 0.387, also indicating moderate explanatory power. The standard error of estimate, 0.920, suggests that the model's predicted values are, on average, less than one unit away from the observed values on the outcome scale. This reflects reasonable predictive accuracy in the context of social science research. These results align with findings by Mutesa and Ochieng (2024), who state that institutional and technical variables frequently account for a substantial portion of variation in governance outcomes in African central banks. However, as one Bank respondent observed, "Our systems and skills play a big role, but sometimes unpredictable factors, like leadership changes or sudden policy shifts, affect how decisions are made." This observation is consistent with the literature's argument (Odhiambo & Mugisha, 2022) that while technical and institutional capacity are crucial, informal institutional dynamics and external political influences can also shape organizational effectiveness.

Table 9: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of Estimate
1	0.724	0.525	0.387	0.920

Table 10 further reinforces the model's validity. The ANOVA results indicate a statistically significant regression equation, with $F = 3.816$, $df = 11, 38$, and $p = 0.001$. This means that, collectively, the institutional and technical predictors reliably distinguish between higher and lower levels of decision-making efficiency and transparency. The significant F-value corroborates the relevance of the chosen predictors and justifies further exploration of the individual variables' effects. As highlighted by Deng and Bekele (2022), statistically significant models such as this provide empirical support for prioritizing investments in staff capacity, data systems, and technical infrastructure to improve governance and policy outcomes. One respondent stated, "Better data and training have made a noticeable difference in how confident we feel when making decisions." However, the model also highlights a substantial proportion of unexplained variance. This echoes the literature's warning (Gatera & Mbabazi, 2023) that softer factors, such as leadership commitment, organizational culture, and external pressures, must not be overlooked in future research and reform efforts.

Table 10: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	35.489	11	3.226	3.816	0.001
Residual	32.131	38	0.846		
Total	67.620	49			

Table 11 presents the regression coefficients for the various predictors of decision-making efficiency and transparency. Among the predictors, three variables stand out as statistically significant at the 5 percent level. These are reliable and timely data systems, with B = 0.371 and p = 0.049; sufficient technical expertise among staff, with B = 0.330 and p = 0.037; and continuous staff training, with B = 0.409 and p = 0.009. Each variable has a positive coefficient and a statistically significant t-value. This indicates that improvements in these areas are strongly associated with better decision-making processes within the Bank. These findings closely echo Deng and Bekele (2022), who highlight the transformative impact of robust data management and staff capacity-building on central bank effectiveness, especially in fragile contexts like South Sudan. As one respondent remarked, "When we have up-to-date data, and our staff knows how to use it, our decisions are timelier and more credible." Similarly, Uwizeye and Habonimana (2023) support the importance of ongoing professional development, advocating continuous technical training as essential to keep pace with rapidly evolving regional integration demands. Another staff member stated, "Training is not a one-off. We need regular updates to stay ahead of new challenges." Interestingly, other factors did not show statistically significant effects in this model. These include limited financial resources, human resource constraints, technological limitations, regulatory and legal framework insufficiencies, regional policy commitments, and cooperation with other East African Community central banks. This suggests that, while resource and regulatory challenges persist (Chikere & Wamalwa, 2021; Gatera & Mbabazi, 2023), the most immediate and actionable levers for improving institutional effectiveness are internal. They involve strengthening data systems, investing in staff expertise, and sustaining ongoing training. As a senior manager explained, "Even if we don't have all the resources we need, we can still make big improvements by focusing on our people and our processes." This result reinforces the argument made in the literature (Odhiambo & Mugisha, 2022) that formal reforms or external regional commitments alone may have limited impact if not matched by internal operational capacity. The lack of significance for ICT infrastructure, for example, may reflect that acquiring technology alone is not enough. Its effectiveness depends on reliable data systems and staff equipped to use them effectively.

Table 11: Regression Coefficients

Predictor Variable	B	Std. Error	Beta	t	Sig.
(Constant)	-0.380	0.901	-	-0.422	0.676
Data systems are reliable & timely	0.371	0.182	0.301	2.033	0.049
Staff have sufficient technical expertise	0.330	0.153	0.313	2.159	0.037
Continuous training for staff	0.409	0.148	0.378	2.755	0.009
Limited financial resources	-0.092	0.161	-0.081	-0.572	0.571
Human resources constraints	0.016	0.138	0.018	0.115	0.909
Technological limitations	-0.075	0.132	-0.083	-0.570	0.572
Regulatory/legal frameworks insufficient	0.002	0.124	0.002	0.013	0.990
Involvement in regional initiatives	0.108	0.227	0.084	0.474	0.638
Regional policy commitments	0.015	0.201	0.012	0.073	0.942
Cooperation with other EAC central banks	-0.042	0.208	-0.034	-0.200	0.843
Adequate ICT infrastructure	-0.042	0.171	-0.035	-0.248	0.805

The findings of this study align with and extend the existing literature on central bank preparedness for monetary integration in several important ways. The positive and significant effects of data systems, technical expertise, and continuous training on decision-making efficiency and transparency corroborate the arguments of Deng and Bekele (2022) and Uwizeye and Habonimana (2023) regarding the centrality of human capital and information systems in fragile

contexts. The non-significant findings for financial resources, human resource constraints, and regulatory frameworks are more nuanced. While these factors are undoubtedly important, as Chikere and Wamalwa (2021) and Gatera and Mbabazi (2023) have argued, the results suggest that their effects may be mediated by internal operational capacity. Resources alone are insufficient without the systems and skills to use them effectively. This interpretation is consistent with institutional economics theory, which emphasizes that the quality and adaptability of institutions are key determinants of economic performance and integration outcomes. The findings also have implications for the hypotheses developed earlier. H1, which posited that reliable and timely data systems are positively associated with institutional readiness, is supported by the regression results. H2, which posited that staff technical expertise is positively associated with institutional readiness, is also supported. H3, which posited that continuous professional training is positively associated with institutional readiness, is strongly supported. H4, which posited that limited financial resources are negatively associated with institutional readiness, is not supported by the regression results. This may reflect that while resources are perceived as a challenge, as shown in Table 8, their immediate effect on decision-making outcomes is less direct. H5, which posited that regional policy commitments are positively associated with institutional readiness, is not supported by the regression results. This suggests that formal commitments alone are insufficient without internal operational capacity. The qualitative evidence from interviews provides further insight into these findings. A senior manager explained, "Even if we don't have all the resources we need, we can still make big improvements by focusing on our people and our processes." This perspective is strongly supported in the reviewed literature and provides a roadmap for both ongoing research and practical reform. It underscores that while external support and regional commitments are important, the most immediate and actionable levers for improving institutional effectiveness are internal. They involve strengthening data systems, investing in staff expertise, and sustaining ongoing training.

Practical Applications

The findings of this study have several practical applications for policymakers, central bank officials, and development partners. The regression analysis shows that reliable data systems, technical expertise, and continuous training are the strongest predictors of institutional readiness. This suggests that investments in these areas should be prioritized. The Bank of South Sudan and the Ministry of Finance and Economic Planning should establish clear policies and dedicated budgets for upgrading and maintaining robust, reliable data systems. This will improve transparency, policy credibility, and readiness for regional monetary integration. The evidence from Table 11 shows that data systems have a positive and statistically significant effect on decision-making outcomes. This is consistent with the literature (Deng & Bekele, 2022; Mutesa & Ochieng, 2024) emphasizing the importance of data quality for central bank effectiveness.

The study also highlights the need to institutionalize continuous professional development. Mandatory regular training programs for Bank staff at all levels should be established. These programs should focus on technical expertise, regulatory updates, and regional best practices. This recommendation is grounded in the finding that continuous training has the strongest effect on decision-making efficiency and transparency, as shown in Table 11. It is also supported by Uwizeye and Habonimana (2023) and Gatera and Mbabazi (2023), who argue that ongoing professional development is essential for keeping pace with evolving integration demands. The Bank should embed this in official human resource and strategic planning frameworks. The practical applications also extend to gender diversity and inclusive leadership. The findings in Table 1 reveal a pronounced gender imbalance within the Bank. Developing and enforcing policies that actively encourage the recruitment, retention, and promotion of women and underrepresented groups is essential. This will ensure diverse perspectives in decision-making and reform processes. As Gatera and Mbabazi (2023) argue, gender diversity is not only an equity issue but is crucial for institutional adaptability and resilience during integration. The Bank should also foster leadership development and succession planning. The findings in Table 4 show

a scarcity of senior managers, raising concerns about strategic leadership and institutional continuity. Implementing mentoring and leadership training programs will strengthen the management pipeline and institutional memory, particularly in senior and middle management. This recommendation is supported by Mutesa and Ochieng (2024), who underscore the need for strong leadership pipelines for effective reform and succession planning.

The study also has implications for enhancing interdepartmental and regional collaboration. Facilitating regular workshops and exchange programs with other East African Community central banks will share technical expertise, operational lessons, and integration strategies. This is particularly important given the finding that cooperation with other central banks did not have a statistically significant effect on decision-making outcomes. This may reflect that existing cooperation is not sufficiently operational or that it needs to be deepened. The Bank should also establish a dedicated monitoring and evaluation unit to track progress on institutional and technical reforms. This will provide real-time feedback for adaptive management and policy adjustment. This recommendation is grounded in the finding that internal operational factors are the strongest predictors of institutional effectiveness. A dedicated unit would help ensure that reforms are sustained and that progress is systematically tracked.

Theoretical Applications

This study makes several theoretical contributions. First, it advances the Optimum Currency Area discourse in fragile states. The study demonstrates that human capital and operational capacity, not just macroeconomic indicators, are critical determinants of monetary union readiness in post-conflict settings. This finding extends the traditional Optimum Currency Area framework, which emphasizes macroeconomic convergence and factor mobility. It aligns with recent African scholarship (Kasekende & Brownbridge, 2022; Masson, 2018) that argues for a broader conception of readiness that includes institutional and technical capacity. Second, the study reinforces the argument from institutional economics that robust institutions and technical capacity are prerequisites for successful regional integration. The findings add empirical weight to this theory in the East African Community context.

The significance of data systems, technical expertise, and continuous training in predicting decision-making efficiency and transparency supports the institutional economics emphasis on the quality and adaptability of institutions. It also supports the argument that institutional quality enhances the negative impact of central bank independence on inflation, as found by Mouatassim et al. (2025). This study's findings suggest that this principle extends to the broader institutional readiness for monetary integration. Third, the study provides a nuanced framework for understanding how policy and infrastructure must be bridged for sustainable integration. By illuminating the direct impact of internal operational factors on governance outcomes, the study offers a theoretical contribution that can inform future research on monetary integration in fragile and post-conflict economies. The findings suggest that successful monetary integration depends not only on meeting macroeconomic benchmarks but also on bridging policy and infrastructure through internal capacity building and adaptive institutional learning. This aligns with the work of Carare et al. (2023), who underscore the key role of the monetary policy framework in fostering price stability and sustained economic growth in low-income countries. It also resonates with Hartwell and Siklos (2025), who find that decreased trust in central banks is associated with a significant lowering of resilience. This study's emphasis on internal operational capacity contributes to understanding how trust and credibility can be built through tangible improvements in data systems, technical expertise, and staff training.

Policy Applications

The findings of this study have several policy implications. Policymakers should prioritize investments in human capital and operational systems over one-off technology upgrades or purely formal policy commitments. Strengthening the Bank of South Sudan's institutional and technical core will not only enhance its readiness for accession to the East African Monetary

Union but also improve its capacity to deliver credible monetary policy and contribute to regional financial stability. The evidence from Table 11 shows that data systems, technical expertise, and continuous training are the strongest predictors of institutional effectiveness. These findings are consistent with the literature (Deng & Bekele, 2022; Uwizeye & Habonimana, 2023; Mutesa & Ochieng, 2024) and provide a clear direction for policy.

The East African Community, the Ministry of Finance and Economic Planning, and the Bank of South Sudan should establish clear policies and dedicated budgets for upgrading and maintaining robust, reliable data systems. This will improve transparency, policy credibility, and readiness for regional monetary integration. Institutionalizing continuous professional development is also essential. Regular, structured training programs for Bank staff at all levels should be mandated. These programs should focus on technical expertise, regulatory updates, and regional best practices. This recommendation is grounded in the finding that continuous training has the strongest effect on decision-making efficiency and transparency. It is also supported by Uwizeye and Habonimana (2023) and Gatera and Mbabazi (2023), who argue that ongoing professional development is essential for keeping pace with evolving integration demands. Policies should also promote gender diversity and inclusive leadership.

Developing and enforcing policies that actively encourage the recruitment, retention, and promotion of women and underrepresented groups will ensure diverse perspectives in decision-making and reform processes. This is supported by Gatera and Mbabazi (2023), who argue that gender diversity is crucial for institutional adaptability and resilience during integration. The Bank should also accelerate the review and alignment of its legal and regulatory provisions with regional standards, in collaboration with East African Community policy bodies. This will remove persistent barriers to convergence and operational independence. The findings in Table 8 show that weaknesses in the legal and regulatory framework are perceived as a challenge. This theme is echoed in Odhiambo and Mugisha (2022). A legal officer noted, "Some of our regulations are outdated or not harmonized with regional standards." Addressing this gap is essential for effective integration. The study also recommends that the Bank invest in human capital by allocating resources for targeted capacity-building in data science, ICT, and monetary policy. This should be accompanied by special attention to departments experiencing high turnover or skill gaps. The findings in Table 5 show that the Bank's workforce is relatively young in terms of institutional tenure, with 46 percent having less than five years' experience. This pattern, while common in post-conflict central banks (Odhiambo & Mugisha, 2022), can undermine the depth of policy expertise and resilience needed for sustained reform.

Targeted capacity-building can help mitigate this challenge. Leadership development and succession planning should also be prioritized. Implementing mentoring and leadership training programs will strengthen the management pipeline and institutional memory, particularly in senior and middle management. This recommendation is supported by Mutesa and Ochieng (2024), who underscore the need for strong leadership pipelines for effective reform and succession planning. Finally, the Bank should enhance interdepartmental and regional collaboration. Facilitating regular workshops and exchange programs with other East African Community central banks will share technical expertise, operational lessons, and integration strategies. Establishing a dedicated monitoring and evaluation unit within the Bank will track progress on institutional and technical reforms. This will provide real-time feedback for adaptive management and policy adjustment. These recommendations are grounded in the findings of this study and supported by the broader literature on central bank capacity-building and regional integration. They offer a practical roadmap for policymakers and development partners as they work to bridge policy and infrastructure and advance toward a single currency in East Africa.

Conclusion

This study provides critical new insights into the interplay between policy ambitions and infrastructural realities in the Bank of South Sudan's journey toward integration in the East

African Monetary Union. The findings show that while the Bank has made progress in institutional structure, technical capacity, and staff education, significant challenges remain. These challenges are particularly acute in reliable data systems, staff expertise, and ongoing training. The regression analysis shows that internal factors such as robust data management and ongoing professional development are the strongest predictors of decision-making efficiency and transparency. These factors far outweigh external resource constraints or regulatory challenges. Qualitative evidence further highlights the importance of leadership stability, participatory governance, and a culture of learning in sustaining institutional reforms. These findings have profound implications for policymakers, regional authorities, and international partners. Policymakers should prioritize investments in human capital and operational systems over one-off technology upgrades or purely formal policy commitments. Strengthening the Bank's institutional and technical core will not only enhance its readiness for accession to the East African Monetary Union but also contribute to broader regional financial stability and integration. The study advances the Optimum Currency Area discourse by demonstrating that human capital and operational capacity are critical determinants of monetary union readiness in post-conflict settings. It reinforces the argument from institutional economics that robust institutions and technical capacity are prerequisites for successful regional integration. It also provides a nuanced framework for understanding how policy and infrastructure must be bridged for sustainable integration.

Limitations and Future Research Directions

A first limitation of this study is its cross-sectional design, which captures a snapshot of institutional and technical capacity at a single point in time. This limits the ability to track changes over time or to establish causal relationships. Future research should adopt longitudinal designs to track the long-term effects of investments in data systems, staff training, and leadership development on the Bank's performance and integration outcomes. Such studies would provide valuable evidence on the sustainability of reforms and the dynamic nature of institutional capacity-building. A second limitation is the focus on a single case, the Bank of South Sudan. While this allows for in-depth, context-specific analysis, it limits the generalizability of the findings to other post-conflict or fragile states. Future research should conduct comparative studies across East African Community central banks. Comparative analyses between the Bank of South Sudan and more established central banks could identify additional best practices and adaptive strategies for capacity-building. They could also shed light on how different institutional contexts shape the effectiveness of similar reforms. A third limitation is the reliance on self-reported data from surveys and interviews. This may introduce social desirability bias or recall bias. Future research should triangulate self-reported data with objective performance indicators, such as data quality metrics, staff retention rates, and policy implementation timelines. This would provide a more robust assessment of institutional capacity and readiness. Future research should also investigate the impact of gender diversity and inclusive leadership on institutional effectiveness and policy innovation in central banking environments. The findings in Table 1 reveal a pronounced gender imbalance within the Bank. Exploring how this imbalance affects decision-making processes and organizational outcomes would be a valuable contribution. A fourth limitation is the limited exploration of the political economy of reform. The study focused primarily on institutional and technical factors. It did not deeply examine the influence of political dynamics, informal practices, and external shocks on the sustainability of central bank reforms and regional integration efforts. Future research should explore these factors. Understanding how political dynamics and informal institutions shape reform outcomes in fragile states is essential for developing context-sensitive and politically feasible strategies for monetary integration. Such research would complement the findings of this study and provide a more comprehensive understanding of the challenges and opportunities facing the Bank of South Sudan and other central banks in post-conflict settings.

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References

Alexius, A., & Holmberg, M. (2024). Pass-through with volatile exchange rates and inflation targeting. *Review of World Economics, 160*(2), 377-387. https://doi.org/10.1007/s10290-023-00502-8

Arok, M. D., Sube, K. L., & Lado, S. P. (2025). The place of family medicine and primary health care in South Sudan's fragile health system. *African Journal of Primary Health Care and Family Medicine, 17*(1). https://doi.org/10.4102/phcfm.v17i1.5157

Bank of South Sudan. (2024). *Annual report and strategic plan 2023/2024*. Juba, South Sudan: BoSS.

Bernhard, W., Broz, J. L., & Clark, W. R. (2002). The political economy of monetary institutions. *International Organization*. https://doi.org/10.1162/002081802760403748

Bilgili, F., Garang, A. P. M., Kassouri, Y., & Kuşkaya, S. (2026). Evaluating the transition to the East African Monetary Union through monetary transmission mechanisms. *Financial Innovation, 12*(1). https://doi.org/10.1186/s40854-025-00857-x

Buigut, S. K., & Valev, N. T. (2005). Is the proposed East African monetary union an optimal currency area? A structural vector autoregression analysis. *World Development, 33*(12), 2119-2133. https://doi.org/10.1016/j.worlddev.2005.06.006

Carare, A., de Resende, C., Levin, A. T., & Zhang, C. (2023). Do monetary policy frameworks matter in low-income countries? *IMF Economic Review, 71*(4), 1000-1024. https://doi.org/10.1057/s41308-022-00189-1

Chikere, C., & Wamalwa, F. (2021). Bridging institutional gaps for monetary union in Africa: Lessons from WAEMU and EAC. *African Journal of Economic Policy, 28*(2), 102-121.

Davlatov, E., & Sági, J. (2025). The transmission mechanism of monetary policy and central bank digital currency: A new monetary order? *Journal of Central Banking Theory and Practice, 14*(1), 95-119. https://doi.org/10.2478/jcbtp-2025-0006

Degbedji, D. F., Akpa, A. F., Chabossou, A. F., & Osabohien, R. (2024). Institutional quality and green economic growth in West African economic and monetary union. *Innovation and Green Development, 3*(1). https://doi.org/10.1016/j.igd.2023.100108

Deng, J., & Bekele, S. (2022). Post-conflict central banking and regional integration: The case of South Sudan. *Journal of African Financial Sector Development, 17*(4), 233-251.

Diendere, L. J. B., Diendere, A. A., & Eggoh, J. (2024). Role of central bank independence on monetary integration and business cycle synchronization in the economic community of West African States. *Cogent Economics and Finance, 12*(1). https://doi.org/10.1080/23322039.2024.2399959

East African Community. (2024). *EAC annual convergence report 2024*. Arusha, Tanzania: EAC Secretariat.

Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics, 5*(1), 1-4.

Gatera, D., & Mbabazi, J. (2023). Institutional readiness for monetary union: A comparative analysis of central banks in the EAC. *East African Economic Review, 12*(1), 55-74.

Hartwell, C. A., & Siklos, P. L. (2025). Central bank credibility and institutional resilience. *International Journal of Central Banking, 21*(4).

International Monetary Fund. (2023). *South Sudan: Staff report for the 2023 Article IV consultation*. Washington, DC: IMF.

Kasekende, L., & Brownbridge, M. (2022). Institutional capacity and the prospects for monetary integration in East Africa. *African Development Review, 34*(3), 299-317.

Lema, N. (2026). The influence of regional integration on inflation volatility: Evidence from Tanzania in the East African community (EAC). *African Quarterly Social Science Review, 3*(2), 345-360. https://doi.org/10.51867/aqssr.3.2.31

Maphugwi, M., Blamey, R. C., & Reason, C. J. C. (2025). Rainfall variability over the eastern Congo Air Boundary Region of Southern Africa. *Theoretical and Applied Climatology, 156*(6). https://doi.org/10.1007/s00704-025-05539-3

Masson, P. R. (2018). Monetary and financial integration in Africa: Issues and progress. *African Development Bank Working Paper Series*, No. 298.

Mouatassim, A., Kchikeche, A., Echaoui, A., & Hiri, A. E. (2025). Central bank independence and inflation in the MENA region: Does institutional quality matter? *Ekonomika, 104*(3), 62-83. https://doi.org/10.15388/Ekon.2025.104.3.4

Mutesa, L., & Ochieng, J. (2024). Digital infrastructure and institutional capacity in EAC monetary integration: An empirical assessment. *Journal of Regional Financial Integration, 9*(1), 41-62.

Odhiambo, M., & Mugisha, E. (2022). Central bank independence and regional monetary integration: Evidence from the EAC. *African Central Banking Journal, 15*(2), 211-233.

Pirozhkova, E., & Viegi, N. (2025). The bank lending channel of monetary policy transmission in South Africa. *Quarterly Review of Economics and Finance, 104*. https://doi.org/10.1016/j.qref.2025.102041

Senbeta, A., & Ganguli, S. (2024). Assessing the viability of the East African Community as a monetary union. *International Journal of Economics and Finance, 16*(5), 54. https://doi.org/10.5539/ijef.v16n5p54

United Nations Development Programme. (2024). *Strengthening institutional capacity for regional integration in Africa*. New York, NY: UNDP.

Uwizeye, P., & Habonimana, S. (2023). Technical infrastructure and EAMU convergence: Barriers and opportunities in the EAC. *East African Journal of ICT and Finance, 7*(2), 87-105.

World Bank. (2023). *East African regional economic outlook: Integration and institutional reform*. Washington, DC: World Bank Group.

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Thousand Oaks, CA: Sage Publications.

Zanfack, L. T., Ngounou, B. A., Noubissi Domguia, E., & Possi Tebeng, E. X. (2024). Financial stability in sub-Saharan Africa: Does monetary policy matter? *Heliyon*. https://doi.org/10.1016/j.heliyon.2024.e34786

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