Journal DOI: 10.36713/epra1013 | SJIF Impact Factor (2025): 8.619 ISSN: 2347-4378
EPRA International Journal of Economics, Business and Management Studies (EBMS)
Volume: 13 | Issue: 1 | January 2026 -Peer-Reviewed Journal

FACTOR MOBILITY, INCOME INEQUALITY AND REGIONAL INTEGRATION AMONG THE EAST AFRICAN COMMUNITY PARTNER STATES

Daniel Wambugu Muturi[1], Issac's Kipruto Kemboi[1], Elvis Kiano[1]
[1]*Department of Economics,School of Business and Economics, Moi University, Kenya*

ABSTRACT

This study empirically investigates the effect of factor mobility, specifically, labour mobility and capital mobility and income inequality on regional integration among the East African Community (EAC) Partner States. The research utilised an explanatory design and implemented a quantitative panel data methodology including 4 EAC countries, over a period of ten years. Data were examined utilising dynamic panel Generalised Method of Moments (GMM) estimation, with specification and instrument validity confirmed through standard diagnostic tests. The regression analysis indicated that the lagged level of regional integration, labour mobility, capital mobility and income inequality, all had favourable and statistically significant effects on the regional integration. Higher labour mobility strengthened cross-border labour market linkages and people-to-people connections; increased capital mobility deepened financial and investment integration; and income inequality was positively associated with integration, suggesting that regional integration has so far advanced alongside, rather than resolved distributional imbalances.

These findings highlight the significance of promoting factor mobility while simultaneously addressing inequality, to foster deeper and more sustainable regional integration. Policymakers and regional institutions are urged to prioritise full implementation of free movement commitments, harmonisation of financial regulations and inclusion-oriented policies that ensure the gains from integration are broadly shared across and within the EAC Partner States.

KEYWORDS: *Regional Integration, Labour Mobility, Capital Mobility, Income Inequality, Dynamic GMM, East African Community*

1. INTRODUCTION

Regional integration has re-emerged as a central development strategy in a world marked by geopolitical fragmentation, supply-chain realignments and slowing multilateral trade liberalisation (World Economic Forum, 2023). Regional trade agreements are now nearly universal, yet the depth and quality of integration vary widely. Intra-regional trade still accounts for a modest share of world commerce and many blocs struggle to move beyond tariff preferences into genuine factor market integration and policy coordination (Mikolajun & Viaene, 2015). In this context, the mobility of labour and capital, and the distributional consequences of integration for income inequality, have become key concerns for both scholars and policymakers.

Africa illustrates these tensions acutely. Despite the promise of the African Continental Free Trade Area (AfCFTA), intra-African trade remains only about 13–16% of the continent's total trade, compared with much higher intra-regional shares in Europe or East Asia (UNCTAD, 2019; UN Economic Commission for Africa, 2023). The 2024 Economic Development in Africa Report notes that over half of Africa's trade is still conducted with just five extra-African partners, and only 16 of 54 countries source more than 0.5% of intermediate goods regionally, signalling missed opportunities for value-added regional production (UNCTAD, 2024). At the same time, Africa is the world's second most unequal continent, with Gini coefficients frequently above 0.40 and in some cases above 0.60 (African Development Bank, 2024). This combination of shallow integration and persistent inequality fuels debate on whether current integration arrangements are adequately leveraging factor mobility and whether they are inclusive.

The East African Community (EAC) is often cited as one of Africa's more advanced regional economic communities, having moved from a Customs Union to a Common Market in 2010 and aspiring to a Monetary Union and Political Confederation (EAC, 2024). Yet, trade and production data suggest that integration outcomes remain modest. The EAC Trade and Investment Report 2023 shows that intra-EAC trade, though growing by 13.1% in value, accounted

for only 15% of the bloc's total merchandise trade of over US$ 80 billion; 85% of trade still occurs with extra-regional partners (EAC Secretariat, 2024). Multi-region input–output analysis finds that intra-EAC trade is 15–23 times smaller than EAC trade with the rest of the world and that the regional share in members' exports and imports has stagnated or even declined since 2000, implying "no overall trend towards greater [trade] integration" (Krantz, 2025, p. 18). Non-tariff barriers, regulatory divergence and incomplete implementation of Common Market provisions, continue to constrain deeper integration.

Factor mobility is formally at the heart of the EAC's integration project. The Common Market Protocol commits partner states to the free movement of workers, rights of establishment and residence, and the free movement of capital (EAC, 2010). In practice, labour mobility in the East and Horn of Africa is rising but uneven. The number of migrant workers in the subregion nearly doubled from 2.5 million to 4.7 million between 2010 and 2019, and the region hosts seven of Africa's fifteen largest intracontinental mobility corridors (Oucho & Kandilige, 2023). However, the International organisation for Migration (IOM) and the EAC reports, highlight persistent work-permit hurdles, limited mutual recognition of qualifications and weak protection of migrant workers' rights, which limit the full realisation of labour mobility's integration potential (IOM, 2023; East African Trade Union Confederation, 2020).

Capital mobility is likewise central to regional integration but imperfectly understood in the EAC context. Theoretically, freer cross-border movement of savings and investment should deepen financial linkages, support regional value chains and contribute to risk sharing (Clarke, 1994; Mikolajun & Viaene, 2015). Empirically, Kumar, Sen, and Srivastava (2014) show that regional integration in four African blocs (SACU, UEMOA, COMESA and ECOWAS) is associated with changes in savings–investment correlations consistent with increased capital mobility, though with considerable heterogeneity across communities. Within the EAC, recent reports document growing intra-EAC investment flows but also highlight concentration by sector and destination, regulatory uncertainty and infrastructure bottlenecks that may blunt the integrative effect of capital mobility (EAC Secretariat, 2024; World Bank, 2024).

Income inequality adds a further layer of complexity. East Africa has been described as facing an "inequality crisis," with Oxfam and Development Finance International documenting high and in some cases rising disparities and limited fiscal effort to reduce them (Martin & Kamande, 2022). Gini coefficients in the EAC partners such as Kenya, Tanzania, Uganda and Rwanda typically range between the high 0.3s and low 0.5s, placing them among the more unequal low- and middle-income countries (Our World in Data, 2024; UNU-WIDER, 2023). Inequality has been linked to weaker social cohesion, lower trust and contested legitimacy of reforms, all of which can affect public support for regional integration (Ametoglo, Guo, & Wonyra, 2018; Santos-Paulino, DiCaprio, & Sokolova, 2019). Yet, the empirical relationship between regional integration and inequality is far from settled. Santos-Paulino et al. (2019), using a large multi-region panel and GMM, find that regional integration can reduce inequality and poverty in developing countries, while Ametoglo et al. (2018) report that in ECOWAS, political integration reduces inequality but economic integration increases the income gap. For East Africa, public library of science (PLoS) research on trade, gross domestic product (GDP) value added and inequality, finds diverging long-run GDP per capita trends and complex links between trade structure and inequality (Banga et al., 2022), while recent EAC-focused work reaches mixed conclusions on whether integration has narrowed or widened income disparities (Kang'ethe, 2024; Ngeno et al., 2024).

These contradictions reveal a conceptual gap. Much of the existing literature either examines how regional integration affects inequality, or how institutional quality and financial flows shape integration, but rarely considers factor mobility (labour and capital), income inequality and institutional settings together as joint determinants of regional integration—particularly in the EAC. Studies on labour mobility focus on governance of migration and rights protection rather than its quantified impact on integration indices (Oucho & Kandilige, 2023; UNESCAP, 2014). Work on capital mobility and integration in Africa is mostly REC-wide (e.g., Kumar et al., 2014) or focused on foreign direct investments (FDI)–integration linkages, sometimes with institutional quality as moderator, as in Kwaw-Nimeson and Tian's (2023) SYS-GMM study of the Community of Sahel-Saharan States (CEN-SAD) using the Africa Regional Integration Index (ARII). EAC-specific studies such as Kang'ethe (2024) and the IJAMR (2024) article, typically treat regional integration as an explanatory variable for inequality, not as an outcome shaped by factor mobility and distributional structures. Consequently, we still know little about how labour mobility, capital mobility and income inequality jointly influence the degree of regional integration among EAC partner states, under the constraints of their institutional environments.

A methodological gap reinforces this conceptual limitation. Many empirical contributions on the EAC integration rely on descriptive analysis, static fixed- or random-effects models, gravity specifications or ordinary least squares with Newey–West corrections (Kang'ethe, 2024; Ngeno et al., 2024). Such approaches often ignore the dynamic nature of regional integration, which tends to be path-dependent and do not adequately address endogeneity and reverse causality between integration, factor mobility, inequality and institutions. In contrast, newer African regional integration work has begun to adopt dynamic panel Generalized Method of Moments (GMM) estimators to model persistence and control for simultaneity, as seen in studies of institutional quality, FDI and integration using ARII (Kwaw-Nimeson & Tian, 2023) and of institutions and growth in sub-Saharan Africa (Asongu & Odhiambo, 2021; Hassen, 2022). However, to date there is no study that applies a dynamic system-GMM framework to explicitly model regional integration in the EAC as a function of labour and capital mobility, income inequality and institutional quality. Against this backdrop, a focused investigation of factor mobility, income inequality and regional integration among the EAC partner states—using a dynamic GMM approach—can make two key contributions. Conceptually, it integrates labour and capital mobility, distributional outcomes and institutional quality into a unified framework for explaining why the EAC integration has advanced in some dimensions but remained shallow overall. Methodologically, it exploits the strengths of system-GMM to handle dynamic adjustment, unobserved heterogeneity and potential endogeneity, offering more robust evidence on the drivers and constraints of regional integration in East Africa.

The document is organised as follows. Section 2 reviews the existing empirical studies on the three main relationships examined in this research: labour mobility and regional integration, capital mobility and regional integration, and income inequality and regional integration. It also explains how this study adds to these areas of research. Section 3 describes the data and methods used in the analysis, including the reasons for focusing on the EAC and how the key variables are measured. Section 4 presents the study's findings using different analytical approaches. Finally, Section 5 discusses the policy implications that arise from the results.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1 Theoretical review

As provided by Paul Krugman's New Economic Geography (NEG), factor mobility and regional integration are directly intertwined because the spatial distribution of economic activity depends on increasing returns to scale, transport costs, and the mobility of labour and capital (Krugman, 1991). In Krugman's core–periphery model, when trade costs fall and factors can move, firms and workers cluster in more attractive locations, deepening regional linkages and generating self-reinforcing agglomeration effects. For the EAC, this implies that policies which lower barriers to labour and capital mobility—through the Common Market Protocol—can shift the region toward a more integrated "core," characterised by dense trade, investment and production networks. The positive and significant effects of labour and capital mobility on the regional integration index in this study are therefore consistent with NEG's prediction that market enlargement and factor reallocation underpin deeper integration (Fujita, Krugman, & Venables, 1999). At the same time, NEG cautions that such agglomeration may be uneven and can exacerbate spatial and income inequalities between and within countries—providing a theoretical basis for the observed positive association between income inequality and regional integration.

Endogenous growth theories further anchor this study by framing regional integration and factor mobility as engines of dynamic, internally driven growth. Romer (1986, 1994) and Grossman and Helpman (1991) show that openness, larger markets and integration promote knowledge accumulation and technological progress through learning-by-doing and international knowledge spillovers. In these models, the long-run growth rate is not exogenous but shaped by incentives to innovate, which are strengthened when trade and factor flows expand market size. For the EAC, higher regional integration—supported by mobile labour and capital—can thus raise returns to innovation, attract investment in higher value-added activities, and reinforce growth, but also generate distributional tensions if gains accrue disproportionately to already advantaged firms, regions or skill groups.

The Schumpeterian strand of endogenous growth theory, as developed by Aghion and Howitt (1998), highlights "creative destruction," where innovation reallocates resources from less productive to more productive uses and where institutions shape how inclusive this process becomes. This perspective aligns with the study's focus on income inequality and institutional quality: factor mobility and integration can raise efficiency and growth, but without appropriate institutional frameworks and cohesion policies, they may also widen inequalities. Taken together,

Krugman's NEG and endogenous growth theory provide a strong conceptual foundation for examining how labour mobility, capital mobility and income inequality are linked to regional integration outcomes among the EAC partner states.

2.2 Labour Mobility and Regional Integration

Basu (2025) explored the factors influencing labour migration within regions, particularly focusing on early migration stages. His study highlighted the dominance of economic factors over social ones during the initial stages of migration. The research employed a qualitative analysis approach to identify the main drivers of labour migration in the region, showing that employment opportunities were the primary motivators for individuals to move. The study concluded that while social factors do play a role in migration, they are secondary to economic incentives in driving the early migration process.

Kurz (2025) analysed differential impact of humanitarian and non-humanitarian migration on international terrorism in the Organisation for Economic Cooperation and Development (OECD) countries. He utilised statistical analysis to examine migration and terrorism data across several countries, identifying a significant relationship between types of migration and incidence of terrorism. The study found that humanitarian migration has distinct effects on terrorism dynamics compared to non-humanitarian migration. This work contributed valuable insights into how labour migration influences both socio-economic and security outcomes, impacting regional integration processes.

Alam, Ali and Das *(2025)* examined integration dynamics of cross-border migrants from Bangladesh into West Bengal's border districts. Their comparative analysis focused on early partition-era migrants and contemporary migrants, exploring how migration has shaped the social and economic fabric of the region. They used demographic and economic competition as a key framework for understanding integration. The study concluded that early migrants exhibited stronger economic integration, while newer migrants face significant challenges due to demographic pressures and economic competition, hindering smooth integration and regional cohesion.

Churski, Adamiak and Dubownik *(2025)* investigated the changing role of functional urban areas in regional policy, particularly in relation to migration, labour markets and service accessibility. They conducted a mixed-methods study integrating commuting, migration flows and socio-economic data to explore how urban areas influence regional policy decisions. Their findings indicated that functional urban areas play a central role in regional integration by facilitating labour mobility and access to services, which, in turn, enhances economic integration and reduces regional disparities. RISTO (2025) analysed the migration policies between Italy and Albania, focusing on how these policies impact regional integration. Using a qualitative case study approach, the study examined migration agreements between the two countries and their socio-economic effects. The findings highlighted that the bilateral migration agreements have facilitated labour mobility, thus improving economic ties between the two nations. This integration has not only benefited the migrant workers but has also supported broader regional stability and economic growth.

Filipas, Vretenar and Jardas Antonić *(2025)* conducted a bibliometric analysis of labour market trends in the European Union, particularly in relation to an aging workforce and migration. They examined impact of labour mobility and demographic changes on regional economic integration.

The study found that labour mobility is crucial in addressing labour shortages caused by an aging population, making it a key factor in maintaining regional economic stability. They emphasised importance of policy adjustments to optimise labour migration in light of demographic trends.

Kohnert *(2025)* explored the dangerous migration routes from Ethiopia to South Africa, specifically focusing on labour mobility and regional integration. The study employed a qualitative approach to analyse the migration paths and socio-economic impacts on the migrants involved. The findings pointed to severe limitations that unsafe migration routes impose on labour mobility, which disrupts integration of migrants and affects regional economic and social stability. The study highlighted difficulties that migrants face when choosing these dangerous paths and emphasised need for more sustainable migration policies that would enable safer, more regulated migration routes.

Voronyi, Sytnyk and Ivanitskyi *(2025)* studied impact of migration on Ukraine's economy during martial law, focusing on labour mobility and its role in economic recovery. Through a quantitative approach, they analysed migration flows

and their effects on local and national economies. Their findings indicated that migration has a significant impact on regional economies, especially in times of conflict. Labour mobility is seen as a crucial element for economic recovery and integration of regions affected by political instability and war.

Vo *(2025)* conducted a case study on the housing pathways of migrant workers in Ho Chi Minh City, Vietnam, examining challenges migrants face in accessing housing and impact on their integration into the labour market. The study found that housing issues are a significant barrier to economic integration for migrant workers, as inadequate housing can impede their ability to participate fully in the labour market. The study emphasised importance of affordable housing policies to facilitate smoother labour mobility and better integration into urban economies.

Kosyakova, Olbrich and Hammer *(2025)* examined relationship between regional economic integration and labour mobility in the context of migration flows between Western and Central Eastern European countries. Using data from the International Mobility Panel, their study highlighted that migration flows significantly influence labour market outcomes and integration, especially in the context of economic disparities between regions. They found that labour market factors, such as wage differences, are key drivers of migration and regional economic integration.

Pangallo *(2025)* conducted an anthropological study on integration of Polish migrant workers in Greece, focusing on their economic integration and participation in the labour market. The study used an ethnographic approach to examine experiences of Polish migrants in Greece, specifically looking at wage mobility and job stability. The findings showed that Polish migrants were successfully integrating into the Greek labour market, with many improving their socio-economic status over time. The study concluded that labour mobility between the two countries has strengthened economic ties and supported regional integration.

Lidzbarski *(2025)* explored integration of Polish migrants in the Greek islands, particularly focusing on their housing and labour market integration. The study used a comparative approach to assess migration experience of Polish workers in Greece and their economic outcomes. The study found that labour mobility played a central role in integration of Polish migrants into the Greek labour market, with a strong focus on overcoming housing barriers and improving economic opportunities.

Wu (2025) conducted a study on the role of internal migration in shaping labour market outcomes in regional integration. His longitudinal study tracked internal migration patterns within China and examined how migration affects regional economic development. The study concluded that internal migration has profound impacts on labour markets and regional economic integration, with long-term benefits for both migrants and host regions.
Based on the theoretical and empirical reviews, we formulate the following hypotheses:
H1. *Labor mobility has a significant effect on regional integration in the EAC*

2.3 Capital Mobility and Regional Integration
Bhusal *(2025)* examined South Asian global value chain integration patterns, focusing on a value-added perspective that moves beyond gross trade metrics. The study identified key gaps in infrastructure and regional fragmentation, which limit integration despite high levels of capital mobility. Bhusal employed a country-specific analysis to explore how capital mobility affects integration process and concluded that even though capital flows across borders, these structural issues hinder full potential of regional economic cohesion in South Asia. The study suggests that addressing these barriers would significantly enhance regional integration.

Obiora and Okafor *(2025)* investigated the AfCFTA agreement impact on Nigeria's manufacturing sector from 2018 to 2022. They utilised econometric analysis to assess capital mobility and its role in boosting manufacturing output. Their findings showed a positive correlation between increased capital flows under the AfCFTA initiative and Nigeria's manufacturing growth, though the authors emphasised that inadequate infrastructure and policy hurdles have limited broader economic integration across the continent. The study concluded that further improvements in these areas are essential for full benefits of regional integration to materialize.

Bhusal *(2025)* also explored integration patterns of South Asian countries into global value chains from a value-added perspective. This study sought to analyse impact of capital mobility on regional economic development, using a detailed economic model to assess cross-border trade dynamics. Bhusal concluded that despite robust capital mobility,

inadequate infrastructure investment and ongoing regional fragmentation limits the economic benefits that could be derived from deeper regional integration. The study calls for greater infrastructural development to complement capital flows and foster more effective regional integration.

Vujanović, Steinbach and Fiore *(2025)* assessed intra-Western Balkans dynamics, focusing on regional integration through capital flows and trade agreements. Their comparative economic model found that despite high mobility of capital within the region, the integration process remains fragmented. The study revealed that while the European Union plays a significant role in capital mobility, political and economic disparities among Western Balkan countries have slowed the pace of integration. The authors recommend stronger political alignment and harmonised regulatory frameworks to accelerate economic integration.

Arutyunyan, Solovyeva and Galyav *(2025)* analysed factors influencing international capital movement within the Eurasian Economic Union *(EAEU)*. Using regression analysis, they identified significant impact of regulatory disparities and political challenges on capital mobility. Despite high volume of capital flows, the study found that regional integration in the EAEU is impeded by a lack of cohesive policies and political coordination. The authors suggest that for the EAEU to realize its full economic potential, a more unified approach to regulation and policy is necessary.

Rodríguez-Peña *(2025)* explored relationship between migration and capital mobility across different regions. Using a global comparative analysis, Rodríguez-Peña identified that regions with higher levels of capital mobility tend to have more integrated economies, fostering economic growth and stability. The study concluded that capital flows not only enhance economic development but also support smoother movement of labour, reinforcing integration process in economically connected regions. However, it was noted that challenges in regulatory frameworks can hinder efficient use of capital.

Raga, Papadavid, Dávalos and Fontana *(2025)* examined resilience of African economies to external shocks, focusing on role of foreign direct investment *(FDI)* and capital flows. Their study used a combination of case studies and econometric models to assess how FDI contributes to economic resilience during times of geopolitical instability. The authors concluded that capital mobility is vital for strengthening economic resilience in Africa, though they highlighted need for deeper regional integration to better withstand future external shocks.

Benard *(2025)* explored Macau's evolving identity and economy, particularly focusing on role of capital flows in its integration into China's Belt and Road Initiative *(BRI)*. Using a qualitative analysis, the study examined growth of Macau's casino industry and its economic implications. The findings showed that capital mobility has played a crucial role in Macau's economic integration, allowing the region to become a key player in the broader BRI initiative. The study emphasised that despite the success in capital integration, political complexities still pose challenges to full economic cohesion with the neighbouring regions.

Efthimiou *(2025)* investigated role of foreign direct investment *(FDI)* in regional development, particularly in the tourism sector. Using panel data analysis, the study examined how capital flows have facilitated economic integration in various regions. Efthimiou found that regions with higher FDI inflows experienced more rapid economic development, particularly in the tourism sector. However, the study also noted that disparities in FDI distribution could create uneven development within integrated regions, hindering broader economic cohesion.

Lozano Morra, Iirarte Goñi and Serrano *(2025)* studied long-term trends in resource consumption in Latin America, exploring relationship between capital mobility and economic integration. By integrating Mefa and Stirpat approaches, they analysed how capital flows have influenced economic growth and resource management. The study concluded that although capital mobility has been a significant factor in fostering regional integration, issues like unequal resource distribution and infrastructure gaps have hindered full benefits of integration, particularly in less developed areas of Latin America.

Ivory *(2025)* explored relationship between capital mobility and social integration among marginalised migrant communities in Japan. By examining cross-national marriage patterns and migration data, the study found that capital mobility plays a significant role in improving both economic and social mobility for migrants. The study concluded

that greater access to capital can enhance integration outcomes for migrants, but it also stressed need for supportive policies to address social inequalities.

Puzar *(2025)* analysed role of the European Monetary Union *(EMU)* in facilitating capital mobility within Europe. Using a comparative study, Puzar found that the EMU has significantly enhanced capital flows across European countries, promoting greater economic integration. However, the study also highlighted challenges such as economic disparities and uneven distribution of capital, which have impeded full regional cohesion. Puzar called for more uniform fiscal policies to address these challenges and promote deeper economic integration within the EU.

Feng *(2025)* examined historical context of capital mobility in China, particularly during the Warlord Era. Using a historical economic analysis, the study explored how trade routes and capital flows influenced economic integration of Chinese regions. Feng concluded that despite movement of capital, political fragmentation prevented full economic integration. The study emphasised need for unified economic policies to foster more effective regional integration in China.
Based on the theoretical and empirical reviews, we formulate the following hypotheses:
H2. *Capital mobility has a significant effect on regional integration in the EAC*

2.4 Income Inequality and Regional Integration
Ullah et al. *(2024)* examined how income distribution affects poverty reduction and sustainable development *(SD)* in 64 countries participating in the BRI from 2005 to 2020. They also explored role of multidimensional regional integration *(MRII)* in promoting integrated sustainability. By employing the Sys-GMM methodology, the results confirmed that countries participating in the BRI are theoretically in line with a sustainable development trajectory, as proposed by economic theory. In addition, MRII made a significant contribution to the overall sustainability trajectory. Temerbulatova, et al. *(2024)* conducted a study that analysed intricate connections between economic growth and income inequality in various regions of Kazakhstan, uncovering subtleties of their interplay. The study sought to evaluate enduring and immediate impacts of economic growth on income inequality in both positive and negative directions across the regions of Kazakhstan. By utilizing time series data specific to each region, they analysed reciprocal influence of economic growth on inequality. To describe both short-term and long-term connections, they employed an error correction model *(ECM)*. The findings revealed that correlation between economic growth and income inequality varies among different regions, indicating that each region has it's distinct economic and social characteristics. The estimation results confirmed the hypothesis of a Kuznets curve with an inverted U-shape, which establishes a relationship between gross regional product (GRP) per capita and inequality. The curve shows that different regions have different starting points. Concerning the inverse relationship, their analysis revealed a direct causal connection in the West Kazakhstan, Zhambyl and Pavlodar regions. This suggests that higher levels of income inequality fostered economic growth.

According to Sovia *(2024)*, in recent decades, there has been a notable rise in economic inequality across several EU countries. However, focus of evaluating regional disparities within the EU primarily revolves around convergence of average per capita incomes, with limited examination of distribution of regional income. They analysed the latest data from the Luxembourg Income Study *(LIS)* spanning from 1989 to 2013, to examine whether income inequality has decreased among regions in the EU. Additionally, they evaluated structural factors that may influence speed at which this convergence occurs. The analysis presented three conclusions. Initially, it can be observed that nomenclature of territorial units for statistics (NUTS) 2 regions are moving towards a greater degree of income inequality. Furthermore, this process exhibits a notable increase in speed when regions possess comparable structural characteristics. There is now evidence that regions receiving Cohesion Policy funds are experiencing a convergence-acceleration effect, indicating that these funds may be driving the process of convergence.

Villanthenkodath et al. *(2024)* examined impact of economic globalisation, trade openness and financial openness on income inequality in low, middle and high-income countries. They used panel data from 1991 to 2020 and included variables such as economic growth, urbanisation, agriculture, industry and service sectors' value-added as a percentage of GDP as control variables in their analysis. The findings from the pooled mean group-autoregressive distributed lag (PMG-ARDL) test conducted on the panel data, revealed a substantial and meaningful long-term association between the variables.

Beckfield *(2009)* presented theoretical arguments that differentiate globalisation from regional integration. He establishes a connection between regional integration and inequality through various theoretical mechanisms. Additionally, he formulated hypotheses regarding the relationship between regional integration and inequality. Furthermore, he provided new empirical evidence on overall impact of regional integration on inequality in Western Europe. The analysis utilised three categories of models: 1) time-series models that examined the region-year as the unit of analysis, 2) panel models that examined the country-year as the unit of analysis, and 3) analysis of variance to determine changes in income inequality between and within countries over time. The available evidence indicated that regional integration reconfigures inequality in Europe. Regionalisation is linked to a reduction in inequality between countries, as well as an increase in inequality within countries. The analysis of variance indicates a negative net effect, with country inequality accounting for a greater proportion of total income inequality.

According to Beckfield, *(2006)*, Regional integration, or the establishment of an international economy and political system through negotiations between different regions, is expected to have an impact on income inequality. Regional economic integration is likely to result in an increase in income inequality, due to the exposure of workers to international competition and the weakening of labour unions. Regional political integration is likely to increase income inequality, but it does so in a distinct way. The integration process leads to a reduction in the welfare state in market-oriented regional governments, as they implement liberal policies due to financial constraints. The arguments presented are supported by evidence from both random-effects and fixed-effects models of income inequality in Western Europe.

According to the findings, regional integration accounts for approximately 50% of rise in income inequality in the Western European countries examined in this study. The impact of regional integration on income inequality is adjusted for various factors, including two well-established indicators of globalization. This implies that adopting a sociological perspective on regional integration enhances our comprehension of the growing income inequality in Western Europe.

Ean and colleagues *(2020)* examined correlation between regional economic integration and income inequality in a selected group of ASEAN countries from 2005 to 2018 using a balanced panel analysis. An assessment was conducted to examine impact of trade and financial integration on inequality. Empirical evidence has demonstrated that trade integration is more efficacious than financial integration in enhancing income distribution. The export activities in manufacturing and service sectors contribute to narrowing of income distribution in the ASEAN-5 countries, while agricultural and manufacturing sectors contribute to the same in the ASEAN-3 countries. Hence, it is not advisable to universally apply integration policies aimed at reducing inequality to countries with diverse economic structures and varied development activities.

Huh and Park *(2021)* attempted to create a novel composite index of globalisation by incorporating distinct influences of both intra-regional and extra regional integration. The study also utilised the novel index to empirically assess the potential impacts of globalisation on economic growth and income inequality. The index consisted of 25 indicators that represent the fundamental socio-economic elements of global integration. Principal component analysis is employed to assign weights to each component and create a composite measure. The findings indicated that while globalisation fosters economic expansion, it has potential to exacerbate income inequality. The primary beneficiaries of globalisation are high-income countries, as they experience greatest positive impact on economic growth compared to other income groups. Additionally, these countries also encounter a less significant increase in income inequality. In terms of global economic integration, intra-regional integration holds greater significance compared to extra-regional integration. The analysis revealed that extra-regional integration is primarily accountable for increase in income inequality that has occurred alongside globalisation.

Santos-Paulino et al. *(2019)* conducted an empirical analysis of the influence of regional integration on development, specifically focusing on its effects on economic growth and social well-being. By employing both bilateral and regional integration strategies, we demonstrated that capacity to reap advantages from integration differs among regional groups in developing countries. Specifically, developing Asia experienced comparable benefits to developed countries. The paper's findings suggested that trade and trade policy have a significant impact on diminishing inequality and poverty in developing nations. Additionally, it demonstrated that regionalism can serve as a conduit to enhance effectiveness of multilateralism in tackling domestic issues.

A study by Tober *(2022)* contended that process of European institutional integration has a tempering impact on connection between power of trade unions and income inequality, specifically focusing on inequality at the highest levels, in the EU partner countries. He argued that the process of European institutional integration diminished ability of trade unions to negotiate effectively, as a result of increased market competition and a decline in union influence over the labour supply.

Therefore, as European institutional integration advances, ability of trade unions to decrease inequality is expected to diminish. Through a comprehensive analysis of the EU15 over a long period of time, he demonstrated that impact of trade unions on inequality is highly dependent on level of European institutional integration. The effect of trade unions in reducing inequality diminishes significantly as a country integrates more into the EU, aligning with the theoretical argument.

Sauer, et al. *(2023)* analysed data from 73 countries worldwide from 1981 to 2010. They investigated a wide range of factors that contribute to income inequality and explored how these factors interact and influence each other. Their focus was on examining variations in factors that contribute to income inequality across different regions of the world and at different levels of income. The results of their research revealed that presence of a limited number of consistent factors among the countries included in our global sample. The decrease in proportion of labour income and rise in imports from wealthy nations were major factors in growth of income inequality. However, taxation and imports from less affluent countries had opposing effects. The study uncovered specific effects of technological advancements, global financial integration, increased domestic financial activity and government spending on social programs in different regions. Crucially, they did not discover consistent proof of education's ability to create equality between countries with high and low incomes.

Mora, *(2005)*, conducted a panel data analysis, which revealed evidence of a partial Kuznets convergence phenomenon: economic growth led to a reduction in disparities, despite the counteracting impact of regional funds *(which was less pronounced when considering the CAP)*. Nevertheless, several additional factors contributed to prevention of inequality within a country, including implementation of national fiscal policies, a gradual shift towards a more diversified tertiary sector and variations in development of human capital.

Beckfield, *(2005)* conducted a study to analyse effects of regional integration on domestic markets and governments. More precisely, it examined impact of Western Europe's regional integration on (1) disparity in income within and between societies, and (2) level of national welfare provision and variations among different welfare States. The assessment of these effects involves integration of innovative quantitative measures of regional integration into models that incorporate standard measures of economic inequality and welfare state. The dataset was collected from 17 Western European countries, specifically Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom. The data covered the period from 1950 to 2000. Various statistical techniques were utilised, such as time series analysis *(including cointegrating regression and ordinary least squares)*. The methods employed include autocorrelation-consistent standard errors for addressing autocorrelation and panel analysis using random-effects models, fixed-effects models, and ordinary least squares (OLS) with panel-correct standard errors. The analyses revealed that regional integration is linked to economic convergence, heightened income inequality within national societies, welfare-state isomorphism and welfare-state retrenchment.

Martínez-Galarraga et al., *(2015)* analysed long-term development of regional income disparity in Spain. Research revealed that as economy grows and national markets become more inter-connected, there is a pattern of regional income inequality following an inverted 'U' shape. Income per worker exhibited a pattern of regional inequality during the latter half of the nineteenth century, reaching its highest point in 1900, and subsequently declining over the next ninety years. Since 1990, Spain's entry into the European Union has led to a depletion of regional productive structures, resulting in a new wave of disparities in labour productivity throughout the country. This could potentially lead to a further divergence in regional income.

Based on the theoretical and empirical reviews, we formulate the following hypotheses:
H3. *Income inequality has a significant effect on regional integration in the EAC*

Journal DOI: 10.36713/epra1013 | SJIF Impact Factor (2025): 8.619 ISSN: 2347-4378
EPRA International Journal of Economics, Business and Management Studies (EBMS)
Volume: 13 | Issue: 1 | January 2026 -Peer-Reviewed Journal

3. RESEARCH METHODOLOGY

3.1 Sample and data

The study focused on the EAC Partner States, with the target population comprising all the eight Partner States. The inclusion criteria required that a country (i) be an officially recognised EAC Partner State during the study period from 2014 to 2023 and (ii) have consistently published complete data for all the variables of interest over this period. Based on these criteria, only four countries met the data requirements, yielding a balanced panel of 40 country-year observations over 10 years. The study relied exclusively on secondary data, obtained through a structured data collection plan. Data were sourced from the World Bank database and the national bureaus of statistics of the respective countries. The final dataset was analysed using a dynamic panel Generalized Method of Moments (GMM) estimator, to capture persistence in regional integration and address potential endogeneity among the study variables.

3.2 Measurement of variables

This section addresses the measurement of the research variables. Regional integration is the dependent variable, captured using a composite index that includes the average tariff on imports, the shares of intra-regional exports and imports in GDP, and the overall share of intra-regional trade. Labour mobility, capital mobility, and income inequality are the key independent variables. Labour mobility is measured by international migrant stock as a percentage of the population, capital mobility is proxied by net capital flows (balance of payments, current US dollars), and income inequality is captured using the Gini coefficient. Detailed definitions, measurement approaches, expected signs, and data sources for all the research variables are presented in Table 1.

Table 1: Measurement of variables

Abbreviation	Name of the variable	Description and measurement	Expected Sign	Source
RI	Regional Integration	Composite index of average tariff on imports, share of intra-regional exports over GDP, share of intra-regional imports over GDP, Share of intra-regional trade.		African Regional Integration Index
LM	Labour Mobility	International migrant stock (% of population)	Positive	World Bank's Global Bilateral Migration Database
CM	Capital Mobility	Net capital flows (BoP, current US$)	Positive	World Bank Data Set
IE	Income Inequality	Gini coefficient	Negative	World Bank Data Set/OECD

Source: Researcher 2025

Model specification

The following regression equation was adopted to test the proposed hypotheses:

$$RE_{it} = \beta_0 + \beta_1 LM_{it} + \beta_2 CM_{it} + \beta_3 IE_{it} + \varepsilon_{it}$$

4. DATA ANALYSIS AND INTERPRETATION

4.1 Descriptive statistics

Table 2 presents the descriptive statistics for four key variables—labour mobility, capital mobility, income inequality and regional integration—across 50 observations from the EAC Partner States.

Labour mobility has a mean value of 2.92 percent of the population, with a standard deviation of 1.63, and ranges from 0.49 to 7.32 percent. This indicates moderate variation in the share of international migrants across the EAC countries, with some states exhibiting relatively low cross-border labour movement and others hosting a higher proportion of migrants. These figures are consistent with broader evidence that, although East Africa is one of Africa's most mobile subregions, intra-regional migration remains concentrated along specific corridors and is unevenly distributed (Oucho, 2014; Basnett, 2013).

Capital mobility, proxied by net capital flows, has a mean of approximately US$ 223 million, with a sizeable standard deviation of about US$ 125 million, and values ranging from roughly US$ 55.6 million to US$ 548 million. This substantial dispersion suggests that some EAC economies attract or send much larger net capital flows than others, reflecting differences in financial depth, investment climate, and macroeconomic stability. Similar heterogeneity in capital mobility within African regional economic communities has been documented by Kumar, Sen and Srivastava (2014), who find that regional integration affects savings–investment correlations unevenly across member states.

Income inequality, measured by the Gini coefficient, has an average of 40.27 with a standard deviation of 3.31, and spans from 31.2 to 43.7. These levels fall within the range reported for many low- and middle-income countries and confirm that the EAC Partner States face moderate to high inequality (Ametoglo, Guo, & Wonyra, 2018). While the dispersion is not extreme, the lower bound near 31 and upper bound above 43 indicate that some partner states are significantly more unequal than others, echoing findings that regional integration in Africa often occurs in a context of persistent or rising disparities (Santos-Paulino, DiCaprio, & Sokolova, 2019).

Regional integration, represented by a composite index, has a negative mean of about $–3.25\times10^{9}$ with a large standard deviation (2.94×10^{9}), ranging from $–1.07\times10^{10}$ to $–5.47\times10^{8}$. The negative scaling reflects the construction of the index rather than "disintegration" per se, but the wide spread suggests pronounced cross-country differences in integration depth. This is consistent with recent evidence that intra-EAC trade and integration outcomes remain highly uneven across members, with some economies more regionally embedded than others (Krantz, 2025).

Table 2: Descriptive statistics results

Variable	Obs	Mean	Std. Dev.	Min	Max
Labor mobility	50	2.922646	1.630328	0.4885355	7.324502
Capital mobility	50	2.23e+08	1.25e+08	5.56e+07	5.48e+08
Income inequality	50	40.273	3.312934	31.2	43.7
Regional integration	50	-3.25e+09	2.94e+09	-1.07e+10	-5.47e+08

Source: Researcher 2025

4.2 Diagnostic results

The diagnostic tests collectively indicate that the dynamic GMM model is statistically well specified. First, the multicollinearity assessment shows that all Variance Inflation Factor (VIF) values are below 3, with a mean VIF of 1.90, far under the conventional thresholds of 5 or 10. This implies that the explanatory variables are not excessively correlated and that coefficient estimates are likely to be stable.

Second, the Arellano–Bond tests confirm an acceptable serial correlation pattern. While AR(1) in first differences is weakly significant at the 10% level ($p = 0.077$), this is expected in first-differenced models and does not threaten validity. Crucially, the AR(2) test is insignificant ($p = 0.574$), indicating no second-order serial correlation and supporting the legitimacy of the GMM moment conditions.

Finally, both the Sargan ($p = 0.153$) and Hansen ($p = 0.955$) tests of overidentifying restrictions fail to reject the null hypothesis of instrument validity. The Hansen result, which is robust to heteroskedasticity, provides strong evidence that the instruments are exogenous and appropriately specified. Overall, these diagnostics support the reliability of the GMM estimates for inference.

Journal DOI: 10.36713/epra1013 | SJIF Impact Factor (2025): 8.619 ISSN: 2347-4378
EPRA International Journal of Economics, Business and Management Studies (EBMS)
Volume: 13 | Issue: 1 | January 2026 -Peer-Reviewed Journal

Table 3: Diagnostic test results

Diagnostic Test	Key Statistic(s)	p-value	Interpretation
Multicollinearity (VIF)	Mean VIF = 1.90	–	No multicollinearity concern (all VIF < 5)
Arellano–Bond AR(1) in first differences	z = –1.77	0.077	Mild AR(1) expected; not problematic at 5% level
Arellano–Bond AR(2) in first differences	z = 0.56	0.574	No AR(2); moment conditions not violated
Sargan Test of OIR	$\chi^2(14) = 19.33$	0.153	Instruments valid (not rejected)
Hansen Test of OIR (robust)	$\chi^2(14) = 6.40$	0.955	Instruments robustly valid under heteroskedasticity

Source: Researcher 2025

4.3 Correlation Results

The correlation matrix in table 4 summarizes the pairwise linear relationships among regional integration, labour mobility, capital mobility, and income inequality. Regional integration is only weakly and positively correlated with labour mobility (r = 0.0732) and capital mobility (r = 0.1151), suggesting that countries with slightly higher labour or capital mobility tend to have marginally higher regional integration scores, but the relationships are very small in magnitude. The correlation between regional integration and income inequality is somewhat stronger but still moderate (r = 0.2593), implying that more unequal countries are modestly more integrated, which may reflect transitional dynamics where integration and inequality move together in early or uneven stages. The most notable relationship is between labour mobility and income inequality (r = 0.3742), marked as statistically significant (*). This moderate positive correlation suggests that countries with greater labour mobility also tend to exhibit higher levels of income inequality. One interpretation is that freer movement of labour may initially benefit relatively skilled or mobile groups more than others, widening disparities unless accompanied by inclusive labour market and social policies. Correlations between capital mobility and the other variables are weak (–0.1507 with labour mobility; 0.1348 with inequality), indicating limited simple linear association and also suggesting that multicollinearity is unlikely to be a concern in the regression analysis.

Table 4: Correlation test results

Variable	Regional Integration	Labour Mobility	Capital Mobility	Income Inequality
Regional Integration	1.0000			
Labour Mobility	0.0732	1.0000		
Capital Mobility	0.1151	-0.1507	1.0000	
Income Inequality	0.2593	0.3742*	0.1348	1.0000

Source: Researcher 2025

4.4 Regression analysis

The dynamic panel Generalized Method of Moments (GMM) model was employed to estimate the determinants of regional integration, addressing key econometric challenges such as endogeneity, unobserved heterogeneity, and the persistence of integration outcomes. Unlike static Ordinary Least Squares (OLS) or simple fixed-effects models, dynamic GMM allows the inclusion of a lagged dependent variable and uses internal instruments to mitigate bias arising from simultaneity and omitted variables (Arellano & Bond, 1991; Roodman, 2009). This approach is widely recommended in empirical work on regional integration and institutional dynamics in Africa, where feedback effects between integration, factor flows and macroeconomic conditions are likely (Kumar, Sen, & Srivastava, 2014; Santos-Paulino, DiCaprio, & Sokolova, 2019). The highly significant F-test suggests that the model is statistically robust and that the set of regressors—lagged regional integration, labour mobility, capital mobility, and income inequality—collectively explains a substantial portion of the variation in the regional integration index.

The coefficient on the lagged dependent variable, L1. Regional integration is 0.259 (p = 0.000). This positive and highly significant coefficient confirms that regional integration is a persistent process: current levels of integration are strongly influenced by previous levels. This aligns with the idea that integration is path-dependent and cumulative—once trade, factor flows, and institutions are aligned regionally, they tend to reinforce one another over time (Balassa, 1961; Krantz, 2025). A coefficient below 1 also indicates that while integration is persistent, it is not explosive, implying gradual adjustment toward a long-run equilibrium.

Labour mobility has a positive and statistically significant effect on regional integration (β = 0.207, p = 0.006). Substantively, this suggests that a one-unit increase in the labour mobility indicator is associated with a 0.207-unit increase in the regional integration index, holding other variables constant. This finding is consistent with theoretical and empirical studies that emphasise free movement of workers as a core driver of "deep" integration, beyond tariffs and trade in goods (Basnett, 2013; Oucho, 2014). By facilitating cross-border matching of skills to jobs, increasing people-to-people linkages, and transmitting information and norms, labour mobility helps weave together regional labour markets and supports the functioning of a common market. Similar results in ECOWAS and EU contexts show that greater intra-regional migration is associated with stronger internal trade and policy coordination (Beine, Bourgeon, & Bricongne, 2013; Ametoglo, Guo, & Wonyra, 2018).

Capital mobility exhibits the largest coefficient among the explanatory variables (β = 0.324, p = 0.000), indicating a strong and highly significant positive effect on regional integration. A 0.324 increase in the integration index for each unit rise in capital mobility, underscores the central role of financial integration and cross-border capital flows in knitting economies together. This is in line with the literature showing that economic integration tends to stimulate capital mobility—often reflected in lower savings–investment correlations—and that increased financial openness can deepen regional ties by financing cross-border infrastructure, production networks, and value chains (Kumar et al., 2014). Studies on African regional economic communities similarly find that deeper regional arrangements are associated with increased responsiveness of capital flows across member states and closer financial integration (Midagu & Kazadi, 2020). These results suggest that, for the East African Community, policies that liberalise and harmonise capital accounts, strengthen regional financial markets and reduce regulatory frictions can significantly enhance integration.

Income inequality also has a positive and statistically significant effect on regional integration (β = 0.066, p = 0.003), albeit with a smaller magnitude than labour and capital mobility. This implies that, within the sample, higher inequality is associated with a modest increase in regional integration. At first sight, this might appear counterintuitive, given concerns that high inequality can undermine social cohesion and political support for integration. However, similar patterns have been documented in other regional blocs. For instance, Beckfield (2006) finds that European integration has often coincided with rising income inequality in member states, while Wonyra and Guo (2018) and Yameogo and Omojolaibi (2022) show that, in ECOWAS and WAEMU, economic integration can be associated with higher within-country inequality even as trade and growth increase. In the East African context, recent work by Kadigi (2022) and Kang'ethe (2024) suggests that structural changes linked to trade integration and value-added patterns can produce uneven gains across sectors and social groups.

The positive coefficient here is best interpreted as reflecting a transitional or descriptive relationship rather than a normative endorsement of inequality. It may capture the fact that countries that have pursued more ambitious integration and liberalisation reforms sometimes experience rising disparities when social protection, tax policy and labour-market institutions lag behind. This is consistent with broader evidence that regional integration can produce winners and losers, and that without deliberate redistributive and inclusion policies, inequality can increase even as integration deepens (Santos-Paulino et al., 2019).

The GMM results provide several important insights. First, they confirm that regional integration in the EAC is a dynamic, path-dependent process, with past integration strongly predicting current outcomes. Second, both labour and capital mobility emerge as powerful drivers of integration, supporting the view that factor market opening is essential for moving from "shallow" to "deep" integration (Balassa, 1961; Krugman, 1991). Third, the positive association between income inequality and integration highlights that integration can proceed alongside, and perhaps contribute to, rising disparities, reinforcing the need for flanking social and redistributive policies if integration is to be politically and socially sustainable.

Journal DOI: 10.36713/epra1013 | SJIF Impact Factor (2025): 8.619 ISSN: 2347-4378
EPRA International Journal of Economics, Business and Management Studies (EBMS)
Volume: 13 | Issue: 1 | January 2026 -Peer-Reviewed Journal

Methodologically, the use of dynamic GMM enhances the credibility of these findings by addressing endogeneity between integration and its determinants, a concern emphasised in recent African integration studies (Kumar et al., 2014; Kwaw-Nimeson & Tian, 2023). Assuming that the associated diagnostic tests (Arellano–Bond, Sargan/Hansen) support instrument validity, the estimates can be considered robust for policy inference. Overall, the results suggest that policies promoting labour and capital mobility, when coupled with measures to manage inequality and strengthen institutions, are likely to be most effective in advancing regional integration among East African Community partner states.

Table 5: System GMM results

Item					**Value**
Number of obs					40
Number of groups					10
Number of instruments					19
F(4, 9)					5109.01
Prob > F					0.000
Regional integration	**Coef.**	**Std. Err.**	**t**	**p-value**	**95% CI**
L1. Regional integration	0.259	0.033	7.81	0.000	[0.184, 0.333]
Labor mobility	0.207	0.059	3.53	0.006	[0.074, 0.340]
Capital mobility	0.324	0.017	19.26	0.000	[0.286, 0.362]
Income inequality	0.066	0.016	4.04	0.003	[0.029, 0.104]
Constant	0.281	0.035	8.10	0.000	[0.203, 0.360]

Source: Researcher 2025

CONCLUSION AND RECOMMENDATIONS

Following the application of the inclusion/exclusion criteria from 2014 to 2023, the study examined four East African Community (EAC) Partner States with complete data, yielding 40 country-year observations. Secondary data were drawn from the World Bank and national statistical bureaus, and a dynamic panel Generalized Method of Moments (GMM) estimator was employed to analyse the determinants of regional integration. The lagged dependent variable confirmed strong persistence in regional integration, indicating that current integration levels are heavily shaped by past outcomes (Arellano & Bond, 1991; Krantz, 2025). Labour mobility, capital mobility, and income inequality all exhibited positive and statistically significant effects on the regional integration index. Labour and capital mobility emerged as powerful drivers of "deep" integration, consistent with theories and evidence that factor mobility underpins advanced stages of regional integration (Balassa, 1961; Basnett, 2013; Kumar, Sen, & Srivastava, 2014). The positive association between income inequality and integration suggests that integration in the EAC has so far tended to proceed alongside, rather than resolve, distributional imbalances—echoing findings from ECOWAS and WAEMU where economic integration can coincide with rising within-country inequality (Ametoglo, Guo, & Wonyra, 2018; Yameogo & Omojolaibi, 2022). Diagnostic tests (Arellano–Bond, Sargan, Hansen) supported the validity of the specification and instruments, indicating that the GMM estimates are reliable for inference (Roodman, 2009).

The findings suggest several key recommendations for policymakers and regional practitioners within the EAC. First, because labour mobility significantly enhances regional integration, EAC governments should prioritise full implementation of the Common Market provisions on free movement of workers, mutual recognition of qualifications and non-discrimination in employment (Basnett, 2013). This includes simplifying work permit regimes, harmonising labour regulations, and improving portability of social protection, to ensure that mobility is both economically beneficial and socially acceptable. Second, the strong role of capital mobility implies that deepening regional financial integration—through harmonised financial regulation, stronger regional banking networks, and reduced restrictions on cross-border investment—can materially advance integration (Kumar et al., 2014). However, to avoid concentration of benefits, these reforms should be linked to financing of regional infrastructure and productive sectors rather than speculative flows. Third, given the positive link between income inequality and regional integration, regional and national authorities should embed distribution-sensitive mechanisms—such as regional development funds, targeted support to lagging regions, and progressive tax and social policies—into integration agendas (Santos-

Paulino, DiCaprio, & Sokolova, 2019). Without such flanking policies, integration may face political resistance from groups or regions that perceive themselves as losers in the process. Finally, strengthening institutional quality remains essential: effective institutions enhance the gains from factor mobility and help ensure that integration contributes to inclusive development (Kwaw-Nimeson & Tian, 2023).

This study provides important empirical insights into how labour mobility, capital mobility, income inequality, and regional integration interact in the EAC, but it has several limitations. The analysis covers only four EAC partner states with complete data over 2014–2023, which may limit the generalisability of the findings to the entire Community. The use of aggregate national-level indicators may obscure within-country and sectoral heterogeneity—for example, differences between formal and informal labour markets or between manufacturing and services (Kadigi, 2022). Although dynamic GMM helps address endogeneity and unobserved heterogeneity, results remain sensitive to instrument choice and sample size (Roodman, 2009). Future research could extend this work in several directions. First, incorporating more granular sector- or corridor-level data could shed light on how specific value chains or labour migration corridors drive integration. Second, expanding the sample as more data become available and comparing the EAC with other African regional economic communities (e.g., ECOWAS, SADC) would help contextualise the findings (Ametoglo et al., 2018; Yameogo & Omojolaibi, 2022). Third, future studies could integrate institutional quality explicitly into the model—as both a direct determinant and moderator of factor mobility and inequality—to capture how governance conditions shape integration dynamics (Kwaw-Nimeson & Tian, 2023). Finally, combining quantitative GMM analysis with qualitative case studies of firms, workers and border communities, would provide a richer understanding of how regional integration is experienced "on the ground" and how policies can better align economic integration with social inclusion in the EAC.

Declarations
The authors declare that there are no conflicts of interest regarding the publication of this paper.

Conflict of Interests
The authors declare that there are no conflicts of interest related to this study. No financial or personal relationships influenced the outcomes of the research.

Availability of Data and Materials
The data that support the findings of this study are available from the World Bank database and the respective countries' Bureau of Statistics websites. The datasets used and analyzed during the current study are available from the corresponding author upon reasonable request.

Authors' Contribution
The author was responsible for the conceptualization, methodology, data collection, analysis, interpretation of results, and writing of the manuscript. The author also provided critical revisions and approved the final manuscript for submission.

Funding Sources
This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Acknowledgments
Special thanks are also extended to individuals who provided valuable feedback on earlier drafts of this manuscript

REFERENCES

1. *Aghion, P., & Howitt, P. (1998). Endogenous growth theory. MIT Press.*
2. *Ametoglo, M. E. S., Guo, P., & Wonyra, K. O. (2018). Regional integration and income inequality in ECOWAS zone. Journal of Economic Integration, 33(3), 604–628.*
3. *Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. Review of Economic Studies, 58(2), 277–297.*
4. *Ayenagbo, K. (2021). Transmission mechanisms through which institutions mediate the process of globalization to influence poverty levels. Modern Economy, 12(4), 787–803.*
5. *Balassa, B. (1961). The theory of economic integration. London, UK: George Allen & Unwin.*

6. *Basnett, Y. (2013). Labour mobility in East Africa: An analysis of the East African Community's Common Market and the free movement of workers. Development Policy Review, 31(2), 131–148.*
7. *Beckfield, J. (2005). The dual world polity: Fragmentation and integration in the network of intergovernmental organizations. Social Problems, 52(3), 393–420.*
8. *Beckfield, J. (2006). European integration and income inequality. American Sociological Review, 71(6), 964–985.*
9. *Beckfield, J. (2009). Remapping inequality in Europe: The net effect of regional integration on total income inequality in the European Union. International Journal of Comparative Sociology, 50(5–6), 486–509.*
10. *Dout, H., & Kebalo, L. (2021). Trade intensity, fiscal integration and income inequality in ECOWAS. Statistics, Politics and Policy, 12(2), 375–394.*
11. *Fujita, M., Krugman, P., & Venables, A. J. (1999). The spatial economy: Cities, regions, and international trade. MIT Press.*
12. *Grossman, G. M., & Helpman, E. (1991). Innovation and growth in the global economy.*
13. *Huh, H.-S., & Park, C.-Y. (2021). Globalization, regional integration, and income inequality: New evidence using a composite index of globalization. World Development, 145, 105521.*
14. *Kadigi, R. M. J. (2022). Trade, GDP value-adding activities and income inequality in the East African Community. PLOS Sustainability and Transformation, 1(12), e0000036.*
15. *Kang'ethe, V. W. (2024). Effects of regional integration on income inequality in the East African Community (2000–2021) (Master's thesis). Kenyatta University.*
16. *Krantz, S. (2025). Patterns of global and regional integration in the East African Community. Review of World Economics, 161(1), 151–230.*
17. *Krugman, P. (1991). Increasing returns and economic geography. Journal of Political Economy, 99(3), 483–499.*
18. *Kumar, S., Sen, R., & Srivastava, S. (2014). Does economic integration stimulate capital mobility? An analysis of four regional economic communities in Africa. Journal of International Financial Markets, Institutions and Money, 29, 33–50.*
19. *Kwaw-Nimeson, E., & Tian, Z. (2023). Institutional quality, foreign direct investment, and regional integration: Empirical evidence from CEN-SAD. SAGE Open, 13(1), 1–20.*
20. *Martínez-Galarraga, J., Rosés, J. R., & Tirado, D. A. (2015). The long-term patterns of regional income inequality in Spain, 1860–2000. Regional Studies, 49(4), 502–517.*
21. *Midagu, G., & Kazadi, J. K. (2020). Capital mobility in Africa: A re-examination of the Feldstein–Horioka puzzle. Economic Change and Restructuring, 53(4), 631–654.*
22. *Mora, T. (2005). Geographical patterns of regional inequality in Europe. Review of Urban & Regional Development Studies, 17(2), 110–132.**
23. *Oucho, J. O. (2014). Labor mobility, regional integration and social protection in southern economies. In J. O. Oucho (Ed.), A new perspective on human mobility in the South (pp. 49–64). Springer.*
24. *Romer, P. M. (1994). The origins of endogenous growth. Journal of Economic Perspectives, 8(1), 3–22.*
25. *Roodman, D. (2009). How to do xtabond2: An introduction to difference and system GMM in Stata. Stata Journal, 9(1), 86–136.*
26. *Santos-Paulino, A. U., DiCaprio, A., & Sokolova, M. V. (2019). The development trinity: How regional integration impacts growth, inequality and poverty. The World Economy, 42(7), 1961–1993.*
27. *Sauer, P., Rao, N. D., & Pachauri, S. (2020). Explaining income inequality trends: An integrated approach. WU Working Paper 296, Vienna University of Economics and Business.*
28. *Savoia, A. (2024). Convergence and divergence in regional income inequality in the European Union. Social Indicators Research, 170(2), 491–514.**
29. *Temerbulatova, Z., Mukhamediyev, B., Zhidebekkyzy, A., & Bilan, S. (2024). Regional disparities and dual dynamics: Economic growth and income inequality in Kazakhstan. Economics and Sociology, 17(2), 241–255.*
30. *Tober, T. (2022). European institutional integration, trade unions and income inequality. Socio-Economic Review, 20(1), 351–371.*
31. *Ullah, A., Khan, S., & Pinglu, C. (2024). Income distribution and sustainable development nexus: Fostering poverty reduction and integrated sustainability amidst multi-dimensional regional integration. Sustainable Futures, 7, 100159.*
32. *Ullah, A., Zhao, K., Ullah, S., Pinglu, C., & Khan, S. (2021). Sustainable utilization of financial and institutional resources in reducing income inequality and poverty. Sustainability, 13(3), 1038.*
33. *Villanthenkodath, M. A., Mahalik, M. K., & Pal, S. (2023). Economic globalization, trade openness, financial openness and income inequality: Evidence from developing countries. Journal of Economic Studies, 50(1), 37–59.*
34. *Wang, F., & Ezaki, M. (2006). Regional economic integration and its impacts on growth, poverty and income distribution: The case of China. In International Conference on Economic Integration and Structural Change (conference paper).*
35. *Wonyra, K. O., & Guo, P. (2018). Regional integration and income inequality in ECOWAS zone. Journal of Economic Integration, 33(3), 725–751.*
36. *Yameogo, C. E. W., & Omojolaibi, J. A. (2022). Regional economic integration and its impact on income distribution and the poverty level: The case of the WAEMU zone. Quaestiones Geographicae, 41(2), 21–35.*