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Assessing the Viability of the East African Community as a Monetary Union

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Abstract

The objective of this paper is to evaluate the feasibility of the East African Community (EAC) in establishing a successful monetary union. Despite its strong interest and progress, the East African Community (EAC) faces substantial challenges in pursuing a single-currency monetary union. A careful examination of trade data and evaluation of the convergence criteria supports a cautious move toward forming a monetary union rather than its formation for political expediency. The compliance of EAC countries in achieving the target levels of the convergence criteria is, at best, mixed. Mainly, achieving low inflation rates, maintaining lower budget deficit-to-GDP and debt-to-GDP ratios, and building robust foreign reserves were weak. Despite the divergence among member countries in attaining a low and stable inflation rate, overall strong co-movement in inflation rates and the ability to maintain an average inflation rate near the target of eight percent is encouraging. 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. In addition to these new developments, weak trade complementarity, inadequate cross-border infrastructure, expansive non-tariff barriers, and different degrees of compliance with convergence make a speedy move towards monetary union risky. Addressing these observed potential problems before monetary union via harmonization of investment and economic policies, creating robust institutions that foster trust and regional cooperation will mitigate economic and political rivalry and aid in forming an effective monetary union.

Keywords: convergence, East African Community, monetary union, trade

1. Introduction

Economic and monetary unions (EMUs) have long been a source of interest and debate among economists and policymakers. The idea that regional economic integration would enhance trade, promote the flow of capital and factors of production, improve access to markets, and drive sustainable economic growth has led to the proliferation of regional economic blocs. According to the data from the World Trade Organization (WTO), as of August 2023, the total number of regional trade agreement (RTA) notifications to the WTO has reached 817, of which 593 RTAs were notifications in force which means the remaining 224 notifications were inactive RTAs (Note 1).

African states have been enthusiastic about regional economic blocs and have worked to promote economic integration and collaboration by establishing regional trade blocs. This journey has recently resulted in the establishment of an even more ambitious platform, the African Continental Free Trade Agreement (AfCFTA), a groundbreaking project aimed at unlocking new opportunities for trade, investment, and diversification that can significantly boost intra-Africa trade, particularly trade in value-added production (UNCTAD, 2021). The successful implementation of this continental-wide free trade agreement is expected to contribute to economic development and sustainable growth in Africa (UNCTAD, 2021).

The current state of regional trade agreements in Africa is a web of uneven regional blocs with overlapping memberships and lack of implementation, making intra-African trade cumbersome and expensive (World Bank, 2020). Despite initial excitement, regional integration progress in the continent encountered various hurdles.

Internal disputes, political instability, cross-border conflicts, inadequate infrastructure, and low trade complementarity have hampered the full realization of regional trade agreements' potential and benefits. Furthermore, overlapping participation in numerous regional entities disrupted coordination efforts, resulting in inefficiencies and delayed implementation of the accords (Olney, 2022; World Bank, 2020).

The sub-regional trade blocs on the continent currently exist at different stages, ranging from free trade areas to monetary unions, with mixed success in achieving their stated goals. Contrary to the earlier effort to promote sub-regional trade agreements, the AfCFTA aims to reinforce regional integration efforts in Africa while creating a continent-wide free trade area. According to the African Union, the AfCFTA has been designed to strengthen African regional economic integration in two ways. First, it seeks to develop a consistent regulatory framework to reduce market fragmentation caused by multiple regulations in sub-regional preferential trade agreements (World Bank, 2020). Second, the AfCFTA provides a chance to address crucial policy issues frequently ignored by inadequately structured sub-regional trade agreements, fostering deeper economic integration throughout the continent (Note 2) (World Bank, 2020). One of the sub-regional trade agreements in Africa is the East African Community. With its long history, the EAC was envisioned to promote economic, social, and political integration in the region to improve the quality of life for its citizens who live in the EAC.

The primary objective of this paper is to analyze the feasibility of EAC as a single-currency monetary union using recent trade and macroeconomic data. The paper aims to assess the convergence criteria for EAC in line with those of the European Monetary Union and explores potential challenges and opportunities towards the goal of a single currency monetary union in EAC. Evaluating the degree of compliance by EAC member countries with stated convergence criteria will help policymakers identify potential hurdles and address them before the accord's implementation. The findings of this study are intended to provide insights into the feasibility of proposed monetary unions to help decision-makers identify potential bright spots and problematic areas using the convergence criteria.

2. The EAC as an EMU – Past, Present, and Future

The EAC is a regional economic bloc rooted in the pre-independence era and stands at the forefront of the initiative to promote economic integration, cooperation, and development among its member states. The EAC, which includes Burundi, the Democratic Republic of the Congo, Kenya, Rwanda, South Sudan, Tanzania, and Uganda, comprises a broad range of economies in the East African region, each with its strengths and difficulties. Within the African continent, the EAC stands as a pivotal regional bloc that has, in recent years, intensified its efforts towards realizing the vision of an integrated economic and monetary union among its member states.

EAC has its roots in the colonial era, but it was re-established by a treaty signed on November 30, 1999 (entered into force on July 7, 2000) by three founding members—Kenya, Tanzania, and Uganda (World Bank, 2020). Rwanda and Burundi joined the EAC in 2007 with successive expansions, while South Sudan, the Democratic Republic of the Congo, and Somalia joined recently in 2016, 2022, and 2023, respectively. The EAC comprises eight countries strategically located in Eastern Africa with over 280 million people and a combined GDP of $300 billion (excluding Somalia). The EAC Customs Union was formed in 2005, and in 2010, EAC announced the establishment of the common market and planned to implement a monetary union with steps to reach the East African Political Federation with Political Confederation during the transition. The East African Monetary Union (EAMU) Protocol was signed on November 30, 2013, planning a monetary union within ten years into a single currency in the Community (Ltaifa, Yabara, & Williams, 2014).

This paper explores the prospects, challenges, and implications of an economic and monetary union among the EAC. It seeks to shed light on the evolving landscape of regional economic integration in East Africa, providing insights into the rationale behind EMU, the progress made thus far, and the complex web of economic, financial, and political factors shaping this transformative endeavor. EAC's successful economic and political integration could foster geopolitical stability in the continent's most unstable and conflict-ridden region by strengthening economic interdependence among its member countries, providing a peace dividend well beyond its borders. The findings of this research are poised to contribute to the broader discourse on regional economic integration, offering valuable insights for policymakers and scholars alike. Cautious examination of trade data and the convergence criteria listed below shed light on the path forward for EAC countries as they strive to harness their collective potential and shape a future of shared prosperity through deeper economic and political integration.

According to Ltaifa et al. (2014) and UNECA (2019), EAC's core revised macroeconomic convergence criteria include the following:

- External reserves that cover 4.5 months of imports.

- The annual headline inflation rate does not exceed 8 percent.
- A no more than 5 percent overall budget deficit excluding grants (no more than 3 percent of GDP including grants) and
- Maintain a sustainable gross debt to GDP ratio of less than 50 percent.

In addition to these core criteria, Ltaifa et al. (2014) listed the following secondary EAC criteria.

1) Maintaining stable real exchange rates,
2) Maintaining market-based interest rates,
3) A sustainable no less than 7 percent real GDP growth,
4) A national savings of not less than 20 percent of GDP, and
5) A tax-to-GDP ratio of 25 percent.

2.1 Description of the Economies: Vital Statistics

According to the data from the World Bank, World Development database (Note 3), in 2022, the combined GDP of the EAC stood at approximately 222.4 billion dollars (at 2015 constant prices), with a total population of over 170 million people, making it one of Africa's most populous regional economic communities (Note 4). Among the EAC members, the Kenyan economy is by far the largest and most diversified, accounting for about forty-three percent of the regional gross domestic product, followed by Tanzania.

For the last two decades, almost all EAC member countries have enjoyed a higher average economic growth than their historical averages. Based on the data from the IMF data mapper (Note 5), since 2000, Rwanda, Tanzania, and Uganda have achieved a growth rate well above the regional and world average. However, contrary to the general trend for the region, Burundi grew at an average rate of 2.4 percent, far below the regional average. The remarkable economic growth achieved by EAC members over the last two decades has translated to an improvement in the standard of living in the region, as many socio-economic measures, such as infant mortality and life expectancy, have shown a significant improvement. The improvement in economic performance in the 2000s can partly be explained by the considerable increase in private investment from domestic and foreign sources and substantial public infrastructure investment.

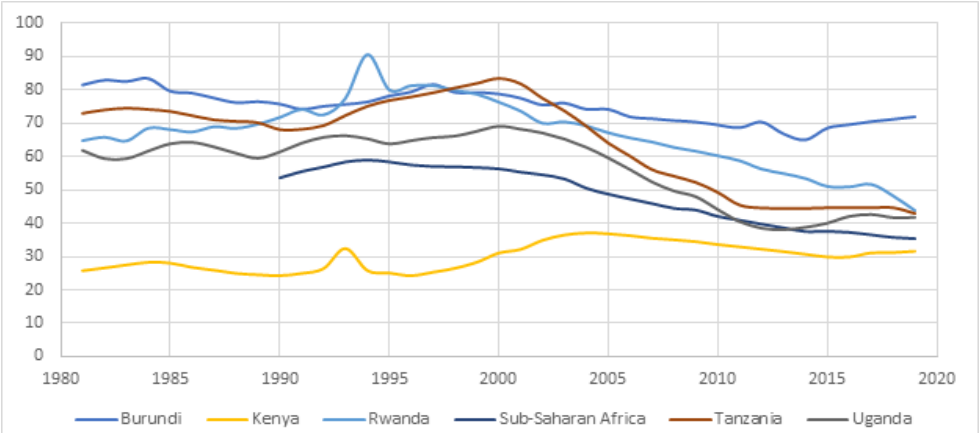

Figure 1. The evolution of poverty in EAC

Source: World Bank Poverty and Inequality Dataset (Note 6).

Although EAC countries share a lot in common, they also have meaningful differences in their economic, social, and political structures. For example, the average income measured by GDP per capita (constant 2017 PPP) for the region ranges from $708 in Burundi to $4,882 in Kenya (Note 7). Before the COVID-19 pandemic stalled the remarkable progress in poverty reduction achieved for two decades, the EAC registered some significant gains (World Bank, 2022). As shown in Figure 1, Uganda, Rwanda, and Tanzania are among the EAC countries that recorded an impressive trend of poverty reduction that started around the year 2000.

According to the poverty and inequality database from the World Bank, the share of the population below the international poverty line of $2.15 a day in Tanzania had dropped from 83.6 percent in 2000 to 43.1 percent in 2019. In Rwanda, the trend in poverty reduction that started in the mid-1990s has reduced the poverty rate from

80.1 percent in 1995 to 43.9 percent in 2019, while in Uganda, the poverty rate has dropped from 69.4 percent in 2000 to 41.7 percent in 2019. Compared to the three nations mentioned above, Burundi experienced only a modest decline in the share of the population below the poverty line, from 78.8 percent in 2000 to 71.9 percent in 2019.

Kenya's poverty rate and poverty reduction record are very different from the other EAC countries. The World Bank poverty and inequality dataset shows that Kenya has the lowest poverty rate in the region, although that rate has primarily remained in the 30 percent to 40 percent range from 2000 to 2019. The observed variation in the size of the economy and population, economic structure, economic performance, and poverty reduction could be a potential challenge for EAC member countries in pursuing deeper economic and political integration as their priorities might differ.

2.2 Intra-EAC Trade

Figure 2 shows intra-EAC trade has consistently grown and doubled between 2016 and 2022. From 2016 to 2022, on average, intra-EAC exports accounted for 25.2 percent of the total EAC exports, while intra-EAC imports accounted for 7.7 percent of the total EAC imports. During the same period, intra-EAC exports grew at an average rate of 10.4 percent compared to the overall regional export growth of 11.5 percent. On the other hand, intra-EAC imports rose at a higher rate, 16.8 percent, compared to the overall growth of EAC imports from the rest of the world, which was 10.8 percent. Overall, the intra-EAC trade during the same period grew 12.5 percent faster than the EAC trade growth of 10.9 percent. The low starting base and significant intra-EAC trade growth over the last decade show EAC's great potential in facilitating intra-regional trade.

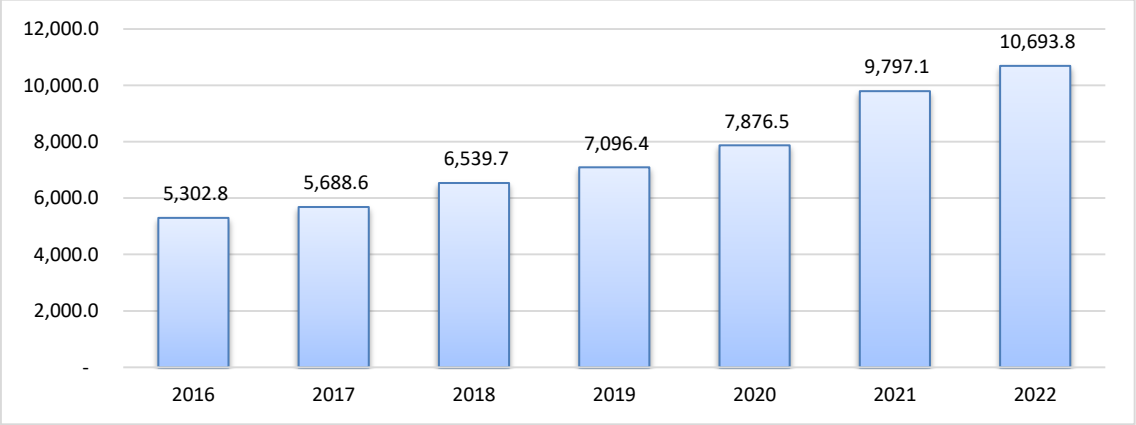

Figure 2. Total Intra-EAC merchandise trade (millions of US$)

Source: East African Community (Note 8).

In addition to the market size, abundant natural resources in the region, improved security, and deeper EAC economic integration make EAC attractive for business and investment. In this regard, the EAC's favorable geographic location presents an opportunity for EAC to develop as a vital commerce hub connecting Africa, the Middle East, and Asia. EAC member countries are also known for their untapped natural resources, which include minerals, agriculture, and oil and gas reserves. If these resources are developed and properly managed, the region's natural resources and young population could ignite the much-needed shared prosperity, rapid economic development, and poverty reduction the region needs.

Although the potential for intra-regional trade exists through deeper integration and specialization, the gains from intra-regional trade could be hampered by poor cross-border infrastructure, non-tariff barriers and the similarity of exports by EAC member countries. Nevertheless, such barriers can be minimized by encouraging value-adding cross-border investments to reduce non-EAC import dependence while creating job opportunities for youth.

As shown in Figures 3 and 4, the size of intra-EAC trade varies widely among EAC members. In 2022, Uganda had the highest intra-EAC export share among the EAC members, as twenty-six percent of its exports were destined for EAC, while 11 percent of its imports originated from the EAC countries. The intra-EAC exports for Kenya accounted for 18 percent, followed by Rwanda's 9 percent and Burundi's 8.6 percent. Tanzania's intra-regional trade (exports and imports) was surprisingly non-existent, as less than one percent of its exports and imports were intra-EAC trade.

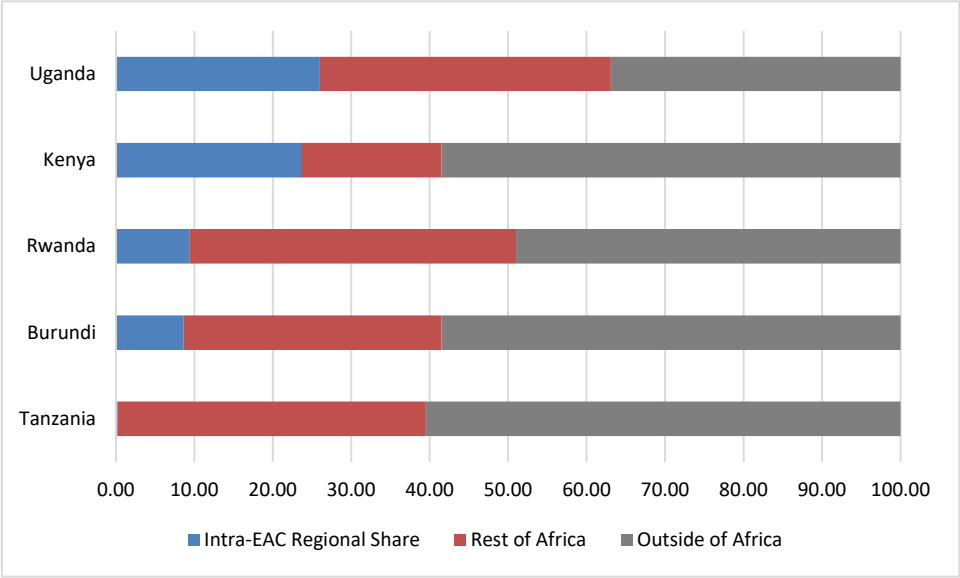

Figure 3. Export share of EAC members

Source: East African Community (Note 9).

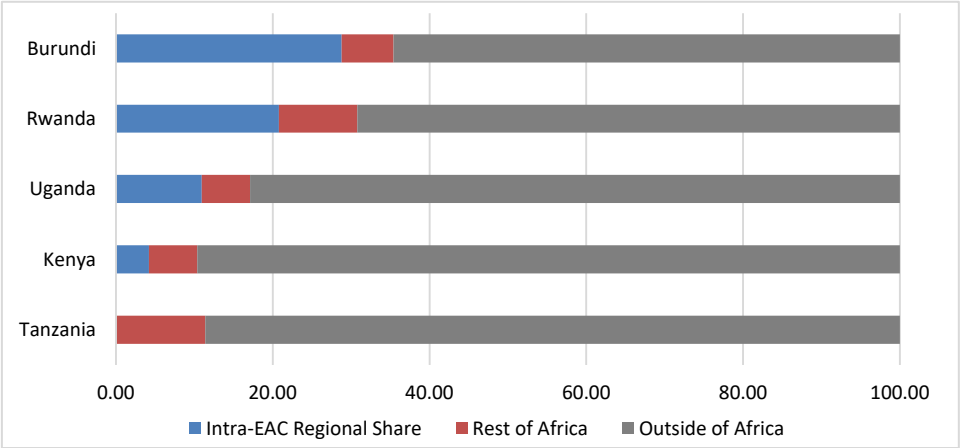

Figure 4. Import share of EAC members

Source: East African Community (Note 10).

Since its inception, the EAC has implemented significant trade liberalization, encouraged regional infrastructure investments, and harmonized legal and regulatory frameworks to achieve the stated goals. However, it still needs continued efforts and political will to deepen integration—for example, the goal of introducing a common currency by 2024 (UNECA, 2019) will require making bold decisions.

Despite the recent expansion through the accession of new members, major difficulties that would slow progress in the future and test the resolve of the political leaders in the region remain unchecked. Cross-border conflicts, political divisions within each member country, trade conflicts, and uneven economic progress put the goal of achieving a robust EMU to the test. These variances might lead to discrepancies in interests and priorities, resulting in slow progress toward goals and implementation of agreements. For example, even though developing a customs union and a common market has lowered tariff barriers, non-tariff barriers, and restrictive trade practices such as bureaucratic impediments, corruption at border crossings remains a problem in many parts of Africa (UNCTAD, 2021). Conflicts inside member countries, political difficulties, and disputes among member countries can prevent collaboration. Political instability and poor infrastructure, such as road networks, ports, and energy supplies, impede the cross-border movement of products and people, creating a substantial obstacle to regional development (UNCTAD, 2021).

Having harmonized trade, investment, and competition policies would go far in attracting investment and

achieving shared prosperity. Instead of implementing competing investment and competition policies among EAC member countries, these policies should be closely linked to bolstering the region in a way that produces shared benefits. For example, individual member nations' efforts to negotiate and sign trade and investment agreements with non-member countries and blocs undermine EAC and weaken the feasibility of negotiating as a bloc.

Recognizing the challenges requires sustained political will, collaboration in financing cross-border infrastructure and human capital investments, and regional efforts to address trade barriers, conflicts, and disparities. The EAC has made significant progress toward establishing an influential regional economic bloc, but continued commitment and cooperation are required to achieve its economic development and poverty reduction goals.

3. Literature Review

Mundell's (1961) seminal work on Optimal Currency Areas laid the foundation for the creation of the European Monetary Union (EMU) as outlined in the Maastricht Treaty and the literature on optimum currency areas. Several studies have extensively discussed the potential benefits and costs of monetary unions, factors that affect the magnitude of these potential benefits and costs. Mundell (1961) identified key factors that contribute to the success of a currency union, including a high level of trade integration, labor mobility, harmonized laws and regulations, and the adoption of a single currency, which reduces exchange rate risks and benefits businesses. Although the loss of independence in monetary and exchange rate policies is identified as the main costs of monetary union, the magnitude of the costs associated with monetary unions depends on the degree of flexibility in the labor market and how symmetrical the economies are in terms of business cycle (Mundell, 1961). Building on this concept, several studies have examined the efficacy of proposed monetary unions in different parts of the world.

While efforts are ongoing to establish a continent-wide free trade area in Africa, sub-regional economic groups like the East African Community continue to prioritize regional trade integration and economic interdependence. Buigut et al. (2011) analyzed the possibility of forming a single currency union among East African countries and found that while these countries exhibited asymmetric reactions to demand and supply shocks, they displayed similar speeds and measures of adjustment. Although the observed asymmetric reaction to shocks in the region is a weakness for feasibility and sustainability of the planned EAC monetary union, similarity in speed of adjustment can be considered as strength of the union. Dridi (2018) for example explored inflation convergence among five EAC countries. Dridi concluded that the inflation rates in EAC countries were similarly affected by external shocks and international factors impacting inflation which makes achieving price stability in the region manageable. However, a recent study by Hacker et al. (2022) pointed out that decreasing correlations in inflation rates among the largest EAC countries could pose a challenge for the prospective union. On the other hand, Caporale et al. (2020) found a meaningful business cycle synchronization in the EAC region provide strong support for the proposed single common currency union.

Based on the work of Opolot and Luvanda (2009), Buigut (2011) examined the convergence criteria for EAC countries, in nominal and real exchange rates, monetary base, and real GDP. The weak convergence in these major macroeconomic variables highlighted the divergence that exists among EAC countries and the challenges that would be faced. The results highlighted the need for a slower and well-planned convergence process, as partial convergence might not be compatible with a fast-track approach. Buigut (2011) recommended a rationalized and coordinated monetary policy to ensure a reliable and sustainable currency union. Ltaifa et al. (2014) also emphasized the importance of institutional oversight and management of the convergence process, while Umulisa (2020) called for continued efforts to promote trade between EAC countries as intra-regional potential was promising.

Umulisa and Habimana (2018) examined business cycle synchronization among EAC countries, identifying core-periphery patterns and their potential negative impact on the viability of a currency union. The Wavelet decomposition they employed shows that Kenya, Tanzania, and Uganda for the core of the monetary union while Burundi and Rwanda seem to have a different cycle. Umulisa (2020) and Ejones et al. (2021) and assessed the effectiveness of the EAC as a regional trade agreement in promoting intra-regional trade and found that such agreements have indeed enhanced trade within the EAC.

Carcel et al. (2016) underscored the significance of achieving similar inflation rates among EAC countries, such as Burundi, Kenya, Rwanda, Tanzania, and Uganda. They noted variations in trade levels between countries, with Tanzania having significant trade with non-EAC countries, particularly in gold mining. Homogeneous inflation rates, although not common in the region, remain a criterion for the potential monetary union. The

authors suggested that joining a monetary union could improve monetary and financial stability in these countries. Ford (2023) emphasized the benefits of introducing a single currency in the EAC to reduce transaction costs and risks for regional banks and businesses.

In addition to the nominal and macroeconomic convergence criteria outlined in the Maastricht Treaty, Drummond et al. (2015) highlighted the importance of real convergence criteria, such as per capita income convergence and trade integration, for the creation of a single currency union in the EAC. They stressed the need for a cross-border institution to oversee progress and individual actions toward achieving real convergence. Chuku et al. (2023) discussed the importance of infrastructure development in the EAC to promote intra-trade, a prerequisite for a potential monetary union. They argued that this was particularly urgent in light of global supply chain disruptions and de-globalization trends arising from geopolitical events such as the Ukraine War and the post-COVID-19 economic landscape. The authors emphasized the multiplier effects of infrastructure development in areas such as information and communication technology, transport, water, and electricity, which are crucial factors in establishing a monetary union. Olney (2022) also confirmed the disproportionately significant positive effect of infrastructure on intra-Africa trade compared to other regions of the world.

In conclusion, the establishment of a currency union in any region requires careful consideration of various convergence criteria, including trade integration, labor mobility, harmonized laws and regulations, and inflation convergence. While the idea of a single currency union holds potential benefits for the EAC region, challenges related to trade diversification, policy synchronization, and real convergence must be addressed. Furthermore, close attention should be paid to the lessons learned from existing currency unions, to ensure the long-term viability and sustainability of any potential monetary union.

4. Data Analysis

The most successful completion of the single currency process has been experienced so far in the European and Monetary Union. Unsurprisingly, all regional single currency discussions in the literature use the European and Monetary Union as a reference. Short of political union, the European and Monetary Union is a single currency zone reaping benefits from zero-currency risk, which has led to reduced business risks; however, the countries have independent governments. There is no doubt that the single currency zone of the EMU enables member countries to reap the benefits of starting new businesses, with labor mobility leading to more jobs and the creation of a trade bloc, boosting tourism with reduced risks. One of the greatest achievements of the European and Monetary Union was the establishment of the Central Bank, called the European Central Bank (ECB), which was responsible for the unified monetary policy in the zone.

After the monetary union, countries had to demonstrate eligibility for their EMU candidature. This constituted a process through which the countries had to sync with the EMU over time by converging their macroeconomic variables along the EMU parameters, popularly known as the Maastricht criteria. The five criteria include measures for price stability, sound public finance, sustainable public finance, convergence in long-term interest rates, and exchange rate stability.

Mundell (1961) provided the foundations for creating the convergence criteria for the countries to be part of the Optimal Currency Area (OCA). The conditions for fulfilling the Maastricht Criteria included limits or criteria imposed on candidate or accession countries regarding limits on inflation, national budget deficit, long-term interest rate, and exchange rate volatility (ERM II). ERM II was to ensure that the management of the accession country's currency was within a limited deviation from the reference currency, which was DEM (German Deutschmark) prior to 2000. On January 1, 2000, the Euro was launched as the single currency. Non-Euro countries were permitted to have their currencies fluctuate without severe tensions against the Euro for two consecutive years, which meant that the currencies could not deviate from the standard reference currency beyond a limited range.

Following the inspiration of single currency unions such as the European Union, the West African Economic and Monetary Union, and the Economic and Monetary Community of Central Africa, the EAC embarked on the ambitious mission of creating a single-currency monetary union. Hence, this paper considers the possibility of a successful EAC as the single currency monetary union by checking if the EAC has been achieving the macroeconomic convergence criteria for creating the single currency zone. This paper does not analyze the pros and cons of creating a single monetary policy across the EAC and forming a single Central Bank, nor the eligibility of EAC members for the monetary union. Instead, the study examines if the EAC countries as a whole and individual members in the EAC meet the criteria of convergence as identified in Ltaifa et al. (2014) and UNECA (2009), which were derived from the original Maastricht Treaty criteria.

Table 1. The four primary convergence criteria of EAC

Key metric	Measured against	Convergence criterion
Price stability	Consumer price Inflation rate	Annual headline inflation rate not exceeding 8%
Sound Public Finance	Government deficit as a percentage of GDP	A no more than 5 percent overall budget deficit excluding grants (no more than 3 percent of GDP including grants)
Sustainable Public finances	Government debt as a percentage of GDP	Maintain a sustainable gross debt to GDP ratio of less than 50 percent
Reserves	Not applicable	Maintain external reserves that cover 4.5 months of imports

Source: Ltaifa et al. (2014) and UNECA (2019).

4.1 Empirical Analysis of EAC Convergence for EMU

This paper studies the possibility of EAC convergence based on the abovementioned convergence criteria. EAC was initially slated to implement a single currency within an economic and monetary union by 2024. Hence, in this paper, the macroeconomic trends since 2004 are analyzed to check if EAC is on track to attain the convergence criteria identified in Table 1. The criteria are analyzed based on data collected from the World Bank, World Development Indicators, and Net Reserves from FRED, Federal Reserve Bank of St. Louis. Recently, the Democratic Republic of Congo and South Sudan have been granted accession into the EAC. This paper's baseline analysis is referenced on data from the five core EAC members: Burundi, Kenya, Rwanda, Tanzania, and Uganda. Depending on data availability, the effect of including the Democratic Republic of the Congo into the candidate countries has been studied. South Sudan is excluded from the analysis due to the lack of data available during the study period.

4.1.1 Inflation

From Figure 5a, it is evident that though the inflation rates are varying, and the convergence criteria of eight percent have not been maintained for most of the study period (2004-2022), there is undeniably a heavy co-movement of the inflation rates across the core five countries. This observation corroborates the view of Dridi (2018), who highlighted that external shocks and international factors affecting inflation have similar effects on EAC member countries. For example, the fact that all EAC members import fuel makes them susceptible to volatility in oil prices and disruptions in oil production in exporting countries. Though the eight percent inflation rate target wasn't achieved during the analysis period, the strong co-movement in inflation rates across EAC members suggests monetary authorities could cooperate and undertake policies that will have similar effects across members, making it possible to meet the convergence criterion. If additional measures are taken to contain the headline inflation rate below the target of eight percent, the countries have a strong potential to meet this convergence criterion. A central bank like the ECB is needed to fulfill convergence criteria in the future, such as monetary variables like interest rates and exchange rates, through a single monetary policy across EAC.

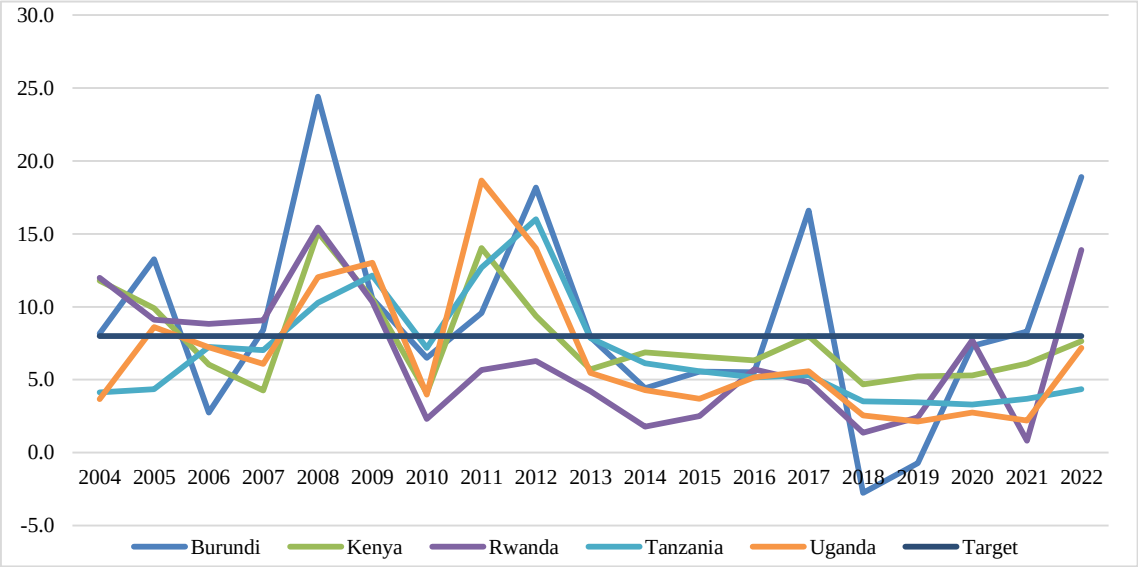

Figure 5a. CPI, average annual percentage change for the original five EAC countries 2004-2022

Source: World Bank, World Development Indicators (Note 11).

From Figure 5b, one can see that the inflation rate in the Democratic Republic of the Congo was, on average, significantly higher and seemed to be more volatile than the rest of the group during the study period. This observation is also reasonable, given the security situation in the country. Despite seeing the end to the deadliest conflict that involved multiple neighboring countries, continued insecurities from further disturbances remained a challenge for normal economic activities in many parts of the country. Devastated infrastructure, displaced people, and disrupted trade resulting from these conflicts could explain the elevated level and volatility of inflation observed in the Democratic Republic of the Congo compared to those of other member countries of EAC. The fiscal pressure of conflicts on government spending would also add to the inflationary buildup that otherwise would have been minimized. Conflicts and wartime spending required diverting scarce resources away from productive projects, such as infrastructure-related ones, that would have aided price stability and the affordability of goods and services.

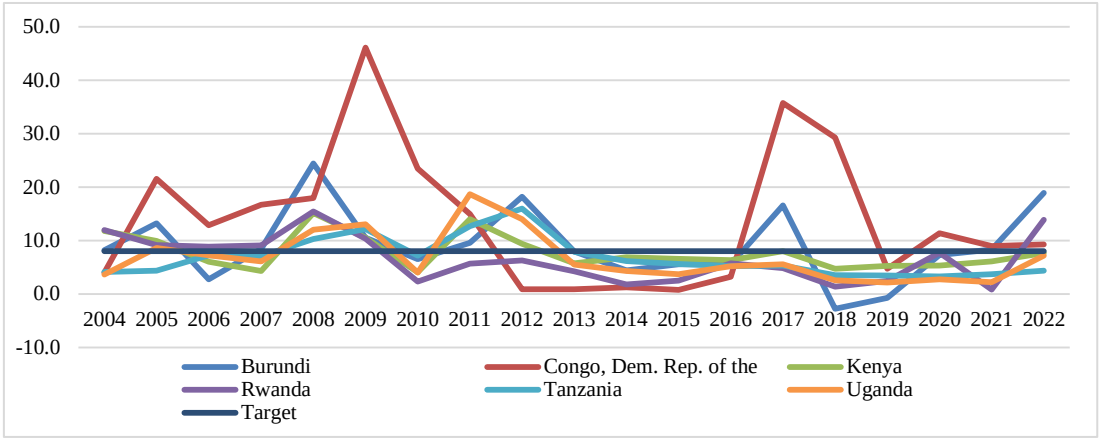

Figure 5b. CPI, average annual percentage change for the EAC countries (including Congo, DR) 2004-2022

Source: World Bank, World Development Indicators (Note 11).

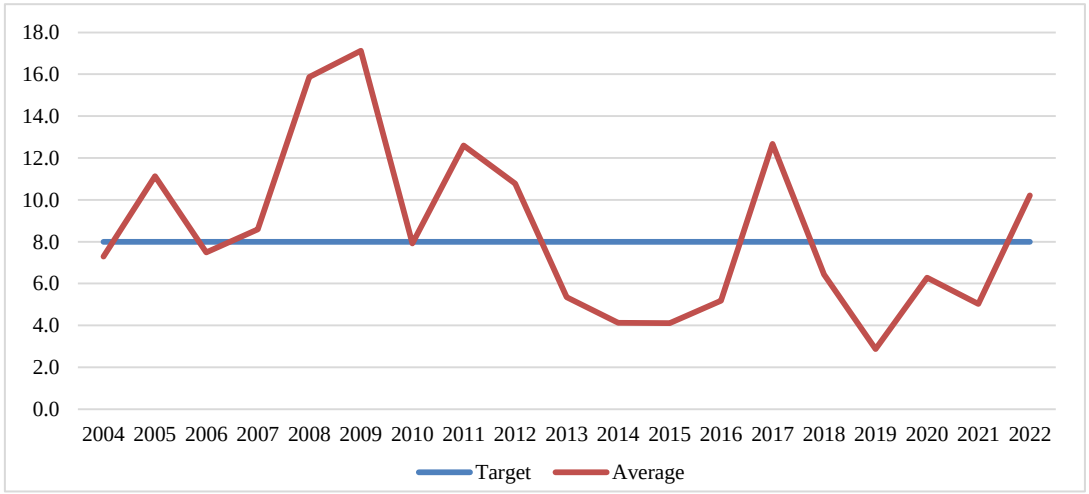

Figure 5c. CPI, average annual percentage change vs. target level for EAC countries (including Congo, DR) 2004-2022

Source: World Bank, World Development Indicators (Note 11).

The pattern observed in Figure 5c shows that if all the six EAC countries coordinate monetary policy or establish a consolidated Central Bank as in the European Central Bank, the convergence criterion of price stability can reasonably be achieved. Even for the Democratic Republic of the Congo, an EAC member that recorded a higher and more volatile inflation rate, political stability and improved security will help bring the inflation rate within the EAC average. As Buigut (2011) suggested, a single monetary policy or policy coordination needs to be required to grant accession and successfully implement the monetary union. The same idea has been reiterated by authors such as Ltaifa et al. (2014), who suggested better institutional oversight for policies across the union

as an essential step in achieving OCA. It is highly recommended that the accession countries work towards a single monetary policy under the supervision of a central monetary authority like the European Central Bank (ECB).

4.1.2 Budget Deficit

Unlike inflation rates, which exhibited strong co-movement, EAC member countries' budget deficit to GDP ratio varied widely during the analysis time frame. This observed divergence and lack of fiscal discipline would be challenging going forward.

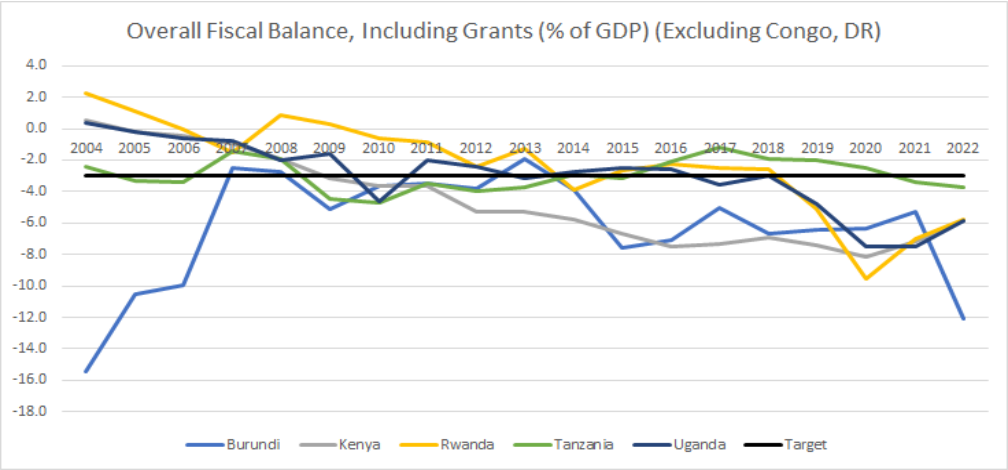

Figure 6a. Overall fiscal balance including grants (% of GDP) for the original five EAC countries 2004-2022

Source: World Bank, World Development Indicators (Note 11).

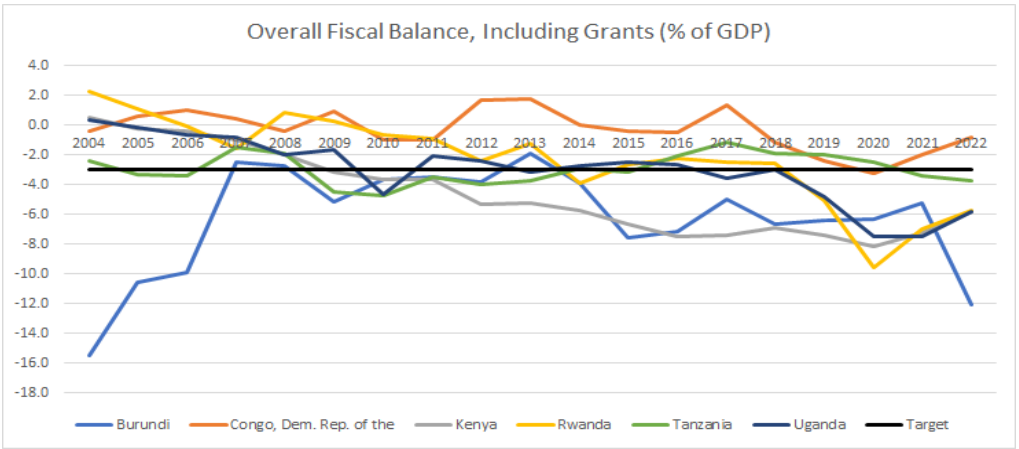

Figure 6b. Overall fiscal balance including grants (% of GDP) for the EAC countries (including Congo, DR) 2004-2022

Source: World Bank, World Development Indicators (Note 11).

Figures 6a and 6b show two patterns about the convergence criteria for stabilizing the budget deficit to GDP ratio (including grants) below 3 percent. First is the degree of divergence within EAC members in their efforts to keep their fiscal balance below the target level. Second, the fiscal balance in the region worsened after 2018.

Democratic Republic of the Congo and Tanzania have shown consistent fiscal discipline by keeping the budget deficit to GDP ratio (including grants) at or below the target level. Rwanda and Uganda are two EAC members whose fiscal balances have deteriorated after 2019. Until 2019, both these countries managed to keep their budget deficit to GDP ratio at or below the target of 3 percent. The deteriorating fiscal condition in the region around 2019 coincided with the onset of the COVID-19 pandemic, which reduced government revenues while requiring increased spending on health and social programs.

For Burundi and Kenya, however, the lack of fiscal discipline precedes 2019. Overall, the divergence in

compliance with this criterion, the lack of fiscal discipline by some EAC member countries, and the deterioration in the fiscal stance of the region (Figure 6c) will make this convergence criterion one of the challenges for the implementation of the proposed monetary union and stability of the union after the introduction of the single currency union as well.

As can be seen in Figure 6c, the average budget deficit to GDP ratio for the EAC remained within the recommended three percent ceiling until 2014. The region's worsening fiscal stance is worrisome. In 2022, six EAC countries' average budget deficit to GDP ratio stood at 5.7 percent, almost double the target level.

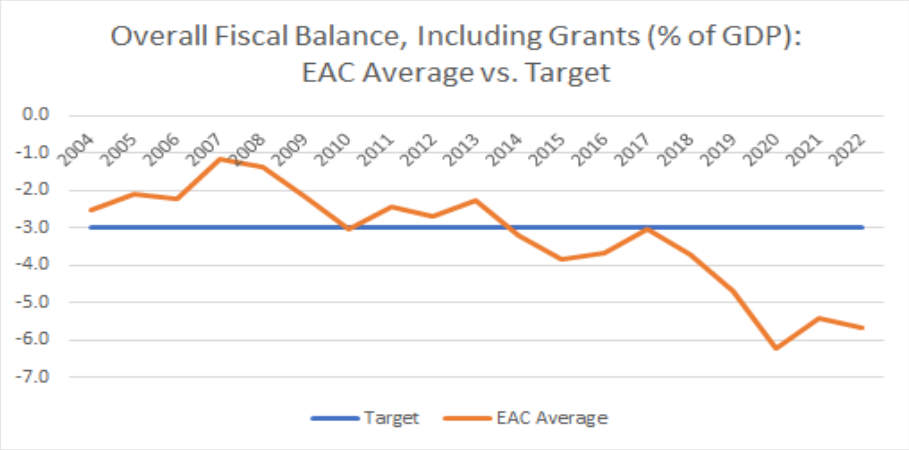

Figure 6c. Average overall fiscal balance including grants (% of GDP) vs. target level for the EAC countries (including Congo, DR) 2004-2022

Source: World Bank, World Development Indicators (Note 11).

4.1.3 Debt to GDP Ratio

Maintaining a sustainable debt-to-GDP ratio below 50 percent of GDP is another convergence criterion that most of the EAC countries were able to adhere to. The average EAC debt to GDP ratio stayed below the threshold of 50 percent from 2007 to 2020, showing strong fiscal discipline across the regional bloc. Starting in 2018, however, Burundi, Kenya, and Rwanda surpassed that threshold level, while Tanzania and Uganda maintained their debt-to-GDP ratio below the target of 50 percent. The buildup in debt to GDP ratio in recent years could be related to the heavy infrastructure investments that countries in the regional bloc have registered over the last decade.

Figures 7a and 7b show that except for Burundi and the Democratic Republic of the Congo, the rest of the EAC members were able to maintain debt to GDP ratio below the target level in the early 2000s. In recent years, among the EAC members, the Democratic Republic of the Congo had the lowest 14.5 percent debt-to-GDP ratio in 2022.

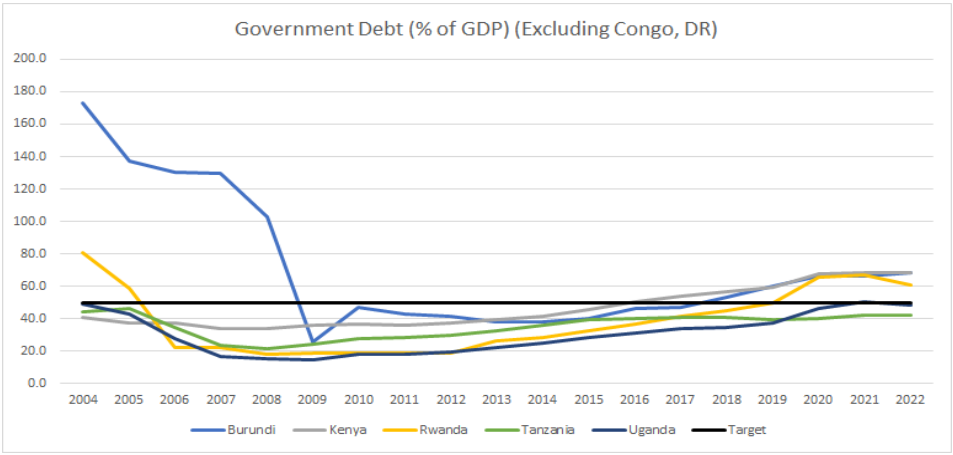

Figure 7a. Government debt to GDP ratio for the original five EAC countries 2004-2022

Source: World Bank, World Development Indicators (Note 11).

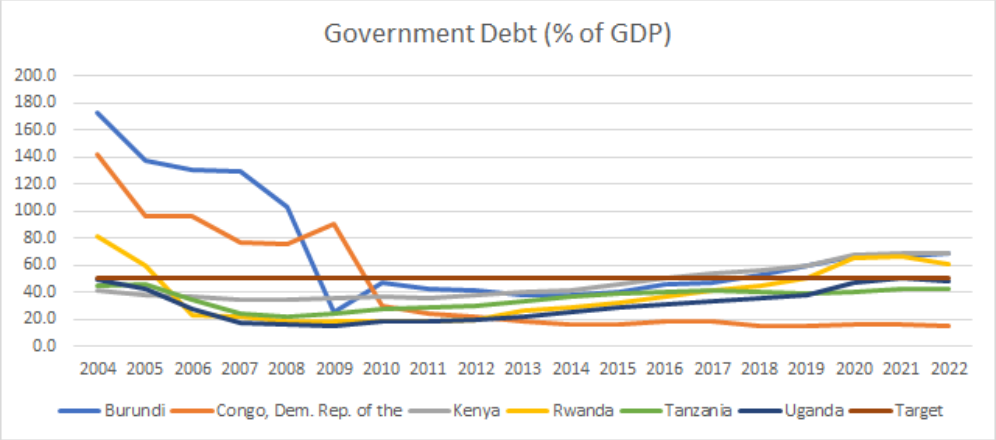

Figure 7b. Government debt to GDP ratio for the EAC countries (including Congo, DR) 2004-2022

Source: World Bank, World Development Indicators (Note 11).

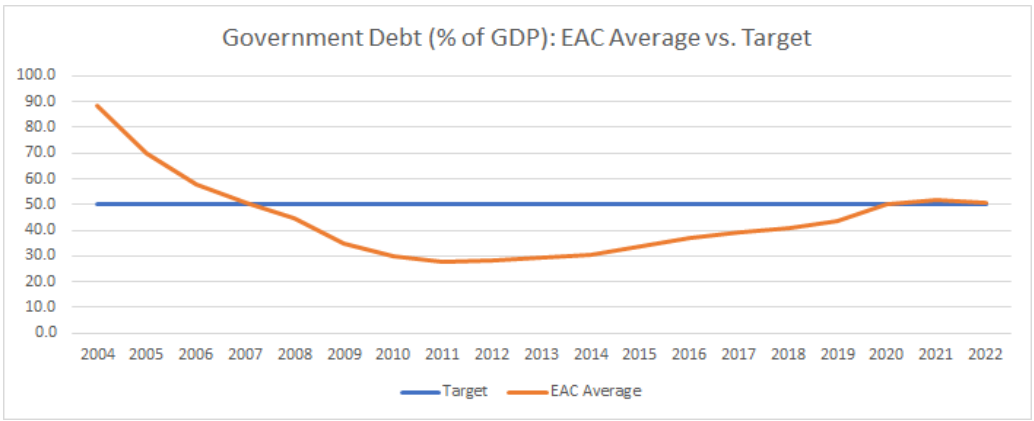

Figure 7c. Average government debt to GDP ratio vs. target level for the EAC countries (including Congo, DR) 2004-2022

Source: World Bank, World Development Indicators (Note 11).

In a monetary union that EAC hopes to achieve soon, member countries' monetary authorities should relinquish their power to a common Central Bank that will be responsible for conducting monetary policy and overseeing financial institutions in all EAC member countries. However, even under a monetary union, each country maintains its independence on fiscal policy and debt servicing initiatives. From the figures above, the countries tend to move synchronously over the years on public finance management despite the recent uptick in debt to GDP ratio in some EAC member countries.

4.1.4 Reserves

The fourth stated convergence criterion is maintaining external reserves that cover more than four and half months of imports. This criterion is essential because of EAC's heavy dependence on imports from non-EAC member countries. In 2022, only 7.7 percent of EAC's merchandise imports of goods and services originated from EAC countries.

Figure 8a shows a reasonable variation in attaining and maintaining the target level of reserves. Despite the recent dip in the reserves below the target level of 4.5 months, for many years during 2004-22, Tanzania and Uganda maintained external reserves around or over the target level. One EAC member that stands out from the group is Burundi. Burundi has consistently struggled to attain the required 4.5 months of import coverage. As seen in Figure 8b, this very low reserve level has also affected the average EAC reserve, which has stayed below the target level of 4.5 months except for a few years during the analysis period.

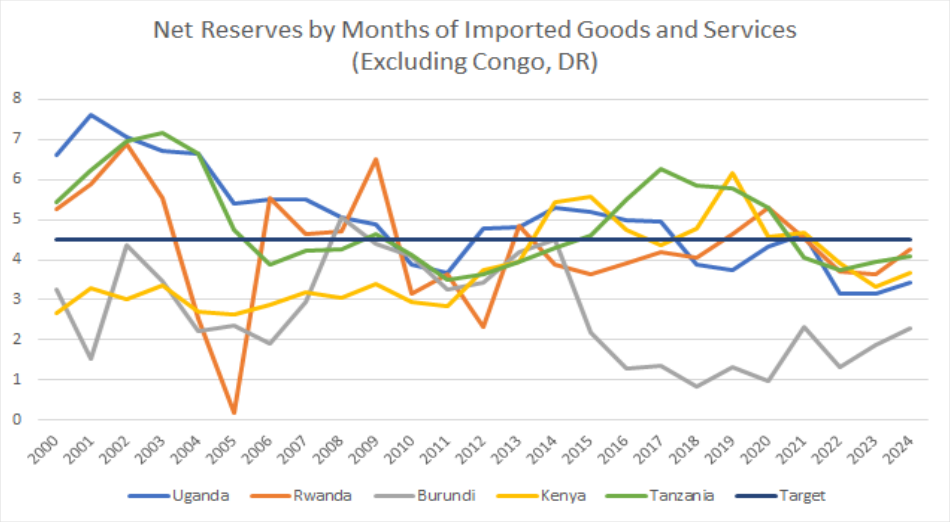

Figure 8a. Months of external reserves import coverage for the original five EAC countries 2004-2022

Source: FRED, Federal Reserve St. Louis (Note 12).

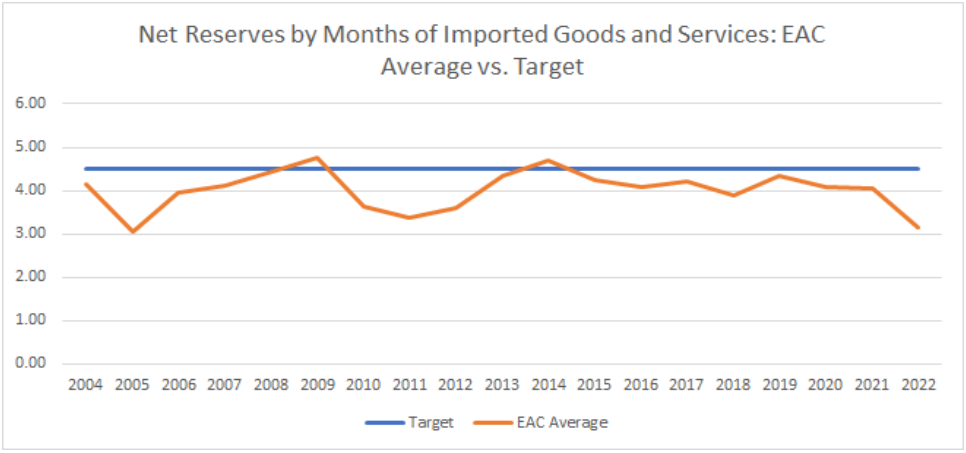

Figure 8b. Months of external reserves import coverage: EAC Average vs. Target 2004-2022

Source: FRED, Federal Reserve St. Louis (Note 13).

4.1.5 External Debt

As shown in Figure 9a, all EAC countries except Burundi, the Democratic Republic of the Congo, and Rwanda started with relatively low external debt. Many EAC countries have enjoyed a period of relatively low external debt, i.e., lower than the continental average external debt to GDP ratio of 30 percent, in the late 2000s and early 2010s. Recent data shows an uptick in the external debt-to-GDP ratio, mainly for Kenya, Rwanda, and Uganda. Burundi and the Democratic Republic of the Congo seem to maintain a stable level of external debt throughout the analysis period. Overall, the average EAC external debt to GDP ratio stayed below or around the African average of 30 percent, which is encouraging given the region's heavy dependence on non-EAC imports.

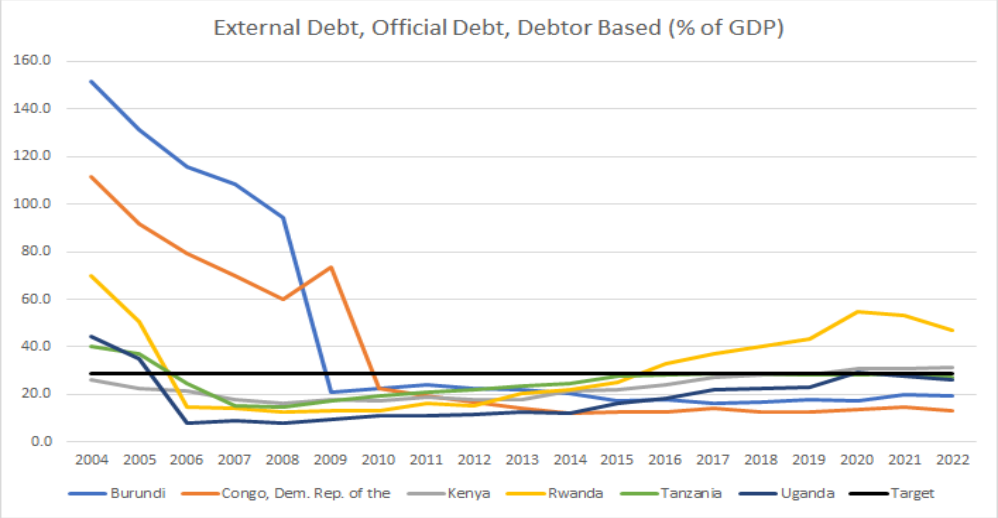

Figure 9a. External debt to GDP ratio for the original five EAC countries 2004-2022

Source: World Bank, World Development Indicators (Note 11).[xi]

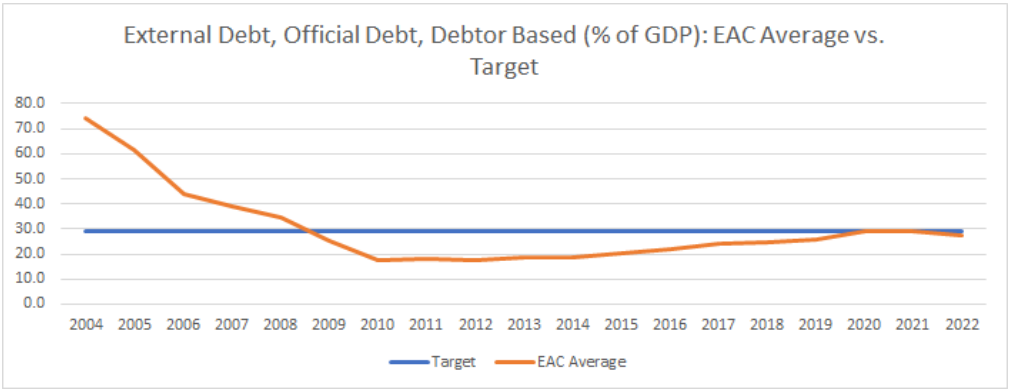

Figure 9b. External debt to GDP ratio: EAC Average vs. Target 2004-2022

Source: World Bank, World Development Indicators (Note 11).[xi]

5. Conclusion

As part of the vision for economic, social, and political integration in the East African region, the EAC is making significant advances towards establishing a single currency union. Even with strong interest and progress, the EAC monetary union faces obstacles and uncertainties that must be addressed before implementation. Despite the original plan to achieve a single currency union in 2024, a cautious approach is recommended due to a lack of convergence in several criteria. This paper uses recent trade and macroeconomic data to examine the feasibility of EAC as a single-currency monetary union. The paper assesses compliance with the convergence criteria to identify potential challenges and opportunities towards the goal of a single currency monetary union in EAC.

The assessment shows mixed results in meeting the convergence criteria for inflation rates, budget deficits, debt-to-GDP ratios, and reserves. While inflation rates show overall strong co-movement and near-target levels, there is significant divergence in maintaining a lower budget deficit and fiscal discipline among EAC members. However, there is progress in maintaining a sustainable debt-to-GDP ratio. The difference in compliance among EAC member countries is another potential challenge that could harm the effectiveness and stability of the proposed monetary union. It seems that Burundi and the Democratic Republic of the Congo contribute significantly to the group's divergence, primarily due to recent conflicts in these countries.

A careful examination of trade data and evaluation of the convergence criteria supports a cautious move toward forming a monetary union rather than its formation for political expediency. Early implementation of harmonized economic and investment policies, removal of non-tariff trade barriers, and establishment of robust regional

institutions are essential for a successful monetary union. In addition to harmonized trade and economic policies, regional political stability is crucial in achieving an effective monetary union; hence, addressing regional conflicts and building trust and a sense of unity in the region is vital.

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Notes

Note 1. https://www.wto.org/english/tratop_e/region_e/region_e.htm

Note 2. World Bank. *The African Continental Free Trade Area: Economic and Distributional Effects.* Washington, DC: World Bank. doi:10.1596/978-1-4648-1559-1. License: Creative Commons Attribution CC BY 3.0 IGO

Note 3. https://databank.worldbank.org/source/world-development-indicators.

Note 4. The EAC including the two newest member countries (Democratic Republic of the Congo and South Sudan) has over 280 million people with a combined GDP of $300 billion. We completely excluded South Sudan from the analysis due to a lack of up-to-date and complete data on vital macroeconomic variables.

Note 5. https://www.imf.org/external/datamapper/

Note 6. https://datacatalog.worldbank.org/search/dataset/0038020/Poverty-and-Equity-Database

Note 7. https://databank.worldbank.org/source/world-development-indicators.

Note 8. https://eac.opendataforafrica.org/dlpbiif

Note 9. https://eac.opendataforafrica.org/dlpbiif

Note 10. https://eac.opendataforafrica.org/dlpbiif

Note 11. https://databank.worldbank.org/source/world-development-indicators

Note 12. https://fred.stlouisfed.org/

Note 13. https://fred.stlouisfed.org/