Twin Deficits and Bank Profitability: A Framework for Stability in Kenya

Executive Summary

Kenya's fiscal and current account deficits, often referred to as "twin deficits," have posed significant macroeconomic challenges while simultaneously shaping the dynamics of its banking sector. Fiscal deficits, averaging 7.4% of GDP over the past decade, have led to a sharp rise in public debt, reaching 70.7% of GDP by 2023. Similarly, the current account deficit has remained persistently high, despite recent narrowing to 5.2% in early 2023. These imbalances create profit opportunities for banks, especially through government securities and foreign exchange market volatility. However, they also increase systemic vulnerabilities, including reduced private sector credit and heightened exposure to macroeconomic instability. This brief explores the interaction between the twin deficits and bank profitability, highlighting key trends, transmission mechanisms, and policy recommendations to enhance financial stability and economic resilience.

The analytical work reveals several important findings. First, fiscal deficits drive profitability for banks by creating investment opportunities in government securities but simultaneously crowd out private sector lending, constraining long-term growth. Second, current account deficits exacerbate exchange rate volatility, which banks exploit for short-term profits, but this exposes them to elevated risks from currency depreciation. Third, the banking sector's reliance on government securities ties its stability to fiscal health, making it vulnerable to macroeconomic instability.

These findings have critical implications. For policymakers, the results emphasize the need for fiscal consolidation and sustainable debt management to reduce reliance on public borrowing. Stabilizing external balances and fostering an environment conducive to private sector credit growth are also vital to ensuring economic stability. For bankers and CEOs, the priority must shift toward income diversification, enhanced risk management, and improving operational efficiency. By reducing dependence on government securities and foreign exchange markets, banks can build resilience against macroeconomic shocks. A balanced strategy that combines fiscal and external stability with measures to promote private sector lending is essential for safeguarding Kenya's banking sector. Such an approach will ensure long-term profitability for banks while fostering a stable and inclusive economic environment.

Keywords: Twin deficits, banking, profitability, stability, Kenya

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1. Introduction and Context

henever an economy is on a path of soaring fiscal and current account deficits, as Kenya has been over the past decade, the concern is often on their ramifications for economic stability. The average annual fiscal deficit as a share of GDP of 7.4% has resulted in net government debt rising from 34.8% of GDP in 2013 to 70.7% by the end of 2023. Over the same period, the current account deficit, which stood at 7.8% of GDP in 2013, widened to 9.3% before gradually narrowing to 5.2% by early 2023. While policymakers financial sector regulators worry about the implications of the connectedness of these deficits on stability and growth, banks seldom miss the opportunity to maximize earnings from positions in money and foreign exchange markets. However, these dynamic highlights a disconnect between macroeconomic stability concerns and potential financial stability risks linked to the deficits.

The intellectual debate on whether the deficits are "twins" focuses on their theoretical underpinnings. According to Keynesian thinking, fiscal deficits increase absorption in the economy,

trigger import expansions, and consequently worsen trade deficits. Alternatively, the Barro-Ricardo Equivalence hypothesis suggests that fiscal deficits, financed by debt, anticipate future tax increases, leading households to save rather than increase spending. Under this framework, the impact on the external balance is minimal. Determining whether the deficits are twins or distant cousins is an empirical question, but this paper moves beyond that debate to focus on their implications for banks. It argues that the behavior of banks, driven by their profitmaximization objectives, is shaped by these imbalances. Persistent current account deficits often signal economic vulnerabilities, such as overdependence on foreign capital, which can undermine market stability and bank profitability. Similarly, high fiscal deficits lead to increased

government borrowing, crowding out private sector credit and potentially reducing profitability.

The analysis is grounded in the distinct two-phase evolution of Kenya's fiscal and current account imbalances over the past two decades. The fiscal deficit, which was relatively stable and within manageable levels between 2000 and 2013, transitioned into a period of steady deterioration, thereafter, leading to a sharp rise in net public debt as a share of GDP (Figure 1). Similarly, the external balance followed a comparable trajectory, with a low and stable current account deficit from 2000 to 2010 evolving into a widening imbalance, albeit with some narrowing post-2017 (Figure 2).

Figure 1: Fiscal Balance and Net Public Debt

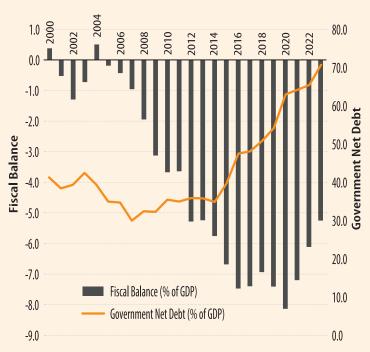
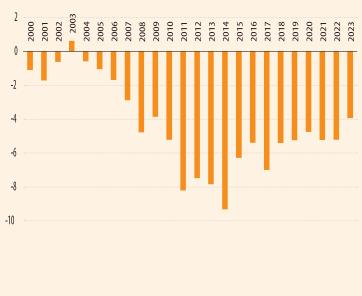


Figure 2: Current account balance (% of GDP)



Source: The National Treasury and IMF World Economic Outlook Database

Based on these trends, a key observation is that while there is a strong association between fiscal and current account deficits, this does not confirm that they are "twins." As depicted in Figure 3, the nexus between fiscal and current account deficits is evident (A), but the link between debt accumulation and economic growth remains tenuous (B).

The above findings neither negates Keynesian thinking nor fully aligns with the Barro-Ricardian Equivalence hypothesis.

Three critical insights emerge from this contextual basis:

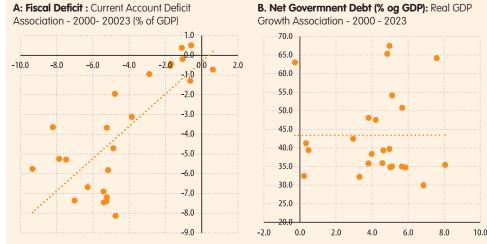
- 1. The imbalances, though exacerbated exogenous factors, largely stem from economic policies and a lack of corrective measures to address their consequences.
- 2. Macroeconomic imbalances serve as lagged indicators of broader economic variables, often unfolding at a pace misaligned with balanced economic development.

3. These dynamics introduce sustainability risks, including the potential for economic instability liquidity and challenges.

Fiscal and current account deficits influence bank balance sheets through several transmission channels. Higher government borrowing raises overall interest rates, increasing banks' cost of funds and compressing net interest margins. Additionally, deficits crowd out private sector borrowing, reducing lending opportunities and constraining loan portfolio growth.

These imbalances can also drive inflationary pressures, eroding the value of banks' assets and profitability, sianalina macroeconomic while instability that heightens credit risk

Figure 3: Domestic – External Imbalances and Economic Growth



Source: The National Treasury and IMF World Economic Outlook Database

and necessitates higher loan loss provisions. The interconnectedness of sovereign risks and banking industry risks is evident, as illustrated by the 2024 downgrade of Kenya's sovereign credit rating¹ and key banks' credit ratings by Moody's. This highlights the importance of sound fiscal policies and sustainable external balances for maintaining financial stability.

2. Related literature

The literature highlights a complex between microinterplay macroeconomic factors in influencing bank profitability, with much of the focus traditionally placed on microlevel determinants. Fiscal deficits primarily influence bank profitability through interest rates and currency fluctuations. Increased government borrowing to finance deficits often raises interest rates, which can enhance banks' net interest margins but crowd out private sector lending (Makambi, Muhindi, and Nduku, 2017). However, higher interest rates may also increase banks' funding costs, compressing interest margins. Additionally, banks in developing economies, heavily exposed to government securities, face risks as fiscal health deteriorates, leading to credit risk and elevated loan-loss provisions (Panizza and Presbitero, 2014). Persistent deficits contribute inflationary also

pressures, influencing monetary policy and operational costs. While short-term fiscal expansion may boost profitability, prolonged deficits can slow economic growth and negatively affect profitability.

On the other hand, current account impact banks through exchange rate risks, inflation, and borrowing costs. Persistent deficits often lead to currency depreciation, which can cause valuation losses on foreign-denominated assets and increase default risks (Silva, 2021). Central bank interventions, such as raising interest rates, may temporarily boost net interest margins simultaneously reduce loan demand and elevate credit risks. High current account deficits also signal economic instability. constrainina bank profitability through tighter liquidity and elevated credit risks.

Empirical findings on the effects of fiscal and current account deficits

on bank profitability are mixed. For instance, Magdalena, Lucian, and Maria (2021) find that fiscal deficits in Central and Eastern Europe boosted bank profitability, though this is not sustainable in the long run. Similarly, Montiel (2011) argue that banks in developing economies benefit from lending to governments, perceived as safer borrowers than private entities. Conversely, studies by Ehigiamusoe and Lean (2020) and Lalon, Afroz, and Khan (2023) emphasize the negative effects of fiscal deficits, including crowding out private investment, rising borrowing costs, and increased default rates.

While macroeconomic imbalances shape market liquidity, asset quality, diversification opportunities, bank-specific characteristics also play a pivotal role. Operational efficiency, reflected in lower cost-to-income ratios, is a key driver of profitability (Olson and Zoubi, 2011; Ozili and Ndah, 2024). Liquidity management

¹ See Kenya | Reports | Moody's (moodys.com)

presents a trade-off; while maintaining high liquidity supports stability, it can reduce profitability if excess liquidity is not effectively utilized (Tran, Lin, and Nguyen, 2016). Larger banks tend to benefit from economies of scale, enhancing profitability, but excessive size may lead to diseconomies of scale and operational inefficiencies (Grzeta, Zikovic, and Tomas, 2023). Diversification of income sources has also been shown to stabilize bank profitability, reducing reliance on traditional interest income (Stiroh, 2004; Nguyen, Parsons, and Argyle, 2021).

Macroeconomic factors, such as economic growth and inflation, significantly influence bank profitability. During economic expansions, improved asset quality and increased demand for loans enhance profitability (Tercero-Lucas, 2021). Conversely, high inflation, while enabling banks to charge higher nominal interest rates, can lead to economic instability, increased default rates, and reduced profitability (Katırcıoglu, Ozatac, and Taspınar, 2020).

3. Econometric specification

This study employs a panel data model to analyse the impact of fiscal and current account deficits on bank profitability in Kenya, using data from 37 commercial banks spanning 2002 to 2022. Bank profitability is measured through Return on Assets (ROA) and Return on Equity (ROE), with fiscal deficits (FD) and current account deficits (CD) as key explanatory variables. The model incorporates bank-specific controls such as size, income diversification, capital adequacy, cost of funds, liquidity risk, asset quality, and operational efficiency. Macroeconomic controls include inflation and real GDP growth, capturing the broader economic context.

4. Key findings and insights

The analysis reveals notable, albeit nuanced, dynamics between these variables. A negative correlation between the current account balance and ROA (Figure 4a) indicates that larger current account deficits are associated with higher bank profitability. This finding suggests that external imbalances, while reflecting economic instability, may create opportunities for banks to achieve greater profitability through higher interest margins and increased financial intermediation. Similarly, the analysis finds a negative correlation between the central government balance and bank profitability (Figure 4b). Larger fiscal deficits, while indicative of economic imbalance, tend to boost profitability by driving higher government borrowing, which creates additional lending opportunities and raises margins. However, these relationships are not uniform across banks, as heterogeneity in business models, risk preferences, and exposure to government versus private sector lending introduces variability in outcomes.

Figure 4: Scatter Plot of twin deficits and bank profitability

Figure 4a: Correlation between Current Account Balance (% of GDP) and Bank Profitability (ROA) 5.0

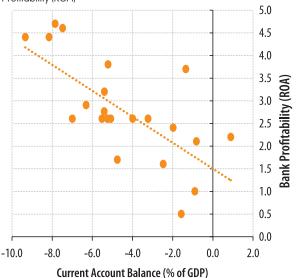
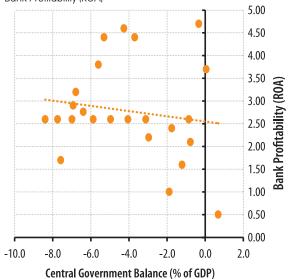


Figure 4b: Correlation between Central Government Balance (% of GDP) and Bank Profitability (ROA)



Source: National Treasury & Consolidated Bank Financial Statements

4.1 Implications of Twin Deficits on Economic Growth

The econometric estimation explores a two-stage relationship between twin deficits—fiscal and current account imbalances—and their effects on economic growth and bank profitability, focusing on Return on Assets (ROA). The first stage focuses on the direct effects of the fiscal and current account balances on real GDP growth, revealing significant findings. A negative and statistically significant relationship is observed between the central government balance as a percentage of GDP and GDP growth (coefficient: -0.149, p = 0.002). Larger fiscal deficits harm economic growth, primarily through the crowdingout effect, where increased government borrowing raises interest rates, reducing private investment. This highlights the importance of fiscal discipline, particularly in emerging economies, where maintaining macroeconomic stability is critical for sustained growth. Similarly, the current account balance as a percentage of GDP is negatively correlated with GDP growth (coefficient: -0.169, p < 0.000).

Persistent external imbalances act as a contractionary force, signaling external dependency and exacerbating currency instability, which dampens growth prospects. Other macroeconomic factors, such as inflation and exchange rate depreciation, also significantly affect GDP growth. High inflation exerts a large and negative effect (coefficient: -1.183, p < 0.000), destabilizing the economy by reducing consumer purchasing power, distorting price signals, and discouraging long-term investment. Exchange rate depreciation similarly hinders growth (coefficient: -0.063, p < 0.000) by raising uncertainty, increasing foreign-denominated debt costs, and fueling inflationary pressures. These findings underscore the detrimental effects of fiscal and external imbalances on economic growth, reinforcing the need for sound macroeconomic policies to stabilize these key indicators and support longterm economic development.

4.2 Implications of GDP Growth on Bank Profitability

In the second stage, the study explores the indirect impact of these deficits on bank profitability, transmitted through economic growth. Specifically, in this stage, the fitted values of GDP growth, derived from the first stage, are used to estimate their effect on bank profitability, measured by Return on Assets (ROA). This stage captures the indirect impact of the twin deficits on profitability, mediated through economic growth. The findings reveal that real GDP growth has a statistically significant positive effect on ROA (coefficient: 0.304, p = 0.004), demonstrating that stronger economic growth enhances bank profitability by increasing loan demand, improving credit quality, and creating a favorable macroeconomic environment. Among bank-specific factors, the loan-to-assets ratio positively influences profitability (coefficient: 0.0358, p = 0.002), while income diversification into non-interest activities has a negative effect (coefficient: -0.0838, p = 0.001), likely due to inefficiencies and higher costs. Capital adequacy positively correlates with profitability (coefficient: 0.0229, p = 0.024), while poor asset quality, measured by NPLs, negatively impacts profitability (coefficient: -0.0737, p = 0.032). The persistence of profitability is strong, with the lagged ROA (L1) showing a highly significant positive effect (coefficient: 0.699, p < 0.000), indicating that past performance strongly predicts future profitability.

The findings emphasize the critical role of macroeconomic stability and effective bank management in sustaining

profitability. The positive relationship between GDP growth and profitability highlights the importance of fostering a stable economic environment through policies that promote fiscal discipline, control inflation, and stabilize exchange rates. For banks, the positive impact of lending activity on profitability underscores the need for balanced growth in loan portfolios, supported by robust credit risk management to mitigate the adverse effects of nonperforming loans. The negative impact of diversification into non-interest activities suggests inefficiencies, pointing to the need for strategic optimization to ensure noninterest income contributes positively to profitability. Capital adequacy is essential, as well-capitalized banks are better equipped to absorb shocks and sustain margins. Finally, the persistence of profitability underscores the importance of structural advantages, such as operational efficiency and market positioning, in ensuring long-term financial performance. Together, these findings highlight the importance of aligning macroeconomic policies and banking strategies to foster a resilient financial sector.



Kenya's rising deficits and surging debt highlight economic vulnerabilities, with banks profiting from imbalances at the risk of long-term stability.

4.3 Summary of Transmission Mechanism

The 2SLS results provide clear evidence of a transmission mechanism from the two deficits to bank profitability, operating through economic growth. In the first stage, the two deficits are shown to significantly depress GDP growth. These findings align with the broader literature on the harmful effects of macroeconomic imbalances on economic performance. In the second stage, GDP growth emerges as a key determinant of bank

profitability, confirming the hypothesis that a favourable macroeconomic environment is essential for financial sector performance. Therefore, fiscal and external sector imbalances indirectly reduce bank profitability by slowing economic growth. These results underscore the importance of sound macroeconomic policies for fostering a stable and profitable banking sector.

5. Conclusion and policy implications

The twin deficits in Kenya offer a dual-edged sword for the banking sector—short-term profit opportunities amid long-term stability risks. The two-step process demonstrates that the two deficits not only exert a direct influence on the economy but also indirectly affect financial sector performance via their impact on growth. Specifically, the analysis points to the observation that higher bank profitability in periods of economic imbalance is driven by lending to the government rather than the private sector. While this may provide short-term financial stability for banks, it poses significant risks to the broader economy, including reduced private sector dynamism, increased economic vulnerability, and potential long-term harm to economic welfare.

To safeguard the economy's future, it is essential to balance bank profitability with sustainable lending practices that support both public and private sector growth, ensuring a resilient and inclusive economic environment. The safeguards are assured by the prudential regulatory requirements as well as the bank-specific drivers of profitability. The two-step process demonstrates that the two deficits not only exert a direct influence on the economy but also indirectly affect financial sector performance via their impact on growth. While this finding endears itself to the twin deficit conclusion, the channel of influence is through the implication of the imbalances on stability more than it is through growth.

The inference of the imbalances being twins has implications for both banking practitioners and policy makers.

 First, a larger fiscal deficit, as reflected in the central government balance, marginally reduces ROA but significantly enhances ROE when the fiscal position improves. This suggests that banks benefit from a stable fiscal environment, which provides a more predictable economic context for lending and

- investment activities. Simultaneously, the current account balance's negative but insignificant impact on profitability highlights the broader economic risks associated with external imbalances. Banks operating in economies with twin deficits might face increased funding costs and macroeconomic instability, affecting the performance of their asset portfolios.
- Second, in environments characterized by twin deficits, banks ought to adopt a more cautious approach to portfolio management. They need to consider the potential volatility in interest rates and economic conditions that may arise from fiscal and external imbalances. To optimize their portfolios, banks could focus on diversifying their asset base to include more stable and liquid assets that can buffer against economic shocks. Moreover, banks might need to enhance their risk management frameworks to mitigate the risks associated with potential policy shifts aimed at addressing twin deficits, such as fiscal austerity measures or currency adjustments.
- Third, policymakers should recognize the impact of twin deficits on the banking sector's stability. To mitigate these effects, it is crucial to maintain fiscal discipline and pursue policies that reduce external imbalances. Regulatory bodies might consider encouraging banks to build capital buffers and liquidity reserves that can withstand the economic fluctuations associated with twin deficits.
- Fourth, persistency of the twin deficits should motivate a strategic response that includes scenario analysis and stress testing to anticipate and manage the potential impacts on bank portfolios. By focusing on operational efficiency, cost management, and conservative lending practices, banks can better navigate the challenges posed by fiscal and current account imbalances. Furthermore, diversifying income streams and enhancing non-interest income can provide additional stability and reduce the reliance on interest-sensitive assets.

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