Finance Research Letters 84 (2025) 107773

Contents lists available at ScienceDirect

Finance Research Letters

journal homepage: www.elsevier.com/locate/frl

How robust is the link between growth and fiscal consolidation under global uncertainties? A reassessment for Sub-Saharan Africa

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ARTICLE INFO

JEL Classification:
E62
F43
O55

Keywords:
Fiscal consolidation
Economic growth
Uncertainty
Sub-Saharan Africa

ABSTRACT

Persistent fiscal imbalances have long challenged Sub-Saharan African (SSA) economies, raising critical questions about the macroeconomic consequences of fiscal consolidation. While past research on advanced economies yields mixed evidence, much less is known about how fiscal tightening affects growth trajectories in developing contexts, particularly under global economic shocks. We reevaluate the growth impact of fiscal consolidation across 37 SSA countries over the 2000–2022 period. Employing an instrumental variable-local projection (IV-LP) approach, we identify the dynamic responses of economic growth to exogenous fiscal shocks while addressing endogeneity concerns. Our findings reveal robust evidence that fiscal consolidation consistently depresses economic growth in SSA. Importantly, this contractionary effect is substantially amplified under conditions of elevated global uncertainty – measured using a range of geopolitical risk and economic policy uncertainty indices. These results challenge recent claims of expansionary austerity in low-income settings and emphasize the need for adaptive policy design. We recommend adopting state-contingent fiscal rules that temporarily pause or soften consolidation efforts during periods of global volatility and resume them during more stable times. Such an approach can help SSA economies mitigate procyclical policy mistakes, preserve growth momentum, and build resilience to external shocks.

1. Introduction

We revisit the relationship between fiscal consolidation (FC) and economic growth in Sub-Saharan Africa (SSA), contributing to an understudied dimension of macro-fiscal policy in developing economies. Our analysis builds upon and critically extends the findings of Badru et al. (2025) and Woldu and Szakálné Kanó (2023), who presented results regarding the growth-expanding effects of FC. Our FC, proxied by action-based fiscal shocks, delineates the economic growth-depressing effect in SSA countries.

Achieving long-term fiscal sustainability and rebuilding fiscal buffers is now a global imperative (Clift, 2024). Unlike high-income counterparts, SSA countries typically operate within structurally constrained macroeconomic environments (Bhorat et al., 2017). The pandemic-induced fiscal expansions in many SSA economies, characterized by emergency social spending and stimulus measures, have led to unsustainable debt trajectories (Kose et al., 2021). These include limited access to international capital markets, shallow domestic financial systems, and procyclical fiscal policies, all exacerbating fiscal vulnerabilities (Botta et al., 2023). Also, actively managed exchange rates and incomplete market liberalization reduce the effectiveness of automatic stabilizers and constrain the

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https://doi.org/10.1016/j.frl.2025.107773
Received 13 May 2025; Received in revised form 20 May 2025; Accepted 14 June 2025
Available online 15 June 2025

countercyclical role of fiscal policy. Jalles et al. (2024) noted that the procyclical nature of fiscal policy in many low-income countries undermines automatic stabilizers and exacerbates macroeconomic volatility. These conditions amplify the real effects of fiscal tightening and curtail the government's ability to sequence and tailor consolidation episodes in growth-friendly ways.

FC suggests a targeted policy approach characterized by either curbing government expenditure or raising taxes, designed to restore balance in public finances and slow the pace of debt accumulation.[1] FC reflects a government's intent to uphold macroeconomic stability and sustain long-term budget discipline. However, disagreement persists regarding when such measures should be enacted. Barrios et al. (2010) argued that significant fiscal imbalances justify immediate adjustment, whereas von Hagen and Strauch (2001) contended that economic expansions offer a more suitable environment for implementing fiscal reforms. Historical patterns in fiscal performance often play a greater role in motivating consolidation than real-time economic indicators (Alesina and Ardagna, 2013; Romer and Romer, 2010).

Debate continues over the economic consequences of fiscal tightening, with two contrasting approaches. One view contends that reducing government expenditure or increasing taxes weakens aggregate demand, particularly when output remains below capacity and household liquidity is constrained. Under such scenarios, tighter fiscal policy may depress consumption and investment, slowing economic momentum (Afonso et al., 2022).

Alternatively, the expansionary austerity hypothesis suggests that fiscal adjustments may generate positive growth effects under specific circumstances. On the demand side, modest and well-timed tax increases can alleviate uncertainty over future policy, strengthening investor and consumer confidence. If lower future tax burdens are anticipated, households and firms may respond by accelerating consumption and investment. Fiscal reforms perceived as credible may also reduce sovereign risk, leading to lower interest rates and greater private sector dynamism (Kaas et al., 2020). On the supply side, reductions in public sector wages can exert downward pressure on overall labor costs, potentially enhancing competitiveness and productivity.

Our analysis relates to a broader body of work investigating how FC episodes shape key macroeconomic indicators (i.e., investment, consumption, and economic growth). Giavazzi and Pagano (1996) provided early evidence on how economic agents may adjust behavior during and after fiscal adjustments. Within this stream, Blanchard (1990) introduced frameworks emphasizing that consumer decisions are influenced by forward-looking considerations, where fiscal reforms generate nonlinear effects depending on economic context and perceived policy credibility. Recent work by Fatás and Summers (2018) investigated the enduring consequences of fiscal adjustments undertaken by advanced economies following the global financial crisis. Their findings challenge the conventional notion that fiscal austerity leads to rapid recovery and instead point to persistent output losses.[2] Similarly, Gechert et al. (2019) estimated the structural consequences of austerity; they concluded that such measures dampen potential output growth, highlighting the need to reassess the broader implications of fiscal consolidation on long-term economic resilience.

An additional factor that warrants attention is the broader macroeconomic and fiscal environment shaping FC's success. Tovar Jalles et al. (2024) highlighted that fiscal tightening tends not to spur expansion in industrial and middle-income countries lacking fundamental macroeconomic stability. Similarly, Afonso (2010) constructed a framework showing that while FC may yield long-term growth dividends in Europe, its short-term effects are generally limited. Born et al. (2020) further revealed that the impact of reducing government consumption on sovereign risk premiums is highly state-dependent, suggesting that the prevailing economic context is crucial in determining the success of austerity measures.

Nonetheless, the effectiveness of FC shocks in low-income and developing countries, particularly in SSA, remains debatable. Arizala et al. (2021) emphasized that the limited development of financial systems and the pervasive informal economic activities in these countries often constrain the effectiveness of austerity-driven expansionary policies. Consequently, assessing whether contractionary or expansionary austerity yields greater benefits in SSA is crucial. While extensive research has addressed these issues in advanced economies (Ando et al., 2025; Ciaffi et al., 2024), analyses focusing on SSA remain comparatively limited. For instance, Yabré and Semedo (2021) investigated the role of political stability in shaping fiscal consolidation efforts across SSA, concluding that stable political environments support such fiscal adjustments. Arizala et al. (2021) found that short-term economic output in SSA typically declines in response to tighter fiscal measures, underscoring the immediate contractionary effects of fiscal tightening in these contexts.

We advance the existing discourse in several essential ways. We employ a local projection framework with instrumental variables (IV-LP), estimated via a two-stage least squares (2SLS) approach. Prior analyses (Badru et al., 2025; Woldu and Szakálné Kanó, 2023) overlooked a key issue: the causal relationship between FC and economic growth is endogenous. Growth fluctuations can prompt fiscal tightening, while unobserved factors may jointly affect both outcomes (Jordà and Taylor, 2025). Unlike traditional vector autoregressions, LPs offer a more flexible framework for estimating impulse responses directly at each forecast horizon without relying on strict parametric assumptions. This reduces sensitivity to model misspecification and enhances robustness. Incorporating IVs into LPs further addresses endogeneity concerns by isolating exogenous variation in policy shocks, which is critical when FC decisions may be influenced by contemporaneous economic conditions (Jordà and Taylor, 2025). Consequently, the IV-LP approach facilitates a clearer understanding of causality and policy effectiveness, particularly in complex environments like SSA, where data limitations and confounding factors could challenge traditional methods.

Furthermore, standard deficit-based consolidation measures are plagued by measurement error, and forward-looking expectations about fiscal policy can simultaneously shape growth trajectories (Ramey, 2011). Moreover, these existing works neglect the

[1] Governments typically implement such measures in response to extended periods of fiscal profligacy or unsustainable debt growth. When executed effectively, these interventions are believed to yield positive outcomes for private sector behavior and overall economic stability.

[2] They argued that these consolidation efforts had significant long-term adverse effects on GDP, well beyond the typical short-run estimates of fiscal multipliers.

moderating role of global uncertainties, particularly geopolitical and policy-related uncertainties, which are especially salient in SSA. In this region, fragile governance structures, reliance on foreign aid, and narrow fiscal space intensify the contractionary impacts of FC during periods of heightened global volatility.

Our analysis is structured as follows: Section 2 details the methodology. Section 3 reports the results of baseline and mechanism analyses. Section 4 presents the conclusions.

2. Methodology

2.1. Model setup

We adopt the LP framework devised by Jordà (2005) to capture the responsiveness of economic growth to FC shocks, with the impulse response function denoted as follows:

$$y_{t+h} - y_{t-1} = \alpha_i^h + \beta^h FC_t + \gamma_i^h \sum_{i=1}^{k} z_{t-i} + \nu_t^h + \varepsilon_{i,t+h}, \ \textit{for } h = 1, \ldots, m \tag{1}$$

where y_t is the economic growth at year t; a_i and ν_t represent the country- and year-fixed effects, respectively; FC_t is the FC shocks, where β^h captures the impulse response over projected horizon h; z_t denotes covariates, including lags of both shocks plus y_t; ε_t is an error term. A state-dependent LP method is,

$$y_{t+h} - y_{t-1} = \alpha_i^h + S_{t-1}\left[\beta_p^h FC_t + \gamma_i^h \sum_{i=1}^{k} z_{t-i}\right] +$$

$$(1 - S_{t-1})\left[\alpha_i^h + \beta_q^h FC_t + \gamma_i^h \sum_{i=1}^{k} z_{t-i}\right] + \nu_t^h + \varepsilon_{i,t+h} \tag{2}$$

where S_t is an indicator distinguishing between economic regimes, i.e., p and q, with β_q and β_p representing the corresponding impulse responses estimated for each regime.

To characterize how global uncertainty interacts with FC impacting economic growth in SSA nations, Eq. (2) is further extended as follows:

$$y_{t+h} - y_{t-1} = \alpha_i^h + S_{t-1}\left[\beta_p^h FC_t + \phi_p^h GU_t + \delta_p^h (FC_t \times GU_t) + \gamma_i^h \sum_{i=1}^{k} z_{t-i}\right] +$$

$$(1 - S_{t-1})\left[\alpha_i^h + \beta_q^h FC_t + \phi_q^h GU_t + \delta_q^h (FC_t \times GU_t) + \gamma_i^h \sum_{i=1}^{k} z_{t-i}\right] + \nu_t^h + \varepsilon_{i,t+h} \tag{3}$$

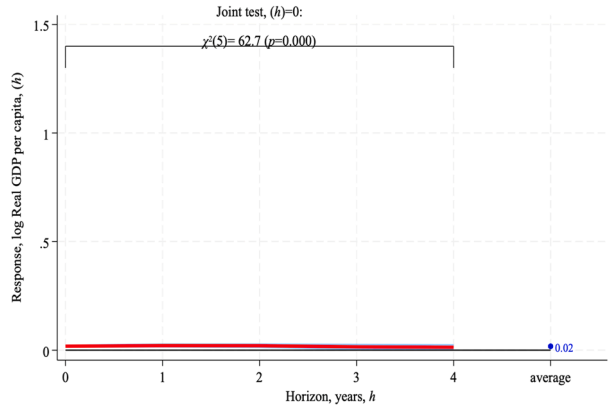
where GU_t is the global uncertainty index at year t; $FC_t \times GU_t$ captures how the effect of FC depends on the level of global uncertainty on economic growth. Others align with Eq. (2).

2.2. Variables and data

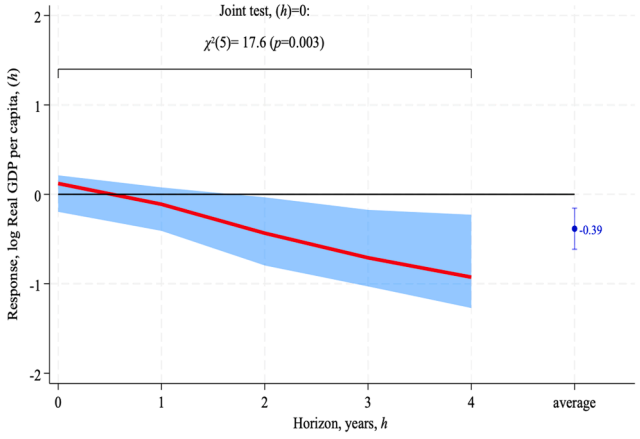
FC has been well developed in the OECD nations, i.e., Guajardo et al. (2014). However, the same methodology proposed by Guajardo et al. (2014) remains challenging in SSA because of data unavailability. To facilitate a comparative analysis, an auction-based method for FC computation is adopted (Badru et al., 2025). We characterize FC events as periods marked by deliberate fiscal adjustments meeting one or more of the following criteria: a minimum one percentage point rise in the primary balance ratio (%GDP), an increase of at least 0.5 percentage points in government revenues ratio (%GDP), or a reduction of no $<$0.5 percentage points in government expenditures relative to GDP. Following Baldacci et al. (2015), these adjustments are deemed effective only when they are concomitant with a reduction in the government debt-to-GDP ratio. We construct a binary FC dummy, assuming a value of one if any of the outlined thresholds are met in each period and zero otherwise. This identification strategy ensures that only deliberate policy efforts to improve fiscal sustainability by lowering public debt burdens are included in our analysis.

Per capita GDP (log-transformed) is an outcome variable in Eq. (1). Simultaneously, covariates including inflation, population (log-transformed), and trade activities are included as exogenous controls to accommodate potential influences impacting economic growth. Besides, LP compromises two lags of all selected indicators for benchmark estimates.

We employ the geopolitical risk (GPR) index developed by Caldara and Iacoviello (2022) and economic policy uncertainty (EPU)



(a) Narrative specification.



(b) Adjusted specification.

Fig. 1. Impact of fiscal consolidation shock on the real per capita GDP. *Notes*: Fig. 1 presents the results derived from an IV-LP framework (i.e., two lags), where the log of GDP per capita is the outcome variable, and FC shocks are the principal explanatory indicator. Standard errors are computed using clustering at the country level. The joint significance of coefficients across various forecast horizons h is assessed using a χ^2 test, with the corresponding p-value in each subplot indicating statistical relevance. The coefficients in Fig. 1 reflect the average dynamic response of GDP per capita to FC shocks over time. Appendix A reports the validity tests for the IV-LP method.

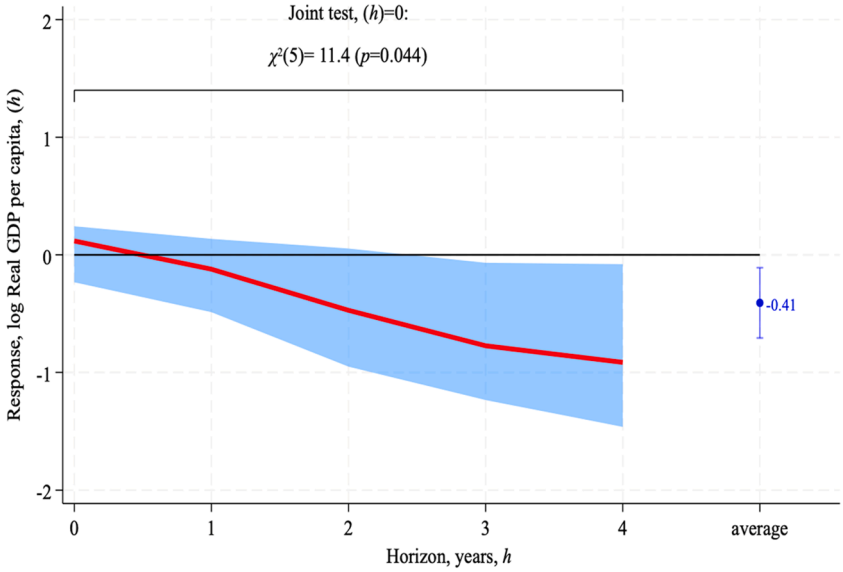
index to validate how uncertainty fluctuates the nexus between FC and economic growth in SSA. We distinguish between elevated and subdued uncertainty periods by referencing the 25th percentile threshold of the index's distribution. Specifically, observations with GPR and EPU values exceeding this threshold are classified as high-uncertainty periods, while those falling below are treated as low episodes.

Our sample includes 37 SSA nations from 1990 to 2021.[3] Our raw data is sourced from Müller et al. (2025) and the World Bank database, with 2015 US dollars as the benchmark.[4] We construct a balanced panel dataset by completing variables with minimal missing values through linear extrapolation. The GPR and EPU indices are extracted from Caldara and Iacoviello (2022) and the Economic Policy Uncertainty Index Website,[5] respectively. Due to data limitations specific to the region, we rely on the global GPR and EPU measures to evaluate how uncertainty conditions the relationship between FC and economic growth across SSA economies. Notably, macroeconomic indicators frequently display persistent directional movement over time, i.e., GDP. In time-series terminology, such behavior is typically characterized by a unit root, indicating that these variables are integrated of order one, or I(1). When expressed in logarithmic terms, their first differences offer a close approximation of percentage changes, capturing the dynamics of GDP growth (Jordà, 2023).

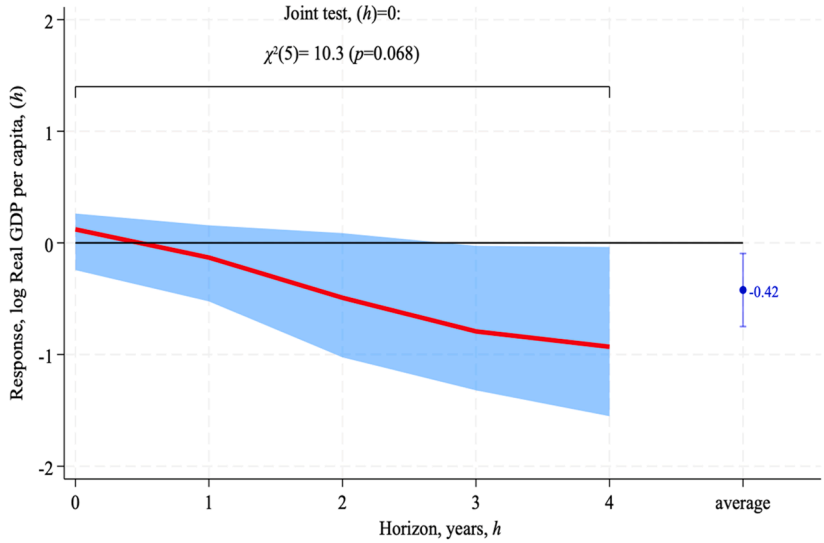
[3] Our sample covers the period 1990 to 2021, as consistent and reliable fiscal data (i.e., government spending and debt) are only available from 1990 onward for most SSA countries. Although some macro indicators extend beyond 2021, key fiscal variables are either missing or preliminary after that year. To ensure robustness, we limit the analysis to 1990-2021.

[4] All monetary values are expressed in constant 2015 U.S. dollars to adjust for inflation and maintain comparability across countries and over time, following common practice by the World Bank.

[5] See https://www.policyuncertainty.com/.



(a) Estimation based on one lag.



(b) Estimation based on three lags.

Fig. 2. Impact of fiscal consolidation on the real per capita GDP. *Notes*: Fig. 2 presents the results derived from an IV-LP framework (i.e., three lags), where the log of GDP per capita is the outcome variable, and FC shocks are the principal explanatory indicator. Standard errors are computed using clustering at the country level. The joint significance of coefficients across various forecast horizons h is assessed using a χ^2 test, with the corresponding p-value in each subplot indicating statistical relevance. The coefficients in Fig. 2 reflect the average dynamic response of GDP per capita to FC shocks over time.

3. Results

3.1. Fiscal consolidation versus economic growth

We present both baseline and refined impulse response trajectories generated via a state-dependent IV-LP framework to enable a robust examination. The refined estimates incorporate two key improvements: (1) all macroeconomic indicators are filtered using the Hodrick-Prescott (HP) method to isolate their cyclical components, thereby removing automatic fiscal responses and identifying discretionary effects more accurately; and (2) estimations are carried out via an instrumented local projection method, offering a more robust identification strategy compared to the standard LP approach adopted by Badru et al. (2025). Anticipating concerns about result sensitivity, we later assess robustness by varying the lag length in the projection horizon. This strategy allows us to ensure that our

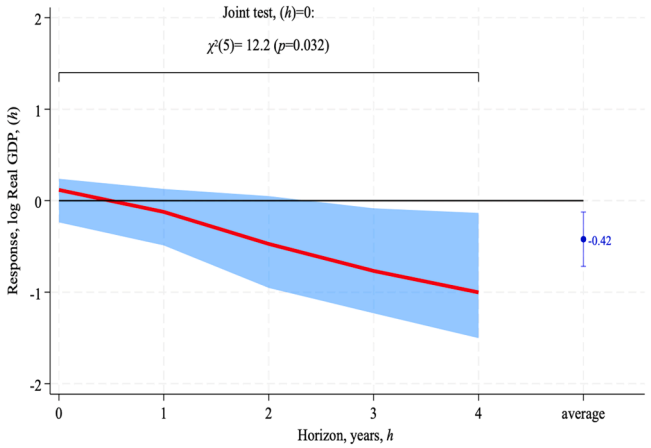


Fig. 3. Impact of fiscal consolidation on real GDP. *Notes*: Fig. 3 presents the results derived from an IV-LP framework (i.e., two lags), where the log of GDP is the outcome variable, and FC shocks are the principal explanatory indicator. Standard errors are computed using clustering at the country level. The joint significance of coefficients across various forecast horizons h is assessed using a χ^2 test, with the corresponding p-value in each subplot indicating statistical relevance. The coefficients in Fig. 3 reflect the average dynamic response of GDP to FC shocks over time.

findings are not unduly influenced by arbitrary lag specifications, providing additional credibility to the dynamic patterns we report.

Panels (a) and (b) of Fig. 1 depict outcomes under the narrative and adjusted scenarios, respectively. The divergence in results is stark – while the narrative approach suggests a positive response of economic output in SSA to FC shocks, with an accumulative response magnitude approximating 0.02, this finding closely echoes those reported in Badru et al. (2025), highlighting the role of action-based fiscal interventions in stimulating regional growth.

Following Guajardo et al. (2014), we recalibrate the narrative specification using instrumental variables. Specifically, Eq. (1) is estimated through 2SLS, wherein our constructed series of fiscal shocks serves as an instrument for the variation in the cyclically adjusted primary balance (CAPB). The first-stage regression links changes in the CAPB to the identified fiscal shocks; the second-stage regression examines how these instrumented CAPB changes affect measures of real economic performance.[6] This IV-LP approach directly addresses the endogeneity bias often present in fiscal-growth relationships.

After addressing potential endogeneity, the adjusted response trajectory in Fig. 1(b) reveals a markedly adverse cumulative effect, reaching −0.39. Moreover, the associated χ^2 test strongly rejects the hypothesis of uniform responses across time, indicating statistically significant heterogeneity in impulse responses. The estimated coefficients suggest that as discretionary fiscal tightening intensifies, the adverse impact on economic growth in SSA becomes progressively more pronounced over the forecast horizon.

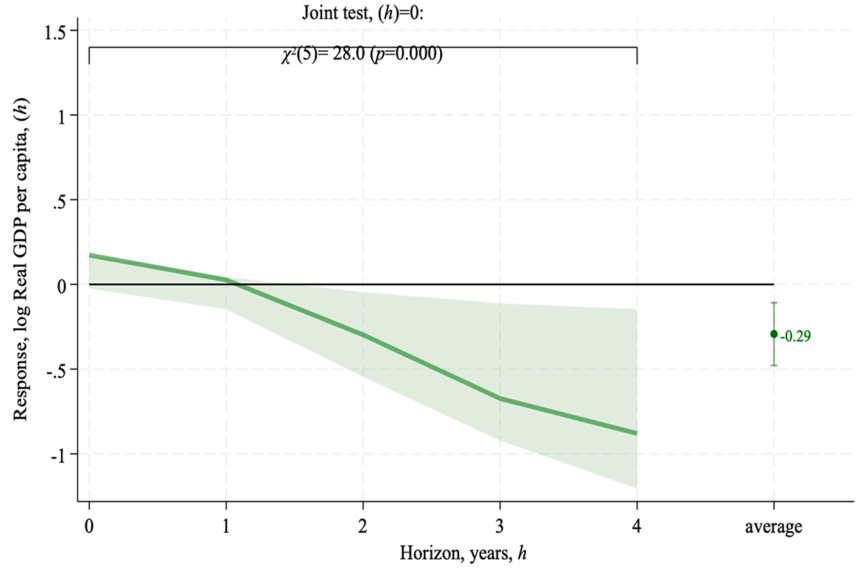
The stark contrast between the naïve narrative and the IV-adjusted impulse response estimates underscores the critical importance of addressing endogeneity in evaluating the macroeconomic effects of FC in SSA. The initial positive response in the narrative specification aligns with surface-level interpretations commonly found in action-based fiscal datasets, as echoed in Badru et al. (2025). However, this alignment may be misleading due to omitted variable bias or reverse causality; Ramey (2011) demonstrated that policy announcements often coincide with anticipated economic downturns, thereby inflating perceived fiscal multipliers when using narrative approaches alone.

Leveraging the IV-LP method corrects for potential simultaneity problem. Our finding resonates with the theoretical insights from Alesina et al. (2019), who argued that the macroeconomic consequences of austerity depend heavily on the composition and timing of fiscal adjustments. In resource-constrained and institutionally weaker economies like SSA, consolidation measures, especially those that reduce government investment, have contractionary effects due to their crowding-in limitations and lack of monetary offset mechanisms. Guajardo et al. (2014) completed that when fiscal shocks are identified through changes in CAPB rather than narrative measures, the resulting multipliers are more negative, particularly in economies with rigid exchange rate regimes or limited monetary autonomy – characteristics that typify many SSA countries.

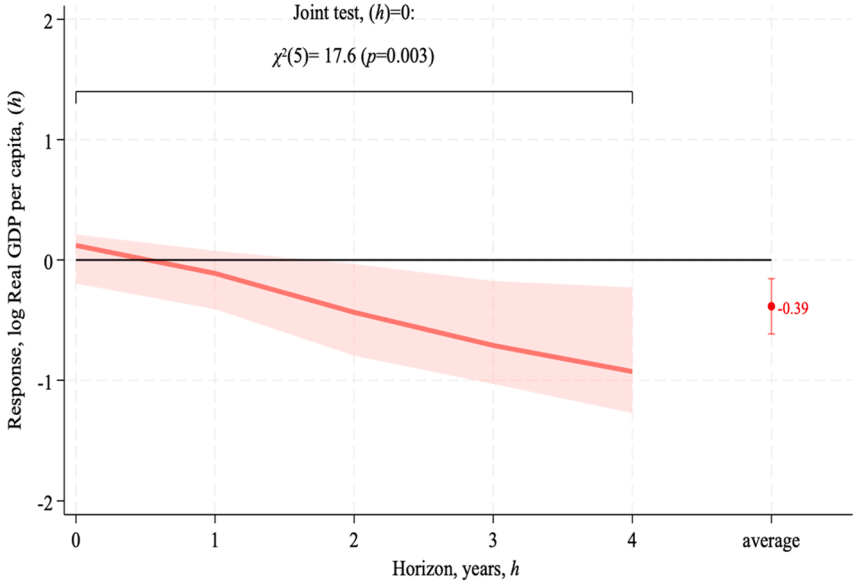
3.2. Robustness tests

To assess the extent to which the choice of lag structure influences the impact of financial development on economic growth, we re-estimate the model under two distinct lag configurations: a one (a) and three (b) lags, as plotted in Fig. 2. In both cases, the cumulative

[6] The *change in CAPB* isolates the exogenous variation in fiscal policy that is independent of short-run economic fluctuations. We regress economic growth on the *instrumented* values of CAPB changes in the subsequent stage – effectively using the narrative fiscal shocks as a valid instrument. Because these shocks are unrelated to contemporaneous growth conditions, they satisfy the exclusion restriction, ensuring that the only channel through which they affect growth is via changes in fiscal policy. Specifically, since the shocks are unrelated to contemporaneous economic trends, they are unlikely to influence growth through any channel other than fiscal policy itself.



(a) Boom episodes, i.e., $boom_{t-1} = 1$.



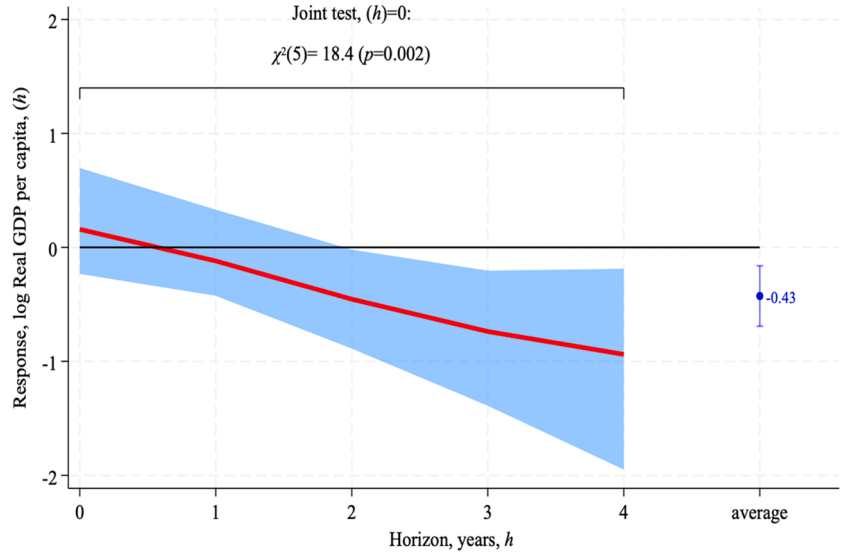
(b) Slump episodes, i.e., $slump_{t-1} = 1$.

Fig. 4. Impact of fiscal consolidation on real per capita GDP. *Notes*: Fig. 4 presents the results derived from an IV-LP framework (i.e., two lags) based on boom and slump episodes, where the log of GDP is the outcome variable, and FC shocks are the principal explanatory indicator. Standard errors are computed using clustering at the country level. The joint significance of coefficients across various forecast horizons h is assessed using a χ^2 test, with the corresponding p-value in each subplot indicating statistical relevance. The coefficients in Fig. 4 reflect the average dynamic response of GDP to FC shocks over time.

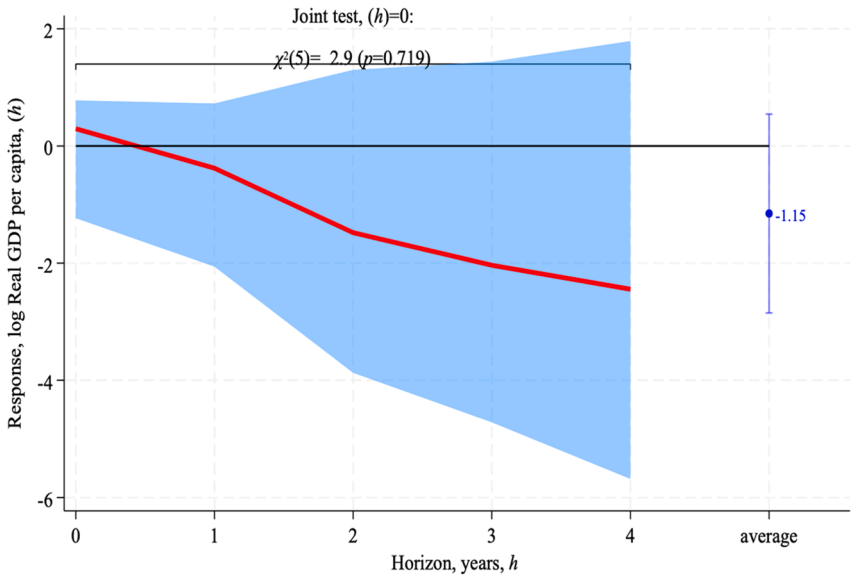
impulse response coefficients remain negative, registering values of −0.41 and −0.42, respectively. Moreover, the χ^2 test statistics continue to support the presence of response heterogeneity across different time horizons. These findings confirm that the estimated effects are robust to variations in lag length specification.

While per capita GDP offers a clearer picture of average living standards and individual economic well-being, aggregate GDP more effectively represents the scale effect, capturing expansionary dynamics and overall resource demands. Accordingly, we substitute per capita GDP with national GDP in our subsequent analysis, as illustrated in Fig. 3. Notably, this adjustment yields an identical cumulative impulse response, maintaining the estimated value of −0.42 previously observed with per capita GDP in Fig. 1.

To illustrate how state-dependent analysis might be operationalized, consider defining a binary variable D_{t-r} that captures the economic condition at $t - r$, where $r > 0$ denotes a lead time before FC shocks. If this economic condition is identified in advance and



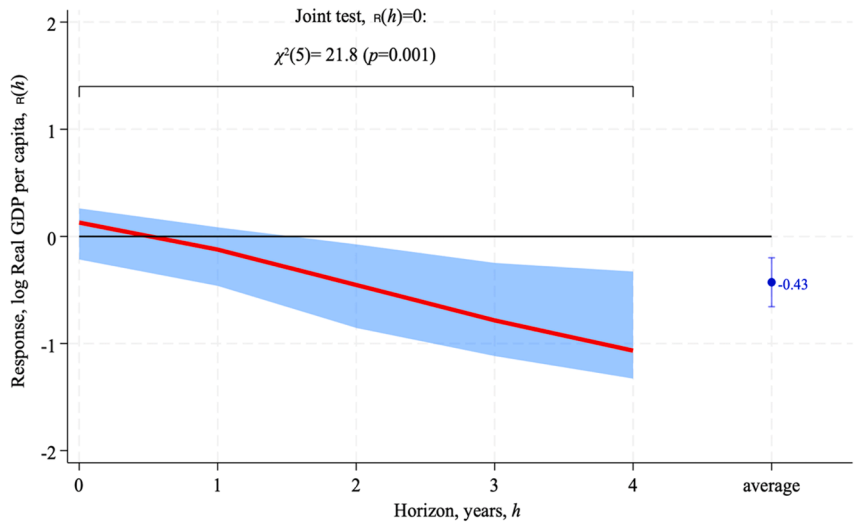
(a) High GPR scenario.



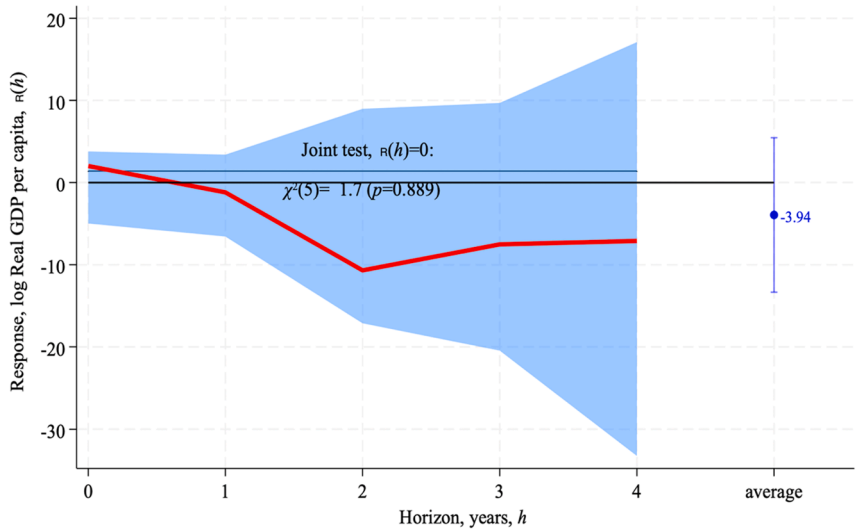
(b) Low GPR scenario.

Fig. 5. Impact of fiscal consolidation on real per capita GDP conditional on varying GPR levels. *Notes*: Fig. 5 presents the results derived from an IV-LP framework (i.e., two lags) based on different GPR levels, where the log of GDP is the outcome variable, and FC shocks are the principal explanatory indicator. Standard errors are computed using clustering at the country level. The joint significance of coefficients across various forecast horizons h is assessed using a χ^2 test, with the corresponding p-value in each subplot indicating statistical relevance. The coefficients in Fig. 5 reflect the average dynamic response of GDP to FC shocks over time.

remains uninfluenced by the policy action, as if assigned randomly, then this setup approximates an exogenous framework. LPs are designed to circumvent the need for simulated counterfactuals. By conditioning on the current state and relevant controls, LPs estimate the expected dynamic response of the economy, averaging across all conceivable future paths, including those involving subsequent regime changes. The variable D_{t-r} is a stratification indicator, assigned a value of one during economic expansions and zero during downturns. These phases are identified based on whether the cyclical deviation of output from its trend, obtained through HP filtering,



(a) High EPU scenario.



(b) Low EPU scenario.

Fig. 6. Impact of fiscal consolidation on real per capita GDP conditional on varying EPU levels. *Notes*: Fig. 6 presents the results derived from an IV-LP framework (i.e., two lags) based on different EPU levels, where the log of GDP is the outcome variable, and FC shocks are the principal explanatory indicator. Standard errors are computed using clustering at the country level. The joint significance of coefficients across various forecast horizons h is assessed using a χ^2 test, with the corresponding p-value in each subplot indicating statistical relevance. The coefficients in Fig. 6 reflect the average dynamic response of GDP to FC shocks over time.

is above or below zero. A crucial identifying assumption underpinning the analysis is that FC shocks occur independently of the prevailing state of the business cycle.[7] The individual slump response is subject to considerable uncertainty; however, greater clarity emerges upon examining the average effect, which amounts to −0.29 in booms and −0.39 in slumps, respectively. The finding implies that economic shocks have more severe effects during slumps than in booms. Nonetheless, our baseline estimates remain robust regardless of which methods are unpacked. Appendix B details the multiplier effects. Additional robustness tests are presented in Appendix C.

[7] We segment macroeconomic activity into expansionary and contractionary periods. This classification is based on the cyclical component extracted using the HP filter, where the smoothing parameter λ is set at 6.25, as Badru et al. (2025) suggested. Periods with a positive cyclical deviation are identified as expansions, while those with a negative deviation are labeled as recessions.

3.3. The impact of uncertainties

We examine two distinct indicators of uncertainty (i.e., GPR and EPU) as visualized in Figs. 5 and 6. These uncertainty levels are categorized based on whether their annual values exceed or fall below the 25th percentile of the sample distribution.[8] To investigate how economic growth responds to FC across varying uncertainty regimes, we estimate Eq. (2). The IV-LP framework reveals that, relative to the baseline estimates, the cumulative impulse response of FC becomes more pronounced under extreme conditions. While the estimated impact of FC is consistently larger during periods of low geopolitical and policy-related uncertainty compared to high-uncertainty contexts, these differences are not statistically significant in absolute terms. For instance, the cumulative response under low GPR conditions fails to reject the null hypothesis (p-value = 0.719). This suggests that although economic growth appears to react more strongly to FC shocks in stable environments, the adverse effects tend to gain statistical relevance when uncertainty is elevated.

From a theoretical perspective, periods of heightened geopolitical or economic uncertainty alter the decision-making behavior of firms and households. Specifically, uncertainty increases the option value of waiting, prompting economic agents to delay irreversible investments and consumption (Bloom, 2009). This precautionary behavior dampens the responsiveness of the economy to fiscal actions. In contrast, when uncertainty is low, agents are more likely to interpret FC as a credible and stable policy shift, leading to stronger and more immediate responses. Auerbach and Gorodnichenko (2012) showed that fiscal multipliers vary depending on the prevailing economic regime, with consolidation exerting a more contractionary effect in recessive or high-uncertainty environments. Also, Caggiano et al. (2015) contended that fiscal shocks have larger macroeconomic effects when policy credibility and confidence are high, conditions more likely to prevail in low-uncertainty periods. Nonetheless, our results align with Romer and Romer (2010) and Guajardo et al. (2014), who argued that the impact of fiscal adjustments depends crucially on the context in which they are implemented.

4. Conclusions

Employing the IV-LP estimation strategy, we find consistent evidence that fiscal consolidation efforts exert a contractionary effect on economic growth across Sub-Saharan African economies, independent of the specific adjustment instruments used. This finding diverges from the conclusions drawn by Badru et al. (2025) and Woldu and Szakálné Kanó (2023). Furthermore, our analysis underscores that under elevated global uncertainty – irrespective of the uncertainty metric adopted – the adverse impact of fiscal tightening on growth dynamics becomes notably more severe than periods characterized by lower uncertainty. Therefore, policymakers in SSA should avoid procyclical fiscal tightening during periods of global uncertainty. Instead, countercyclical fiscal frameworks, supported by international financial buffers and adaptive spending mechanisms, can mitigate economic contraction. Strengthening institutional resilience and enhancing transparency in public finance will also improve the effectiveness of fiscal policy under uncertainty.

While our analysis offers robust macro-level insights, it does not capture within-country heterogeneity in how FC impacts different economic sectors or population groups. Future research could incorporate micro-level or distributional data to explore the equity implications of fiscal tightening, especially among vulnerable households. Moreover, although various global uncertainty measures are used, they may not fully reflect how uncertainty is perceived or transmitted nationally. Developing country-specific or high-frequency uncertainty indicators would enhance the precision of policy responses under volatile global conditions.

CRediT authorship contribution statement

Miaomiao Tao: Formal analysis. **Jamel Saadaoui:** Formal analysis. **Emilson Silva:** Formal analysis.

Declaration of competing interest

The authors declare no conflict of interest

Acknowledgements

N/A.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.frl.2025.107773.

[8] Uncertainty indices often exhibit right-skewed distributions, meaning extreme spikes (i.e., geopolitical crises, sudden policy changes) are rare but impactful. The 25th percentile may represent a "moderate uncertainty" baseline, distinguishing between normal and high-uncertainty regimes.

Data availability

The authors do not have permission to share data.

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