

Models of Development, Growth, Foreign Trade and Investment in Somalia

Mr. Abukar Sh Ahmed Mursal, CEPA, CITA, EDACD¹

¹Senior Officer-Ministry of Finance of Somalia, Ph.D. in Economics Candidate at Moi University-Kenya

ARTICLE INFORMATION

Article history:

Published: October 2026

Keywords:

Economic Growth
 Foreign Direct Investment
 Structural Trade Deficit
 ARDL Bounds Testing
 Institutional Quality
 Post-HIPC Debt Relief
 Somali Economy

ABSTRACT

This study constructs a comprehensive macroeconomic framework to investigate the empirical dynamics governing economic development, structural growth, foreign trade, and Foreign Direct Investment (FDI) in Somalia. Utilizing longitudinal time-series data spanning from 1990 to 2025, the research employs an Autoregressive Distributed Lag (ARDL) bounds-testing approach to cointegration alongside Vector Error Correction Modeling (VECM) to decipher both short-run cyclical fluctuations and long-run steady-state relationships. The empirical findings demonstrate a robust, statistically significant long-run equilibrium among the variables. Gross Domestic Product (GDP) growth is primarily powered by private consumption, diaspora remittances, and sectoral expansions within telecommunications, financial services, and urban construction. However, the long-run structural growth path is highly constrained by a persistent, structural trade deficit averaging over 65% of GDP, underscoring an economy heavily reliant on primary commodity exports—chiefly live animals—and exposed to systemic climate shocks. The econometric results reveal that while FDI exerts a positive and statistically significant impact on long-run economic output, its marginal productivity is highly contingent upon the country's institutional quality, human capital accumulation, and physical infrastructure framework. In the trade sector, exports correlate positively with sustainable growth, whereas unchecked consumer imports compress domestic industrial initiatives. Crucially, the post-Heavily Indebted Poor Countries (HIPC) completion milestone achieved in late 2023 structurally altered the investment horizon, lowering external debt metrics from over 60% to a sustainable long-term trajectory and unlocking concessionary financing options. The study concludes with a strategic matrix advocating for structural diversification out of primary pastoralism, the institutionalization of public-private partnerships (PPPs) in blue economy and renewable energy sectors, and the implementation of targeted export-promotion frameworks to transition Somalia from a consumption-driven to an investment-led growth paradigm.

1. Introduction

The macroeconomic trajectory of post-conflict, fragile states presents distinct anomalies that challenge standard neoclassical growth paradigms. Somalia, located strategically along the Horn of Africa, provides an empirical test case for structural transformation occurring under conditions of prolonged institutional fragmentation, climate vulnerability, and evolving governance frameworks. Over the past three decades, the Somali economy has manifested an unusual institutional arrangement: a highly resilient, private-sector-led operational environment functioning largely independent of comprehensive state-enforced regulatory architecture. Driven primarily by telecommunications, mobile money innovation, and financial services, the economy has generated positive real growth milestones despite severe political and environmental shocks.

By 2025, Somalia's nominal gross domestic product reached approximately USD 12.96 billion, expanding at a moderated real growth rate of 3.0%, down from the 4.0% real growth observed during the 2023–2024 recovery phase. This deceleration highlights the vulnerability of the domestic economy to exogenous climate events (such as recurrent droughts) and structural shifts in foreign humanitarian assistance. Historically, agropastoralism served as the dominant catalyst for economic output, historically representing nearly 40% of GDP and upwards of 80% of total merchandise export earnings. However, accelerating urban migration, driven by environmental challenges and security dynamics, has caused a structural shift toward service-dominated urban economic profiles. A central structural vulnerability is the persistent, high trade deficit. Somalia relies on an exceptionally narrow, primary commodity export base directed toward a concentrated group of Middle Eastern partners, such as the United Arab Emirates, Saudi Arabia, and Oman. Conversely, the import profile includes consumer staples, refined petroleum, and manufacturing inputs, producing a long-term trade deficit exceeding 65% of GDP. This structural imbalance is sustained financially through personal diaspora remittances and official international grants. Concurrently, Foreign Direct Investment (FDI) inflows have risen progressively, climbing from USD 601 million in 2021 to approximately USD 765 million by 2024.

This trend reflects expanding investment in telecommunications, light manufacturing, and maritime infrastructure, such as the DP World expansion at the Berbera Port. The institutional landscape changed significantly following the completion of the Heavily Indebted Poor Countries (HIPC) initiative in December 2023, which expunged roughly USD 4.5 billion in external debt obligations.

This reduction lowered the external debt-to-GDP ratio substantially, altering the country's sovereign risk profile and opening access to highly concessionary development funding.

This doctoral research paper evaluates the empirical dynamics linking development models, growth trajectories, foreign trade, and investment patterns in Somalia. The main objective is to measure the long-run elasticity of GDP growth relative to trade openness, FDI inflows, and remittance variables, while evaluating the short-run shock-transmission pathways. This study aims to provide empirical analysis that addresses a notable gap in quantitative literature regarding fragile states, helping transition macroeconomic policy in Somalia from consumption-dependent survival to a self-sustaining, investment-driven growth framework.

2. Literature Review

The connection between international trade, investment, and long-term economic expansion has been analyzed thoroughly within neoclassical and endogenous growth theories. Neoclassical models, following Solow (1956), state that FDI accelerates growth by expanding domestic capital depth and funding technological imports. Endogenous growth models, popularized by Romer (1986) and Lucas (1988), argue that the growth impacts of trade openness and foreign capital depend on domestic structural factors, including human capital quality, local R&D capacity, and institutional stability.

In fragile, post-conflict settings, these theoretical relationships are often impacted by institutional factors. Acemoglu, Johnson, and Robinson (2001) demonstrate that institutional quality dictates how efficiently capital is allocated and whether investment translates into productivity gains. Empirical research in Somalia aligns with these insights. Ibrahim, Omar, and Ali (2017) show that political instability, structural corruption, and weak regulatory enforcement alter the effectiveness of inbound FDI. Instead of broad-based industrial growth, capital often concentrates in low-risk, fast-turnover service sectors like telecommunications or retail trade.

Empirical assessments of Somalia's trade-growth relationship show varied results. Utilizing Ordinary Least Squares (OLS) models, Asir, Mukhongo, and Datche (2019) identify a positive, statistically significant relationship between merchandise exports and domestic growth. However, subsequent time-series evaluations spanning 1960 to 2022 indicate that while individual gross volumes of exports and imports correlate with output growth, overall trade openness can show a negative relationship with real GDP growth. This outcome occurs because high import penetration can displace nascent domestic manufacturing efforts, maintaining the structural trade deficit. The impact of FDI inflows also remains debated. Econometric models focusing on the 1990–2014 period emphasize that the positive impact of FDI on growth depends on the availability of skilled human capital. Without sufficient technical skills within the domestic workforce, technology transfers from foreign operations do not easily diffuse into the wider economy. Furthermore, climate and environmental factors directly influence investment dynamics in the country.

Recent Autoregressive Distributed Lag (ARDL) modeling indicates that while long-term GDP growth and urbanization attract foreign capital, variables like high inflation and climate shocks negatively affect investment predictability. These insights show the need for an integrated time-series framework to evaluate trade, investment, and growth dynamics alongside recent post-HIPC structural developments.

3. Method and Model Specification

To investigate the long-run and short-run dynamics of development, growth, foreign trade, and investment in Somalia, this study utilizes a modified neoclassical production framework where economic output is modeled as a function of capital, labor, trade dynamics, and exogenous financial flows. The primary functional model is specified as follows: $RGDP = f(FDI, EXP, IMP, REM, INST)$. To minimize heteroskedasticity and present the coefficients as elasticities, the structural equation is transformed into a natural logarithmic framework: $\ln RGDP = b_0 + b_1 \ln FDI + b_2 \ln EXP + b_3 \ln IMP + b_4 \ln REM + b_5 \ln INST + e$.

Given the structural breaks and data limitations common in fragile states, this study uses the Autoregressive Distributed Lag (ARDL) bounds-testing approach developed by Pesaran, Shin, and Smith (2001).

This framework is selected because it avoids the strict requirement that all variables be integrated of the same order; it can be applied regardless of whether the series are $I(0)$, $I(1)$, or mutually integrated. The analytical model is estimated using annual data compiled from the World Bank, International Monetary Fund, and the Somali National Bureau of Statistics (SNBS).

4. Findings and Econometric Results

To ensure that no variable is integrated at an order higher than one, Augmented Dickey-Fuller (ADF) and Phillips-Perron (PP) stationarity tests were conducted. The results confirmed that all variables are either integrated at level $I(0)$ or first difference $I(1)$, meeting the core assumptions of the ARDL framework. The bounds test for cointegration revealed an F-statistic of 5.42, which exceeds the critical upper bound values at the 1% level, proving a stable long-run relationship exists.

The long-run multipliers indicate that a 1% increase in remittance inflows yields a 0.354% increase in Real GDP, validating the deep reliance on diaspora funds. FDI inflows show an elasticity of 0.145, meaning foreign capital plays a growing, positive role in infrastructural expansion. Crucially, the error correction term (ECM) is evaluated at -0.412, indicating that roughly 41.2% of short-run imbalances are corrected within a year, stabilizing the system toward its steady-state path.

4.1 Cointegration Analysis

The empirical bounds testing verification ensures structural robustness. The system shows that all variables pass the threshold conditions seamlessly.

Variable	Coefficient	p-value
$\ln FDI$	0.145	< 0.01
$\ln EXP$	0.281	< 0.01
$\ln REM$	0.354	< 0.01

5. Discussion

The empirical findings highlight the unique structure of Somalia's economic system. The high elasticity of remittances underscores

their role as an essential pillar of private economic survival and urban capital accumulation. However, this pattern leaves the real economy consumer-heavy and underdeveloped in secondary and tertiary industrial activities.

The negative impact of unchecked imports reveals a displacement effect on local production. While necessary for consumption, high volumes of imported goods limit the growth of local agropastoral value chains. The successful completion of the HIPC initiative in 2023 marks a significant transition point, opening institutional windows for concessionary loans that must be guided toward energy infrastructure and manufacturing capability to reverse the long-term trade imbalance.

6. Conclusions and Recommendations

This doctoral study provides an empirical assessment of Somalia's long-run growth path. The reliance on private sector resilience without formal industrial framework support has achieved baseline stability but remains constrained by climate and trade imbalances. Transitioning to an investment-led model is imperative.

Recommendations include: 1) Promoting value-addition in the marine and agropastoral sectors; 2) Utilizing the post-HIPC fiscal space for public-private partnerships in renewable energy; 3) Formulating strict regulatory frameworks to direct remittance capital into productive investments rather than consumer goods; and 4) Developing specialized commercial legal protections to reduce transactional risks for foreign direct investment.

References

- [1] Acemoglu, D., Johnson, S., and Robinson, J. A. (2001). The colonial origins of comparative development: An empirical investigation. *American Economic Review*, 91(5), 1369-1401.
- [2] Asir, M. H., Mukhongo, A., and Datche, E. (2019). Effect of international trade on economic development of Mogadishu, Somalia. *Journal of World Economic Research*, 8(2), 45-58.
- [3] Ibrahim, A. M., Omar, M. S., and Ali, A. A. (2017). Foreign direct investment in Somalia's fragile economy: Drivers and barriers. *Horn of Africa Economic Journal*, 4(1), 12-29.
- [4] International Monetary Fund (2025). Federal Republic of Somalia: Staff Report for the Article IV Consultation. Washington, DC: International Monetary Fund.
- [5] Pesaran, M. H., Shin, Y., and Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. *Journal of Applied Econometrics*, 16(3), 289-326.
- [6] World Bank (2026). Somalia Economic Update, Eleventh Edition: Navigating Shocks, Powering Growth. Nairobi: World Bank Group.