



Dept of Economics & IDPR, AAU,

# Policy Brief

**Policy Brief II: Fundamental and Proximate Drivers  
of Public Debt in Ethiopia (1980-2023)**

## Policy Brief II

# Fundamental and Proximate Drivers of Public Debt in Ethiopia (1980-2023)

August 2023

By **Alemayehu Geda (PhD, Professor)**

**Addis Yimer (PhD, Assist. Professor)**

**Acknowledgement:** This paper is the outcome of a project on “Promoting a Pandemic Recovery: Evidence to Support Managing the Growing Debt Crisis,” supported by the International Development Research Center (IDRC) in Ottawa, Canada, under grant number 109742-001. It is carried out by researchers at the Institute of Development Policy Research (IDPR) and the Department of Economics of Addis Ababa University (AAU). We are grateful to the IDRC for its generous financial support of this study. We are also thankful to Arjan de Haan (IDRC) and Carolina Quintana (Red Sudamericana de Economía Aplicada/Red Sur, Montevideo, Uruguay) for their assistance with the administrative aspects of the project. However, any errors are our own. The views expressed in this study are solely ours and do not represent the views of IDRC, Red Sur, or the institutions with which we are affiliated.

Ethiopia attained respectable growth in the last two decades. However, this is achieved at the cost of severe macroeconomic instability, including debt accumulation. This study investigates the fundamental and proximate drivers of public debt in Ethiopia during this time, using annual data covering the period 1980–2021. Based on the Autoregressive Distributed Lag (ARDL) modelling approach and a data exploration-based analysis, the trade deficit, terms of trade deterioration, fiscal deficit, and the saving-investment gap are found to be the primary drivers of public debt in Ethiopia. In addition, growth has been found to ease the debt problem in Ethiopia. The study concludes the Ethiopian debt problem is essentially a trade and development strategy problem that has a structural nature. Thus, a sustained way out of such debt problems, especially the structural insolvency issue, is to direct development finance to address the

structural problems that led to indebtedness in the first place. More specifically, it requires diversification and growth of exports at a higher pace, increasing agricultural productivity (to ease the cost of domestic debt), and bringing about structural transformation through import substitution. In addition, addressing the debt problem requires improving government institutions and building more skilled human capital to manage the macro economy, which includes debt management. With these general findings of the study, we have expounded these major findings and their implications for policy in this “Policy Brief.”

The study’s major and general finding is that both *proximate* (fiscal and trade deficits, liquidity problem) and *fundamental* (structural trade deficit, feeble exports, structural import

dependency, terms of trade deterioration, high saving-investment gap and geopolitics) causes of indebtedness are important in explaining the evolution of debt in Ethiopia. We found concrete and measured effects of each factor in our empirical model. Moreover, the result also generally shows that the fundamental causes are more important (in terms of potency, too) than the proximate causes (such as fiscal deficit and inflation) in explaining Ethiopian debt, especially in the long run.

Although all factors considered were found to be important drivers of indebtedness in Ethiopia, the impact of the trade deficit ranks top. This is followed by the effects of terms of trade deterioration, the domestic saving-investment gap, and the fiscal deficit, especially government expenditure. More specifically, as the top driver of indebtedness, a 1% increase in the trade deficit (as a percentage of GDP) is found to lead to a growth of public debt of 5% in the long run. This underscores the importance of focusing on export growth and diversification as well as aggressive import substitution as policy directions to address the root cause of the debt problem. Related to the trade deficit, terms of trade deterioration (another structural problem) is also found to aggravate indebtedness – underscoring the importance of diversification. In addition, rationalizing government expenditure and prudent management of public spending and domestic resource mobilization (as can be inferred from the saving-investment gap) help address the debt problem. It is compelling that all these *structural* challenges need an articulated development strategy to manage.

One of the most important findings of this study is that the Ethiopian debt problem is essentially a trade problem. The economy is characterized by a structural trade deficit that makes it vulnerable to indebtedness. That is, this trade deficit has led to a persistent shortage of foreign exchange, which is hunting the country today and propelling it to more external indebtedness year after year. The trade deficit is found to be the most potent (has the highest elasticity) in its effect on indebtedness. One of the implications of this finding is that the government's growth strategy needs to investigate the nature and growth of exports and imports to narrow the structural trade deficit and address one of the root causes of indebtedness.

Given its significant impact, using a simple model, we have attempted to simulate the conditions needed to realize a substantial trade deficit reduction in the medium term (next five years). This aims to summarise the impact of these fundamental causes of indebtedness and the importance of a comprehensive approach to address them. Furthermore, the analysis focused on the trade deficit, mindful of its direct impact on foreign exchange availability, which is a major constraint to growth in Ethiopia. That is, more than the domestic saving-investment gap (saving less investment), the foreign exchange gap (exports less imports) is the primary binding constraint of growth today. Thus, we considered narrowing the internal gap (domestic saving-investment gap) to be less effective (or secondary) since such a policy can stifle growth with a detrimental welfare effect.

It does not directly address the structural trade deficit problem, either.

Therefore, the best policy direction that can be taken regarding the internal gap is to direct investment towards addressing both the structural trade deficit problems and the structural supply problems of agriculture, especially food supply. The latter is crucial to lessen the inflationary effect of domestic debt accumulation, which is invariably created through the monetization of deficits.

This structural trade deficit has persisted for at least two decades. The conflict in Northern Ethiopia exacerbates the foreign exchange problem, primarily through its effect on the inflow of debt-creating flows (i.e., aid, as the bulk of them are obtained on concessional terms) from IFIs (WB/IMF in particular) and, perhaps, through the build-up of unknown military-related debt. Thus, dependency on debt-creating flows (aid) is a major problem related to the structural trade deficit problem that needs a strategic policy direction.

The sure way out of this challenge is to reduce the trade deficit by at least half in the medium to long term (next five years).<sup>1</sup> This could be done only by a very high merchandise export growth and aggressive import substitution, which Weeks (2003) called it the “export-based stabilization” policy that Vietnam successfully used when in a similar predicament to that of Ethiopia (Alemayehu and Weeks, 2020). The

trade deficit in the last decade averaged 14.5% of GDP per annum (2013–2022), although it declined to about 12% over the previous five years (2017–2022). Different scenarios to reduce the 12% (of GDP) trade deficit by half are presented in Figure 1 below. These scenarios are based on an assumed average annual GDP growth rate of 7% and a limit to the export-to-GDP ratio of 50% (taken from the African and other LDC growth history).

The scenarios are, then, based on different assumptions about the extent of import substitution and export growth. Figure 1 shows that in the **first policy scenario**, if a realistic import-to-GDP growth rate ratio of two (imports grow at twice the GDP growth rate) is assumed, it will take 6.5 years and average annual export growth of 35% to reduce the current trade deficit by half (the blue line, “trade deficit\_1”).

Since 35% export growth is not feasible given the average export growth rate of 3.5% in the last decade and the recent highest growth of 20% registered in 2020/21, in the **second policy scenario**, this export growth rate is assumed to be 28%. However, this needs an aggressive import substitution or import cut (that restricts the growth of imports to 1.5 times GDP growth) to reduce the trade deficit by half in the same period of 6.5 years (the orange line, “trade deficit-2”).

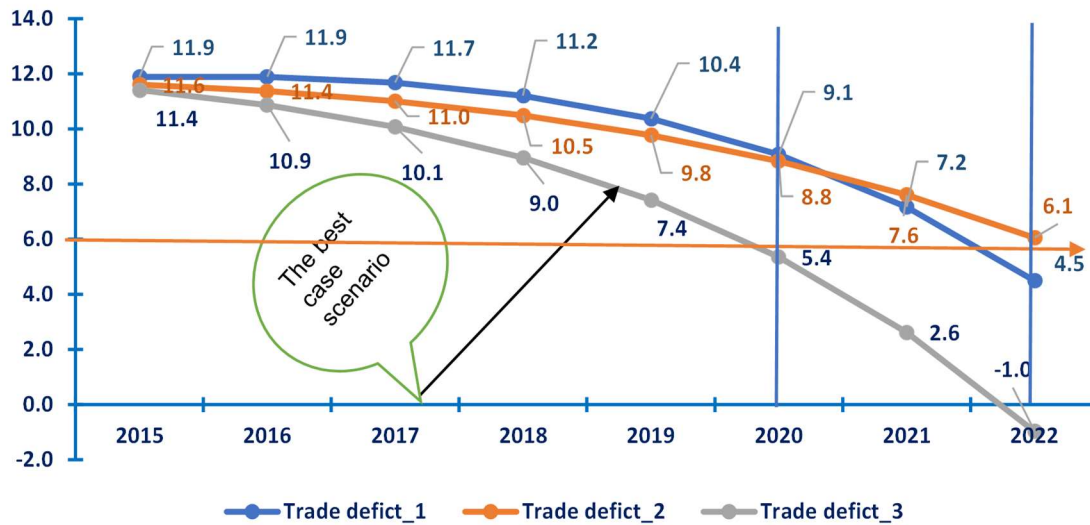
<sup>1</sup> This, however, assumes the trade balance on exports and imports of services remains in equilibrium as it has been for the last ten years or gets better. In a way, boosting service exports and minimizing service imports is the other policy direction worth examining but not

covered here). The recent government intervention in the autonomy of Ethiopian Airline management, which generates most of the service export earnings, is a negative development signal in this regard.

The 1.5 import-to-GDP growth rate ratio is closer to the rate registered in 2022 and the

rate estimated using an import-demand model for the study – and, hence, is feasible.

**Figure 1** Policy scenarios for reducing the current trade deficit by half (Ethiopian Calendar, 2015=2022/23, trade deficit as % GDP, Y-axis)



However, since 85% of Ethiopian imports are essential or strategic imports that are not amenable to reduction -have inelastic demand - (fuel alone accounting for about 20% of imports) without high welfare costs and lower economic growth, the scope for import cuts is limited. Thus, the best policy option is to combine a high export growth rate with an aggressive import substitution strategy and policy.

Thus, the final, **third, and best-case scenario** shown in Figure 1 is simultaneously a policy of aggressive exporting and import substitution (dark grey line, “trade deficit\_3”). Depicting this scenario with an annual export growth rate of 35% and an import growth rate of 1.5 times the GDP growth rate, the current trade deficit could be reduced by half in about five years or less (by 2027/28 or 2020 Ethiopian Calendar). With the previous two scenarios, by 2027/28 (2020 E.C), the trade deficit can decline only to

about 9.1% of GDP. In contrast, this best scenario results in a trade deficit of 5.4% of GDP in 2027/28, a reasonable trade deficit level usually suggested in the literature. Such a strategy would reduce the pressure on structural indebtedness (the medium-term solvency problem) and allow a healthy, sustainable debt level. It also spurs growth by relieving the foreign exchange constraint to growth, which ameliorates indebtedness, according to our empirical finding of a negative association between debt and growth.

Are these scenarios feasible? Export growth in the last ten years was erratic, with an average annual rate of 3.5%. The highest export growth rate attained recently was 20% in 2020/21. Thus, even assuming this highest rate to hold (which is unlikely, given the trend noted),

and also, we can restrict the growth of imports to 1.5 times that of GDP growth (import substations of about USD one billion per annum); the trade deficit will not be reduced by half in 14 years from now. This means the shortage of foreign exchange and the resulting persistent pressure for further indebtedness will continue for many years to come. This underscores how critical it is to aggressively work on both exports and import substitution as a matter of urgency to ease the country's foreign exchange problem and vulnerability to indebtedness.

However, addressing such fundamental drivers of debt through this strategy requires rationalizing the current short-term debt problem – the liquidity problem – through debt restructuring or cancellation first. It also needs more concessional loans to address the short-term liquidity problem and invest in solving the long-run structural issues related to the solvency problem of the debt noted. Paradoxically, the country needs more debt to get out of its debt problem.

It also needs proper fiscal and debt management and institutional capacity building, which are discussed in detail in the companion paper (Alemayehu & Getnet, 2023). The major policy implications and related capacity-building needed to address the debt problem include:

- a) The major policy implication of the study is to underscore the importance of revisiting the country's growth strategy to focus on exporting,

divarication and import substitution as an exit strategy from structural indebtedness and the dependency of growth on debt-creating flows/aid.

- b) There is a need to create the capacity to realize (a) as well as the capacity to carry out proper GDP (as well as export) growth forecasting both to draw its implications for indebtedness as well as to gauge the debt-carrying and debt-servicing capacity of the economy and tune policy accordingly.
- c) There is a need to build capacity to analyze the consequence of debt and debt-servicing on growth and macroeconomic stability (inflation, foreign exchange availability, exchange rate volatility, fiscal deficit, etc.). This could be done best using a comprehensive economy-wide macroeconomic model and by training government experts in its use.
- d) Improving (and establishing new ones) the institutional and legal framework for contracting, approval by the parliament and managing debt (see Alemayehu & Getnet, 2023 for detail) is also needed.
- e) Given fiscal dominance in Ethiopia, prudent fiscal management is more crucial than monetary policy, as monetary policy is generally accommodative. Thus, fiscal policy is central to maintain a stable macroeconomy and sustainable debt than monetary policy.