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Analysis of Sovereign Debt in Ghana

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Abstract

Ghana's recent sovereign debt crisis has re-ignited concerns about fiscal sustainability, macroeconomic stability, and long-term development prospects. With a debt-to-GDP ratio reaching 92.38 percent in 2022 and more than half of government revenue allocated to debt servicing, public investment has contracted sharply, deepening poverty and widening inequalities. This exploratory review examines the structural, political, and institutional factors underpinning the crisis. It synthesises existing literature and secondary data to highlight how persistent election-related fiscal overruns, weak domestic revenue mobilisation, and dependence on volatile commodity exports interact with institutional weaknesses, corruption vulnerabilities, and chronic currency depreciation to generate recurrent fiscal distress. The paper further reviews proposed policy responses in the scholarship and practice, including digitalised revenue collection, progressive tax reforms, economic diversification into value-added agriculture and renewable energy, and innovative debt strategies such as debt-for-climate swaps. Particular emphasis is placed on the role of improved fiscal governance, transparency, and accountability in restoring policy credibility. To broaden the analytical lens, the study advances an exploratory Dual Dependency Framework, integrating insights on international financial exposure, domestic political cycles, and climate-debt interactions. The framework offers a holistic perspective to guide future research and policy debates on managing sovereign debt crises in Ghana and comparable emerging economies.

Keywords: *Sovereign debt, Ghana, fiscal sustainability, governance, economic diversification, debt management*

1. Introduction

Sovereign debt remains a double-edged sword in emerging economies, as it is essential for financing development shortfalls yet capable of causing deep macroeconomic instability when mismanaged. Ghana's debt trajectory exemplifies this paradox, reflecting the persistent tension between fiscal prudence and development financing that continues to challenge many countries in Sub-Saharan Africa. Although debt accumulation episodes date back to post-independence periods, the proximate causes lie in what transpired after the early 2000s.

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Following the Highly Indebted Poor Countries (HIPC) and Multilateral Debt Relief Initiatives (MDRI) in the early 2000s, Ghana experienced a reprieve from debt sustainability. The relief efforts reduced the external debt burden and created fiscal space for investment in infrastructure and social welfare programs. However, the relief gains did not last long. Rising public expenditure, low domestic revenue mobilization, and continued dependence on primary commodities such as gold, cocoa, and crude oil contributed to repeated debt accumulation. Budgetary slippages in election years, massive infrastructure projects financed by Eurobonds, and increasing public-sector pay bills further strained the fiscal position. Consequently, the debt-GDP ratio increased from approximately 26.22% in 2006 to 50.14% in 2014, and later to 92.38% in 2022 (IMF, 2024; Ministry of Finance, 2022).

The rapid escalation of sovereign debt has been accompanied by severe fiscal stress. More than half of government revenue is now devoted to debt servicing, crowding out essential expenditures on health, education, and infrastructure (UNDP, 2023). The depreciation of the Ghanaian cedi by 54.2% in 2022 (Bank of Ghana, 2022a) further increased the cost of servicing external debt in the domestic currency and heightened fiscal pressure. These developments have exposed the weakness of Ghana's macroeconomic framework and the limits of its fiscal governance systems.

Underpinning the crisis lie enduring structural and institutional weaknesses. Persistent budget deficits, such as the 17.44% in the 2020 election year (Bank of Ghana, 2022), are intrinsically tied to political cycles as well as weak controls over spending. The country's tax-to-GDP ratio of 13.8% (Ministry of Finance, 2024), below the regional average, reflects poor domestic resource mobilization capacity. State-owned enterprise inefficiency, energy sector arrears, and unbudgeted obligations have contributed to fiscal strains. Governance lapses, corruption, and the absence of sound fiscal management have eroded investor and public confidence and undermined trust, causing debt to be a chronic rather than an episodic phenomenon.

These domestic vulnerabilities have been reinforced by external shocks. The COVID-19 pandemic triggered revenue shortfalls and emergency spending; global financial tightening raised borrowing costs; and commodity price volatility drained export revenues. With 55.3% of the total debt in Ghana being externally financed, the economy remains highly vulnerable to exchange-rate movements and foreign liquidity conditions (Ministry of Finance, 2022). Altogether, these domestic and foreign pressures have contributed to a sovereign debt crisis that represents a serious threat to the nation's economic recovery and long-term development prospects.

Despite a significant body of literature on debt sustainability in developing economies, relatively few studies have employed an integrated macroeconomic, governance, and political economy lens to examine Ghana's debt crisis. Existing research often emphasizes debt ratios and fiscal aggregates while overlooking how institutional quality, external dependencies, and electoral incentives jointly shape debt outcomes. Consequently, a gap remains in understanding how these factors collectively influence Ghana's recurring fiscal distress and what innovative policy mechanisms could ensure durable debt sustainability. This paper bridges that gap by examining how these interacting variables influence Ghana's chronic debt distress and proposing new ways of achieving sustainable fiscal sustainability.

In this context, this paper examines Ghana's sovereign debt crisis by addressing three interconnected questions. (1) How do macroeconomic imbalances, governance inefficiencies, and political economy factors interact to shape Ghana's debt dynamics? (2) What are the socioeconomic and political implications of Ghana's debt distress on its broader development trajectory? (3) What innovative and sustainable policy interventions can effectively address the crisis while ensuring social equity and long-term fiscal stability?

The study suggests a Dual Dependency Framework, which conceptualizes Ghana's debt distress as the outcome of two related dependencies: external financial exposure and domestic political-cycle pressures, with climate-related shocks acting as an emerging amplifier of fiscal risk. The framework provides an integrated understanding of debt sustainability in emerging markets by combining quantitative data with institutional and governance insights. Furthermore, the paper adds to the policy discussion by proposing realistic and forward-looking interventions such as digital tax mobilization, debt-for-climate swaps, and the establishment of an independent fiscal council in order to attain fiscal discipline and inclusive growth.

The rest of the paper is structured as follows: Section 2 reviews the relevant literature on sovereign debt trends in Ghana. Section 3 discusses the methodology and data sources. Section 4 provides an in-depth analysis of Ghana's economic trajectory and debt trends. Section 5 examines the drivers of sovereign debt accumulation. Section 6 explores the socioeconomic and political implications of high debt distress. Section 7 proposes innovative policy interventions, and Section 8 concludes with key recommendations for sustainable debt management.

2. Literature Review

A complex interaction of historical, economic, and policy-related variables has led to the current position, as the literature on Ghana's sovereign debt issue demonstrates. The literature highlights how weak institutions, election-driven fiscal cycles, external reliance, and climate vulnerabilities interact to drive the country into recurring debt distress. Existing theories and empirical studies provide useful insights, but they also leave significant gaps. This review synthesizes both strands of research and introduces a more comprehensive framework for understanding Ghana's debt dynamics.

Debt theories have been central to debates about sustainability, yet their limitations manifest in the Ghanaian scenario. The Debt Sustainability Framework (DSF), extensively used by the IMF and World Bank, assumes fiscal stability and frequent reporting. Ghana's fiscal outcomes have been far more volatile in practice. The deficit ballooned to 17.4% of GDP in 2020, an election year marked by overspending (Ministry of Finance, 2022). The same trends have been repeated in past elections, consistent with political budget cycle theory (Nordhaus, 1975; Shi & Svensson, 2006). Such volatility undermines DSF predictions, which rarely account for electoral reasons for fiscal deficits.

Debt Overhang Theory offers a different perspective, arguing that high debt discourages investment as firms anticipate future taxation and higher interest rates (Krugman, 1988; Borensztein, 1990). Ghana's recent past attests to this, with formal-sector SMEs facing lending rates of up to 33.75% in 2023 (Bank of Ghana, 2024). The effect, however, is muted in the informal sector, where most Ghanaians operate outside the reach of formal credit markets (UNDP, 2023b). This illustrates the restriction of using debt overhang models on economies where informality dominates employment.

The Intertemporal Budget Constraint (IBC) model frames sustainability as balancing revenues and expenditures over time (Bohn, 1998; Wyplosz, 2007). Although useful in theory, it overlooks the institutional weaknesses and political pressures that lead to overspending in Ghana. A case in point is the decrease in education spending from 3.7% of

GDP in 2019 to 2.9% in 2022 (World Bank, 2024; UNICEF, 2024). This fall was not only due to revenue shortfalls but also shifts in political priorities. The IBC design also fails to capture external shocks such as climate risks, which are becoming increasingly important. Floods and droughts reduce revenues, increase unforeseen expenditure, and require greater borrowing, creating climate–debt feedback loops (IMF, 2024c).

Empirical evidence confirms these theoretical shortcomings. Ghana's debt-to-GDP ratio reached 92.38% in 2022, with more than half of government revenues being used to service debt (IMF, 2024; Ministry of Finance, 2023). Exchange rate shocks exacerbated the crisis because the cedi had depreciated by 54.2% in 2022 alone (Bank of Ghana, 2023). This fall is comparable to that in Sierra Leone and Zambia, both of which faced severe distress or default (IMF, 2023; IGC, 2023). Fiscal indiscipline has driven these outcomes. Ghana's deficit surged to 17.44% of GDP during the 2020 election year, echoing Zambia's reckless overspending before its 2021 default (Ministry of Finance, 2022).

Structural inefficiencies compound the problem. Ghana's energy sector arrears mounted to US$2.1 billion as of 2023, largely due to rigid "take-or-pay" contracts (ACEP, 2024). This mirrors Pakistan's "circular debt" challenge, highlighting how weak contract governance creates persistent fiscal risks. Social consequences of such imbalances have been catastrophic. Education spending fell to 2.9% of GDP in 2022, lower than Sri Lanka's 3.4% during its default (UNESCO, 2024). Rising inflation and social protection cuts pushed 850,000 more Ghanaians into poverty between 2020 and 2022 (World Bank, 2023). High interest rates also limited SME lending, limiting job creation (Bank of Ghana, 2023).

Ghana's debt structure also adds to its vulnerabilities. Eurobonds accounted for 23–24% of GDP and over half of external debt as of the end of 2022 (Ministry of Finance, 2023; Development Reimagined, 2024). Over-reliance on commercial markets has exposed the country to volatility in investor confidence and rising world interest rates. Policy interventions have brought only short-lived relief. The Domestic Debt Exchange Programme of 2023 achieved an 85% participation rate but burdened local pension schemes with monumental losses (Appiah et al., 2024; Fitch Ratings, 2023; Ministry of Finance, 2023a). The IMF (2024) has cautioned that without significant revenue reforms, such gains will be temporary.

Global comparisons highlight both common risks and Ghana's specific vulnerabilities. Zambia's faster reforms under the G20 Common Framework and Sri Lanka's high dependence on foreign infrastructure borrowing are contrasted with Ghana's dual exposure to Eurobonds and domestic arrears. These indicate that Ghana's debt crisis is not just an effect of international shocks but also of inherent domestic vulnerabilities. Collectively, the literature exposes several gaps. The DSF assumes stability and underestimates political cycles. Debt Overhang Theory is unable to account for economies dominated by informality. The IBC overlooks weak institutions and underestimates climate pressures. These gaps limit their use in environments like Ghana.

To address these gaps, the study proposes a Dual Dependency Framework. It is grounded in three interrelated dimensions. First, Ghana's excessive dependence on the international financial markets exposes it to refinancing risks, rollover pressures, and reversals of suddenly flowing funds. Heavy Eurobond exposure, which stood at more than 23% of GDP in 2022, illustrates this dependence. Second, domestic political business cycles create fiscal volatility. Election years consistently induce sharp increases in deficits, as seen in 2020 when the budget deficit reached 17.44% of GDP. Third, climate shocks increase debt risks. Droughts, floods, and related disasters restrict revenues and force new borrowing. Floods in Northern, Volta, Greater Accra, and other regions of Ghana in 2023 caused estimated damages of $150 million, prompting additional emergency financing (IMF, 2024c; IFRC, 2023; NADMO, 2023).

By combining these factors, the Dual Dependency Framework provides a more realistic framework for assessing Ghana's debt sustainability. It captures the interplay between external markets, political cycles, and climate risks that conventional models cannot. More broadly, it has implications for other politically unstable and climate-vulnerable economies with similar debt problems.

3. Methodology

The study uses a mixed-methods analytic approach to examine Ghana's sovereign debt dynamics, integrating quantitative macroeconomic analysis with qualitative institutional analysis. The empirical examination relies on descriptive and analytical approaches to capture the numerical trends in Ghana's debt profile and the intrinsic structural determinants of fiscal vulnerability. The analysis is based on secondary data for the period 2000 to 2022, sourced from the Bank of Ghana, the Ministry of Finance, the International Monetary Fund (IMF) World Economic Outlook and Debt Sustainability Analysis (DSA) reports, World Bank World Development Indicators, and the United Nations Conference on Trade and Development.

Three main analytical steps were applied in the research: Application of the Theoretical Framework. The Debt Sustainability Framework (DSF), Debt Overhang Theory, and Intertemporal Budget Constraint (IBC) model are analyzed to establish their usability and limitations in explaining Ghana's debt accumulation trends. Also, we employ Quantitative Debt Sustainability and Trend analysis by drawing on IMF–World Bank thresholds and time-series data. The analysis evaluates Ghana's liquidity and solvency indicators (debt-to-GDP ratio, present value of debt, and debt service-to-revenue ratio). Descriptive trend analysis is employed to examine principal debt indicators over time, highlighting key turning points related to election cycles, commodity price shocks, and climate events. Finally, Qualitative Political Economy Analysis and Comparative Study were employed. Documentary analysis, policy review, and IMF program documents are conducted to uncover governance inefficiencies, electoral budget cycles, and structural vulnerabilities. Ghana's debt experience is then compared with several developing countries, such as Zambia, Sri Lanka, and Pakistan, to determine similarities, divergences, and transferable policy lessons.

The methodology is informed by a Dual Dependency Framework (DDF), which captures the intersection of international financial interdependencies, national political cycles, and climate–debt feedback loops. This method provides a more nuanced understanding of Ghana's sovereign debt path that goes beyond conventional quantitative assessments, situating macroeconomic indicators in the broader structural and political contexts shaping fiscal sustainability

4. Ghana's Debt Trajectory (2000-2022)

4.1. Debt-to-GDP Trends (2000–2022)

Ghana's debt-to-GDP ratio has experienced a cycle of relief, rebuilding, and re-emerging vulnerability over the past two decades. Ghana began the millennium in 2000 with one of the highest debt burdens among low-income economies, standing at 181.65% of GDP. This unsustainable height was the result of years of heavy borrowing on non-concessional terms, low export diversification, and chronic fiscal deficits.

The Heavily Indebted Poor Countries (HIPC) Initiative and further Multilateral Debt Relief initiatives between 2001-2006 provided huge debt cancellation, which helped Ghana to reduce its debt ratio to just 26.22% by 2006. This unprecedented relief created fiscal space for investment in social sectors and infrastructure development. From 2006-2011, the ratio was quite flat, mostly below 40% even as real GDP growth averaged over 6% a year, supported by high commodity prices and improved macroeconomic management.

A turning point came with the 2011 oil boom. Commercial oil production fueled a temporary spike in GDP growth to almost 14% but rising public spending and weaker commodity prices soon eroded the fiscal gains. The debt ratio had nearly doubled to 50.14% by 2014, led by widening budget deficits as well as by rising external borrowing, including Ghana's first Eurobond issuances.

Debt accumulated more rapidly from 2015. Chronic fiscal deficits driven by electoral spending, energy sector arrears, and poor domestic revenue mobilization pushed the ratio to 61.21% in 2019, beyond the IMF's 60% debt-distress threshold for low- and middle-income nations. Despite modest growth, elevated interest payments and continued borrowing left Ghana increasingly vulnerable to shocks.

The most dramatic increase was witnessed in 2020, the time of the COVID-19 pandemic and the 2020 election. Unanticipated health spending, revenue shortfalls, and a budget deficit of 17.44% of GDP increased the debt ratio to 76.62% in 2021, far above the sustainable threshold. By 2022, the IMF estimated Ghana's debt-to-GDP ratio at 92.38%, but the Ministry of Finance provided a lower estimate of 70.57% due to differences in measuring methods. This places Ghana firmly above the IMF's 60% sustainability benchmark and among Sub-Saharan Africa's most highly indebted economies, which are Zambia and Ethiopia.

Figure 1 illustrates this precipitous trajectory: a sharp decline following HIPC relief, a decade of stability, and a steep increasing trend following 2011 that reached its peak during the pandemic period. The trend highlights the fragility of Ghana's fiscal achievement and underscores how external shocks, election-year spending, and reliance on commodity exports still undermine long-term debt sustainability.

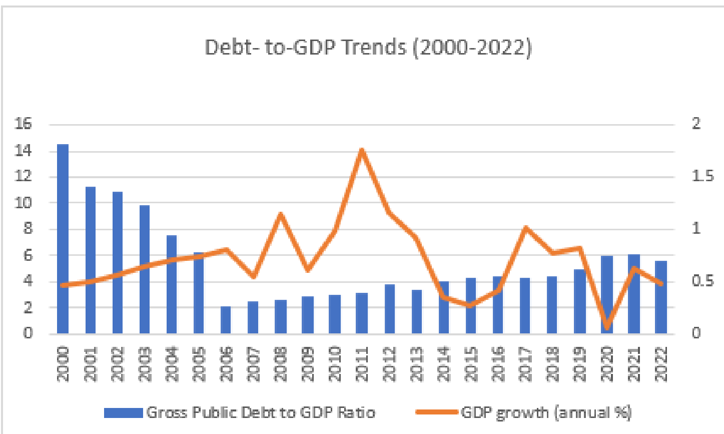

Figure 1. Debt-to-GDP Trends (2000–2022)
Source: Authors' construct using data from the Ministry of Finance and WDI

4.2. Data Discrepancies: IMF vs. Ministry of Finance

In 2022, Ghana's public debt figures differed significantly across major reporting agencies. The Ministry of Finance registered a debt-to-GDP ratio of 70.57%, while the International Monetary Fund (IMF) estimated it much higher at 92.38%. This gap reflects differences in measurement methodology. The Finance Ministry merely displayed central government debt, but the IMF used a broader definition of public liabilities to include off-budget obligations, state-owned enterprise debt, and central bank overdrafts. The IMF's higher estimate consequently captures implicit fiscal risks not evident at the national level in the numbers. The higher estimate thus presented by the IMF, therefore, captures what could be referred to as unobserved fiscal risks. This discrepancy highlights the need for greater transparency and complete reporting, since under-estimated debt ratios can potentially bias policymakers' and investors' perceptions of Ghana's fiscal position and debt sustainability.

4.3. External vs. Domestic Debt Dynamics

The composition of Ghana's public debt has shifted considerably over the last two decades, with changing access to international capital, domestic financial deepening, and political budgetary pressures. The portfolio was externally dominated at the start of the 2000s, with external debt accounting for 84.10% of the total public debt. External debt was predominantly concessional multilateral and bilateral loans accumulated before the Heavily Indebted Poor Countries (HIPC) initiative. Domestic debt was restricted, constrained by a shallow domestic capital market and a limited investor base.

The successful HIPC and Multilateral Debt Relief initiatives between 2003 and 2006 reduced external debt significantly, decreasing its share to 40.99% in 2006, whereas domestic debt increased progressively as Ghana issued additional Treasury bills and cedi-denominated bonds to finance budgetary deficits. This rebalancing allowed the government to borrow at less expense on the domestic side and reduce exchange rate risks.

This trend was overturned after Ghana's first Eurobond issuance in 2007, which marked a strategic re-entry into external borrowing. From 2007 to 2014, the share of external debt rose steadily, supported by successive issues of Eurobonds and bilateral funding for energy and infrastructure projects. External debt had regained 56.71% of the total debt by 2014, while domestic debt stabilized around 44.62

After 2015, rising fiscal deficits and the need to finance maturing foreign obligations have led to heightened attention being devoted to local borrowing. Domestic debt rose sharply, helped by the development of a local bond market as well as increased participation by banks and pension funds. By 2019, domestic debt accounted for about 48.33% of total debt, narrowing the gap with external liabilities.

The most significant change occurred during the COVID-19 pandemic and the 2020 election cycle, when emergency spending and global market volatility led to record borrowing from both sources. Domestic debt surged as the government tapped the Bank of Ghana overdraft facility and issued short-term instruments, while external borrowing continued in the form of Eurobonds and multilateral loans. By 2022, external debt accounted for 55.27% of total public debt, while domestic debt was 44.73%, which is the highest absolute stock of domestic debt in Ghana's history.

Figure 2 illustrates this two-way interaction between domestic and external borrowing. External debt has provided large, upfront financing for infrastructure and budget support, but is exposed to huge currency and refinancing risks, particularly when there is depreciation of the cedi and an increase in global interest rates. Domestic debt, although free from exchange-rate exposure, carries liquidity risk and can crowd out private credit when government borrowing absorbs a large share of domestic savings. Balancing the two financing sources remains key to Ghana's debt sustainability, requiring increased domestic revenue mobilization and prudent external borrowing policies.

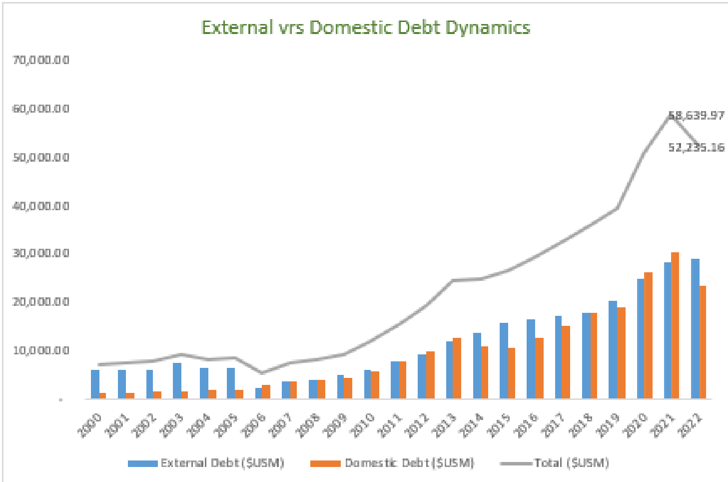

Figure 2. External Vs Domestic Debt Dynamics
Source: Authors' construct using data from the Ministry of Finance and the Bank of Ghana

4.4. Composition of External Debt

Ghana's external debt structure has changed significantly in the last two decades, from reliance on concessional multilateral lending towards market-based finance. Multilateral creditors dominated the portfolio in 2000, providing about \$3.95 billion, while bilateral loans stood at \$1.72 billion, with negligible commercial borrowing. Following debt relief under the HIPC initiative (2003–2006), multilateral debt declined sharply to a level of about \$1.3 billion by 2006, illustrating successful write-offs and concessional rescheduling.

The landscape changed after Ghana's first Eurobond issuance in 2007, which attracted \$750 million of international capital market borrowing. Multilateral debt had recovered to \$4.34 billion by 2012, but Eurobond borrowing continued, reaching \$2.53 billion by 2014 and becoming the major source of financing, overtaking bilateral loans. Between 2015-2019, holdings of Eurobonds doubled to \$7.69 billion from \$3.53 billion, and multilateral and bilateral flows rose moderately. Export credit and commercial debt also rose, as commercial loans rose from almost nothing in 2006 to \$2.16 billion in 2019.

The abrupt jump was registered in the COVID-19 period and run-up to the 2020 elections. By 2022, borrowing from Eurobonds had jumped to \$13.10 billion, which was more than 50% of Ghana's outstanding external debt stock, with multilateral debt standing at \$8.03 billion and bilateral loans falling marginally to \$1.25 billion. Figure 3 clearly captures this trend towards market-based borrowing away from concessional multilateral dominance, with the Eurobond financing now being the single largest contributor.

This shift has significant policy implications. Higher reliance on Eurobonds exposes Ghana to global increases in interest rates, rollover risk, and currency devaluation because settlement of Eurobonds must be made in a foreign currency. While multilateral loans remain relatively stable and concessional, their declining proportion mirrors shrinking space for low-cost borrowing. There is a need to strengthen domestic revenue mobilization and lengthen debt maturities so that Ghana's exposure to surprising reversals in capital flows can be reduced.

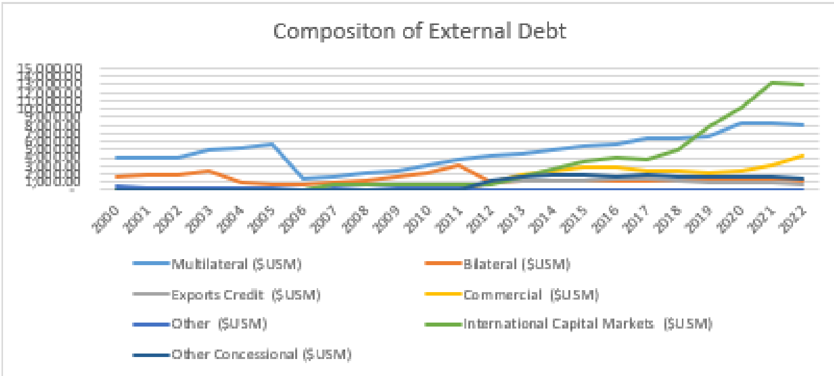

Figure 3. Composition of External Debt
Source: Authors' construct using data from the Ministry of Finance and the Bank of Ghana

4.5. Domestic Debt Maturity Profile

Ghana's domestic debt maturity structure has shifted significantly over the past two decades, fueled by changing borrowing policy and fiscal pressures, as illustrated in Figure 4. Short-term instruments dominated the market in 2000 at 74.80% of domestic debt, with long-term debt making up only 25.20%, exposing the government to severe rollover risks and ongoing refinancing needs.

Reforms aimed at extending maturities in 2010 increased the share of medium-term debt to 44.01%, reducing the dependence on short-term borrowing, though short-term debt still accounted for 38.04%. Short-term debt regained its share in 2015 at 45.72% as election-year spending and fiscal slippages forced the government to rely on shorter, more readily available instruments despite the higher rollover risk.

The maturity profile also improved considerably by 2020, as medium-term debt surged to 60.40% of total domestic debt, supported by debt reprofiling efforts and market demand for longer tenors. Short-term debt reduced drastically to 11.27%, while long-term debt rose to 28.32%, a reflection of better investor confidence in government securities. Medium-term borrowing remained the biggest at 59.72% by 2022, and short-term borrowing increased by a small margin to 17.65%, indicating new liquidity pressure. Long-term borrowing stood at 22.63%, indicating some stabilization but below the 2020 peak. This evolution exhibits a gradual, but uneven shift towards a more sustainable composition of maturity. Periods of fiscal stress, particularly election years, continue to drive shifts back towards short-term borrowing, highlighting the need for stronger fiscal discipline and deeper domestic capital markets to sustain longer maturities.

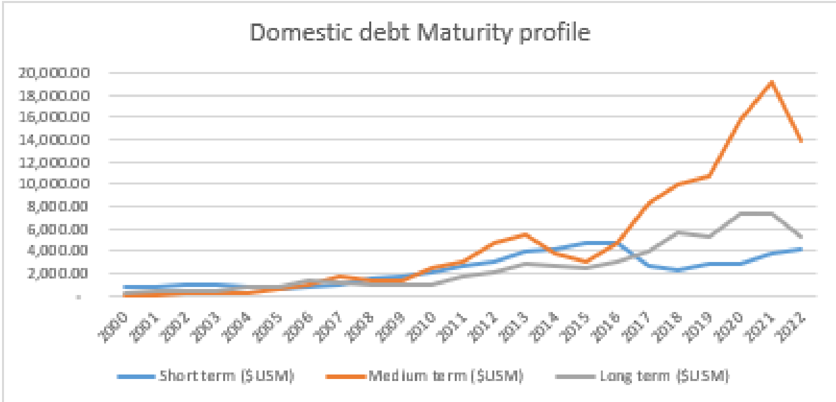

Figure 4. Domestic Debt Maturity Profile
Source: Authors' construct using data from the Ministry of Finance and the Bank of Ghana

5. Drivers of Sovereign Debt

Ghana's recent public debt surge is the consequence of a number of interconnected drivers. Inadequate revenue, commodity dependence, election-related expenditures, sectoral collapses (especially energy and agriculture), and external shocks all play their part in explaining how borrowing has risen faster than the state can service. Fiscal trends between 2000 and 2022 are summarized in Table 1, showing how revenues lagged behind expenditure in years of distress, creating recurring deficits and rising debt.

Underlying Ghana's debt problem is Fiscal weaknesses. The tax base of Ghana is narrow and unstable. Tax receipts accounted for approximately 13–14 percent of GDP on average throughout the 2010s, below the African average of about 16–18 percent. Limited taxable activity, widespread exemptions, and loopholes in administration restrict the state's ability to mobilize domestic resources (OECD, 2021; UNCTAD, 2020). Table 1 confirms this pattern: while revenue grew at a sluggish pace, expenditure jumped in election and crisis years, leading to broader budget deficits and further reliance on borrowing. The Debt Sustainability Framework assumes reliable policy implementation and adequate revenue. Ghana's weak revenue performance thus undermines the DSF's pragmatic worth and provokes refinancing risk (IMF, 2024; Ministry of Finance, 2023).

Compounding Ghana's structural economic weaknesses is the country's Commodity dependence. Ghana remains highly dependent on certain key exports, largely gold, cocoa, and crude oil. These commodities have accounted for export revenues in recent years. Commodity booms generate revenue windfalls, but they also come with procyclical expenditure. The 2011 oil boom, for example, coincided with enormous rises in expenditure that were not reversed when prices fell in 2014–2016. This episode demonstrates how commodity dependence translates into temporary windfalls and long-term fiscal stiffness. According to Debt Overhang Theory, reliance on volatile export earnings raises the chance that debt servicing will crowd out productive investment during declining prices (World Bank, 2023; UNCTAD, 2020).

Pressure on the Electoral cycles and political drivers is another chronic problem of Ghana's fiscal policy. Election years have routinely yielded fiscal slippages. The deficit surge in 2020 to 17.4% of GDP is the most striking example (MoF, 2022). Such election-period spending is usually reflected in the guise of increased wages, capital projects, and off-budget commitments. These cycles undermine the medium-term budget lines used in intertemporal fiscal models and in the DSF. The cycle pre-election boom and post-election restraint reduce policy credibility and increase borrowing needs. Empirically, analysts estimate that a significant share of recent debt buildup is due to election-driven overspending (CDD-Ghana, 2023; IMF, 2024).

Besides electoral forces, sector-specific inefficiencies have also contributed significantly to the debt stock. The energy sector poses a major budgetary burden. Take-or-pay power purchase agreements oblige the state to pay for capacity regardless of demand. The agreements, coupled with tariff shortfalls and high distribution losses, have created massive arrears. As of December 2023, energy sector arrears totaled around US$2.1 billion (2.8% of GDP). Take-or-pay obligations account for a significant share of this expense, and distribution losses exceed 25% (African Centre for Energy Policy, 2024; PURC, 2023; MyJoyOnline, 2024). Between 2018 and 2022, state bailouts and arrears management incurred costs of several billion cedis (Ministry of Finance, 2022; ModernGhana/Citi TV, 2025). These cyclical payments increase the total stock of government debt and undermine public finance confidence. The energy case also reveals a governance dimension. Politically motivated procurement, weak contract management, and postponed tariff reforms have kept the sector in persistent bailouts. That weak governance translates sector problems into sovereign risks and shows why typical debt models that fail to consider political economy can underestimate long-term risk (Ghana Integrity Initiative; IMF, 2024).

Another Sectoral inefficiency is agriculture and food security. Agriculture in Ghana is plagued by low productivity and poor post-harvest systems, with losses exceeding 30% for some key crops. These losses contribute to sizable import bills. Ghana's food import bill reached about $3.25 billion in 2024, widening the trade deficit and reducing fiscal resilience (GNBCC, 2025). Poor rural infrastructure and limited irrigation keep yields low. Such structural weaknesses reduce export diversification and tax receipts. They also add pressure to borrow when there is high inflation in food prices or when domestic production falls.

Ghana's debt woes have been further deepened by external shocks and policy interventions. Ghana's debt situation is also shaped by external shocks. Public debt is largely denominated in foreign currency. In 2022, the cedi declined dramatically by about 54.2% against the U.S. dollar, raising the domestic-currency burden of financing external debt by some $1 billion or more (Bank of Ghana, 2023; Akolgo, 2023). At the same time, increases in world interest rates boosted yields on market debt. Eurobond yields rose above 20% for distressed issuers, causing rollover costs (Bloomberg, 2023). The shocks uncovered the policy buffers' liquidity. Policy action did matter. Ghana's usage of commercial market borrowing (large-sized Eurobond issues from 2007) introduced risk to more precarious capital markets. Compared to Kenya, where more diversified sources of financing and more developed domestic markets were established, Ghana relied more on foreign market debt. That choice exacerbated exposure when global conditions tightened (Development Reimagined, 2024; Kenya Institute for Public Policy Research, 2023).

Behind all these issues lies a basic absence of transparency and institutional weaknesses. One of the issues is the underreporting of liabilities. The Ministry of Finance 2022 central government debt (approximately 70.57% of GDP) presents a striking contrast with the IMF general government measure, which includes off-budget items and was at approximately 92.38% of GDP. The gap encompasses energy arrears, state enterprise debt, and other contingent liabilities that are not fully covered in central government estimates (IMF, 2024; Ministry of Finance, 2023). This reporting irregularity compromises good debt sustainability analysis and weakens market and public transparency. Poor institutions exacerbate the issue. Ghana lacks a functional independent fiscal council to ensure medium-term discipline. Parliamentary budget scrutiny has been procedural, not substantial. These governance weaknesses allow short-run political motives to dominate long-run fiscal planning (OECD, 2023; CDD-Ghana, 2023).

Table 1 (2000–2022) presents three distinct periods. First, post-HIPC recovery reduced debt significantly and created fiscal space. Second, 2007–2014 saw rising borrowing against oil revenues and expenditure on infrastructure. Third, after 2015 and especially in 2020–2022, deficits increased and total debt accelerated as GDP growth slowed and emergency spending picked up. The table's revenue and expenditure columns show that crisis-year deficits are responsible for the majority of new borrowing needs. These trends confirm that weak revenue, excessive discretionary expenditure in election years, sectoral arrears, and external shocks together exacerbate debt accumulation.

Table 1. Fiscal Performance and Sovereign Debt Dynamics in Ghana (2000–2022)

	Revenue	Expenditure	General government gross debt	Current account balance	Budget Deficit
2000	8.616	12.901	80.170	-3.369	4.285
2001	10.877	14.775	61.919	-3.494	3.898
2002	8.500	11.422	57.960	-0.741	2.922
2003	10.859	12.596	52.847	0.580	2.137
2004	12.650	14.729	53.017	-4.097	2.104
2005	11.809	13.818	33.993	-4.490	2.009
2006	12.058	15.385	18.509	-3.602	3.327
2007	12.726	17.988	22.549	-6.333	5.262
2008	11.770	17.676	24.644	-8.809	5.906
2009	12.158	17.482	26.792	-4.042	5.324
2010	12.409	19.880	34.507	-6.393	7.471
2011	14.053	19.526	31.264	-6.576	5.473
2012	13.649	21.977	35.351	-8.637	8.328
2013	12.448	21.564	42.930	-8.954	9.116
2014	13.154	20.966	50.111	-6.806	7.812
2015	14.616	18.623	53.896	-5.711	4.007
2016	13.145	19.891	55.942	-5.060	6.746
2017	13.616	17.582	56.984	-3.316	3.966
2018	14.104	20.895	61.976	-3.037	6.791
2019	14.971	22.491	58.344	-2.232	7.52
2020	14.068	31.511	72.337	-2.534	17.443
2021	15.182	27.212	79.159	-2.710	12.03
2022	15.839	27.056	92.377	-2.100	11.217

Source: Authors' construct using data from the Ministry of Finance & Bank of Ghana

Each driver aligns with and also exposes limits in orthodox theory. Low revenue and non-conforming policy implementation undermine the DSF's empirical predictions. Debt Overhang explains how high public debt raises borrowing costs and crowds out private credit, but in case there is a large off-balance-sheet economy, then the observable effect on output in the short run is minimized. The Intertemporal Budget Constraint remains a good accounting tool, but it does not capture political incentives and contingent liabilities that shift the path of deficits. These theoretical gaps motivate the Dual Dependency Framework in this paper: it rigorously integrates exposure to foreign finance, local political cycles, and climatic or sectoral shocks into sustainability analysis.

6. Implications of Debt Distress

The structural weaknesses, persistent fiscal deficits, commodity dependence, and energy-sector arrears have not only exacerbated Ghana's debt stock but have also set the stage for severe economic, social, and policy autonomy consequences. Economically, Ghana's evolution into high-risk debt distress has severely narrowed fiscal space and investment capacity. As of 2022, the debt-to-GDP ratio reached 92.38% (IMF, 2023), whereas the Ministry of Finance reported a narrower 70.57% on a central-government basis. Interest payments consumed 47.27% of total government revenue, which exceeded combined expenditure on health, education, and infrastructure (World Bank, 2023; IMF, 2023a). Government spending fell from 4.3% of GDP in 2019 to 1.8% in 2022 (Statista, 2024). The figures depict a standard "fiscal crowding-out" effect in which the financing of debt displaced growth-enhancing spending. Depreciation of the cedi by 54.2% in 2022 added approximately US$1 billion to the domestic-currency value of foreign debt and triggered headline inflation of 54.1% by December 2022 (Bank of Ghana, 2023; Ghana Statistical Service, 2023). Private sector credit growth slowed by 10–12% in 2023 as banks cut lending after the 2023 Domestic Debt Exchange Programme (DDEP) and as default risk increased (Bank of Ghana, 2023).

This erosion of fiscal space directly translates into social costs since shrinking public investment weakens essential services. Debt distress reinforced the fiscal squeeze on social services and worsened household welfare. Real expenditure on health and education has stagnated since 2020 despite rising population needs (World Bank, 2023). Poverty is projected to increase from 27% in 2022 to over 33% by 2025 (UNICEF, 2024). Inflation in food prices, which peaked above 61% in early 2023, lowered real incomes, particularly for poor households, who spend over half of their income on food (Ghana Statistical Service, 2023). Small and medium-sized enterprises, providing over 80% of total employment, are subject to borrowing rates higher than 30%, constraining job creation and long-term production (Bank of Ghana, 2024). Such figures support a clear-cut debt-overhang effect where excessive government borrowing discourages private investment and reduces growth.

The social pressures are further complicated by Ghana's constrained policy autonomy under IMF programs, which limits the government's ability to respond to rising poverty and inequality. These IMF program conditionalities have limited the policy space of Ghana. The 2023 Extended Credit Facility requires an increase in the value-added tax rate to 15%, tight deficit targets, and possible privatization of energy resources (IMF, 2023b). These measures stabilize macroeconomic aggregates at the expense of flexibility to execute domestically tailored interventions such as boosting climate-adaptation finance, which remains short of yearly debt-service payments (African Development Bank, 2023; Climate Policy Initiative, 2023). The reverse is the case of Zambia, which achieved more profound bilateral debt relief under the G20 Common Framework, and Sri Lanka, where more external-commercial debt in proportion caused more severe currency depreciation but faster progress toward a restructuring agreement (IMF, 2023c). The slower negotiation and higher domestic-debt burden in Ghana have prolonged financial uncertainty.

Fitch's downgrading (Selective Default) and Moody's (Ca) in 2023 have reduced investor confidence and restricted access to global capital markets (Fitch Ratings, 2023; Moody's, 2023). Foreign direct investment flows have declined, constraining technology transfer and employment generation. The evidence testifies to the need for a comprehensive reform package. Mobilization of revenue must be enhanced through broadening the tax base and reducing exemptions. Establishing an autonomous fiscal council would increase budget discipline and put an end to election-year fiscal slippages that violate Debt Sustainability Framework assumptions. Credible reporting of all contingent liabilities would be required to close the gap between the IMF and the Ministry of Finance measures of debt and restore credibility. A sovereign wealth fund for commodity revenues could smooth spending over boom-bust cycles and limit exposure to external price volatility.

7. Policy Interventions

The scale of these economic and social impacts underscores that temporary fiscal measures are insufficient. Hence, lasting recovery requires structural reforms that address the underlying drivers of Ghana's debt vulnerabilities. Ghana's debt crisis demands actions that work simultaneously to relieve short-term fiscal pressure while changing the long-term rules. The most sustainable strategy combines strong institution building, revenue transformation, sector solutions, enhanced domestic finance, and innovative restructuring tied to development goals.

Firstly, make fiscal institutions work. An independent fiscal council would depoliticize day-to-day budget decisions. The council would have a mandatory statutory obligation to publish independent forecasts, monitor enforcement of the fiscal rule, and issue reports to the public. It would be best funded from the budget and composed of career technocrats. The council would maintain a distinct public debt register. The register must monitor central government debt, general government liabilities, off-budget contingent liabilities, state-owned enterprise obligations, and energy sector arrears. Together, these two measures are cost-effective relative to the damage of persistent fiscal slippage and are building blocks of credibility and investor confidence (OECD, 2023; Ministry of Finance, 2023).

Also, raise revenue without distorting growth. Tax collection can be made cheaper and fairer through digital tools. Linking the national ID with tax ID, expanding e-VAT platforms, and using simple digital filing systems can increase compliance quickly. Formalization of parts of the informal economy through phased registration and a simple, small tax system will bring more companies within the net. Harmonizing tax concessions and better property tax systems can yield consistent revenue boosts. Country and donor analysis shows that well-devised administrative and digital reforms can raise revenue by about one to two percent of GDP in just a couple of years (World Bank, 2023; IMF, 2023).

Similarly, fix the energy sector to halt recurring drains on the budget. A comprehensive audit of power purchase agreements has to be the first step. The audit has to identify take-or-pay clauses, overcapacity, and pricing exposures. Where contracts are clearly unaffordable, the government should undertake good-faith renegotiations. Where renegotiation is not possible, the state should use transparent legal and financial remedies that limit fiscal fallout. Simultaneous measures should include moving tariffs towards cost recovery on a phase-by-phase basis and strengthening regulation so that new contracts are effective and competitive. Estimates show that full energy sector reform can unlock the fiscal equivalent of about two percent of GDP annually if distribution losses and unwise contract costs are restrained (World Bank, 2023; African Centre for Energy Policy, 2024).

Further, use debt restructuring as a tool of climate and social policy. Debt for climate and debt for nature swaps can reduce headline debt while financing adaptation and mitigation. Swap designs must be specific. Acceptable projects are grid-scale solar connected to the national grid, off-grid solar for schools and health centers, reforestation of degraded watersheds by community-driven action, and coastal mangrove restoration that protects fishery incomes. Swaps must be aligned with Ghana's national climate plan such that abatement is monitored and the projects are measurable in terms of results. Where there are bilateral creditors, the negotiations may be harmonized within existing frameworks in a way that ensures effective monitoring and independent verification (Centre for Economic Policy Research, 2023; African Development Bank, 2023).

Again, mobilize patriotic savings and remittances in a disciplined way. Diaspora bonds are cheaper if they are transparent and attached to visible projects. To succeed, they must offer secure payment mechanisms, minimal issue expenses, and satisfactory reporting on the use of proceeds. With steady remittance inflows, diaspora finance can diversify funding and reduce the dependence on expensive foreign commercial borrowing (World Bank, 2023; Bank of Ghana, 2023).

Develop safer domestic debt markets. Deepening the cedi bond market will reduce long-term exchange rate risk. Longer-dated local currency-denominated government bonds, including inflation-indexed securities, must be issued by the government. Pension reforms that increase long-term institutional demand must be accompanied by market deepening. These reforms limit rollover risk and lower the incentive to borrow in foreign currency for domestic spending (Ministry of Finance, 2023).

Make the fiscal adjustment socially fair. Any program that tightens budgets must protect the poor. Targeted cash transfers, temporary subsidies, or a buffer social investment package should cushion the short-term impact of tariff adjustments and tax reforms. Setting aside part of savings from debt relief and sector reforms for social protection will ensure political support and reduce immediate adversity (International Growth Centre, 2023; IMF, 2023).

In addition, prioritize the measures and sequence implementation. The immediate priorities are the institutional reforms and digital revenue measures. These are rapid to set up and generate revenue at low political cost. Next, the audit of the energy sector should be launched, and a clear plan for the renegotiation of unsustainable contracts should be defined. Medium-term actions include creating credible climate debt-for-swap and diaspora bonds. Pension reform and market deepening are more long-term but must begin now as they take time to deliver durable results.

Anticipate political resistance and address it transparently. Tariff reform and broadening the tax base are politically challenging. Build broad political support by conducting stakeholder consultations, publishing the data behind fiscal risks, and linking reforms to concrete benefits such as new schools or clinics financed by the savings. A public communications strategy and an autonomous proceeds audit will reduce suspicion. Take phased action so that changes are expected and offsetting measures like short-term cash transfers are in place.

Estimate fiscal costs and revenues in realistic terms. Digital tax modernization and exemption rationalization can provide one to two percent of GDP. Reforms in the energy sector can release around two percent of GDP if take or pay losses and distribution inefficiencies are cleared. Climate swaps for debt can reduce headline debt by various amounts depending on the design. These are approximate estimates taken from sectoral studies and country examples. They must be refined during a short period of technical design before being fully executed (World Bank, 2023; African Centre for Energy Policy, 2024).

Sustain reforms anchored with strong monitoring and continuous revision. The Independent Fiscal Council must report progress against key performance indicators. Open project audits and third-party verification must be included with debt operations. Regular progress reports based on legal and budget processes will help solidify reforms and reassure creditors and citizens.

8. Conclusion and Recomendations

The study assessed the drivers of Ghana's sovereign debt crisis and examined the extent to which structural vulnerabilities, governance lapses, and external shocks interact to undermine debt sustainability. Drawing on both theoretical frameworks and empirical evidence, the study concludes that Ghana's debt dynamics are directly driven by three interrelated factors: dependence on external finance, election-driven fiscal cycles, and climate-induced fiscal pressures. Ghana's debt-to-GDP ratio rose to 92.38% in 2022, with more than half of government revenues allocated to debt servicing, thereby constraining investment in education, health, and infrastructure. The evidence indicates that political budget cycles, weak institutional oversight, and structural inefficiencies are most notable in the energy sector. These have compounded vulnerabilities, while external shocks, such as COVID-19, exchange rate depreciation, and global interest rate hikes, have further deepened repayment pressures.

In light of these findings, the research concludes that Ghana's debt crisis is not only the result of global market fluctuations but also of persistent domestic weaknesses. The Dual Dependency Framework provides a more comprehensive explanation of Ghana's debt dynamics by integrating external financial interdependencies, domestic political cycles, and climate–debt feedback loops. This framework calls for the adoption of reforms that address the structural and cyclical nature of fiscal vulnerability.

The policy implications of these findings are significant. Strengthening fiscal institutions is urgent in the first place. Establishing an Independent Fiscal Council and developing a comprehensive public debt register to cover off-budget liabilities and state-owned enterprise debt will improve transparency and credibility. Also, revenue mobilization must be scaled up via digital tax reforms, rationalization of exemptions, and progressive property taxes, complemented by measures to reduce energy-sector arrears via renegotiated contracts and cost-reflective tariffs. Again, medium-term reforms should focus on public investment management and commodity revenue stabilization, including the transformation of the Ghana Stabilization Fund into a rules-based Sovereign Wealth Fund. Finally, diversifying financing instruments through debt-for-climate swaps, diaspora bonds, SDG-linked bonds, and long-dated cedi-denominated securities will reduce overreliance on Eurobonds and mitigate foreign exchange risks over the longer term.

Successful implementation will depend on sequencing and political feasibility. Reforms yielding early fiscal gains, such as digital taxation and energy restructuring, should be prioritized to create credibility and public support. Transparent communication linking reforms to enhancements in service delivery will also aid in mitigating resistance. Generally, Ghana's experience provides lessons to other commodity-exporting, election-driven economies and IMF-program nations. This evidence highlights the value of independent fiscal oversight, comprehensive liability accounting, and counter-cyclical rules to prevent debt crises that recur.

Ghana can restore fiscal stability, reduce vulnerability to external shocks, and build resilience in the face of climate and political risks by adopting these measures. Its reform process, in turn, offers lessons to economies such as Sri Lanka and Zambia that are also similarly vulnerable and for peers seeking to balance debt sustainability with inclusive growth.

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