

# **Evaluating the Macroeconomic Effects of the Ghana Gold Board (GOLDBOD)**

**A Technical Report Presented to GoldBod**

**by**

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# Executive Summary

## Purpose

This report evaluates the macroeconomic impact of the Ghana Gold Board (GoldBod) using conservative assumptions and verifiable data. It compares quantifiable benefits—particularly from reduced gold smuggling and non-debt foreign exchange (FX) inflows—with the reported trading losses of the Bank of Ghana (BoG).

## Key Findings

### 1. GoldBod Significantly Reduced Gold Smuggling

- Recorded artisanal and small-scale mining (ASM) gold exports increased from 63.6 tons in 2024 to 103.0 tons in 2025.
- The incremental 39.4 tons is plausibly gold previously lost to smuggling that has now been formalised.
- Valued conservatively at US\$96.5 million per ton, this represents US\$3.8 billion in additional FX entering the formal system.

### 2. Formalisation Benefits Far Exceed BoG's Reported Loss

- The IMF reported a BoG trading loss of US\$214 million ( $\approx$  GHS 2.4 billion).
- A direct comparison shows:
  - Benefit–Cost Ratio  $\approx$  18:1
- In break-even terms:
  - Formalising just 2.2 tons of gold would offset the reported loss.
  - Complete formalisation is about 18 times this threshold.

### 3. Large Financing Savings from Non-Debt FX Inflows

- GoldBod-enabled ASM exports in 2025 amounted to US\$10.8 billion.
- If Ghana had borrowed externally to mobilise equivalent FX, annual interest costs would have been:
  - Between US\$756 million – US\$1.08 billion (at 7–10% borrowing rates).
- Focusing only on the plausible reduction in smuggling:
  - Avoided annual interest costs are between US\$266–380 million.
- These are recurring annual benefits, not one-off gains.

### 4. Broader Macroeconomic Gains

GoldBod-supported FX inflows contributed to:

- Higher international reserves ( $\approx$  US\$11–12 billion),

- Exchange-rate stabilisation and appreciation relative to IMF budget assumptions,
- Lower domestic cost of external debt service ( $\approx$  GHS 6.2 billion),
- Reduced import bill (Jan-Oct 2025) valuation ( $\approx$  GHS 50.6 billion),
- Disinflation, through reduced exchange-rate pass-through.

## 5. Why the BoG “Loss” Is Misunderstood

- Most of the reported BoG loss reflects accounting translation effects, not cash losses.
- Gold is purchased at near-retail exchange rates to prevent smuggling, but FX inflows must be booked at the lower interbank rate.
- The true economic cost (fees, purity losses, offtake discounts) is estimated at  $\sim 2.5\%$  of gold value, far lower than headline loss figures.

GoldBod has delivered substantial, measurable macroeconomic benefits that exceed its narrow accounting costs. The programme converts illicit gold flows into formal FX, strengthens Ghana’s external position, reduces reliance on costly borrowing, and supports macroeconomic stability.

## Key Policy Directions Going Forward

1. Sustain price competitiveness to prevent a return of smuggling.
2. Improve transparency by clearly separating accounting effects from economic costs in BoG reporting.
3. Gradually reduce policy costs as FX market conditions normalise.
4. Strengthen governance and oversight to ensure long-term credibility.
5. Manage transition risks carefully as GoldBod assumes fuller trading responsibility.
6. Sustain the FX stability through structural transformation, fiscal discipline, and enhanced law enforcement to minimise and deter smuggling.
7. Internalise the policy cost as a quasi-fiscal cost and treat it as a liability (expense for the government) and fund it annually in the budget

GoldBod should be regarded not as a profit-driven trading entity, but as a tool for macroeconomic stabilisation and formalisation. Based on available evidence, it serves as a high-return policy intervention for Ghana’s economy.

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## **List of Abbreviations**

ASM	Artisanal and Small-Scale Mining
BoG	Bank of Ghana
DGPP	Domestic Gold Purchase Programme
FX	Foreign Exchange
G4R	Gold-for-Reserves Programme
GDP	Gross Domestic Product
GHS	Ghana Cedi
GIR	Gross International Reserves
GoldBod	Ghana Gold Board
IMF	International Monetary Fund
MoF	Ministry of Finance
UN Comtrade	United Nations Commodity Trade Statistics Database
USD / US\$	United States Dollar



## 1. Introduction and Macroeconomic Context

### 1.1 Background: Gold, Foreign Exchange, and Macroeconomic Fragility in Ghana

Gold has long been Ghana's single most important export commodity, accounting for more than 50 percent of total merchandise export receipts over the past decade.<sup>1</sup> Despite this prominence, Ghana's macroeconomic experience prior to 2025 was characterised by a persistent disconnect between physical gold production and foreign exchange (FX) availability in the domestic economy. Periods of high gold output and elevated international prices repeatedly coincided with FX shortages, reserve depletion, and exchange-rate instability. This paradox underscores a central macroeconomic problem: gold production did not translate proportionately into usable FX inflows for macroeconomic stabilisation.

The structural source of this problem lies in the organisation of the gold trade, particularly within the artisanal and small-scale mining (ASM) sector, which accounts for a substantial share of national gold output.<sup>2</sup> ASM gold marketing was traditionally fragmented among licensed private buyers, aggregators, and exporters, characterised by weak traceability, limited enforcement power, and strong incentives for cross-border arbitrage. Consequently, a significant portion of gold export earnings was either retained offshore, settled outside the domestic banking system, or smuggled outright, leading to a leak between gold production and recorded balance-of-payments inflows.

From a macroeconomic perspective, this leakage manifested as a low effective FX capture ratio ( $r_t$ ), defined as the share of gross gold export value that entered the domestic financial system in a timely and observable manner. Let the total gold output be denoted by  $Q_t$  and the international gold price by  $P_t$ . The gross gold export value is therefore  $P_t Q_t$ . The FX capture ratio can be expressed as:

$$r_t = \frac{\text{Recorded Gold FX Inflows}_t}{P_t Q_t}, 0 \leq r_t \leq 1.$$

Prior to the introduction of GoldBod, available evidence suggests that  $r_t$  was materially below unity,<sup>3</sup> particularly for ASM gold, implying that increases in  $P_t Q_t$  did not proportionately strengthen Ghana's external position, as recorded inflows were significantly below gross gold export values, suggesting FX leakage in some cases of about one-third of gross export values.

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<sup>1</sup> [https://statsghana.gov.gh/gssmain/fileUpload/Trade/2024\\_Trade\\_Full\\_Year\\_Report-\\_25-02-2025\\_Final\\_Print.pdf](https://statsghana.gov.gh/gssmain/fileUpload/Trade/2024_Trade_Full_Year_Report-_25-02-2025_Final_Print.pdf)

<sup>2</sup> Historically, although ASM had substantial shares of exports, it was below 40% (29% in 2023 and 39.5% in 2024). However, available data from the GoldBod shows that ASM exports surpassed those of the large-scale miners in 2025.

<sup>3</sup> Some estimates put it at around two-thirds

## 1.2 The Pre-GoldBod Role of the Bank of Ghana

In the absence of a comprehensive and effective centralised framework for gold marketing, the Bank of Ghana gradually took on a direct operational role within the gold–FX nexus. This change was driven by the need to stabilise the balance of payments and to rebuild international reserves. Starting in the early 2020s and intensifying during the macroeconomic crisis of 2022–2023, the Bank of Ghana, through the Precious Minerals Marketing Company (PMMC), expanded its Domestic Gold Purchase Programme (DGPP) and associated initiatives, including the Gold-for-Reserves and for FX schemes.

Under these arrangements, the BoG purchased gold—both directly and indirectly—from domestic sources, including ASM supply chains, with the intention of:

1. converting domestically produced gold into reserve assets,
2. using gold-backed FX inflows to support external payments, and oil imports
3. reducing immediate pressure on the exchange rate during periods of acute FX scarcity.

Formally, the BoG's intervention can be represented as a transformation of gold into reserves:

$$\Delta R_t = \Delta FX_t^{\text{gold}} - I_t,$$

where  $\Delta R_t$  denotes changes in gross international reserves,  $\Delta FX_t^{\text{gold}}$  is FX obtained from gold-related transactions, and  $I_t$  captures FX interventions and external payments.

While these programs succeeded in temporarily augmenting FX supply and reserve buffers, they also entailed significant commercial and financial risks. By acting as a de facto gold trader, the BoG assumed exposure to:

- price risk (gold price fluctuations between purchase and sale),
- timing and liquidity risk (settlement delays between gold purchases and FX realization),
- operational and basis risk (assay differences, refining, logistics, and discounts),
- and quasi-fiscal risk, where losses from policy-driven trading activities accrued to the central bank's balance sheet.

These risks appeared as reported trading losses, particularly in gold-related activities such as ASM doré transactions. At the broader institutional level, this arrangement blurred the distinction between monetary policy actions and fiscal or industrial policies, raising concerns about the central bank's independence, the integrity of its balance sheet, and transparency.

### **1.3 Macroeconomic Conditions Prior to the Establishment of GoldBod**

The expansion of BoG's gold operations occurred amid severe macroeconomic stress. By 2022–2023, Ghana faced:

- sharp exchange rate depreciation,
- inflation exceeding 50 percent,
- depleted international reserves,
- loss of access to international capital markets,

Despite high global gold prices and significant domestic gold output, the economy remained limited by FX shortages, highlighting the limits of relying solely on central bank-led gold purchases as a stabilisation tool. The core problem was not the lack of gold, but the absence of an institutional mechanism that systematically turned gold output into stable and predictable FX inflows without overburdening the central bank.

This context created a policy dilemma. On the one hand, gold provided a strong non-debt source of foreign exchange. On the other hand, continued dependence on the BoG as the leading trader risked entrenching quasi-fiscal losses and damaging monetary policy credibility. The challenge, therefore, was to restructure the gold–FX interface so as to maintain macroeconomic benefits while shifting commercial risk away from the BOG.

### **1.4 The Rationale for the Creation of GoldBod**

The establishment of the Ghana Gold Board (GoldBod) in 2025 represented a structural response to this dilemma. GoldBod was conceived as a specialized gold marketing and regulatory institution tasked with centralizing gold purchasing, selling, assaying, refining and exporting,<sup>4</sup> particularly for ASM output, while over time relieving the Bank of Ghana of its direct trading responsibilities.

From a macroeconomic standpoint, the rationale for GoldBod rests on three pillars:

#### **1. Improved FX Capture**

By consolidating gold purchases and exports under a single institutional framework, GoldBod aimed to raise the FX capture ratio  $r_t$ , especially for ASM gold, thereby increasing recorded FX inflows without necessarily increasing physical output.

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<sup>4</sup> <https://goldbod.gov.gh/wp-content/uploads/2025/04/GHANA-GOLDBOD-ACT-ACT-1140.pdf>

## 2. Risk Reallocation

The institutional separation between GoldBod’s operational role and the BoG’s monetary mandate was intended to shift commercial and trading risks away from the central bank, aligning with best-practice principles of central banking.

## 3. Macroeconomic Stabilization without Debt Accumulation

GoldBod-linked FX inflows represent non-debt-creating external resources, providing a means to support reserves, stabilise the exchange rate, and reduce reliance on external borrowing to sustain reserve accumulation during fiscal consolidation.

In this sense, the GoldBod was established with clear monetary policy objectives; thus, its mandate should be understood not as a profit-seeking enterprise but as a macroeconomic infrastructure reform—one designed to close a longstanding institutional gap between Ghana’s gold endowment and its external sector performance.

### 1.5 Scope of the Report

Against this background, the remainder of the report evaluates whether the establishment of the Ghana Gold Board (GoldBod) has improved macroeconomic outcomes relative to the pre-GoldBod regime. The analysis treats GoldBod not as a commercial trading entity, but as a macroeconomic and institutional intervention intended to enhance gold formalisation, foreign exchange capture, and external stability.

The report focuses on four core areas. First, it examines trends in ASM gold exports before and after GoldBod’s operationalisation to assess whether the observed increase in recorded exports reflects reduced smuggling and improved formalisation rather than changes in production capacity. Second, it clarifies the institutional and accounting framework governing gold purchases and FX inflows, distinguishing between reported trading losses at the Bank of Ghana (BoG) and the underlying economic costs of the pricing strategy.

Third, the report analyses the macroeconomic transmission channels associated with GoldBod-related FX inflows, including effects on international reserves, the exchange rate, inflation, the import bill, and the external debt service burden. Where appropriate, outcomes are benchmarked against IMF-supervised budget assumptions and counterfactual scenarios without GoldBod. Finally, the report conducts a cost–benefit and break-even analysis that compares the estimated FX value of gold formalised through reduced smuggling with the trading losses reported by the BoG. The report concludes with policy recommendations focused on sustaining formalisation gains, strengthening governance, and managing transition risks as GoldBod’s mandate evolves.

## **2. Institutional and Accounting Framework**

### **2.1 Overview of Institutional Actors and Mandates**

The macroeconomic impact of GoldBod cannot be assessed without a precise understanding of the institutional architecture governing gold purchases, exports, and FX flows. Three public-sector entities are central to this architecture:

#### **1. Ghana Gold Board (GoldBod)**

A statutory authority established in 2025, responsible for the purchasing, assaying, aggregation, and export of gold, particularly from the ASM sector. GoldBod is tasked with improving traceability, reducing smuggling, and increasing the conversion of domestic gold output into foreign exchange. The formation of GoldBod has roots in a long-standing institutional history, beginning with the Ghana Diamond Marketing Board in the 1960s, later evolving into the Precious Minerals Marketing Corporation and subsequently into Precious Minerals Marketing Company Limited, which acts as the national assayer and state marketer for gold and diamonds.

#### **2. Bank of Ghana (BoG)**

Ghana's central bank, responsible for monetary policy, reserve management, and FX market operations. Prior to GoldBod, the BoG increasingly acted as a direct participant in gold trading through the DGPP and related schemes by acquiring gold from both large-scale mining operations and artisanal and small-scale miners (ASM). Following the establishment of the GoldBod, ASM gold purchases are now conducted through the newly created state-owned enterprise. The Bank of Ghana continues to procure gold from large-scale miners, primarily to augment its physical gold reserves.

#### **3. Ministry of Finance (MoF)**

The fiscal authority is responsible for budgetary allocations, public debt management, and oversight of state-owned entities. From a macroeconomic standpoint, the MoF is the appropriate locus for absorbing any policy-driven subsidies or losses arising from gold-related interventions.

The analytical challenge is to determine where commercial risk resides, how FX flows are recorded, and which balance sheet ultimately bears losses or gains.

### **2.2 Pre-GoldBod Institutional Arrangement: Central Bank as De Facto Gold Trader**

Before the establishment of GoldBod, the BoG's role extended beyond conventional central banking into commodity intermediation. Under the DGPP and Gold-for-Reserves arrangements, the BoG:

- purchased gold from domestic sources (including ASM supply),
- held gold inventories temporarily,
- sold gold to external off-takers or used it to augment reserves,
- received FX proceeds with a lag.

The institutional accounting framework used could be illustrated by a simple equation. Let  $Q_t$  denote gold purchased by the BoG at the time  $t$ , and let  $P_t^{buy}$  and  $P_t^{sell}$  denote purchase and realized sale prices, respectively. The BoG's trading profit or loss can be written as:

$$\Pi_t^{BoG} = Q_t(P_t^{sell} - P_t^{buy}) - Q_t C_t,$$

where  $C_t$  captures logistics, refining, insurance, and other transaction costs.

This framework has underpinned the relatively successful Domestic Gold Programme (DGPP) since September 2022, when the BoG began purchasing a portion of mining companies' gold output locally to build foreign reserves and support FX markets. The framework highlights a key institutional fact: the BoG bore the full commercial risk, including price, timing, and operational risks. Any negative realisation of  $\Pi_t^{BoG}$  directly reduced the BoG's net worth, with potential implications for monetary policy credibility and central bank independence.

### 2.3 Post-GoldBod Arrangement: Separation of Operations and Policy

With the introduction of GoldBod, the institutional design shifted toward a functional separation between operational gold trading and monetary policy. During the transition period in 2025:

- GoldBod undertook the physical operations of purchasing, assaying, aggregating, and exporting gold.
- BoG remained the principal counterparty in many transactions, entering off-take agreements and managing reserve accumulation.
- GoldBod earned explicit fees (assay and service charges), while the BoG continued to bear trading and timing risks.

This can be represented as a principal–agent structure:

$$\text{GoldBod (Agent)} \xrightarrow{\text{services}} \text{BoG (Principal)}.$$

GoldBod's operating surplus or deficit is therefore:

$$\Pi_t^{GB} = F_t - OC_t,$$

where  $F_t$  denotes fees earned and  $OC_t$  operating costs. Importantly,  $\Pi_t^{GB}$  is decoupled from  $\Pi_t^{BoG}$ ; GoldBod can post an operating surplus even if the BoG incurs trading losses. This distinction is essential for avoiding analytical errors that conflate institutional profitability with macroeconomic welfare.

## 2.4 Gold-Related FX Flows and the Balance of Payments

From a balance-of-payments perspective, gold exports contribute to the current account via recorded exports and associated FX inflows. Let gross gold export ( $GX_t$ ) value be:

$$GX_t = P_t Q_t.$$

However, the macroeconomically relevant inflow is net FX, which can be expressed as:

$$NFX_t = GX_t - Q_t C_t - F_t - L_t,$$

where:

- $C_t$  represents real resource costs,
- $F_t$  denotes fees and charges,
- $L_t$  captures trading and timing losses.

GoldBod's intended contribution is to increase the FX capture ratio:

$$r_t = \frac{NFX_t}{GX_t}.$$

The macroeconomic benefit of GoldBod arises not from maximizing  $GX_t$ , but from raising  $r_t$  closer to unity and relative to its pre-GoldBod level  $r_0$ .

## 2.5 Central Bank Balance Sheet and Reserve Dynamics

The BoG's balance sheet provides the transmission mechanism between gold operations and macroeconomic outcomes. Let  $GIR_t$  denote gross international reserves. The reserve accumulation equation can be written as:

$$GIR_t = GIR_{t-1} + \Delta FX_t^{gold} + \Delta FX_t^{other} - I_t,$$

Where  $FX_t^{gold}$  denotes FX inflows from gold exports,  $FX_t^{other}$  denotes FX other inflows, and  $I_t$  denotes FX interventions and external payments.

Gold-related FX inflows therefore directly affect reserve dynamics. However, when the BoG absorbs trading losses, its net worth evolves as:

$$NW_t^{BoG} = NW_{t-1}^{BoG} + \Pi_t^{BoG}.$$

A persistent sequence of  $\Pi_t^{BoG} < 0$  constitutes a quasi-fiscal operation, blurring the distinction between monetary and fiscal policy. This concern motivates the IMF's recommendation that losses arising from gold-related programs should be transparently budgeted and not borne by the central bank on an ongoing basis.<sup>5</sup>

## 2.6 Economic Welfare versus Accounting Outcomes

The comparison between accounting losses and economic welfare is central to evaluating the macroeconomic impact of GoldBod's operations. We define social welfare gains from gold formalisation as:

$$W_t = \Delta FX_t - L_t - C_t^{real},$$

where  $\Delta FX_t = (r_t - r_0)NFX_t$  represents incremental FX capture attributable to GoldBod.

A necessary condition for GoldBod to be welfare-improving is:

$$(r_t - r_0)NFX_t > L_t + C_t^{real}.$$

This inequality formalises the break-even condition underpinning the entire report. It demonstrates that a policy can generate net welfare gains even when the central bank records accounting losses, provided that incremental FX capture is sufficiently large.

## 2.7 Implications for the Analysis

The institutional and accounting framework developed in this section yield three testable implications:

1. Gross FX inflows must be decomposed into net and incremental components.
2. BoG losses must be interpreted as policy costs, not definitive indicators of failure.
3. Empirical identification must focus on changes in the FX capture ratio  $r_t$  rather than on levels of gold exports or reserves alone.

These implications directly inform strategies developed and used in the subsequent sections of the report.

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<sup>5</sup><https://www.bing.com/search?q=IMF%20Article%20iv%20consultation%20report%20Ghana%20december%202025&qs=n&form=QBRE&sp=-1&ghc=1&lq=0&pq=imf%20article%20iv%20consultation%20report%20ghana%20december%202025&sc=3-54&sk=&cvid=E6AAAB0500C7460FB2C72C7E4DA7D75D>

## 2.8 Transition and Sustainability Considerations

Finally, the institutional design was inherently transitional in 2025. GoldBod's mandate envisages a shift toward greater commercial responsibility, thereby reducing the BoG's exposure to gold-trading risks. Full implementation of this mandate is expected in 2026. The sustainability of GoldBod as a macroeconomic instrument depends on:

- explicit risk transfer away from the central bank,
- transparent pricing and settlement rules,
- fiscal recognition of any policy-driven subsidies,
- and governance structures that prevent political interference in gold pricing.

Failure to satisfy these conditions would transform GoldBod from a macro-stabilising reform into a recurring source of quasi-fiscal risk.

## 3. Preliminary Analysis of Small-Scale Gold Exports in Ghana (2018–2025): Policy Shocks, Smuggling, and Formalisation

### 3.1 Stylised Facts from the Data

The time series on ASM gold exports from 2018–2025 (shown in Table 1) reveals three distinct regimes, each associated with a major policy or institutional change.

**Table 1: Artisanal and small-scale (ASM) gold exports from 2018–2025**

Year	ASM exports (tons)	Export value (US\$ bn)	Key policy environment
2018	75.7	2.8	No withholding tax
2019	53.4	2.2	No withholding tax
2020	39.3	2.0	No withholding tax
2021	3.4	0.185	3% withholding tax introduced
2022	22.0	1.1	Withholding tax cut to 1.5%
2023	37.4	2.1	Partial recovery
2024	63.6	4.6	Pre-GoldBod, high prices
2025	103.0	10.8	GoldBod operational

**Source:** Ghana GoldBod

From Table 1, two features stand out immediately:

1. Extreme volatility in recorded ASM exports, inconsistent with geological or technological changes.
2. Sharp structural breaks coincide with policy interventions, especially taxation and institutional routing.

This already signals that *recorded exports are driven more by incentives and routing than by production capacity in response to world market prices. While higher global gold prices can trigger production, ASM doré supply is primarily influenced by local power dynamics, credit reliance, informality, and transaction costs rather than international gold price signals. Therefore, it is reasonable to attribute much of the export growth in 2025 to reduced smuggling, as ASM doré supply tends to be relatively price inelastic. In fact, Small-scale miners and local traders face significant structural and institutional barriers that hinder full price transmission to output.*

### **3.2 The 2021 Collapse: Evidence of Smuggling and Off-Record Exports**

The most striking observation is the significant reduction in gold exports from 39.3 tons (US\$2.0bn) in 2020 to 3.4 tons (US\$185m) in 2021—a decline of over 90% in volume within one year. There is no plausible production-based explanation for such a collapse:

- No comparable ASM shutdown occurred,
- Gold prices were relatively strong,
- Mining technology and labour supply did not disappear.

The dominant explanatory factor is the introduction of the 3% withholding tax on unprocessed ASM gold in 2021. Economic policy analysis indicates that this tax acted as a price wedge between the formal channel (a 3% reduction in net price) and the informal/smuggling channel (no tax, faster settlement). When the wedge exceeded the cost of smuggling, miners rationally exited the formal channel. The 2021 data therefore provide revealed-preference evidence that ASM gold production continued, but formal reporting collapsed due to incentives.

### **3.3 Partial Reversal in 2022–2023: Incentives Matter**

When the withholding tax was reduced from 3% to 1.5% in 2022, recorded exports rebounded. This could also be a result of the commencement of the DGPP by the BoG:

- 22.0 tons in 2022
- 37.4 tons in 2023

This confirms that the 2021 collapse was policy-induced, not structural.

However, even by 2023, recorded exports remained below pre-tax levels (2018–2020). This suggests lingering distrust within formal channels, continued smuggling routes, and the absence of a strong institutional aggregator. In other words, price incentives alone were necessary but not sufficient to fully reverse the leakage.

### 3.4 2024–2025: GoldBod and the Formalisation Shock

The transition from 63.6 tons in 2024 to 103 tons in 2025 represents a 62% increase in volume in one year, accompanied by a rise in export value from US\$4.6bn to US\$10.8bn.

This jump is too significant to be explained by:

- marginal tax adjustments,
- incremental price effects alone,
- or sudden productivity gains.

Instead, it is consistent with a routing and formalisation shock, where GoldBod:

- centralised ASM purchasing,
- compressed price dispersion,
- improved settlement certainty,
- and eliminated offshore settlement options.

### 3.5 Price vs Quantity Decomposition

A useful decomposition helps clarify the mechanism.

Between 2024 and 2025:

- Quantity increased by 39.4 tons (+62%)
- Export value increased by US\$6.2bn (+135%)

This implies that both volume recovery and higher prices mattered, but volume effects dominate the structural story. Had prices risen without formalisation, we would expect values to rise but volumes to remain stable. Instead, both surged—**strong evidence of smuggling compression**.

### 3.6 Preliminary Interpretation

The data thus far suggest the following causal narrative:

1. ASM production is relatively stable over time.
2. Formal exports are highly elastic to policy incentives and institutional design.
3. The 3% withholding tax in 2021 effectively pushed ASM gold into smuggling channels, collapsing recorded exports.
4. Partial tax reversal restored some flows but did not eliminate leakage.

5. GoldBod represents a regime change, not merely a price adjustment—re-routing gold through a trusted, centralised, and predictable formal channel.
6. The 2025 outcome (103 tons, US\$10.8bn) is best interpreted as:
  - o recovery of pre-tax formal exports, plus
  - o capture of previously smuggled volumes, plus
  - o amplification through higher global gold prices.

## 4. GoldBod Pricing Strategy

### 4.1 Objective and Policy Rationale

The pricing strategy adopted under the GoldBod–BoG framework is explicitly designed to disincentivise gold smuggling, maximise the capture of ASM gold through official channels, and support the Gold-for-Reserves (G4R) programme and broader macroeconomic stability. Unlike a commercial trading operation, profit maximisation is not an objective of this strategy. Instead, the strategy is evaluated on its ability to increase formal FX inflows, strengthen reserves, stabilise the exchange rate, and reduce macroeconomic vulnerability.

The strategy responds directly to Ghana's empirical experience (Table 1). The sharp collapse in recorded ASM gold exports in 2021 following the introduction of a 3% withholding tax demonstrated that small price wedges are sufficient to divert large volumes of gold into illicit channels. The pricing framework is therefore designed to eliminate arbitrage opportunities that favour smuggling.

### 4.2 Determinants of Gold Pricing

Local gold prices under the GoldBod/BoG framework are determined by two variables:

1. The world market (spot) price of gold, denominated in U.S. dollars; and
2. The exchange rate used to convert the world price into Ghana cedis.

GoldBod and the BoG purchase both ASM and large-scale gold at spot price, with no commercial discount relative to the world market price. This has been the practice since the DGPP's inception in 2022 and has partly contributed to the recorded increase in gold exports from 2022. The economic logic is straightforward: pricing below spot creates a guaranteed arbitrage rent for smugglers, undermining formalisation efforts.

We note that Ghana's ASM gold market is fundamentally an arbitrage environment: miners can sell to (i) the official channel or (ii) smugglers (including cross-border routes and offshore settlement). If the official channel applies a discount—whether through

price, exchange-rate conversion, or fees—gold is diverted to informal markets. The miner will choose the channel that maximises expected net proceeds:

$$\max \{\Pi^{official}, \Pi^{smuggle}\}$$

A simple representation is:

$$\begin{aligned}\Pi^{official} &= [P^* \cdot e_b \cdot (1 - \delta_{official})] - c_{official} \\ \Pi^{smuggle} &= [P^* \cdot e_r \cdot (1 - \delta_{smuggle})] - c_{smuggle}\end{aligned}$$

Where:

- $P^*$  = world spot gold price (USD/oz)
- $e_b$  = buying exchange rate used by GoldBod/BoG (GHS/USD)
- $e_r$  = retail/parallel exchange rate relevant for smugglers' pricing
- $\delta$  = discounts/fees/purity and settlement differences (as a fraction of value)
- $c$  = transaction costs (licensing, compliance, risk, delays)

**Key result:** smuggling rises when the “price wedge” is large:

$$[\Pi^{smuggle} - \Pi^{official}] > 0. \text{ This rises if } (e_r - e_b) \uparrow \text{ or } \delta_{official} \uparrow$$

Buying at spot (no discount) and aligning the effective exchange rate toward retail is meant to collapse the wedge.

### 4.3 Why Buying at Spot Makes Economic Sense

By purchasing gold at the spot price, GoldBod collapses the price wedge between formal and informal channels. This makes official sales at least as attractive as smuggling, once risk, delay, and enforcement costs are considered. In economic terms, the strategy increases the elasticity of formal supply by removing the primary incentive for illicit trade.

If official buying is below spot (e.g., applying a commercial discount), you create a guaranteed profit for smugglers:

$$\text{Arbitrage rent per oz} \approx P^* \cdot (e_r - e_b) + P^* \cdot e_b (\delta_{official} - \delta_{smuggle})$$

Even small discounts matter because:

- ASM sellers operate on thin margins,
- smuggling channels are already established,
- and a marginal wedge shifts large volumes.

Therefore, the logic “disincentivise smuggling by buying at spot” is precisely what one would expect in a rational policy design as adopted by the GoldBod.

#### **4.4 Cost Structure of the Strategy**

Buying gold at spot and maintaining competitive local pricing entails a policy cost of approximately 2.5 per cent of gold's value. This cost comprises:

- Offtake discounts (approximately 1.1 percent);
- GoldBod statutory fees (approximately 0.758 percent); and
- Purity and handling losses (approximately 0.1–0.5 percent).

These costs should not be seen as inefficiencies or operational failures. They represent a deliberate policy measure—the explicit price paid to internalise gold flows that would otherwise be smuggled. From an economic perspective, this measure is similar to enforcement or compliance costs in other sectors; it is incurred to secure a greater macroeconomic benefit.

#### **4.5 Exchange-Rate Dimension and the Use of Bonuses**

Historically, gold in Ghana has been traded using the prevailing retail market exchange rate. In 2025, GoldBod sought to reduce the cost of the G4R programme by shifting the buying exchange rate toward the interbank rate, using its regulatory authority. This approach was intended to lower the cost of gold purchases in cedis while preserving competitiveness.

However, two constraints limited a complete transition to interbank pricing:

1. Smugglers' counter-offers are typically benchmarked to retail market exchange rates, and
2. Gold prices in neighbouring countries reflect retail-rate conditions.

To prevent a renewed arbitrage wedge, GoldBod and the BoG introduced bonuses (premiums) for licensed miners. These bonuses are not subsidies in the conventional sense; they are upward adjustments of the interbank rate aimed at converging towards the retail market rate. The result is that gold is currently purchased at near-retail exchange rates, maintaining competitiveness while improving upon the historical practice of buying strictly at retail rates without regulatory discipline.

## **4.6 Accounting Treatment and Reported Losses**

Under prevailing accounting standards, FX inflows must be recorded on the BoG's books at the interbank exchange rate, which is consistently below the effective buying rate when bonuses are included. This results in a translation difference between the economic cost of acquiring gold and the accounting value of the FX inflows.

This valuation mismatch explains most of the reported losses under the G4R programme. Significantly, these are accounting losses, not actual cash losses or trading deficits. They result from the mechanical application of accounting rules rather than from economic inefficiency or poor pricing decisions.

## **4.7 Why the Strategy Is Economically Justified**

The appropriate benchmark for evaluating the pricing strategy is not whether accounting profits are recorded, but whether macroeconomic benefits exceed policy costs. The relevant counterfactual is not a zero-cost programme, but a scenario in which gold is smuggled, FX inflows are foregone, reserves are weaker, and exchange-rate pressure intensifies.

By accepting a small, transparent policy cost, the pricing strategy:

- maximises formal FX capture.
- strengthens foreign exchange reserves.
- supports exchange-rate stabilisation through FX market support.
- reduces imported inflation; and
- lowers the domestic-currency cost of external debt service and imports.

When viewed against these outcomes, the strategy represents a welfare-enhancing trade-off: an observable cost is incurred to avoid much larger, unobserved macroeconomic losses.

## **5. Analysis of the Benefits of GoldBod**

### **5.1 Reduction in smuggling**

A central claim in Ghana's current policy debate is that GoldBod has improved macroeconomic performance by reducing gold smuggling and increasing the share of gold export proceeds that enters the formal FX system. This claim in macroeconomic terms is meaningful: if smuggling is large, then gold production does not translate into FX inflows, weakening reserves, increasing exchange-rate pressure, and amplifying inflation through pass-through.

We evaluate the smuggling-reduction channel using (i) UN Comtrade mirror-trade evidence (UAE imports versus Ghana's reported exports)<sup>6</sup> (ii) Reuters & SWISSAID Data<sup>7</sup> and (iii) GoldBod's observed ASM exports.

### ***Pre-GoldBod Context: Evidence of Smuggling from Mirror Trade***

The most credible operational proxy for smuggling is the mirror-trade gap:<sup>8</sup> partner-country recorded imports of gold from Ghana compared to Ghana's recorded exports. The UN Comtrade data shows that the UAE imported US\$7.1 billion worth of gold from Ghana over 2022–2023, while Ghana's balance of payment reported US\$4.8 billion, implying a discrepancy of US\$2.3 billion. This figure can be interpreted as: when the UAE is used as a benchmark, roughly one-third ( $\approx 33\%$ ) of production is unaccounted for.

Formally, we define the mirror gap:

$$Gap^{USD} = Imports^{UAE} - Exports^{GHA}$$

Using the UN Comtrade data

$$Gap_{2022-23}^{USD} = 7.1 - 4.8 = 2.3 \text{ bn USD}$$

If  $r_0$  denotes the pre-GoldBod FX capture ratio, and this implies that  $1 - r_0 \approx 0.33$ , then:

$$r_0 \approx 0.67$$

This provides a quantitative baseline: before GoldBod, only about two-thirds of the gold export value was being captured and recorded through formal channels, with the remainder representing leakage through smuggling, under-declaration, offshore settlement, or related channels.

### ***Pre-GoldBod Context: Evidence of Smuggling Reuters & SWISSAID Data***

According to the SWISSAID study:

- Over five years (2019–2023), there is a 229 metric-ton gap between Ghana's officially recorded gold exports and the gold import figures reported by trading partners—primarily the United Arab Emirates.

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<sup>6</sup> <https://comtradeplus.un.org/>

<sup>7</sup> <https://swissaid.kinsta.cloud/wp-content/uploads/2024/05/swissaid-on-the-trail-of-african-gold-web-ok.pdf>

<sup>8</sup> These mirror-statistics based estimates are widely used because *they capture what official export numbers report versus what destination partners record as imported*, and the gap is interpreted as a proxy for smuggling or unrecorded trade.

- This discrepancy is estimated to be worth about US \$11.4 billion in lost export value.
- About 34 tons of gold output in 2023 were undeclared, roughly equal to the country's formally recorded artisanal gold production for that year.
- Much of the “missing” volume appeared to flow through Dubai through informal channels, including hand-carried gold or untracked shipments, taking advantage of weak border controls and tax distortions.

### ***GoldBod Outcomes: Post-Reform Formalization in ASM Exports***

Ghana's recorded ASM gold export volume increased from 63.6 metric tons in 2024 to 103 metric tons for 2025 (Table 1).

The simplest and most policy-relevant object is the change in recorded ASM export tonnage:

$$\Delta Q^{ASM} = Q_{2025}^{ASM} - Q_{2024}^{ASM}$$

Substituting values:

$$\Delta Q^{ASM} = 103.0 - 63.6 = 39.4 \text{ tons}$$

This is the core “formalisation wedge” observed in the data: 39.4 tons of additional ASM gold exported through recorded channels within one year.

### ***Is the Observed Increase Consistent with Smuggling Reduction?***

The critical question is whether the observed increase in recorded ASM exports is quantitatively consistent with the pre-reform smuggling estimate.

Assume 2024 recorded exports  $Q_{2024}^{ASM} = 63.6$  tons represented 67% of true ASM output (consistent with the 33% leakage estimate). The implied true ASM output is:

$$Q^{true} \approx \frac{63.6}{0.67} \approx 94.9 \text{ tons}$$

Implied “smuggled/unrecorded” ASM gold pre-GoldBod is:

$$Q_{pre}^{smuggled} \approx 94.9 - 63.6 = 31.3 \text{ tons}$$

Now compare:

- Estimated immediate pre-reform unrecorded quantity: 31.3 tons
- Over the five years, 45.8 tons per year<sup>9</sup>
- Observed post-reform increase in recorded ASM exports: 39.4 tons

The magnitudes are close:

**39.4 ≈ 31.3 to 45.8**

This alignment is exactly what one would expect if GoldBod's primary initial effect was routing previously unrecorded ASM gold into formal export channels, rather than a sudden structural surge in production. ***This does not prove that all 39.4 tons were previously smuggled, but it strongly supports the proposition that a large share of the increase reflects reduced leakage.***

### ***FX Value of Formalisation: Translating Tons into Macro-Relevant Magnitudes***

To evaluate macroeconomic significance, the increased recorded tonnage must be translated into a plausible FX value. The gold price rose from US\$2,386/oz (2024) to US\$3,439/oz (2025)—a 44% increase.

This matters because the same quantity of formalized gold generates much larger FX in 2025.

Using a conservative valuation approach:

- 1 ton ≈ 32,150 troy ounces
- Use P=US\$3,000/oz as a conservative 2025 average (below the cited peak/level)

Then FX value per ton is:

$$V^{tonne} \approx 32,150 \times 3,000 \approx 96.5m \text{ USD/ton}$$

Therefore, the implied FX value of the formalised increment is:

$$\Delta FX^{formalized} \approx 39.4 \times 96.5m \approx 3.80bn \text{ USD}$$

So even under conservative valuation, the smuggling-reduction/formalisation effect corresponds to about US\$3.8 billion of additional recorded export value. Table 2 presents a summary of the analysis of GoldBod's impact on reducing smuggling.

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<sup>9</sup> Annualized average from SWISSAID data:  $\frac{229}{5} \approx 45.8$  tons per year

**Table 2: Summary of the reduction in smuggling analysis**

Metric	Reuters / SWISSAID Estimate	Post-GoldBod Record (Administrative Data)
Smuggling proxy (quantity)	~229 tons over 5 years ( $\approx$ 46 tons/year) based on mirror-trade discrepancies	$\approx$ 39.4 tons increase in recorded ASM exports between 2024 and 2025 (63.6 tons $\rightarrow$ 103 tons)
Value implication	~US\$11.4bn over 5 years ( $\approx$ US\$2–3bn per year, multi-year average prices)	$\approx$ US\$3.8bn implied FX value from the formalisation of 39.4 tons at conservative 2025 prices
Implied FX capture ratio	Pre-GoldBod FX capture implicitly $\approx$ 65–70%, with $\approx$ 30–35% leakage	Post-GoldBod recorded ASM exports suggest a material rise in effective FX capture. $\approx$ 84% of the upper band (45.8 tons) of the previously averagely smuggled gold.
Interpretation	Large, persistent, unrecorded ASM flows indicate systemic smuggling	Administrative data show a step-change in formal ASM exports
Policy significance	Highlights the macroeconomic cost of illicit trade (lost FX, reserves, royalties)	Demonstrates that Ghana, through the GoldBod, now has a formal channel large enough to absorb historic leakage

## 5.2 Macroeconomic Transmission Channels

### 5.2.1 Impact on Gross International Reserves

Gold-related foreign exchange (FX) inflows played a material supporting role in the accumulation of Ghana's gross international reserves in 2025, which rose toward US\$12 billion (US\$11.4billion as at October 2025), strengthening import cover (4.8 months of import cover, up from 3.5 months of import cover for the same period last year) and reducing external rollover risk. While reserve accumulation reflected multiple factors, including IMF programme disbursements, fiscal consolidation, and improved current account dynamics, the formalisation of gold exports under GoldBod contributed through a non-debt-creating FX inflow channel.

#### **Reserve Accumulation Identity**

At a macroeconomic level, changes in gross international reserves can be expressed as:

$$\Delta R_t = CA_t + KA_t + FA_t + EO_t$$

where  $CA_t$  is the current account balance,  $KA_t$  the capital account,  $FA_t$  the financial account, and  $EO_t$  errors and omissions. Gold exports enter the reserve accumulation process primarily through the current account, as they generate FX receipts without corresponding future liabilities.

By increasing the share of gold export proceeds that is formally recorded and settled through the domestic financial system, GoldBod increased the effective translation of gold production into reserve assets. This mechanism differs fundamentally from external borrowing or short-term capital inflows, as it does not increase Ghana's external debt stock or rollover obligations.

### ***Magnitude and Quality of FX Inflows***

Administrative and trade data indicate that gold-related FX inflows in 2025 were large relative to historical norms. ASM gold export values alone reached approximately US\$10.8 billion, compared with US\$4.6 billion in 2024. While not all export proceeds are retained as reserves—owing to imports, private FX demand, and market support—the scale of formalised gold receipts substantially expanded the pool of FX available to the economy and the central bank.

Importantly, the quality of these inflows matters. Gold-related FX receipts are:

- non-debt-creating,
- less volatile than portfolio flows, and
- less sensitive to global risk sentiment than short-term capital inflows.

As a result, they enhance the reserve position's resilience beyond what its nominal size alone would suggest.

### ***Import Cover and Rollover Risk***

The rise in gross international reserves to about US\$11.4 billion improved Ghana's import cover, well above the IMF's prudential benchmark (typically three months of imports).<sup>10</sup> Improved import cover reduces vulnerability to external supply shocks and strengthens the central bank's ability to smooth FX market volatility. At the same time, higher reserves reduced rollover risk by lowering the need for emergency FX financing to meet external payment obligations. In a context of constrained access to international capital markets, this effect is macroeconomically significant: reserves accumulated through export formalisation provide a buffer that borrowing cannot easily substitute.

### ***Attribution and Complementarity***

***It is important to stress that GoldBod was not the sole driver of reserve accumulation in 2025. IMF programme support, debt restructuring progress, and fiscal adjustment all contributed to improved external balances.*** However, GoldBod-related gold inflows were complementary to these factors. By strengthening the FX

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<sup>10</sup> Actual data shows 4.8 months of import cover as at October 2025, up from 3.5 months of import cover for the same period last year

supply side, GoldBod reduced pressure on reserves and enhanced the effectiveness of broader macroeconomic adjustment. In this sense, GoldBod functioned as a structural enabler of reserve accumulation rather than a standalone policy instrument. Its contribution lies in improving the conversion of domestic real assets (gold) into usable external buffers.

### ***Implication***

***The key analytical implication is that reserve accumulation in 2025 was not driven solely by financing inflows or import compression, but also by improved capture of export receipts. This distinction is critical for sustainability. Reserves built on export formalisation are more durable and less distortionary than reserves built through borrowing or administrative FX controls.***

#### **5.2.2 Exchange Rate Impact**

Table 3 summarises the performance of the Ghanaian cedi against the United States dollar over the period 2020–2024, highlighting the persistent, and in some years severe, depreciation pressures that characterised the pre-GoldBod period. Over this period, the cedi experienced repeated episodes of double-digit depreciation, reflecting structural foreign exchange shortages, weak reserve buffers, and heavy reliance on external financing. This historical context is vital for assessing whether subsequent exchange-rate developments represent a continuation of past dynamics or a structural break associated with changes in the organisation of the gold trade and foreign exchange inflows.

**Table 3: Performance of the cedi against the USD, 2020-2025**

<b>Year</b>	<b>GHS/US\$(y-o-y)</b>	<b>Depreciation (-); Appreciation (+)</b>
2020	5.76	-3.93%
2021	6.01	-4.09%
2022	8.58	-29.97%
2023	11.88	-27.81%
2024	14.70	-19.18%
2025	10.45	+40.67%

**Source: BoG's Summary of Macroeconomic and Financial Data**

Since the DGPP commenced in the last quarter of 2022, we have seen a marked improvement in the cedi's relative stability. The annual depreciation rate slowed from about 30% in 2022 to 19% in 2024.

The period following the operationalisation of GoldBod in 2025, however, coincided with a marked and historically unusual appreciation and stabilisation of the Ghanaian cedi.

On an annual average basis, the Bank of Ghana (BoG) interbank GHS/USD rate moved from GHS 14.2 per US\$1 in 2024 to GHS 12.53 per US\$1 in 2025, representing an average appreciation of approximately 13 percent. On a year-end basis, the appreciation was even more pronounced: the exchange rate strengthened from GHS 14.7 per US\$1 at end-2024 to GHS 10.45 per US\$1 at end-2025, implying a 40.67 percent year-on-year appreciation.

These outcomes stand in sharp contrast to the macroeconomic baseline embedded in the IMF-supported PC-PEG 2025 budget, which projected a depreciation of about 9 percent over the year. The budget assumed an average GHS/USD rate of GHS 15.95 in 2025, broadly consistent with prevailing street-market rates in December 2024. This IMF-program benchmark, therefore, provides an appropriate counterfactual against which to assess the contribution of exchange-rate-related policy interventions, including GoldBod and G4R.

### ***FX Supply Effects and Market Conditions***

GoldBod's most direct exchange-rate channel operates through spot FX availability. By centralising the purchase and export of gold and routing proceeds through the domestic financial system, GoldBod increased the volume and predictability of FX inflows available to the formal market. From a market-clearing perspective, the nominal exchange rate can be expressed as a function of net FX supply:

$$\Delta e_t = f(FX_t^{supply} - FX_t^{demand}), \frac{\partial e_t}{\partial FX_t^{supply}} < 0$$

An outward shift in formal FX supply reduces depreciation pressure and compresses parallel-market premia. Evidence from 2025 suggests that GoldBod-related inflows materially eased FX scarcity at a critical juncture, contributing to a reduction in disorderly market conditions that had characterised earlier periods.

### ***Expectations and the IMF Counterfactual***

The divergence between the IMF-program assumption (GHS 15.95) and the realised end rate (GHS 10.45) is analytically significant. It indicates not only a flow effect but also an expectations effect. In dollarized economies such as Ghana, exchange-rate dynamics are strongly influenced by forward-looking behaviour. When market participants observe sustained, rule-based FX inflows—particularly from a non-debt-creating source such as gold—precautionary demand for foreign currency declines. GoldBod's support for BOG's reserve buildup and its pre-emptive communication of FX availability altered expectations about FX availability, reducing hoarding behaviour and speculative pressure. This expectations channel helps explain why the appreciation exceeded what might be implied by contemporaneous flows alone.

### ***Attribution and Complementarity***

It is important to emphasise that GoldBod was not the sole driver of the exchange-rate outcome. The tight monetary policy stance, the BoG's G4R programme, fiscal consolidation, the credibility of the IMF programme, and improved global sentiment toward emerging markets also played important roles. However, GoldBod-related FX inflows were complementary to these factors. By strengthening the FX supply side, GoldBod amplified the effectiveness of macroeconomic adjustment and reduced the likelihood that policy gains would be undermined by FX shortages. In this sense, GoldBod functioned as a stabilising auxiliary mechanism, reinforcing rather than substituting for orthodox macroeconomic policy.

### ***Implication***

***The key to understanding is that the relevant benchmark for assessing exchange-rate impact is not the previous year's exchange rate alone, but the policy counterfactually embedded in the IMF-supported budget. Relative to an expected depreciation to GHS 15.95, the realised outcome represents a substantial positive deviation. While this deviation cannot be entirely attributed to GoldBod, the timing, scale, and non-debt-creating nature of gold-related FX inflows strongly suggest that GoldBod played a meaningful supporting role in the observed appreciation and stabilisation of the cedi.***

### **5.2.3 Inflation Impact**

Inflation dynamics in Ghana in 2025 were shaped by a combination of tight monetary policy, fiscal consolidation, and improved external conditions. Within this broader adjustment framework, GoldBod contributed indirectly to disinflation by supporting exchange-rate stabilisation and reducing exchange-rate pass-through, rather than through any direct price-setting mechanism. Headline inflation declined sharply from 24 percent in 2024 to 6.3 percent in November 2025, the lowest level recorded in four years (Ghana Statistical Service). As noted by the IMF Country Director, Dr. Adrian Adler, the contrast between the sharp depreciation experienced in 2024 and the subsequent appreciation and stabilisation of the cedi in 2025 played a pivotal role in restoring price stability. This observation is consistent with standard macroeconomic transmission channels in small open economies.

#### ***Exchange Rate Pass-Through Channel***

In Ghana, inflation is highly sensitive to exchange-rate movements due to:

- a large import content of consumption and production,

- dollar-indexed pricing of fuel, pharmaceuticals, and intermediate goods,
- and backward-looking price-setting behaviour.

Inflation can be expressed in reduced form as:

$$\pi_t = \alpha \Delta e_t + \beta \pi_{t-1} + \gamma X_t$$

where  $\Delta e_t$  is the exchange rate change and  $X_t$  captures fiscal, monetary, and supply-side factors.

By supporting FX inflows and reducing disorderly market conditions, GoldBod contributed to:

- lower exchange-rate volatility,
- a compression of depreciation expectations,
- and reduced cost-push pressures on imported intermediate and consumer goods.

Even with incomplete pass-through, the magnitude of the 2025 exchange-rate appreciation implies a meaningful disinflationary impulse.

### ***Quantitative Plausibility***

Empirical studies for Ghana<sup>11</sup> typically estimate short-run exchange-rate pass-through to inflation in the range of 0.2–0.4. Applying conservative bounds:

- Average appreciation relative to IMF baseline: ~21%
- Implied inflation reduction via pass-through:

$$0.2 \times 21\% \approx 4.2 \text{ percentage points} \quad \text{to} \quad 0.4 \times 21\% \approx 8.4 \text{ percentage points}$$

This range is economically significant when compared to the observed decline in inflation from 24% to 6.3%. While this calculation does not attribute the entire disinflation to the exchange rate, it demonstrates that exchange-rate stabilisation alone could plausibly account for a significant share of the observed inflation decline.

### ***Role of GoldBod Within the Policy Mix***

GoldBod's role in this process was indirect and complementary. By increasing formal FX supply through gold export formalisation, GoldBod:

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<sup>11</sup> Bank of Ghana (2014), “Exchange Rate Pass-Through in Ghana” (Working Paper); Frimpong & Oteng-Abayie (2010), “Exchange Rate Pass-Through in Ghana”, International Business Research; Ayonka (2020), “Effect of Exchange Rate Pass Through on Domestic Price Levels in Ghana” (MPhil thesis, UCC)

- reduced FX scarcity,
- lowered depreciation risk premia,
- and reinforced confidence in the sustainability of the cedi's appreciation.

These effects enhanced the effectiveness of:

- monetary tightening by the Bank of Ghana,
- fiscal adjustment under the IMF-supported programme,
- and administrative measures aimed at restoring macroeconomic credibility.

In the absence of improved FX availability, disinflation would likely have required either tighter monetary conditions or more aggressive demand compression, with higher output costs.

### **Limits to Attribution**

*It is important to emphasise that inflation outcomes in 2025 cannot be attributed solely to GoldBod. Fiscal consolidation, BOG sterilisation efforts, easing of supply bottlenecks, improved inflation expectations and above all, the tight monetary policy stance adopted by the Monetary Policy Committee all played central roles. GoldBod should therefore be viewed as a supporting macro-policy mechanism that helped stabilise the exchange rate and reduce imported inflationary pressures, rather than as the primary driver of disinflation.*

### **Implication**

We note that exchange-rate stability acts as a powerful inflation anchor in Ghana, and institutional reforms that improve FX capture can meaningfully reinforce disinflation efforts. GoldBod's contribution lies in strengthening the transmission of orthodox macroeconomic policies to prices by reducing exchange-rate volatility and the pass-through of exchange-rate changes.

#### **5.2.4 Impact on the Government's External Debt Service**

Movements in the exchange rate have a direct and immediate effect on Ghana's external debt service burden, as a significant share of public debt is denominated in foreign currency. In this context, the appreciation and stabilisation of the Ghanaian cedi in 2025 generated a sizeable valuation effect, reducing the domestic-currency cost of servicing external debt relative to the IMF-supervised budget baseline.

### ***Exchange-Rate Valuation Channel***

External debt service obligations are contracted in U.S. dollars and other foreign currencies, while budget execution occurs in Ghana cedis. The domestic-currency cost of external debt service is therefore given by:

$$D_t^{GHS} = D_t^{USD} \times e_t$$

where  $D_t^{USD}$  is the dollar value of debt service due and  $e_t$  is the GHS/USD exchange rate. A stronger cedi mechanically lowers the cedi value of a given dollar obligation, even when the nominal debt stock and contractual payments remain unchanged.

The IMF-supervised 2025 budget was built on an assumed average exchange rate of GHS 15.95 per US\$1, reflecting prevailing market conditions at the end of 2024 and an expected depreciation trajectory. However, the realised average interbank exchange rate in 2025 was GHS 12.53 per US\$1, representing a substantial and unexpected appreciation relative to the policy baseline.

### ***Quantified Impact on External Debt Service***

Table 4 summarises Ghana's external debt service position as at mid-December 2025 and illustrates the valuation effect of the exchange-rate deviation from the budget assumption.

**Table 4: Impact of exchange rate appreciation on external debt service (2025)**

2025 External Debt Payments	Amount (US\$)	GHS Amount @ Budget Avg. Rate (15.95)	GHS Amount @ Realised Avg. Rate (12.53)	GHS Savings
Interest	504,880,793	8,052,848,642	6,326,156,331	1,726,692,311
Amortisation	605,846,212	9,663,247,087	7,591,253,040	2,071,994,046
Eurobond	709,025,252	11,308,952,764	8,884,086,404	2,424,866,360
<b>Total</b>	<b>1,819,752,257</b>	<b>29,025,048,493</b>	<b>22,801,495,775</b>	<b>6,223,552,718</b>

**Source:** Author's computation using Ministry of Finance external debt service data and Bank of Ghana interbank exchange rates.

Total external debt service payments of US\$1.82 billion would have amounted to GHS 29.0 billion at the budgeted exchange rate. At the realised average rate, the same obligations required GHS 22.8 billion, implying a gross domestic currency saving of approximately GHS 6.22 billion.

These savings should be regarded as valuation gains, not as fiscal profits or reductions in contractual debt obligations. The amounts payable in US dollars remained unchanged; the savings resulted solely from the stronger-than-expected exchange rate. However, from a macro-fiscal perspective, valuation effects of this scale are economically significant. They alleviate short-term budgetary pressures, improve cash flow

management, and reduce the need for offsetting fiscal adjustments elsewhere. At year-end exchange rates, the domestic-currency savings are approximately equivalent to US\$560 million, highlighting the sensitivity of Ghana’s debt service burden to exchange-rate fluctuations in a highly dollarized debt structure.

### ***Role of GoldBod in the Transmission Mechanism***

GoldBod’s contribution to this outcome is indirect but material. By increasing formal foreign-exchange inflows through the formalisation of gold exports, GoldBod helped to strengthen FX market liquidity, reduce disorderly market conditions, and compress depreciation expectations. These effects supported the appreciation and stabilisation of the cedi relative to the budget baseline.

While GoldBod was not the sole driver of exchange-rate dynamics in 2025—fiscal consolidation, IMF programme credibility, and monetary tightening were also critical—it functioned as a supporting structural mechanism that enhanced the effectiveness of broader macroeconomic adjustment. In the absence of improved FX supply conditions, the realised exchange rate would likely have been closer to the budget assumption, implying a materially higher domestic-currency debt service burden.

### ***Policy Implications***

*The analysis highlights a key macroeconomic insight: exchange-rate stabilisation delivers immediate and sizeable fiscal benefits in economies with significant foreign-currency-denominated public debt. Institutional reforms that improve FX capture and reduce leakage—such as GoldBod—can therefore contribute meaningfully to debt sustainability, even without altering the nominal debt stock.*

#### **5.2.5 Implications for the Import Bill**

Ghana’s import bill is highly sensitive to exchange-rate movements, given the economy’s significant reliance on imported consumer goods, intermediate inputs, fuel, and capital equipment. In this context, the appreciation and stabilisation of the Ghanaian cedi in 2025 generated substantial economy-wide savings by reducing the domestic-currency cost of imports relative to the IMF-supervised budget baseline. Based on official trade data for January to October 2025, Ghana’s total import stood at approximately US\$14.8 billion by the end of October. The budgetary and macroeconomic implications of this import volume depend critically on the exchange rate at which foreign exchange is purchased.

#### ***Exchange-Rate Valuation Channel***

The domestic-currency cost of imports is given by:

$$M_t^{GHS} = M_t^{USD} \times e_t$$

where  $M_t^{USD}$  is the dollar value of imports and  $e_t$  is the GHS/USD exchange rate. A stronger cedi, therefore, lowers the cedi value of imports for households, firms, and the government, even when the underlying volume of imports remains unchanged.

The IMF-supervised 2025 budget assumed an average exchange rate of GHS 15.95 per US\$1, reflecting expectations of continued depreciation. However, the realised average interbank rate in 2025 was GHS 12.53 per US\$1, implying a substantial appreciation relative to the policy baseline.

### ***Quantified Impact on the Import Bill***

Table 5 summarises the valuation effect of this exchange-rate divergence on Ghana's projected 2025 import bill.

**Table 5: Impact of exchange rate appreciation on Ghana's import bill (2025)**

Forex Payment	Amount (US\$m)	Amount in GHSm @ Budget Avg. Rate (15.95/\$1)	Amount in GHSm @ Realised Avg. Rate (12.53/\$1)	Net Benefit (GHSm)
2025 Import Bill (Jan-Oct 2025)	14,795.8	235,993.01	185,391.37	50,601.64

**Source:** Author's computation using Ghana trade data (Jan–Oct 2025) and Bank of Ghana interbank exchange rates.

At the budgeted exchange rate, Ghana's projected import bill would have amounted to approximately GHS 236.0 billion. At the realised average exchange rate, the same dollar value of imports required GHS 185.4 billion, implying a gross economy-wide saving of about GHS 50.6 billion.

These savings represent a valuation benefit, not a reduction in the physical volume of imports. They accrue broadly across:

- households, through lower prices of imported consumer goods,
- firms, through reduced costs of imported inputs and capital goods,
- and government, through lower cedi outlays on imported goods and services.

From a macroeconomic perspective, the scale of this effect is substantial. A reduction in the domestic-currency cost of imports of this magnitude improves real purchasing power, lowers cost-push inflation pressures, and supports overall economic welfare. Consistent with this channel, Fitch Ratings estimates that real spending power in Ghana increased by about 2.5 percent as of June 2025, compared with 1.1 percent in 2024. With inflation continuing to trend downward, the real-income gains from exchange-rate stabilisation are likely to persist.

### ***Role of GoldBod in the Transmission Mechanism***

GoldBod's contribution to the import-bill outcome is indirect but economically meaningful. By improving formal FX inflows through gold export formalisation, GoldBod helped to:

- ease FX scarcity,
- reduce disorderly market conditions,
- and support the appreciation and stabilisation of the cedi.

While other factors—such as fiscal consolidation, IMF programme credibility, and monetary tightening—were also central, GoldBod functioned as a supporting structural channel that enhanced FX availability. In the absence of these improved FX supply conditions, the exchange rate would likely have been closer to the budget assumption, implying a significantly higher domestic-currency import bill.

### ***Policy Implications***

The analysis highlights the macroeconomic importance of exchange-rate stability for a highly import-dependent economy. Institutional reforms that strengthen FX capture and reduce leakage—such as GoldBod—can deliver large welfare gains by lowering the domestic cost of essential imports. These gains operate alongside and reinforce orthodox macroeconomic adjustment policies.

### **5.2.6 Financing Savings from Smuggling Reduction and Non-Debt Reserve Accumulation**

A central macroeconomic benefit of GoldBod's operations lies in its ability to convert illicit gold flows into formal, non-debt-creating foreign exchange (FX). This delivers a measurable financing dividend to the Ghanaian economy by reducing reliance on costly external borrowing to secure FX liquidity and build reserves. Two closely related channels are relevant:

- i. interest savings arising from reduced smuggling, and
- ii. Interest savings from reserve accumulation financed by export receipts rather than debt.

#### **5.2.6.1 Interest Savings from Smuggling Reduction (Formalisation Dividend)**

##### *Measuring “Smuggling Saved”*

We proxy for smuggling reduction by the increase in recorded ASM gold exports following the operationalisation of GoldBod. Between 2024 and 2025:

- Recorded ASM exports increased from 63.6 tons to 103.0 tons,
- implying an incremental 39.4 tons of gold routed through formal channels.

Given the absence of evidence of a sudden expansion in ASM production capacity, this increase is plausibly interpreted as gold previously lost to smuggling that was formalised under GoldBod.

### ***Valuation of Formalised Gold***

Converting tons to ounces:

$$39.4 \times 32,150 \approx 1,266,710 \text{ oz}$$

Valued at a conservative 2025 spot price of US\$3,000/oz, the implied FX value is:

$$\Delta V \approx \text{US\$}3.8 \text{ billion}$$

### ***Avoided Interest Cost***

Had Ghana needed to mobilise an equivalent US\$3.8bn through external borrowing, the annual interest burden would have been:

- At 7%: US\$266 million
- At 10%: US\$380 million

In cedi terms (at the 2025 average rate of GHS 12.53):

- GHS 3.3 – 4.8 billion per year

This represents a pure financing gain attributable to smuggling reduction—FX secured without increasing the public debt stock. This financing gain over a 10-year period amplifies the avoided interest cost in addition to the full amortisation of the debt

#### **5.2.6.2. Interest Savings from Non-Debt Reserve Accumulation**

Beyond the incremental smuggling recovery, GoldBod facilitated the mobilisation of a much larger volume of gold exports through formal channels in 2025. Total recorded ASM gold exports amounted to US\$10.8 billion, a scale of FX inflow that materially supported reserve accumulation and FX market stability.

### ***Counterfactual Borrowing Cost***

If Ghana had sought to build equivalent FX buffers through external borrowing rather than export receipts, the implied annual interest cost would have been:

- At 7%: US\$756 million
- At 10%: US\$1.08 billion

In cedi terms:

- GHS 9.5 – 13.5 billion per year (illustrative)

These figures underscore the macroeconomic importance of non-debt-creating reserve build-up, particularly in a context of constrained market access and elevated sovereign risk premia.

### ***Conservative Adjustment***

Recognising that not all export receipts are retained as reserves, a conservative adjustment can be applied. Even if only 30–50 percent of the US\$10.8bn effectively supports reserves or avoids reserve drawdown, the avoided annual interest cost remains in the range of US\$227–540 million, which is still macro-relevant.

#### **5.2.6.3 Economic implications**

These two channels demonstrate that GoldBod’s impact extends beyond commercial or accounting considerations:

- Smuggling reduction delivers a formalisation dividend, lowering the economy’s reliance on expensive external financing by US\$266–380 million per year (baseline).
- Non-debt reserve accumulation delivers a broader financing dividend, avoiding US\$756 million to US\$1.08 billion in annual interest costs at prevailing sovereign borrowing rates.

Crucially, these benefits accrue every year that the formalisation and reserve build-up effects are sustained, whereas reported BoG “losses” are largely one-off accounting translation effects.

From a macro-financial perspective, GoldBod effectively substitutes export-generated FX for debt-financed FX, improving external resilience while reducing fiscal and rollover risks. When evaluated against the avoided interest costs alone—excluding additional benefits from exchange-rate stabilisation, lower inflation, cheaper imports, and reduced debt-service valuation—GoldBod’s operations generate large and recurring economic gains that comfortably exceed the narrow accounting losses recorded on the BoG’s balance sheet.

Table 6 summarises of financing benefits of GoldBod from smuggling reduction and non-debt FX accumulation (2025)

**Table 6: Summary of financing benefits of GoldBod from smuggling reduction and non-debt FX accumulation (2025)**

Benefit Channel	FX Value US\$ bn	Borrowing Rate Assumed	Annual Interest Cost Avoided		Economic Interpretation
			US\$ m	GHS bn*	
Smuggling Reduction (Formalisation Dividend)	3.8	7%	266	3.33	FX recovered from illicit channels; avoids borrowing to replace lost FX
		10%	380	4.76	Upper-bound financing savings
Total ASM FX Mobilised via GoldBod	10.8	7%	756	9.47	Non-debt FX used to support reserves and FX liquidity
		10%	1,080	13.53	Illustrative upper bound
Conservative Reserve-Relevant Share (30%)	3.24	7%	227	2.84	Only portion translating into reserves / avoided drawdown
		10%	324	4.06	Conservative scenario
Moderate Reserve-Relevant Share (50%)	5.40	7%	378	4.74	Plausible central case
		10%	540	6.77	Central–upper bound

Note: \*GHS equivalents computed using the 2025 average interbank rate of GHS 12.53 per US\$.

### 5.3 Formalisation Benefits and the Reported Bank of Ghana's Trading Losses

The final step in the analysis is a narrow cost–benefit comparison, restricted deliberately to observable and verifiable magnitudes. While earlier sections have discussed the broader macroeconomic repercussions of GoldBod's operations—exchange-rate stabilisation, reserve accumulation, inflation dynamics, and fiscal valuation effects—this section focuses exclusively on direct numerical comparison between:

1. the estimated foreign exchange (FX) value of gold formalised through reduced smuggling, and
2. The reported trading loss recognised by the Bank of Ghana (BoG).

This approach provides a transparent benchmark for assessing whether the policy cost implied by the BoG's reported loss is commensurate with, or outweighed by, the measurable benefits of formalisation.

### ***The Reported BoG Trading Loss***

According to the International Monetary Fund (IMF), the Bank of Ghana recognised a trading loss of approximately US\$214 million, equivalent to about GHS 2.4 billion, in relation to gold operations. For the purposes of this section, this figure is taken as given, without adjustment or reinterpretation. No attempt is made here to decompose the loss into accounting versus economic components; the analysis treats the US\$214 million as the full policy cost.

### ***Quantifying the Formalisation Benefit***

As established earlier, recorded ASM gold exports increased substantially following the operationalisation of GoldBod. Using conservative valuation assumptions:

- Incremental formalised gold (proxy for smuggling reduction): 39.4 tons
- Conservative valuation per ton (2025 prices): US\$96.5 million per ton

This yields an estimated FX value of formalisation of:

$$\text{Formalisation Benefit} = 39.4 \times 96.5 \approx \text{US\$3.80 billion}$$

This figure represents the gross FX value of gold that entered formal channels, relative to the immediate pre-GoldBod baseline.

### ***Benefit–Cost Ratio***

A simple benefit–cost comparison can be expressed as:

$$\text{Benefit–Cost Ratio} = \frac{\text{Formalisation FX Value}}{\text{Reported BoG Loss}}$$

Substituting the observed values:

$$\text{Benefit–Cost Ratio} = \frac{3.802}{0.214} \approx 17.8$$

This implies that the estimated FX value of formalisation is roughly 18 times larger than the trading loss recognised by the BoG.

### ***Break-Even Analysis***

A helpful way to interpret this result is to compute the break-even quantity of formalised gold required for the formalisation benefit to equal the reported loss.

Let:

- $L = \text{US\$214 million}$  (BoG loss),
- $v = \text{US\$96.5 million per ton}$  (conservative valuation).

The break-even formalised quantity  $Q^*$  is:

$$Q^* = \frac{L}{v} = \frac{214}{96.5} \approx 2.2 \text{ tons}$$

This result is economically striking. It implies that:

If GoldBod reduced smuggling by as little as 2.2 tons of gold, the resulting FX value would fully offset the reported BoG trading loss. The observed increase in recorded exports—39.4 tons—is about 18 times this break-even threshold.

### ***Interpretation***

From a strictly numerical standpoint, the implication is unambiguous:

- The scale of formalisation achieved vastly exceeds what would be required to justify the reported BoG loss on cost–benefit grounds.
- Even under conservative valuation assumptions, the formalisation dividend dominates the policy cost by an order of magnitude.

Importantly, this conclusion holds without invoking:

- reserve accumulation effects,
- exchange-rate stabilisation,
- inflation reduction,
- interest savings, or
- fiscal valuation gains.

Those channels, analysed elsewhere in the report, would only strengthen the net-benefit assessment.

When the FX value of gold formalised through reduced smuggling is compared directly with the Bank of Ghana's reported trading loss of US\$214 million, the benefit–cost ratio is approximately 17:1. In break-even terms, formalising just 2.2 tons of gold would suffice to offset the reported loss, whereas the observed increase in recorded exports is over 39 tons. On purely numerical grounds, the formalisation benefits of GoldBod overwhelmingly exceed the reported trading loss.

## **6. Conclusion and Policy Recommendations**

### **6.1 Conclusion**

This report set out to assess the macroeconomic impact of the Ghana Gold Board (GoldBod) using a deliberately conservative and numerically grounded approach. The analysis focused on verifiable quantities, transparent assumptions, and direct

comparisons between measurable benefits and reported costs. The central finding is unambiguous: once properly evaluated, the macroeconomic benefits of GoldBod's operations overwhelmingly exceed the reported losses incurred by the Bank of Ghana (BoG).

The formalisation of artisanal and small-scale mining (ASM) gold constitutes the cornerstone of GoldBod's economic impact. Recorded ASM exports increased sharply in 2025, with an estimated 39.4 tons of gold plausibly diverted from smuggling into formal channels. Valued conservatively at US\$96.5 million per ton, this implies a formalisation dividend of approximately US\$3.8 billion in incremental foreign exchange. A narrow cost–benefit comparison shows that this formalisation benefit alone is nearly 17 times larger than the US\$214 million trading loss reported by the BoG. In break-even terms, formalising as little as 2.2 tons of gold would have sufficed to offset the reported loss, far below the observed increase in recorded exports.

Beyond formalisation, GoldBod materially improved Ghana's external position by enabling non-debt-creating foreign exchange inflows. The mobilisation of approximately US\$10.8 billion in ASM gold exports reduced the need for costly external borrowing to support reserve accumulation and FX liquidity. Using conservative sovereign borrowing rates of 7–10 percent, the implied annual interest cost avoided ranges from US\$756 million to US\$1.08 billion, even before adjusting for reserve-retention shares. When the interest savings attributable specifically to smuggling reduction are isolated, they still amount to US\$266–380 million per year, underscoring the durability of the financing dividend.

These FX inflows translated into broader macroeconomic gains. Ghana's gross international reserves rose toward US\$11–12 billion in 2025, improving import cover and reducing rollover risk. Exchange-rate stabilisation followed, with the cedi appreciating sharply relative to the IMF-supervised budget baseline. This appreciation generated large valuation gains, including an estimated GHS 6.2 billion reduction in the domestic-currency cost of external debt service and approximately GHS 50.6 billion in savings on the import bill. Through reduced exchange-rate volatility and partial pass-through, GoldBod indirectly supported disinflation, complementing fiscal consolidation and monetary tightening.

Crucially, the much-discussed “losses” recorded by the BoG are shown to be predominantly accounting translation effects, arising from the statutory requirement to book FX inflows at the interbank exchange rate while gold purchases are executed at near-retail rates to disincentivise smuggling. Once these valuation effects are separated from the true economic policy cost—estimated at approximately 2.5 percent of gold value—the programme's net contribution remains strongly positive. The appropriate

counterfactual is not a zero-loss scenario, but one characterised by continued smuggling, FX scarcity, weaker reserves, and heightened macroeconomic instability.

GoldBod represents a welfare-enhancing institutional innovation that internalises gold flows previously lost to illicit channels, strengthens Ghana's external buffers, and reduces reliance on expensive debt financing. The empirical evidence presented in this report indicates that the programme's measurable benefits—formalisation gains, financing savings, valuation relief, and macroeconomic stabilization—substantially and persistently outweigh its narrow accounting costs. Going forward, the key policy challenge is not whether GoldBod should exist, but how to sustain its gains, improve transparency around accounting treatment, and gradually reduce policy wedges as FX market conditions normalise.

## 6.2 Policy Recommendations

### 6.2.1 Ensuring Sustainability of Formalisation Gains

#### *Recommendation 1: Institutionalise Price Competitiveness with Automatic Adjustment Rules*

GoldBod's success hinges on its ability to neutralise smuggling incentives. To sustain this, pricing rules should be codified and formula-based, linking local gold prices transparently to:

- world spot prices, and
- a clearly defined FX benchmark (interbank rate plus a bounded premium).

An explicit pricing formula—adjusted automatically within predefined bands—would reduce discretion, enhance credibility, and ensure that official prices remain competitive even as market conditions evolve.

#### *Recommendation 2: Gradually Compress the Retail–Interbank Spread*

A key driver of reported accounting losses is the divergence between retail and interbank exchange rates. Sustained FX inflows provide an opportunity to:

- deepen the interbank FX market,
- reduce parallel market premia, and
- lower the bonus required to attract gold into formal channels.

Over time, this would reduce both translation losses and the policy wedge, improving the programme's cost efficiency without undermining formalisation.

***Recommendation 3: Ring-Fence a Share of Gold FX for Reserve Adequacy***

To maximise macroeconomic impact, a clearly defined minimum share of GoldBod-generated FX should be earmarked for reserve accumulation or to avoid a drawdown. This would strengthen the programme's credibility as a macro-stabilisation tool and ensure that formalisation gains translate into durable external buffers.

**6.2.2 Strengthening Governance and Transparency**

***Recommendation 4: Separate accounting effects from economic costs in official reporting***

To prevent misinterpretation of BoG financial statements, GoldBod and the BoG should publish:

- a reconciliation table separating accounting translation effects from true economic policy costs, and
- an annual estimate of the net macroeconomic benefit of the programme.

This would align public communication with economic reality and reduce the politicisation of accounting outcomes.

***Recommendation 5: Enhance Independent Oversight and Audit Disclosure***

Given the scale of transactions involved, GoldBod's operations should be subject to:

- regular independent audits,
- explicit disclosure of pricing formulas, fees, and purity adjustments, and
- periodic performance reviews against clearly defined objectives (formalisation rates, FX captured, reserve contribution).

Such measures would mitigate governance risks, reduce scope for rent-seeking, and reinforce institutional legitimacy.

***Recommendation 6: Strengthen Data Integration across Institutions***

GoldBod, the BoG, the Minerals Commission, and the Ghana Revenue Authority should move toward integrated gold-sector data systems. Real-time reconciliation of production, exports, FX inflows, and fiscal receipts would improve monitoring, reduce leakages, and support evidence-based policy adjustments. This will also make it possible to design appropriate taxes to generate revenue for the government.

### 6.2.3 Managing Transition Risks

#### *Recommendation 7: Manage the Transition to Full GoldBod Trading with Clear Phasing*

As GoldBod assumes fuller responsibility for ASM gold trading, the transition should be phased and rule-based, with clear milestones. Abrupt shifts in pricing, fees, or exchange-rate treatment risk recreating arbitrage opportunities and undermining formalisation.

#### *Recommendation 8: Avoid Over-Reliance on Central Bank Balance Sheet Absorption*

While the BoG's involvement has been critical in the early phase, long-term sustainability requires a gradual shift toward:

- commercially viable trading structures,
- reduced quasi-fiscal exposure of the central bank, and
- greater private-sector participation under strong regulation.

This will limit balance-sheet risks and align the programme with best practice in central banking.

#### *Recommendation 9: Build Exit Options and Stress-Test the Model*

The GoldBod framework should be stress-tested against:

- declines in global gold prices,
- tightening global financial conditions,
- narrowing FX spreads, and
- potential reversal of ASM production trends.

Clear exit or adjustment mechanisms should be articulated *ex ante* to avoid ad hoc policy responses during adverse shocks.

### 6.2.4 Strategic Framing

#### *Recommendation 10: Reframe GoldBod as a Macro-Stabilisation Instrument, Not a Trading Entity*

GoldBod should be explicitly framed as a macro-stabilisation and formalisation instrument, not as a profit-seeking trading company. This framing is essential to:

- set appropriate performance benchmarks,
- manage expectations around financial statements, and
- align public discourse with the programme's true objectives.

### **6.2.5 Sustaining the FX Stability**

Maintaining these gains needs more than short-term efforts; it requires economic restructuring, fiscal discipline, and policies that boost productivity, competitiveness, and diversification.

#### ***Recommendation 11: Structural Transformation***

A major step towards maintaining Ghana's foreign exchange gains is transforming the economy into one driven by exports. Dependence on raw export commodities has historically made the economy vulnerable to global price swings and limited value retention. Export diversification is crucial. While gold remains the backbone of Ghana's foreign exchange earnings, it must be supplemented by non-traditional exports. Achieving export diversification requires improvements in productivity, efficiency, and competitiveness.

The pursuit of a 24-hour economy provides a practical way to enhance productivity and efficiency. Greater productivity and efficiency lower unit costs, boost competitiveness, and help stabilise the currency by decreasing demand for FX through import substitution. It also presents an opportunity to expand exports, thereby increasing export earnings.

In furtherance of this;

- The government must prioritise investment in agro-processing, tourism, manufacturing, and digitalisation, enabling the country to add value to its abundant natural resources.
- The government should establish an institutional framework within the Accelerated Export Development initiative to coordinate efforts and ensure that export promotion is incorporated into overall national development strategies.

#### ***Recommendation 12: Promotion of “Made in Ghana” goods or Import Substitutes***

Promoting locally produced goods remains vital for maintaining the gains in the exchange rate. The recent directive that mandates ministries, schools, hospitals, and other government institutions to buy locally made products must be strictly enforced. Public awareness campaigns should emphasise how purchasing Ghanaian products strengthens the cedi, boosts employment, and advances industrial development. Incorporating “Buy Ghana” messages into civic education and mainstream media can increase consumer awareness and decrease reliance on imports, helping to ease the burden on foreign exchange reserves.

***Recommendation 13: Fiscal Discipline***

- Fiscal discipline remains central to sustaining currency stabilisation. The government must remain prudent in public spending and prioritise productive investment in infrastructure, agriculture and industry over recurrent expenditure. Such investments boost productivity, increase value addition, diversify exports, and strengthen foreign reserves.
- Equally important is the continued effort to ramp up domestic revenue mobilisation. Improving tax compliance and broadening the revenue base reduces dependence on external borrowing, stabilises fiscal accounts, and enhances investor confidence. The signalling effect of strong fiscal discipline will make Ghana attractive to foreign investors in the priority sectors for the structural transformation.

***Recommendation 14: Enhanced Law Enforcement to Minimise and Deter Smuggling***

- Transform the anti-gold smuggling task force into a permanent multi-agency task force—including Police, Military, EOCO, GRA Customs, NACOC, National Security, Minerals Commission, and GoldBod—with clear mandates, budgets, and performance metrics. Its goal is to disrupt illegal gold exports and conduct joint operations at mines, aggregators, airports, borders, and assay centres, with swift procedures to seize unlicensed gold and assets, to be rerouted officially through GoldBod.
- Tighten licensing and on-the-ground checks by punishing unlicensed gold trading activities and linking licence renewal for buyers, aggregators and exporters to demonstrated compliance with KYC/AML records, transaction reporting to GoldBod, and no adverse enforcement findings.
- Prioritise Intelligence-led enforcement and incentives and close border and transport loopholes by deploying trained, vetted gold-focused units at high-risk border posts and airports with handheld analyzers and clear SOPs for gold seizures

***Recommendation 15: Reclassify the transactional loss to BoG from GoldBod support as a government liability.***

Our analysis highlighted the enormous benefits of the DGPP and, especially, the GoldBod operations in reducing smuggling. The 18-to-1 benefit-cost ratio for the Ghanaian economy in 2025 justifies the recommendation that the transactional loss be treated as a government liability and thus provided for in the annual fiscal budgets.

To do this;

- Fiscal authorities should “internalise” the loss into the fiscal budget as a quasi-fiscal cost of a government policy. Instead of viewing it simply as a BoG operational expense, it should be recognised as the cost of executing a government-mandated plan to accumulate FX reserves and to combat smuggling.
- On the BoG’s balance sheet, the loss should be recorded as an asset called “Claim on central government from the DGPP” rather than allowing the loss to reduce BoG’s equity.
- The fiscal authorities should classify it as an expense once they have reached an agreement with the IMF and auditors on its classification as a liability in the fiscal accounts and its inclusion in the budget.
- Link future GoldBod operations, aimed at supporting FX reserve accumulation and the FX market, to fiscal decisions by openly recognising it as a fiscal cost and funding it via the annual budget.

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### 2025 BUDGET SPEECH