

Evidence Packet: Ghana Macroeconomic Indicators (2015–2024)

Purpose

This evidence packet provides the quantitative foundation used to evaluate analytic reasoning in a macroeconomic case study of Ghana. The data mirrors the empirical basis used by professional human analysts, enabling a direct comparison between human-written analysis and large language model (LLM)-generated analysis under equivalent evidentiary conditions.

The packet is intentionally limited to a small set of high-salience indicators commonly referenced in IMF country assessments. It is designed to support **analytic interpretation**, not forecasting or model training.

Data Sources

Primary Source: - International Monetary Fund (IMF), *World Economic Outlook (WEO)* database

Human Analytic Baseline: - IMF *Article IV Consultation – Ghana* (narrative analysis)

All data used are publicly available and non-proprietary.

Country and Time Scope

- **Country:** Ghana
- **Time Period:** 2015–2024
- **Frequency:** Annual

The selected time window captures periods of economic expansion, fiscal stress, external shocks, and post-pandemic adjustment, making it analytically rich for trend-based reasoning.

Indicators Included

The following indicators were extracted from the IMF WEO dataset and transformed into a time-series format (indicator × year):

1. **GDP Growth (% change, constant prices)**
Measures real economic growth and overall economic momentum.

2. Inflation – Period Average (% change)

Captures consumer price dynamics and purchasing power trends.

3. Inflation – End-of-Period (% change)

Indicates price stability conditions at year-end, often referenced in policy analysis.

4. Government Gross Debt (% of GDP)

Reflects fiscal sustainability and debt burden relative to economic output.

5. Fiscal Balance (% of GDP)

Net lending/borrowing position of the general government, indicating fiscal stance.

6. Current Account Balance (% of GDP)

Measures external sector balance and vulnerability to external financing pressures.

Analytic Relevance

These indicators collectively support core macroeconomic analytic tasks, including:

- Identifying growth and inflation trends
- Assessing fiscal sustainability
- Evaluating external sector vulnerabilities
- Reasoning about macroeconomic risks and trade-offs

They correspond directly to the evidence cited and interpreted in IMF Article IV consultations, ensuring methodological alignment between human and LLM analyses.

Intended Use in the Project

This evidence packet is provided *unchanged* to both:

- Human-written analytic products (IMF reports)
- LLMs tasked with producing an independent macroeconomic assessment

Any differences observed in conclusions, structure, or reasoning are therefore attributable to **analytic capability**, not differences in data access.

Notes on Interpretation

- The data are descriptive, not prescriptive.
- No single indicator is treated as definitive; analytic value arises from synthesis across indicators and time.

- This packet does not include policy recommendations, which are part of the analytic task rather than the evidence base.

Prepared for the DEVCOM/DAC Analytic Capabilities Project