

Executive Summary (Strategic Version)

This project began as a regression model predicting one-year-ahead GDP growth for Emerging Market economies using IMF macroeconomic data.

Initial modeling revealed weak predictive performance, high heterogeneity across countries, and structural instability in the dataset. The regression formulation proved statistically fragile and difficult to interpret.

To improve robustness and feasibility within project constraints, the approach was strategically revised.

The project now focuses on European economies and reframes the problem as a binary classification task: predicting whether GDP will decelerate in the following year.

This reformulation offers several advantages:

- More homogeneous macroeconomic structure.
- Higher data consistency.
- Stronger cyclical synchronization.
- Balanced classification target.
- Improved economic interpretability.
- Stronger out-of-time predictive signal.

The dataset has been fully cleaned, structured, and validated, resulting in 737 country-year observations with no missing values and no information leakage.

The project is currently entering the modeling phase, beginning with baseline logistic regression and time-based validation.

The revised framework is methodologically stronger, more interpretable, and better aligned with early-warning macroeconomic modeling.