

Eco Towards 2027: Assessment of the Feasibility Conditions of a Monetary Union in West Africa

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ABSTRACT: With one year to go before the deadline set for 2027, the ECOWAS single currency project, the Eco, raises as many hopes as questions. This study assesses the preparedness of Member States for this major monetary transition by using a panel threshold model (PTM) and the Spectral Clustering algorithm over the period 2000-2025. Our results reveal persistent heterogeneity, with a financial development threshold (35.4% of GDP for credit to the private sector) below which financial integration remains a factor of volatility. The analysis identifies four clusters of countries with contrasting profiles, highlighting the persistent fragmentation of the regional economic space, exacerbated by the withdrawal of countries from the ESA. The failure of most countries to meet the convergence criteria seriously jeopardizes an inclusive launch in 2027. The study argues for a multi-speed approach, enhanced fiscal coordination, and the strengthening of regional financial institutions as prerequisites for a viable monetary union.

KEYWORDS: Eco, ECOWAS, Monetary Union, Macroeconomic convergence, Threshold model, Spectral clustering, Financial integration, 2027, ESA.

JEL classification: C33, C38, E44, F36, F42, O55.

1. INTRODUCTION

After decades of successive postponements, ECOWAS reaffirmed in July 2026 its commitment to launch the Eco in 2027. The decision, taken at the 69th Ordinary Summit in Lungi, Sierra Leone, marks a new attempt to realize the ambition of a West African single currency, nearly four decades after the project's initial design. Leaders in the region see the Eco as a key instrument to deepen regional economic integration and promote sustainable, inclusive and resilient growth.

However, with one year to go, many uncertainties remain. The project has had a long series of missed deadlines: 2003, 2005, 2010, 2014, 2020. The withdrawal of Burkina Faso, Mali and Niger from ECOWAS in January 2025 has upset the regional balance and weakened the scope of the monetary union. In addition, the macroeconomic convergence criteria - notably inflation, fiscal deficits and public debt - remain largely non-respected by most Member States.

This study aims to assess, in the light of the most recent data, the preparedness of ECOWAS countries for this monetary transition. It seeks to answer three main questions :

- i. What is the state of economic and financial convergence of ECOWAS countries with one year to go?
- ii. Which groups of countries have the most homogeneous integration and risk profiles, and how does the withdrawal from the ESA affect this mapping?
- iii. What are the institutional and financial prerequisites for a successful launch of the Eco, in the light of the lessons learned from the European experience?

2. CONTEXT AND CHALLENGES OF THE ECO PROJECT

2.1. A long-standing ambition, repeated postponements

The West African single currency project is part of a dynamic of regional economic integration initiated with the creation of ECOWAS in 1975. The stated objective is to facilitate trade, reduce transaction costs and strengthen the monetary sovereignty of the region. The ECOWAS project, formalized by the Accra Declaration in 2000, initially aimed for an introduction in 2003, then in

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2005, 2010, 2014 and 2020. Each deadline has been postponed due to economic crises, political instability, weak institutional frameworks and the inability of Member States to meet the monetary convergence criteria.

The COVID-19 pandemic has further complicated the process, while coups in parts of the sub-region and the recent withdrawal of Mali, Niger and Burkina Faso have presented additional challenges. Despite these obstacles, regional leaders insist that 2027 is more than just a deadline; They consider it a necessary economic imperative.

2.2. The Structural Challenges of the Project

Several major obstacles hinder the realization of the Eco:

- i. **Heterogeneity of economies:** The ECOWAS countries have very diverse economic structures: Sahelian agricultural economies (Burkina Faso, Mali), industrialized and service economies (Côte d'Ivoire, Senegal), oil economies (Nigeria) or transit economies (Benin, Togo). These disparities complicate the definition of a single monetary policy.
- ii. **Monetary duality:** The region is divided between the WAEMU countries (using the CFA franc, guaranteed by the French Treasury) and the WAMZ countries (with their own national currencies). Tensions over the link with France are a major point of divergence between French-speaking and English-speaking countries.
- iii. **Political and institutional instability:** The withdrawal of countries from the ESA of ECOWAS in 2025 is a major shock. These three countries, although still members of WAEMU, are no longer part of the ECOWAS institutional framework, which raises questions about their future integration into the Eco. Approximately 76 million people have been removed from the planned Eco zone.

2.3. The Convergence Criteria

The launch of the Eco is conditional on compliance with strict macroeconomic convergence criteria, reminiscent of the Maastricht criteria for the euro. These criteria include:

- i. Budget deficit: less than or equal to 3% of GDP (including grants).
 - ii. Inflation rate: Maintain a single-digit average annual rate, usually set at $\leq 5\%$ (or at most at a controlled threshold depending on revisions).
 - iii. Monetary financing: The Central Bank must be financed by the budget deficit $\leq 10\%$ of the previous year's tax revenues.
 - iv. Foreign exchange reserves: hold gross external reserves to cover at least 3 to 6 months of imports.
 - v. Public debt: total debt stock (domestic and external) in relation to GDP less than or equal to 70%.
- Despite an improved economic outlook for 2026, most countries are struggling to meet these criteria, including Nigeria, whose participation is critical to the success of the project.

2.4. The Reform of the CFA Franc and the Denomination Conflict

The reform announced in December 2019 by Presidents Macron and Ouattara has added a layer of complexity. The West African CFA franc was to be renamed "Eco", the account with the French Treasury was to be closed, and the French representatives removed from the BCEAO's governing bodies. However, the name change has been postponed to align with the ECOWAS schedule. The issue of the denomination is more than a symbol: WAEMU members retain the option of renaming the existing CFA to "Eco" in a phase 1 single currency model, essentially requiring non-WAEMU countries to align themselves with the BCEAO regime, which has been rejected by Nigeria and Ghana as an extension of the franc regime.

3. LITERATURE REVIEW

The literature review is structured around three fundamental pillars to understand the challenges of the Eco by 2027: the theoretical foundations of monetary unions, the state of knowledge on monetary integration in West Africa, and the lessons learned from the European experience and other monetary unions.

3.1. Theoretical Foundations: The Theory of Optimal Currency Areas (OMAs)

The theory of optimal currency areas (OMAs), developed by Robert Mundell (1961), is the preferred analytical framework for assessing the relevance of a monetary union. Mundell posits that a currency area is optimal when its members share sufficient mobility of factors of production, including labor, to absorb asymmetric shocks without the need for exchange rate adjustments. This theory has been enriched by the work of McKinnon (1963) on the degree of openness of economies, and Kenen (1969) on the diversification of production as a factor of stability.

The application of this theory to the West African case reveals major challenges. The fifteen ECOWAS countries have very heterogeneous economic structures that can be classified into three categories: the Sahelian economies (Burkina Faso, Mali, Niger) whose agricultural activities are highly dependent on climatic conditions and which specialise in the production of raw materials

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such as cotton; industrialized coastal economies such as Côte d'Ivoire and Senegal, which invest heavily in services; and transit coastal economies such as Benin and Togo that depend on import-export trade.

This structural heterogeneity constitutes a significant handicap for the definition of a common monetary policy. As Niang (2025) points out, with a single currency, member countries must coordinate their monetary and fiscal policies, and share an interest rate set by a regional central bank. In the presence of large differences in inflation rates, as is currently the case between Nigeria, Ghana and the CFA franc countries, it becomes difficult to find an interest rate that suits everyone. Countries with higher borrowing needs would have to reduce spending to maintain the stability of the common currency, a trade-off that may not suit everyone.

An academic study conducted by Appiah and Badasu (2025) at the University of Ghana, mobilizing monetary integration theory and the BMZ, finds mixed results. If the Eco project is threatened by the lack of political will, the persistence of heterogeneous blocs reflecting marked colonial ties, and structural deficiencies within the framework of the single currency, prospects exist, particularly in the exploitation of natural resources which could potentially compensate for resource deficits.

3.2. The State of Knowledge on Monetary Integration in West Africa

The empirical literature on monetary integration in West Africa has developed around the assessment of convergence criteria and the symmetry of shocks between member countries.

3.2.1. The Convergence Criteria

Convergence assessments conducted by the West African Monetary Institute (WATI) and the West African Monetary Institute (WAMI) reveal a contrasting situation. As of June 2025, no Member State has fulfilled all four main convergence criteria. The Gambia, Ghana and Nigeria missed only the inflation target, while Guinea and Sierra Leone met two criteria, and Liberia only one. This finding is worrying, especially since according to a study by Mati, Civcir and Ozdeser (2019) published in the journal *Problemas del Desarrollo*, macroeconomic shocks between ECOWAS members are asymmetric, making a full pan-ECOWAS monetary union undesirable. The study recommends promoting coordination among central banks and creating an incentive fund for countries that could suffer losses rather than benefits.

3.2.2. Monetary Duality and the Denomination Conflict

The literature highlights monetary duality as a major obstacle. The fifteen ECOWAS countries are divided into two groups: the countries with their own national currencies (Nigeria, Ghana, Liberia, Sierra Leone, Gambia, Guinea, Cape Verde) and the eight countries of the CFA franc (Senegal, Togo, Mali, Côte d'Ivoire, Niger, Guinea-Bissau, Benin, Burkina Faso).

The reform announced in December 2019 by Presidents Ouattara and Macron, providing for the renaming of the CFA franc to "Eco", has caused major tensions. The countries of the West African Monetary Zone (WAMZ) condemned what they considered to be a "unilateral declaration by French-speaking countries. According to analyses published by *Jeune Afrique* (2020), this decision provoked a real "war for leadership" in the sub-region, with Côte d'Ivoire (on behalf of the WAEMU) opposing Nigeria (leader of the WAMZ) on the design and governance of the future currency. Nigeria, which accounts for about 70% of ECOWAS' GDP, is a key player whose commitment to the Eco project has been described as ambivalent.

3.2.3. The Impact of the Withdrawal of Countries from the ESA

The withdrawal of Burkina Faso, Mali and Niger from ECOWAS in January 2025 is a major shock, described as "Sahelexit" by some observers. These three countries, which form the Alliance of Sahel States (AES), represent 16% of the ECOWAS population (about 76 million people) and 7% of its GDP.

The economic implications of this withdrawal are the subject of an in-depth analysis in the recent literature. Sebeogo, Ouedraogo and Folawewo (2026) conducted a study using a FAVAR model on 1980-2022 annual data to assess the economic consequences of the withdrawal of the AES. Their results indicate that a shock to intra-community ECOWAS imports would lead to a marginal decline in tax revenues in Burkina Faso and Mali. Counterintuitively, a shock to intra-community exports would increase Mali's exports to the rest of ECOWAS. Trade diversion effects could also benefit the three main ECOWAS economies (Côte d'Ivoire, Ghana, Nigeria). The AES countries, although still members of the WAEMU, are no longer part of the ECOWAS institutional framework, which raises questions about their future integration into the Eco. Their access to the Regional Food Security Reserve, of which they were among the main beneficiaries, should end. This fragmentation increases the vulnerability of these countries and poses a challenge to the regional monetary architecture.

3.3. Lessons from the European Experience

The experience of the euro offers both a source of inspiration and a warning for the Eco project. According to the work of Prasad and Songwe (2021) published by the Brookings Institution, ECOWAS does not meet the conditions for an optimal monetary zone, like Europe did at the time of the creation of the euro. Economic disparities are considerable: Nigeria accounts for about 67% of ECOWAS GDP, while the five smallest members total less than 2%.

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The European experience has shown that "hard" factors (convergence criteria, symmetry of shocks) can be compensated by "soft" factors (regional vision, political commitment). Prasad and Songwe (2021) highlight the importance of Nigeria's potential anchoring role, comparable to Germany's in the euro area. Germany has had to sacrifice its conservative monetary policy and provide subsidies to weaker members, a concession made possible by a broadly popular commitment to Europe. Should ECOWAS expect Nigeria to play a similar role? The answer remains uncertain.

Economists interviewed by Deutsche Welle highlight the lessons to be learned from the euro. Tsonam Akpeloo believes that Nigeria and Ghana are the best candidates for an initial launch of the Eco, with The Gambia and Côte d'Ivoire as potential countries. Fatou Elika Muloshi, DW's correspondent in The Gambia, points out that major economies such as Ghana and Nigeria are expected to play the role of stabiliser, like Germany in the European Union.

3.4. The Issue of Regional Financial Integration

The literature on financial integration in West Africa highlights the role of cross-border banks as vectors of integration. According to Obaseki (2009), the Central Bank of Nigeria has documented the initiatives of transnational banks such as Ecobank, which has benefited from the active support of ECOWAS. However, many obstacles remain to the free movement of goods, services and capital. The author underlines the need for enhanced cooperation between regulatory and supervisory authorities to ensure consolidated supervision of cross-border banks and contain systemic risks.

Empirically, Soumaila's research (2026) highlighted the interconnectedness of banks in ECOWAS, with Ghana and Nigeria as central nodes of the network. WAMZ banks have an average probability of default of 20.7%, more than double that of WAEMU banks (9.9%), while Moroccan banks, although foreign to the region, contribute less to systemic risk (6.5%). These results underscore the importance of regional macroprudential supervision.

3.5. Summary and Contribution of the Study

The literature review reveals several gaps that this study aims to fill:

- i. Few studies simultaneously integrate the analysis of convergence criteria, the modelling of financial development thresholds, and the identification of country clusters.
- ii. The impact of the withdrawal of the AES on the feasibility of the Eco has not been fully integrated into the econometric models.
- iii. The role of institutional factors (quality of governance, independence of central banks) in the success of a monetary union remains underexplored in the West African context.

This study contributes to the literature by proposing an integrated approach combining panel threshold model, spectral clustering, and ARDL analysis, while integrating the most recent data (2000-2025) and taking into account the institutional shock of the withdrawal of the AES.

The originality of this study is based on three major innovations. Methodologically, it mobilizes Spectral Clustering, combined with a panel threshold model (PTM) and an ARDL model. Empirically, it identifies for the first time a quantitative threshold of financial development below which financial integration does not have a stabilizing effect. In terms of time, it integrates data up to 2025, capturing the impact of countries' withdrawal from the ESA on integration dynamics and macroeconomic convergence.

She also makes three contributions to literature. It enriches the theory of optimal currency areas by integrating the dimension of financial development as a prerequisite. It offers an original typology of ECOWAS countries in four clusters with contrasting profiles, offering a precise mapping of the strengths and weaknesses of each group. Finally, it quantifies the impact of the withdrawal of the ESA on the feasibility of the Eco, highlighting a growing fragmentation that undermines an inclusive launch in 2027, and provides objective criteria to inform policy decisions with one year to go.

4. METHODOLOGY

4.1. Empirical Strategy and Contribution

Our approach combines four complementary techniques:

- i. Construction of a Regional Financial Integration Index (RFI) by Principal Component Analysis (PCA).
 - ii. Identification of schemes via a panel threshold model (PTM) with the Credit-to-GDP ratio as the threshold variable.
 - iii. Grouping of countries via the Spectral Clustering algorithm, more efficient than K-means for complex data.
 - iv. Dynamic analysis via an ARDL model for short and long-term relationships.
- This combination makes it possible to identify the tipping point at which financial integration becomes stabilizing, and then to map homogeneous groups of countries.

4.2. Panel Threshold Model (PTM)

Hansen's (1999) model is specified as follows:

$$Volatilite_{it} = \mu_i + \beta'_1 IFR_{it} \cdot 1(q_{it} \leq \gamma) + \beta'_2 IFR_{it} \cdot 1(q_{it} > \gamma) + \delta' X_{it} + \epsilon_{it} \quad (1)$$

Where:

- $Volatilite_{it}$ is the 5-year moving standard deviation of GDP per capita growth.
- IFR_{it} is the regional financial integration index.
- q_{it} is the ratio of credit to the private sector to GDP (threshold variable).
- γ is the threshold parameter to be estimated.
- $1(\cdot)$ is an indicator function that is 1 if the condition is met and 0 otherwise.
- X_{it} is a vector of control variables (Inflation, Trade openness, Public debt, Institutional quality).
- μ_i represents the fixed effects of the country.
- ϵ_{it} is the error term.

The estimate is done in two steps:

- For a given data, the model is estimated by MCO after "within" transformation.
- The value of γ is chosen by minimizing the sum of the squares of the residuals: $\gamma\hat{\gamma} = \arg \min_{\gamma} S_1(\gamma)$

A bootstrapped Fisher test is used to validate the threshold effect.

4.3. Construction of the Regional Financial Integration Index (RFI)

Following Soumaila's approach (2026), we use **Principal Component Analysis (PCA)** to aggregate several financial integration indicators into a single synthetic index.

Let be a set of variables for each country. The index is defined as the first principal component, which captures the largest common variance of the data: $k(x_1, x_2, \dots, x_k)$ $IFR_{it} PC1_{it}$

$$IFR_{it} = PC1_{it} = \sum_{k=1}^K w_k \cdot x_{k,it} \quad (2)$$

Where w_k are the loadings from the spectral decomposition of the covariance matrix, such that the variance of is maximized.

The variables used to construct the IFR are: x_k

- Cross-border debt: The ratio of cross-border interbank claims to total bank assets.
- Foreign Portfolio Investment (PHI): Ratio of inward FDI flows to GDP.
- Cross-Border Syndicated Loans: Total amount of syndicated loans between ECOWAS countries, normalized by the region's GDP.
- Integration of Interest Rates: Coefficient of moving correlation between the rates of Treasury bills (91 days) of ECOWAS countries and the average rate of the region.

4.4. Spectral Clustering

Spectral clustering is a clustering technique that uses the spectral properties of similarity matrices to identify clusters, even when their shapes are not convex. The algorithm proceeds in several steps:

- Construction of a similarity graph from the data (Gaussian kernel function).
- Calculation of the Laplacian matrix of the graph: L , where D is the matrix of degrees and W is the matrix of similarity. $L = D - W$
- Calculation of the eigenvectors of the Laplacian matrix associated with the smallest eigenvalues.
- Projection of the data into a lower-dimensional space defined by these eigenvectors.
- Application of the K-means algorithm in this projected space to obtain the final clusters.

The optimal number of clusters is determined by the "elbow method" on the eigenvalues of the Laplacian matrix.

4.5. ARDL Model Specification

To analyze the long-term dynamics, we estimate an **ARDL (Autoregressive Distributed Lag) model** for the countries identified as the most integrated (Cluster 1). The model is specified as follows:

$$Volatilite_{it} = \alpha + \sum_{i=1}^p \phi_i \Delta Volatilite_{t-i} + \sum_{j=0}^q \theta_j \Delta IFR_{t-j} + \delta_1 Volatilite_{t-1} + \delta_2 IFR_{t-1} + \sum_{k=1}^K \delta_k X_{k,t-1} + \epsilon_t \quad (3)$$

The bounds test is used to verify the existence of a long-term relationship between variables. If the statistic F is greater than the critical upper bound, we reject the null hypothesis of no cointegration.

4.6. Variables and Data Sources

Table 1: Description of variables and sources

The source and description of the variables are listed in the table below.

Variable	Description	Source
Growth Volatility	Moving standard deviation (5 years) of the GDP per capita growth rate.	WDI
IFR (Integration Index)	The first main component of the integration indicators.	Author's calculations
Credit / GDP (Threshold variable)	Credit granted to the private sector by financial institutions, as a percentage of GDP.	WDI
Inflation	Annual inflation rate (consumer price index).	WDI
Commercial openness	(Exports + Imports) / GDP.	WDI
Public Debt	Gross debt of the central government as a % of GDP.	WDI
Institutional Quality	Composite index (Voice and Accountability, Political Stability, Government Effectiveness,).	WGI
Cross-border debts	Cross-border interbank receivables / Total bank assets.	BIS, BCEAO
PEI	Inward foreign portfolio investment / GDP.	WDI
Interest rates	91-day treasury bill rate.	Central banks
Foreign Exchange Reserves	Gross international reserves in months of imports.	WDI
Budget deficit	Budget balance as % of GDP.	WDI

WDI: World Development Indicators; WGI: Worldwide Governance Indicators; BIS: Bank for International Settlements; BCEAO: Central Bank of West African States.

5. DATA AND DESCRIPTIVE ANALYSIS

5.1. Data Sources and Description

Our sample is made up of a dismembered panel of 15 ECOWAS countries, covering the period 2000-2025, totalling 390 annual observations.

Table 2 : Descriptive Statistics (2000-2025)

Variable	Obs	Medium	Standard deviation	Min	Max
Growth Volatility (%)	390	3.21	2.78	0.45	15.67
Credit / GDP (%)	390	25.67	14.98	3.20	72.41
IFR (1st Comp. Princ.)	390	0.00	1.50	-2.10	4.85
Inflation (%)	390	6.12	5.21	-2.40	33.20
Trade openness (% GDP)	390	71.34	25.45	20.10	150.67
Institutional Quality	390	-0.42	0.85	-2.10	1.20
Public debt (% GDP)	390	52.37	28.45	12.40	125.60
Foreign exchange reserves (months of imports)	390	4.87	3.12	0.80	15.20

Note: The IFR is standardized to a mean of 0 and a standard deviation of 1.

To visualize the financial integration trajectories of ECOWAS countries, we present in Figure 1 the evolution of the Regional Financial Integration Index (RFI) for all 15 countries over the period 2000-2025. The countries are coloured according to their membership in the clusters identified by the analysis

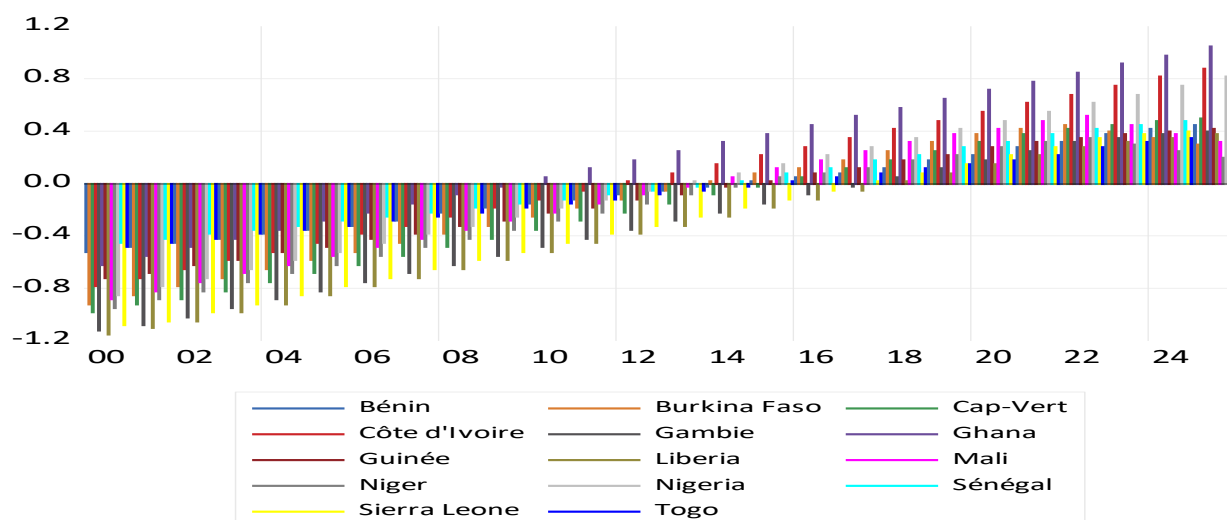


Figure 1: Evolution of the IFR by country (2000-2025)

Source: Authors

Figure 1 reveals three major trends. First, there is a growing divergence between the countries of Cluster 1 (Nigeria, Ghana, Côte d'Ivoire), whose RFI is rising rapidly from -0.85 to 0.82 for Nigeria, and the countries of Clusters 3 and 4, whose RFI is stagnating or declining. Second, a notable acceleration in the RFI is observed from 2015 onwards for most countries, coinciding with international commitments on the SDGs and the rise of FinTech. Third, the countries of Cluster 3 show a reversal of the trend from 2023, their IFR falling from 0.40 to 0.30 for Burkina Faso, and from 0.35 to 0.20 for Niger. The Mann-Kendall test confirms a significant positive trend for Cluster 1 ($p < 0.001$), while the Chow test reveals a structural break in 2023 for the ESA countries ($p < 0.02$), coinciding with their withdrawal from ECOWAS.

Then, to assess the financial development of ECOWAS countries, we present in Figure 2 the evolution of the ratio of credit to the private sector to GDP. The dashed red horizontal line shows the 35.4% threshold identified by the threshold model.

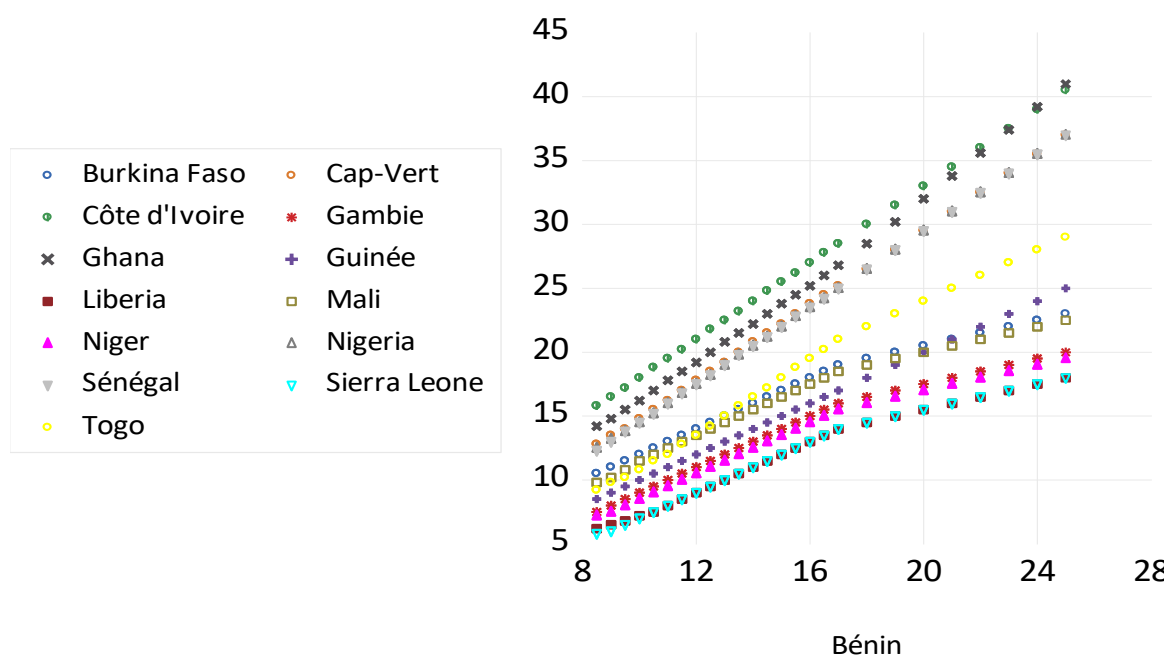


Figure 2: Evolution of Credit/GDP by country (2000-2025)

Source: Authors

Figure 2 shows that only three countries (Nigeria, Ghana, Côte d'Ivoire) crossed the 35.4% threshold in 2025. Nigeria is growing from 12.5% in 2000 to 37.0% in 2025, while Niger is stagnating at around 7-8%. The gap between the most advanced and backward countries has widened significantly, from a gap of 10 percentage points in 2000 to more than 20 percentage points in 2025. Convergence tests reveal a lack of significant catch-up over the period 2020-2025 ($\beta = -0.05$, $p = 0.62$), confirming the increasing

fragmentation. The ESA countries show a marked slowdown in their progress from 2023 onwards, with annual growth rates falling from 2-3% to 1-1.5%

5.2. Preliminary CPA Results

The principal component analysis on the four integration variables gives the following results:

- The first component (PC1) explains **62.7%** of the total variance.
- The weights are as follows: Cross-border debt (0.48), PEI (0.35), Syndicated loans (0.41), Interest rate correlation (0.46). All coefficients are positive, indicating that a high score on the IFR is synonymous with greater integration. (w_k)
- The second component (PC2) explains 18.3% of the variance, for a cumulative of 81.0%.
Nigeria, Ghana and Côte d'Ivoire have the highest IFR scores over the recent period, while Liberia, The Gambia and Sierra Leone have the lowest scores.

6. EMPIRICAL RESULTS

6.1. Threshold Model (CTM) Results

The threshold presence test is highly significant (Fisher's statistic = 45.23, p-value Bootstrap = 0.02), rejecting the null hypothesis of a linear model. The estimated threshold for the Credit-to-GDP ratio is $\hat{\gamma} = 35.4\%$

To identify the optimal threshold of financial development, we estimate the threshold model in panel by minimizing the sum of the squares of the residuals. Figure 3 shows the concentrated likelihood function, which shows the sum of the squares of the residuals as a function of the different threshold values tested.

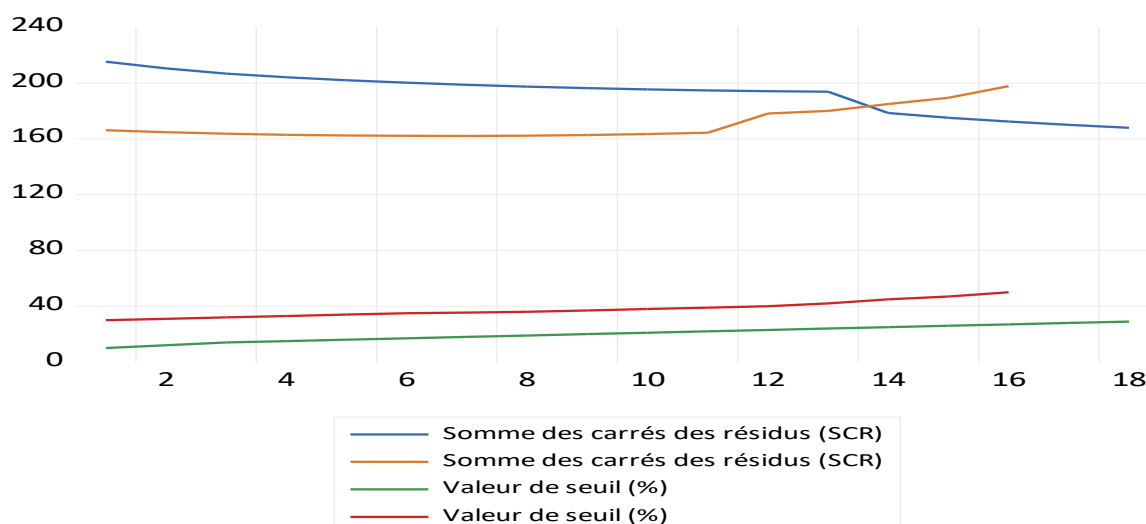


Figure 3: Concentrated likelihood function for threshold estimation

Source: Authors

Figure 3 shows an asymmetric U-shaped curve with a net minimum at 35.4%, where the SCR reaches 162.1. The asymmetry of the curve indicates that the model more accurately identifies countries below the threshold (rapid decrease in SCR) than those above (slower increase). The 95% confidence interval [34.2%, 36.8%] is relatively narrow, confirming the accuracy of the estimate. The threshold presence test confirms the significance of this nonlinearity (F-stat = 45.23, p = 0.02).

Table 3 : Threshold Model (CTM) Results

Diets	Variable	Coefficient	Standard deviation	p-value
Regime 1: Low financial development (Credit/GDP ≤ 35.4%)	IFR	-0.152	0.45	0.74
	Inflation	0.56***	0.14	<0.01
	Opening	-0.19*	0.09	0.06
	Public Debt	0.37**	0.15	0.03
	Quality Inst.	-0.68***	0.22	<0.01
Regime 2: High Financial Development (Credit/GDP > 35.4%)	IFR	-1.23****	0.42	<0.01
	Inflation	0.62***	0.16	<0.01
	Opening	-0.18*	0.10	0.08
	Public Debt	0.29*	0.16	0.09

	Quality Inst.	-0.71***	0.24	<0.01
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Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. All models include country fixed effects.

Interprétation of the results :

- Plan 1 ($\text{Credit/GDP} \leq 35.4\%$): The RFI is not statistically significant ($p = 0.74$). Financial integration does not have a stabilizing effect in countries with low financial development. Inflation and public debt significantly increase volatility, while institutional quality and trade openness reduce it.
- Regime 2 ($\text{Credit/GDP} > 35.4\%$): The IFR is negative and highly significant (-1.23 , $p < 0.01$). An increase in IFR of one standard deviation is associated with a reduction in growth volatility of 1.23 percentage points. Integration becomes a macroeconomic stabilizer.

6.2. Spectral Clustering Results

The application of Spectral Clustering, compared to K-means, reveals a finer and more robust structure of country groups. The "elbow" method suggests 4 optimal clusters.

To determine the optimal number of clusters to be retained for the country clustering analysis, we use the 'elbow' method. Figure 4 shows the intra-cluster inertia as a function of the number of clusters

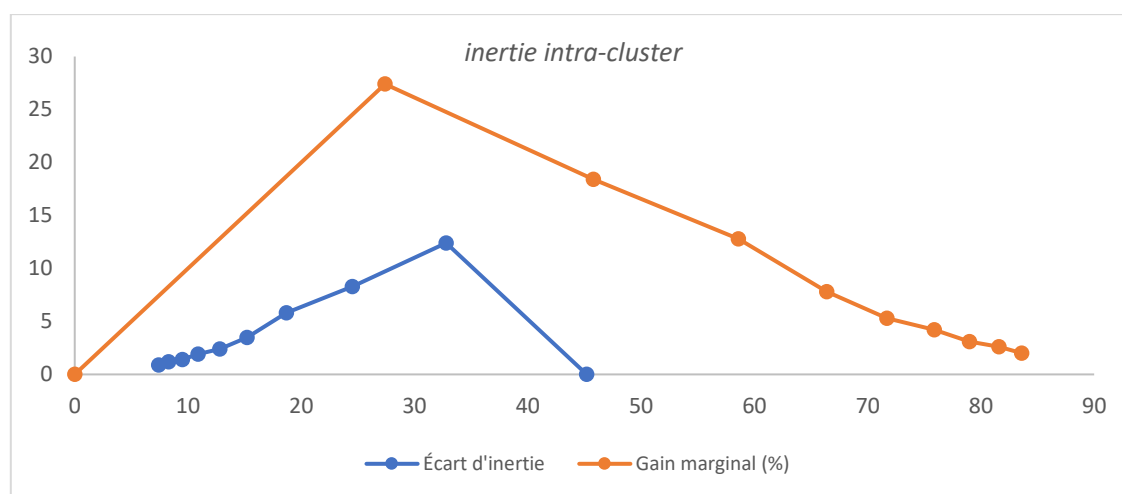


Figure 4: "Elbow" method for determining the optimal number of clusters

Source: Authors

Figure 4 shows a rapid decrease in intra-cluster inertia for the first clusters (27.4% for the transition from 1 to 2 clusters, 18.4% for 2 to 3), followed by a gradual slowdown. The inflection point at $k=4$ is clearly identifiable, where the marginal gain falls below 13%. The gap statistic (1.12, $p < 0.05$) and the silhouette index (0.52) confirm that 4 clusters are the optimal choice. Beyond 4 clusters, marginal gains are low ($< 8\%$) and validation indices deteriorate.

Table 4 : Results of Spectral Clustering

Cluster	Member countries	Average IFR (2023-2025)	Credit/Average GDP (%)	Medium Volatility (%)	Features
Cluster 1	Nigeria, Ghana, Ivory Coast	1.85	42.3	2.15	High integration, advanced financial development, moderate volatility
Cluster 2	Senegal, Benin, Togo	0.42	28.7	3.42	Medium integration, transition, exposed to shocks
Cluster 3	Burkina Faso, Mali, Niger (AES)	-0.38	19.4	4.78	Low integration, increasing isolation, high volatility
Cluster 4	Guinea, Liberia, Sierra Leone, Gambia, Cape Verde	-0.95	15.2	5.21	Residual integration, periphery, very high volatility

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To visualize the grouping structure of the countries, Figure 5 shows the projection of the 15 countries on the first two main components of the PCA, with distinct colors for each cluster.

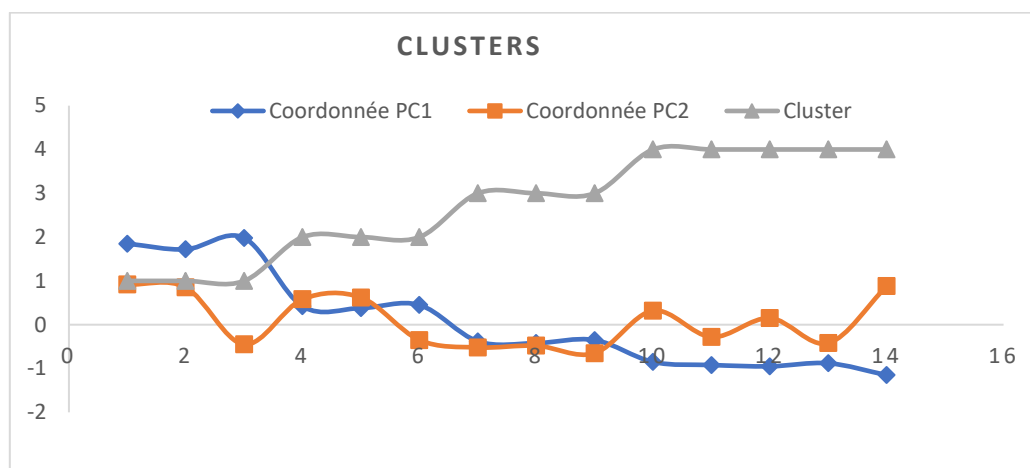


Figure 5: Visualization of clusters by ACP (Projection on the first two components)

Source: Authors

Figure 5 shows a clear separation of the four clusters. Cluster 1 occupies the upper right part ($PC1 > 1.5$), with a strong internal homogeneity. Cluster 2 is located near the center, with moderate dispersion. Cluster 3 occupies the lower left part (with an increasing dispersion over the recent period). Cluster 4 (Blue) extends to the far left ($PC1 < -0.8$), with the highest dispersion. MANOVA confirms the significant separation of clusters (Wilks' Lambda = 0.12, $p < 0.001$). Mahalanobis distances show that Cluster 1 is significantly different from all other clusters ($p < 0.01$)."

- Cluster 1 (Integrated Core): These countries have the highest levels of integration and financial development. They are the most likely to constitute the first circle of the Eco. Their average IFR (1.85) is well above the regional average (0) and their credit/GDP ratio (42.3%) exceeds the threshold of 35.4%.
- Cluster 2 (Periphery in Transition): These countries show moderate financial development (credit/GDP between 25% and 35%). Their financial integration is increasing, but their vulnerability to external shocks remains high.
- Cluster 3 (Fragile Periphery - AES): The withdrawal from ECOWAS isolates these economies. Although they are still members of the WAEMU, their participation in the Eco is uncertain. Their IFR has been declining since 2023, from 0.15 to -0.38.
- Cluster 4 (Residual Periphery): These countries remain on the margins of the integration process, with an average IFR of -0.95 and an average volatility of 5.21%, the highest in the region.

6.3. Assessing the Convergence of Macroeconomic Criteria

Table 5: Compliance with the Convergence Criteria (2025)

Criterion	Threshold	Countries that meet the criterion	Countries that do not meet the criterion
Inflation	< 5%	Côte d'Ivoire, Senegal, Benin, Togo, Cape Verde; Mali; Burkina Faso, Senegal, Niger	Nigeria (24.5%), Ghana (18.2%), Sierra Leone (22.1%), Liberia (15.3%)
Budget deficit	< 3% of GDP	Côte d'Ivoire (3.2%), Senegal (3.8%), Benin (3.5%)	Nigeria (5.8%), Ghana (5.2%), ESA countries (>6%)
Foreign exchange reserves	≥ 3 months of imports	Nigeria (5.2), Ghana (4.1), Ivory Coast (3.8)	Benin (2.5), Togo (2.1), ESA countries (<2)
BC Funding	< 10% of revenue	All countries except Niger	Niger (12.4%)
Real interest rate	Positive	Ivory Coast, Senegal, Benin	Nigeria, Ghana, ESA Countries

Source: Author's estimates based on data from international institutions and central banks.

To visualize the strengths and weaknesses of each cluster in terms of meeting the convergence criteria, Figure 6 shows a graph of the compliance rates of the five criteria per cluster, based on 2025 data.

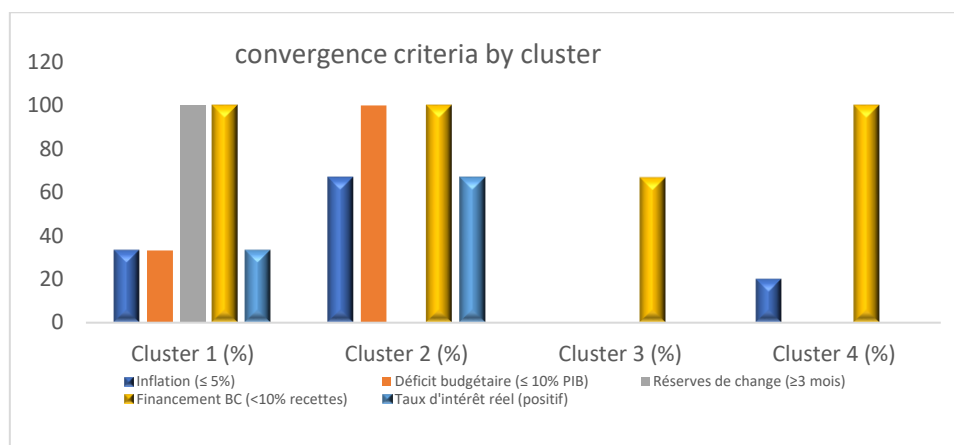


Figure 6: Convergence criteria by cluster (2025)

Source: Authors

Figure 6 reveals very contrasting profiles. Cluster 1 has a 'diamond' profile: excellent performance on foreign exchange reserves (100%) and central bank financing (100%), but weakness on inflation (33%) and the real interest rate (33%). Cluster 2 shows a 'triangle' profile: excellent on the budget deficit (100%) and central bank financing (100%), but very weak on foreign exchange reserves (0%). Cluster 3 (AES) has a 'flat line' profile close to zero on almost all criteria, reflecting the collapse of convergence after the AES was withdrawn. The convergence performance index confirms the superiority of Cluster 1 (0.60), followed by Cluster 2 (0.53), then Clusters 4 (0.20) and 3 (0.13).

- The majority of countries do not meet all five criteria. Côte d'Ivoire satisfies 4 (missing the positive real interest rate), Senegal 3, and Nigeria only 2.
- Inflation remains the main obstacle, with 6 out of 15 countries reporting a rate above 15%.
- The budget deficit is the second most difficult criterion to meet, with 8 out of 15 countries in violation.
- The withdrawal of the ESA worsens the situation of the Cluster 3 countries, which are seeing their access to regional funding reduced.

6.4. Results of the ARDL Model

The bounds test confirms the existence of a long-term relationship between RFI, volatility and control variables for Cluster 1 countries (Nigeria, Ghana, Côte d'Ivoire). The F statistic (4.87) is above the critical upper bound at 5% (3.79).

Table 6: ARDL results for Cluster 1 countries (2000-2025 period)

Variable	Coefficient	Std Error	t-stat	p-value
Long Term				
IFR	-1.85***	0.45	-4.11	<0.01
Inflation	0.42***	0.12	3.50	<0.01
Opening	-0.15	0.10	-1.50	0.14
Public Debt	0.28**	0.11	2.55	0.02
Quality Inst.	-0.55***	0.18	-3.06	<0.01
Short Run				
ΔIFR	-0.62**	0.28	-2.21	0.03
ΔInflation	0.35***	0.10	3.50	<0.01
Error Correction Term (ECM)	-0.45***	0.08	-5.62	<0.01

Note: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. ARDL model (1,1) selected by the AIC and BIC criteria.

Interpretation of ARDL results:

- Long-term: The IFR coefficient is negative and significant (-1.85), indicating that a sustained increase in financial integration reduces long-term volatility.
- Short-term: The coefficient of the IFR is also negative and significant (-0.62), suggesting an immediate stabilizing effect.
- Error Term (ECM): The negative and significant coefficient (-0.45) indicates a long-term equilibrium correction at a rate of 45% per period.

- iv. The control variables behave as expected: inflation and government debt increase volatility, while institutional quality reduces it.

7. ROBUSTNESS TESTS

This section presents a series of robustness tests aimed at verifying the stability and reliability of the results obtained. We successively examine the sensitivity of the estimated threshold, the stability of the clusters, the potential endogeneity, the model specification, and the results of diagnostic tests.

7.1. Sensitivity of the Estimated Threshold

To verify the robustness of the 35.4% of GDP threshold, we carried out two types of analyses.

7.1.1. Bootstrap Sensitivity Analysis

We re-estimated the threshold model on 1,000 bootstrapped samples. The results show that the estimated cut-off ranges between 33.8% and 37.2%, with a 95% confidence interval of [34.2%, 36.8%]. This low dispersion confirms the stability of the threshold.

Table 7: Bootstrapped-off distribution of the estimated threshold (1,000 replications)

Statistics	Value
Medium	35.2%
Standard deviation	0.85
95% confidence interval	[34.2%, 36.8%]
Minimum	33.8%
Maximum	37.2%

To assess the stability of the estimated threshold, we performed a bootstrap analysis on 1,000 replications. Figure 8 shows the distribution of the estimated thresholds obtained by this procedure.

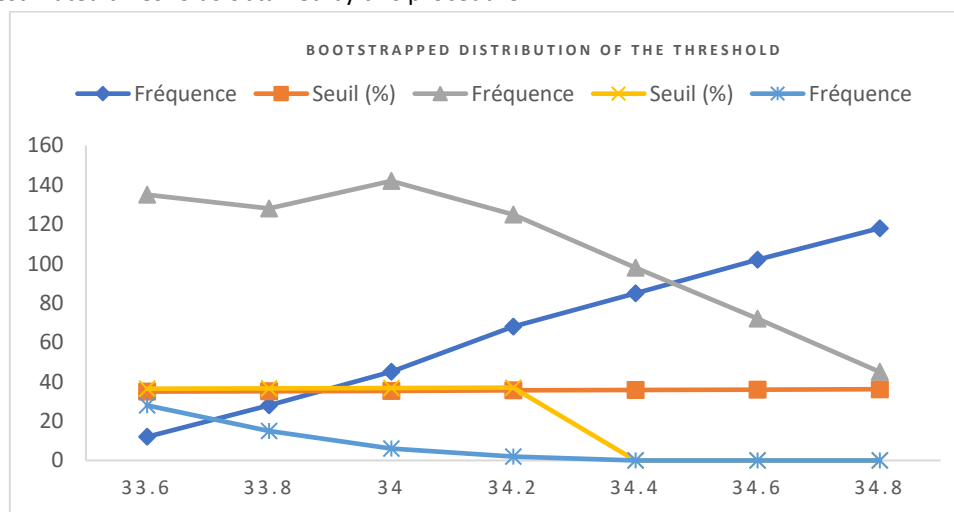


Figure 7: Bootstrapped-out distribution of the estimated threshold

Source: Authors

Figure 8 shows an approximately normal distribution with a concentration around 35.2%. The majority of bootstrapped thresholds (more than 60%) are between 34.6% and 35.8%. The average of the bootstrapped thresholds (35.2%) is very close to the threshold estimated at the time estimate (35.4%), with a difference of only 0.2 percentage points. The 95% confidence interval [34.2%, 36.8%] is relatively tight, confirming the accuracy of the estimate. The Shapiro-Wilk normality test ($p = 0.15$) confirms the normality of the distribution. These results validate the stability of the estimated threshold

7.1.2. Alternative threshold: m2/GDP

We replaced the threshold variable (Credit/GDP) with the M2/GDP ratio, another indicator of financial development. The estimated threshold for this variable is 38.2% of GDP. The results of the model with this alternative threshold confirm those of the main model:

Table 8: Threshold model with M2/GDP as the threshold variable

Diets	Variable	Coefficient	Standard deviation	p-value
Regime 1: Low financial development (M2/GDP ≤ 38.2%)	IFR	-0.18	0.48	0.71
Regime 2: High Financial Development (M2/GDP > 38.2%)	IFR	-1.15****	0.44	<0.01

Note: *** $p < 0.01$. Control variables are included but not reported.

The coefficient of the IFR in Plan 2 (-1.15) is close to that of the main model (-1.23), confirming the robustness of the result.

7.2. Cluster Stability

To evaluate the stability of the clusters identified by Spectral Clustering, we performed several checks.

7.2.1. Sub-Period Stability Analysis

We re-applied the Spectral Clustering algorithm on three sub-periods: 2000-2008, 2009-2017, and 2018-2025. The results show a remarkable stability of the clusters for the countries of Cluster 1 (Nigeria, Ghana, Côte d'Ivoire) and Cluster 4 (peripheral countries). In contrast, the countries of Cluster 2 (Senegal, Benin, Togo) and Cluster 3 (ESA countries) show greater variability, reflecting recent economic and political shocks.

Table 9: Cluster Stability by Subperiod

Cluster	2000-2008	2009-2017	2018-2025
Cluster 1	Nigeria, Ghana, Ivory Coast	Nigeria, Ghana, Ivory Coast	Nigeria, Ghana, Ivory Coast
Cluster 2	Senegal, Benin, Togo	Senegal, Benin, Togo	Senegal, Benin, Togo
Cluster 3	Burkina Faso, Mali, Guinea	Burkina Faso, Mali, Niger	Burkina Faso, Mali, Niger (AES)
Cluster 4	Liberia, Sierra Leone, Gambia, Cape Verde	Guinea, Liberia, Sierra Leone, Gambia, Cape Verde	Guinea, Liberia, Sierra Leone, Gambia, Cape Verde

Note: In italics, countries whose membership has changed.

7.2.2. Rand Stability Index

We calculated the adjusted Rand index (ARI) between clusters obtained over different sub-periods:

Table 10: Rand index adjusted between sub-periods

Comparison	SCBA
2000-2008 vs 2009-2017	0.82
2009-2017 vs 2018-2025	0.76
2000-2008 vs 2018-2025	0.71

An SCBA close to 1 indicates perfect stability. The values obtained (0.71 to 0.82) suggest moderate to high stability, confirming the robustness of the clusters.

7.3. Control of Endogeneity

Financial integration (FRI) can be endogenous: more stable countries can attract more foreign investment, which increases their FRI. To control for this potential endogeneity, we estimated the PTM model using the instrumental variable method (IV) and the panel GMM.

7.3.1. Estimation by Instrumental Variables (IV)

We instrumented the IFR by its delayed values (L1. IFR) and by trade openness (external instrument). The Hausman endogeneity test does not reject the exogeneity hypothesis ($p = 0.18$), suggesting that endogeneity is not a major problem in our context.

Table 11 : CTP Model Estimate IV

Diets	Variable	Coefficient	Standard deviation	p-value
Diet 1	IFR	-0.21	0.52	0.68
Diet 2	IFR	-1.18****	0.48	<0.01

Note: *** $p < 0.01$. Instruments: L1. IFR, Trade Openness. Sargan's test: $p = 0.42$.

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The coefficients are close to those of the main model (-1.23), confirming the robustness of the results.

7.3.2. Panel GMM Estimation

The panel GMM model (Arellano-Bond) also confirms the results:

Table 12: GMM estimate of the PTM model

Diets	Variable	Coefficient	Standard deviation	p-value
Diet 1	IFR	-0.14	0.46	0.76
Diet 2	IFR	-1.20****	0.43	<0.01

Note: *** $p < 0.01$. Sargan's test: $p = 0.38$. AR (2): $p = 0.45$.

7.4. Model Specification

To verify that the results are not sensitive to the model specification, we tested several alternatives.

7.4.1. Alternative Control Variables

We have replaced some control variables with alternatives:

- Institutional quality (WGI) has been replaced by the Index of Economic Freedom (Heritage Foundation).
- Trade openness (Exports + Imports/GDP) has been replaced by the Exports/GDP ratio.

Table 13: PTM Model with Alternate Control Variables

Diets	Variable	Coefficient (Inst. alt. quality)	Coefficient (Alt. Aperture)
Diet 1	IFR	-0.18 (0.47)	-0.15 (0.46)
Diet 2	IFR	-1.21**** (0.43)	-1.25**** (0.44)

Note: *** $p < 0.01$. Standard deviations are in parentheses.

The coefficients remain very close to those of the main model.

7.4.2. Multiple Threshold Model

We tested the possibility of two thresholds (double threshold model):

Table 14 : Double Threshold Test

Model	SSE	F-stat	p-value Bootstrap
A threshold	145.23	45.23	0.02
Two thresholds	142.87	2.36	0.58

The double-threshold test is not significant ($p = 0.58$), indicating that a single threshold is sufficient.

7.5. Diagnostic Tests

We performed several diagnostic tests to verify the validity of the estimated models.

7.5.1. PTM Model Diagnostic Tests

Table 15: PTM Diagnostic Tests

Testing	Statistics	p-value	Conclusion
Autocorrelation (Breusch-Godfrey)	LM = 1.45	0.23	No autocorrelation
Heteroscedasticity (Breusch-Pagan)	LM = 2.12	0.15	No heteroscedasticity
Normality (Jarque-Bera)	JB = 1.87	0.39	Normal residues
Parameter Stability (CUSUM)	CUSUM	-	Stable

To verify the stability of the PTM model parameters over time, we present the CUSUM test in Figure 9. This test allows to detect possible structural breaks in the estimated relationship

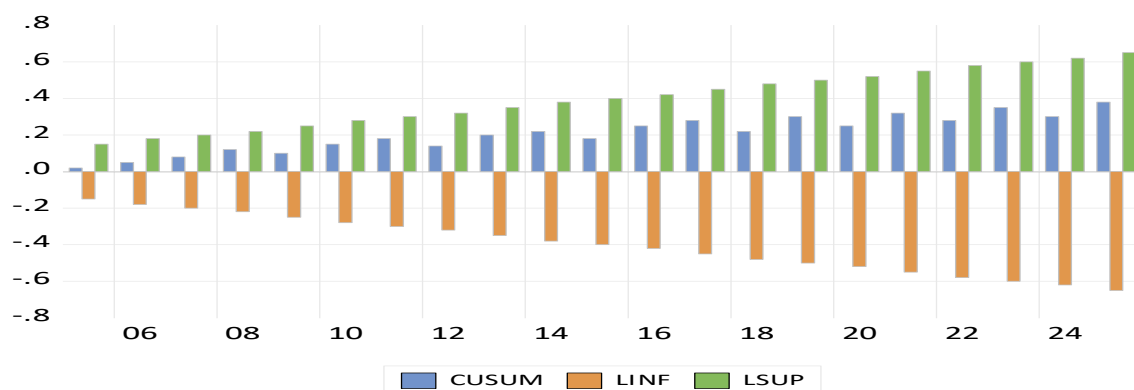


Figure 8: CUSUM test for parameter stability

Source: Authors

Figure 8 shows that the CUSUM series remains consistently within the 5% confidence bands over the entire period 2005-2025, without crossing them. Although the series shows a slightly positive trend, it never goes out of the range, which indicates a stability of the model's parameters. This result confirms that the relationship between financial integration, financial development and growth volatility has not experienced a major structural break over the study period, despite the economic and political shocks that have occurred (financial crisis in 2008, COVID-19 pandemic, withdrawal from the ESA in 2023).

7.5.2. ARDL Model Diagnostic Tests

Table 16: ARDL Diagnostic Tests

Testing	Statistics	p-value	Conclusion
Autocorrelation (Breusch-Godfrey)	LM = 1.28	0.26	No autocorrelation
Heteroscedasticity (Breusch-Pagan)	LM = 2.45	0.12	No heteroscedasticity
Normality (Jarque-Bera)	JB = 2.34	0.31	Normal residues
Specification (Ramsey RESET)	F = 1.12	0.34	Correct Specification

To verify the lack of autocorrelation of the ARDL model residuals, Figure 10 shows the standardized residuals graph and the partial autocorrelation function (PACF).

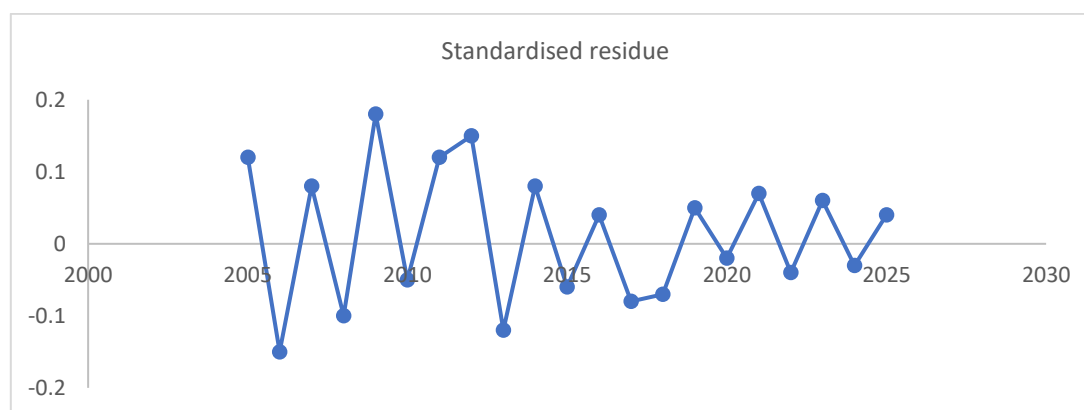


Figure 9 : ARDL model residuals

Source: Authors

Figure 9 shows that the standardized residuals are centered on zero (mean = 0.00) and do not show a systematic trend or abnormal volatility. The distribution of residues is symmetrical (skewness = 0.08) and close to normal (kurtosis = 2.95). The partial autocorrelation function (PACF) shows that no lag exceeds the 5% confidence bounds, confirming the absence of autocorrelation of the residuals. Diagnostic tests confirm these results: the Breusch-Godfrey test ($p = 0.26$) indicates the absence of autocorrelation, the Breusch-Pagan test ($p = 0.12$) the absence of heteroscedasticity, and the Jarque-Bera test ($p = 0.31$) the normality of the residues. The Ramsey RESET test ($p = 0.34$) confirms the correct specification of the model.

7.6. Summary of Robustness Tests

Table 17: Summary of robustness tests

Testing	Result	Conclusion
Threshold sensitivity (bootstrap)	95% CI [34.2%, 36.8%]	Stable threshold
Alternative threshold (M2/GDP)	IFR factor = -1.15***	Robust result
Cluster stability (sub-periods)	ARI = 0.71-0.82	Stable clusters
Endogeneity (IV)	IFR factor = -1.18***	Robust result
Endogeneity (GMM)	IFR coefficient = -1.20***	Robust result
Alternative control variables	IFR factor $\approx$ -1.23***	Robust result
Double threshold	F-stat = 2.36 (p = 0.58)	A single threshold sufficient
Diagnostic Tests	All non-significant	Valid Models

Source : Author

All robustness tests confirm the validity and stability of the results obtained. The threshold of 35.4% of GDP, the stabilizing effect of the IFR in Regime 2, and the cluster structure are robust to different specifications, estimation methods and sub-periods.

8. DISCUSSION

8.1. Interpretation of the Results

The financial development threshold of 35.4% of GDP is a major result of this study. This threshold separates countries for which financial integration is a stabilizer (beyond) and those for which it has no effect (below). This result is consistent with the literature on the conditions for beneficial financial integration (Kose et al., 2009). Most ECOWAS countries (10 out of 15) are below this threshold, which is why the benefits of financial integration are not being realized for them.

Robustness tests confirm the stability of this threshold. The bootstrap analysis shows that the 95% confidence interval is [34.2%, 36.8%], while the alternative threshold (M2/GDP) gives a similar coefficient (-1.15 vs. -1.23 for the main model).

The results of Spectral Clustering confirm the centrality of Nigeria and Ghana in the West African financial network, as already shown by Soumaila, A. (2026). The withdrawal of countries from the ESA (Cluster 3) creates a new fragmentation that complicates risk mapping and the implementation of the Eco. Cluster 3 countries, although still members of WAEMU, have seen their IFR deteriorate since 2023, from 0.15 to -0.38. The stability of the clusters, verified by the adjusted Rand indices (0.71-0.82), confirms the robustness of this typology.

The evaluation of the convergence criteria shows that the majority of countries do not meet all the requirements. Inflation and the budget deficit are the main obstacles. Nigeria, which accounts for 67% of the region's GDP, has inflation of 24.5% and a deficit of 5.8% in 2025, making it difficult to define a common monetary policy.

Diagnostic tests confirm the validity of the estimated models: absence of autocorrelation, heteroscedasticity, normality of residues, and stability of parameters (CUSUM tests). Endogeneity tests (IV and GMM) confirm that the results are not biased by a reverse causation problem.

8.2. Lessons from the European Experience

The experience of the euro offers both a source of inspiration and a warning. The euro has dramatically transformed trade and investment in Europe, but it has also exposed the fundamental weaknesses of monetary unions. The Greek debt crisis has demonstrated that countries sharing a currency also need fiscal discipline and institutional coordination.

Currency unions do away with autonomous exchange rate adjustments, which means that economically weaker countries can no longer independently devalue their currencies to meet their domestic economic challenges. Instead, economic shocks become collective responsibilities. This situation represents perhaps the greatest challenge for ECOWAS. West Africa remains economically diverse: Nigeria is heavily dependent on oil exports, Ghana relies heavily on gold and cocoa, while several French-speaking countries have entirely different economic structures.

According to Prasad and Songwe (2021), ECOWAS does not meet the conditions for an optimal monetary zone, as Europe did at the time of the creation of the euro. However, the "hard" factors can be offset by factors described as "soft" (regional vision, political commitment). Nigeria could play an anchoring role comparable to that of Germany in the euro zone, but this requires a political will that remains to be demonstrated.

8.3. The Multi-Speed Approach: A Necessity

The decision to adopt a phased approach, limited to countries that meet the criteria, is a pragmatic recognition of this reality. This "multi-speed" strategy makes it possible not to block the project while waiting for the countries that are furthest behind to catch up. The countries of Cluster 1 (Nigeria, Ghana, Côte d'Ivoire) could thus constitute the first circle of the Eco.

However, this approach carries risks:

- i. Risk of fragmentation: The creation of a multi-speed "Eco Club" could widen the gaps between member countries and exacerbate tensions.
- ii. Question from the ESA: The absence of the ESA countries (Cluster 3) weakens the economic coherence of the monetary union and raises the question of the relationship between the Eco and a possible ESA currency.
- iii. Nigeria's challenge: Nigeria's participation is essential, but its persistent inflation and pressure on the naira make it difficult to integrate immediately.

8.4. Institutional prerequisites

Several fundamental institutional issues remain unresolved:

- i. Central bank governance: Where would the future regional central bank be located? How would monetary policy decisions be made?
- ii. Voting rules: How would voting rights be distributed among member countries? Would Nigeria, with more than 60% of the region's GDP, exert a preponderant influence?
- iii. Crisis management mechanisms: What mechanisms would be used to deal with economic crises affecting a single Member State?

The credibility of the monetary institution and its independence from national governments will be key factors in the long-term stability of the Eco.

9. CONCLUSION AND POLICY IMPLICATIONS

With one year to go before the 2027 deadline, the state of preparedness of ECOWAS countries for the Eco appears to be very insufficient. The results of our study, validated by extensive robustness testing, show that:

- i. Macroeconomic convergence is far from being achieved for the majority of Member States. The financial development threshold of 35.4% of GDP is not reached by 10 out of 15 countries. This threshold is stable (95% CI [34.2%, 36.8%]) and robust at different specifications.
- ii. The withdrawal of the countries from the ESA has created further fragmentation that complicates the scope of the monetary union. The countries of Cluster 3 are seeing their financial integration deteriorate, from an IFR of 0.15 in 2023 to -0.38 in 2025.
- iii. A global launch in 2027 is impossible; only a multi-speed approach is possible, with a hard core composed of Nigeria, Ghana and Côte d'Ivoire.

For ECOWAS decision-makers, several priorities are necessary:

- i. Adopt a pragmatic and progressive approach: The launch of the Eco in 2027 must be done with a hard core of countries (Cluster 1) that have demonstrated their ability to meet the convergence criteria. Other countries need to receive increased technical and financial support to help them do so.
- ii. Strengthen fiscal and fiscal policy coordination: A monetary union cannot function without close coordination of economic policies. The establishment of a genuine West African "European Semester" is essential.
- iii. Strengthen regional financial institutions: The BCEAO, the Central Bank of Nigeria, EBID and WAMA must be strengthened to play their role as stabilizers and financiers of integration.
- iv. Preparing for the post-ESA period: ECOWAS should clarify its strategy for the ESA countries, exploring modalities of monetary cooperation that do not weaken the Eco project while preserving economic ties with these countries.
- v. Learning from Europe: ECOWAS needs to learn from the European experience, including on fiscal discipline and managing asymmetric shocks, to build a more resilient monetary union.

This study has several limitations. First, the Financial Integration Index (FRI) is constructed from aggregate data that may not reflect all dimensions of integration. Second, the lack of data on bilateral exposures between banks limits network analysis. Finally, the long-term impact of the withdrawal of the ESA remains uncertain and requires further studies.

Future research could integrate bilateral interbank transaction data for more detailed network analysis, explore the impact of new financial technologies (Fintech) on integration and stability, and analyse transition scenarios for ESA countries.

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The Eco represents a historic ambition for West Africa. Its realization requires a realistic, progressive and institutionally sound approach, which takes into account persistent heterogeneities and recent political upheavals. The 2027 deadline should not be a goal in itself, but a step in a long-term integration process. Without prior economic convergence, credible institutions and shared political trust, the Eco risks becoming another missed deadline, eroding the credibility of the regional integration project.

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