

Monetary regimes in crisis: A comparative analysis of Bulgaria's currency board and Romania's inflation targeting

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Abstract. *Between 2015 and 2026, the neighboring economies of Romania and Bulgaria experienced a sharp economic divergence. Standard economic theory typically supports using flexible exchange rates to cushion against outside shocks. However, newer studies point to the risks of fiscal dominance, a situation where political pressure drives up government spending and keeps inflation stubbornly high. To see whether monetary flexibility actually protects an economy or just makes it easier for governments to overspend, this paper analyzes quantitative data directly from Eurostat. The research compares Bulgaria's strict currency board against Romania's flexible inflation targeting system by tracking three main macroeconomic indicators: inflation rates, general government budget deficits, and ten year government bond yields. Looking at this eleven year period shows that Romania's flexible policy allowed the government to spend aggressively during economic upswings. This habit led to ongoing twin deficits, heavy debt after the global pandemic, and expensive borrowing costs. On the other hand, Bulgaria's fixed exchange rate acted as a strict legal limit on domestic spending. This rigid anchor forced politicians to maintain the tight budgets required to meet the Maastricht convergence criteria and finally adopt the euro in 2026. Ultimately, this study adds to the ongoing debate about monetary policy in emerging markets. It shows that for developing Eastern European countries, giving up monetary independence for a strict foreign anchor actually creates much more macroeconomic stability than trying to manage financial shocks on their own.*

Keywords: Monetary policy, currency board, inflation targeting, fiscal discipline, macroeconomic stability, sovereign risk.

Introduction

On January 1, 2026, Bulgaria officially integrated into the Eurozone, establishing a definitive macroeconomic divergence from its neighbor, Romania. Both nations share a similar post communist economic trajectory and were subjected to identical external supply chain disruptions and energy shocks throughout the early 2020s. Despite these structural parallels, their institutional monetary responses yielded starkly contrasting outcomes. Bulgaria leveraged the rigidity of its Monetary Council to enforce strict fiscal discipline, successfully meeting the Maastricht convergence criteria. Conversely, Romania maintained a flexible inflation-targeting regime, which coincided with the entrenchment of severe twin deficits and persistent inflationary pressures.

This paper investigates whether Romania's flexible monetary policy effectively cushioned the domestic economy against exogenous shocks, or if it primarily functioned as a mechanism that enabled procyclical government overspending when compared to Bulgaria's rigid, fixed-anchor system. For transitioning Eastern European economies, the choice of monetary regime carries profound implications for long-term sovereign risk and economic stability. By comparing harmonized inflation trends, general government deficits, and sovereign borrowing costs from 2015 to 2026, this research demonstrates that the flexibility of the Romanian leu facilitated short-term political expenditure at the direct expense of long-term macroeconomic convergence.

To systematically evaluate these diverging paths, this study is guided by a primary research question: To what extent does the rigidity of a monetary regime dictate fiscal discipline during periods of severe macroeconomic stress? From this question, two central hypotheses are derived and tested. Hypothesis 1 (H1) posits that a flexible inflation-targeting regime in an emerging market without strict fiscal rules inherently leads to fiscal dominance, exacerbating public debt during economic shocks. Hypothesis 2 (H2) suggests that surrendering monetary independence to a strict currency board, and thereby tying the domestic euro to a foreign anchor, forces necessary fiscal consolidation and significantly lowers sovereign risk premiums.

Ultimately, this study highlights the disparate economic price tags attached to Eurozone convergence in Eastern Europe. By analyzing an eleven-year dataset, this paper evaluates the resilience of these two competing monetary regimes, offering critical insights into the limitations of monetary flexibility when unaccompanied by rigorous fiscal oversight.

Literature review

When emerging economies select a monetary framework, they fundamentally navigate a tradeoff between policy flexibility and institutional credibility. Classical macroeconomic frameworks, anchored by the Optimum Currency Area theory (Mundell, 1961), argue that maintaining a flexible exchange rate is essential for absorbing asymmetric economic shocks. This theoretical foundation strongly supports inflation-targeting regimes. By retaining an independent central bank, governments possess the crucial ability to adjust interest rates and manipulate currency values to smooth out domestic business cycles without triggering severe macroeconomic contractions.

However, contemporary macroeconomic analysis highlights a critical vulnerability within this flexible approach: the pervasive risk of fiscal dominance. This phenomenon occurs when acute political pressure drives sovereign overspending, effectively neutralizing a central bank's ability to control inflation through standard monetary tools. Recent empirical research emphasizes that unsustainable government debt directly short-circuits monetary policy transmission (Wolswijk, 2026). In environments characterized by high public debt, central banks are often forced to accommodate fiscal expansion, fundamentally restricting their capacity to achieve price stability and causing fiscal and monetary objectives to violently collide.

The genesis of Bulgaria's currency board and the trauma of hyperinflation

To fully contextualize the rigidity of the Bulgarian monetary framework, it is imperative to examine the macroeconomic trauma of the late 1990s. The decision to abandon monetary sovereignty was not born of theoretical preference, but of absolute systemic collapse. Between 1996 and 1997, Bulgaria experienced a devastating financial crisis characterized by the collapse of its domestic banking sector, a massive depletion of foreign exchange reserves, and a hyperinflationary spiral that peaked at an annualized rate exceeding 1,000 percent. The domestic currency, the lev, lost nearly all of its purchasing power, effectively wiping out the savings of the general population and paralyzing domestic commerce. This catastrophic failure of discretionary monetary policy fundamentally eroded public and market trust in domestic institutional governance.

In response, the Currency Board Arrangement (CBA) was instituted in July 1997 under the strict guidance of the International Monetary Fund. The mechanics of this board were deliberately harsh: the lev was irrevocably pegged first to the Deutsche Mark, and subsequently to the Euro at a fixed rate of 1.95583 BGN to 1 EUR. Crucially, the Bulgarian National Bank was legally stripped of its ability to conduct open market operations, extend credit to the government, or act as a lender of last resort to commercial banks, except under highly restricted, fully collateralized conditions. By legally mandating that the domestic money supply must be fully backed by foreign exchange

reserves, Bulgaria effectively imported the monetary credibility of the Bundesbank, and later, the European Central Bank. This historical trauma created a lasting, cross-partisan political consensus: the risks of domestic monetary mismanagement were deemed far greater than the theoretical benefits of independent exchange rate adjustments. Consequently, the currency board became an untouchable institutional anchor, forcing all subsequent macroeconomic adjustments to occur strictly through fiscal policy and internal wage flexibility.

Romania's transition to inflation targeting and the illusion of autonomy

Conversely, Romania's path diverges significantly in its institutional evolution, reflecting a preference for managed flexibility. Following a prolonged period of high, double-digit inflation in the early 2000s, the National Bank of Romania (NBR) formally transitioned to a direct inflation-targeting (IT) framework in August 2005. At the time, this shift was announced as a necessary modernization of the macroeconomic rulebook. The theoretical justification was robust: by allowing the Romanian leu to float freely, the central bank could utilize the exchange rate as an external shock absorber, while manipulating the benchmark policy rate to anchor domestic inflation expectations. This framework was specifically intended to guide the Romanian economy through the structural transformations required for its 2007 accession to the European Union, permitting a gradual disinflationary glide path rather than a sudden shock.

However, the academic literature surrounding inflation targeting in emerging markets frequently highlights a critical operational prerequisite: the absolute necessity of fiscal dominance being subordinated to monetary independence. For an inflation-targeting regime to function optimally, the sovereign government must operate with countercyclical fiscal prudence, allowing the central bank's interest rate transmission mechanisms to effectively influence aggregate demand. In the Romanian context, this prerequisite has been chronically absent. The flexibility of the leu, rather than acting solely as a shock absorber for external crises, frequently masked the accumulation of internal macroeconomic imbalances. Because the central bank retained the theoretical ability to manage liquidity and stabilize the currency, successive political administrations were incentivized to pursue expansionary fiscal policies—such as unfunded public wage increases and pension hikes—without facing the immediate, catastrophic market punishments that a fixed-exchange regime would trigger. Thus, the IT framework, while technically sound in a vacuum, inadvertently provided the monetary cover necessary for the entrenchment of Romania's chronic twin deficits.

For Eastern European nations transitioning through post-communist economic restructuring, the academic focus often shifts away from flexibility toward the stabilizing necessity of strict institutional anchors. By deliberately surrendering control over domestic monetary policy, a nation essentially imports the credibility of the stronger foreign currency to which it pegs. This institutional rigidity forces a structural shift in political behavior. Without the safety valve of currency devaluation or central bank financing, governments are legally compelled to maintain stringent fiscal discipline to manage economic downturns.

The necessity of this discipline is further underscored by the twin deficit hypothesis, which posits a direct, causal linkage between loose fiscal policy and deteriorating current account balances. When a sovereign entity runs a massive budget deficit, it artificially stimulates domestic demand and drives up import consumption, thereby keeping inflationary pressures structurally high. Without the immediate, binding pressure of an impending Eurozone integration, domestic political cycles frequently prioritize short-term economic stimulation over the austere structural reforms required for long-term macroeconomic convergence. Furthermore, emerging societal megatrends are compounding these traditional fiscal vulnerabilities. Both Romania and Bulgaria face severe demographic contraction and rapidly aging populations, which organically drive up structural expenditures on pensions and public healthcare. This demographic strain arrives precisely as the global era of cheap sovereign borrowing concludes, creating a severe debt reckoning for developing economies (Valdés & Dabla-Norris, 2026). Consequently, central banks operating in high-debt,

demographically constrained environments are finding traditional inflation-targeting mechanisms increasingly ineffective (Rhee, 2025). This evolving landscape strongly suggests that without the strict expenditure limits imposed by a rigid monetary anchor, flexible regimes in emerging markets are highly susceptible to chronic fiscal destabilization.

An additional theoretical dimension crucial for analyzing transition economies is the Balassa-Samuelson effect. This framework suggests that as developing nations experience rapid productivity growth in the tradable goods sector—often driven by foreign direct investment and integration into broader European supply chains—wages organically rise. These wage increases inevitably spill over into the non-tradable sector, driving up aggregate domestic price levels. For a country operating under a strict currency board, such as Bulgaria, this structurally driven inflation cannot be offset by currency appreciation. Consequently, the fixed anchor must absorb these productivity-driven price level adjustments entirely through domestic fiscal management. In contrast, Romania's flexible exchange rate theoretically permits nominal currency appreciation to mitigate such imported inflation, yet the pervasive presence of fiscal dominance frequently overrides this theoretical advantage, trapping the economy in a cycle of wage-price spirals and continuous currency depreciation.

Methodology

To systematically evaluate the macroeconomic divergence between Romania and Bulgaria, this research employs a quantitative and comparative design. The study analyzes secondary macroeconomic data extracted exclusively from the European Commission's Eurostat database (European Commission, Eurostat, 2026), covering an eleven-year continuous observational period from January 2015 through January 2026. Utilizing an extended, multi-cycle timeframe rather than a standard four-year political window is a deliberate methodological choice. This expansive scope is necessary to establish a stable pre-pandemic economic baseline, capture the immediate exogenous shocks of the COVID-19 pandemic and the 2022 regional energy crisis, and accurately track the subsequent, diverging recovery paths that culminated in Bulgaria's 2026 Eurozone integration.

The analytical framework isolates three primary macroeconomic indicators to measure institutional resilience and market trust. The first indicator is the Harmonized Index of Consumer Prices (HICP), which is utilized to track inflationary divergence and assess the effectiveness of each central bank's price stability mechanisms. The second indicator evaluates sovereign fiscal health by analyzing the General Government Net Lending and Borrowing data, expressed as a percentage of Gross Domestic Product (GDP). This metric is critical for identifying structural deficits and quantifying the extent of fiscal dominance present in both economies. Finally, the study examines sovereign risk through the lens of EMU convergence criterion bond yields, specifically tracking ten-year government bond rates. This serves as a real-time, market-driven report card, quantifying the specific risk premium demanded by international investors to compensate for perceived institutional instability.

These three specific metrics were explicitly selected because they map directly onto the core Maastricht convergence criteria, which dictate the mandatory prerequisites for Eurozone accession. By keeping the methodological focus strictly narrowed to these fundamental indicators, the study ensures an objective evaluation of macroeconomic stability and international market confidence. This intentional constraint prevents the comparative analysis from being diluted by secondary economic variables or localized industrial fluctuations.

o ensure the validity of the comparative framework, the structural definitions of the chosen metrics must be explicitly outlined. The Harmonized Index of Consumer Prices (HICP) is utilized because it provides a standardized, comparable measure of inflation across all European Union member states, stripping away methodological disparities inherent in localized national consumer price indices. The General Government Net Lending/Borrowing metric is calculated strictly according to the European System of Accounts (ESA 2010) methodology. This ensures that all public expenditures—including complex off-balance-sheet social spending and sovereign debt servicing—are accurately reflected in the deficit figures. Finally, the EMU convergence criterion bond yields specifically track secondary market yields of ten year, euro-denominated sovereign bonds. By utilizing yields denominated in the European single currency, the analysis effectively isolates the pure institutional risk premium demanded by investors, controlling for localized exchange rate volatility and providing a highly accurate gauge of sovereign credibility.

While this comparative methodology provides a robust framework for evaluating monetary regimes, certain structural parameters must be acknowledged. Comparing a larger, more diversified domestic market like Romania against a smaller economy like Bulgaria inherently involves differing industrial compositions and distinct domestic energy dependencies. Consequently, external supply chain disruptions may impact the aggregate output of these nations asymmetrically. However, by focusing the analysis strictly on proportional monetary metrics and sovereign borrowing costs rather than absolute industrial output, this methodology effectively controls for market size, providing a highly accurate reflection of how each specific monetary rulebook absorbed and processed identical regional crises.

Results and discussions

The comparative analysis of macroeconomic indicators between 2015 and 2026 reveals a profound divergence in how Romania and Bulgaria absorbed and recovered from sequential global shocks. The data clearly demonstrates that the institutional architecture of a country's monetary regime fundamentally dictates its fiscal survival during extended periods of crisis. While Romania's inflation-targeting framework was theoretically designed to act as a macroeconomic shock absorber, it systematically failed to neutralize the inflationary pressures generated by the government's aggressive, procyclical fiscal expansion.

Inflationary divergence and price stability

Analyzing the Harmonized Index of Consumer Prices (illustrated in Figure 1) over the eleven year observational period highlights the limitations of monetary flexibility when operating alongside fiscal dominance. For the initial phase of the timeline, between 2015 and 2019, both nations maintained relatively low and stable inflation rates, frequently tracking below the 2.0 percent threshold. However, following the unprecedented global supply chain disruptions of 2021 and the subsequent regional energy crisis of 2022, a severe structural divergence emerged.

Both economies experienced immediate, double-digit inflationary spikes as exogenous energy costs permeated domestic pricing structures.

The critical differentiator appeared during the stabilization phase. Bound by the rigid strictures of its Monetary Council, Bulgaria's inflation began a steady, managed decline in mid 2024. Because the central bank could not autonomously expand the money supply to finance government initiatives, the resulting fiscal tightening effectively cooled domestic demand. This allowed inflation to stabilize at approximately 3.5 percent by the end of 2025, successfully fulfilling the Maastricht price stability criterion. Conversely, Romania's inflation remained persistently sticky, fluctuating between 6.0 and 8.0 percent throughout the same recovery window. This perspective

proves that Romania's elevated consumer prices were not merely a transient reaction to external energy shocks, but rather the symptom of a structural failure to cool an overheating, deficit-driven economy.



Figure 1. Harmonised index of consumer prices - monthly data

Source: Author's own research based on Eurostat data.

Fiscal consolidation versus expansionary deficits

The starkest contrast between the two regimes is visible within their long-term budget discipline. Table 1 illustrates the general government net lending and borrowing data, revealing that Romania's fiscal vulnerabilities were deeply entrenched long before the pandemic induced a global recession. In 2019, during a period of robust European economic growth, Bulgaria generated a fiscal surplus of 2.1 percent of its Gross Domestic Product, deliberately building sovereign buffers. During this exact same macroeconomic window, Romania was already operating at a 4.3 percent deficit, aggressively increasing public sector wages and pension obligations.

Table 1. *General government deficit and surplus as a percentage of GDP*

Country	2015 (%)	2019 (%)	2020 (%)	2022 (%)	2024 (%)
Bulgaria	-1.7	2.1	-4.0	-2.9	-3.0
Romania	-0.6	-4.3	-9.2	-6.5	-9.3

Source: Author's own research based on Eurostat data.

When the 2020 economic shock materialized, Romania's lack of fiscal space caused its deficit to explode to 9.2 percent. Crucially, rather than consolidating during the post-pandemic recovery, political pressures leading up to the 2024 election cycle pushed the deficit even higher, reaching 9.3 percent. Bulgaria, conversely, utilized its institutional straightjacket to navigate the identical crisis. Politicians, stripped of the ability to monetize debt through a flexible central bank, were forced to implement politically difficult budgetary consolidations, successfully shrinking their deficit back to the mandatory 3.0 percent threshold by 2024.

A deeper decomposition of these deficit figures reveals the specific microeconomic drivers perpetuating Romania's fiscal crisis. The rapid widening of the general government deficit to 9.3 percent in 2024 was not driven by productive capital investments, but rather by rigid, recurrent expenditure growth. The primary catalysts included aggressive expansions in public sector wages and broad social assistance programs. Furthermore, Romania suffers from structurally low revenue collection efficiency, frequently recording some of the widest Value Added Tax (VAT) compliance gaps within the European Union. This lethal combination of elevated, inflexible public consumption and inefficient tax collection creates a structural deficit that cannot be easily unwound. Consequently, Romania's public debt trajectory has steepened dramatically, rising from 48.9 percent of GDP in 2023 to nearly 55 percent by the end of 2024. Conversely, Bulgaria's currency board prohibited such unfunded expenditure expansions, forcing the government to closely align public sector wage growth with actual revenue collection and underlying labor productivity gains.

The divergence in fiscal consolidation is further exacerbated when contextualized against the backdrop of severe demographic contraction. Both Romania and Bulgaria are experiencing rapid population aging and significant outward labor migration, which inherently shrinks the active tax base while simultaneously increasing mandatory sovereign outlays for healthcare and pension distributions. In a flexible, inflation-targeting regime like Romania's, the political temptation to bridge this demographic funding gap through continuous deficit spending and debt monetization has proven overwhelming. This creates a dangerous intergenerational wealth transfer, where current public consumption is financed by future sovereign liabilities. Conversely, the institutional rigidity of Bulgaria's currency board completely removes this temptation. Because the Bulgarian government cannot legally finance its demographic deficit through central bank mechanisms, it is forced to implement politically difficult parametric reforms to its social systems and maintain highly competitive tax rates to attract foreign direct investment. This stark contrast highlights that while demographic pressures are symmetric across the Eastern European region, the monetary regime fundamentally dictates whether a state responds with sustainable structural reform or unsustainable debt accumulation.

Sovereign risk and market-dictated borrowing costs

The international financial markets provided a definitive verdict on these diverging strategies, which is vividly reflected in the ten-year government bond yields shown in Figure 2. Between 2015 and 2021, the sovereign borrowing gap between the two neighboring states remained relatively narrow. However, as global central banks ended the era of quantitative easing and capital became significantly more expensive, investors began aggressively pricing in institutional risk.

As Bulgaria successfully demonstrated its commitment to the fiscal discipline required for Eurozone integration, its sovereign borrowing costs stabilized comfortably between 3.0 and 4.0 percent. The rigid currency board essentially allowed Bulgaria to borrow the European Central Bank's credibility, anchoring investor expectations. In stark contrast, Romania's bond yields remained elevated near the 7.0 to 8.0 percent range. This massive spread represents a direct risk premium extracted by international investors. The markets demanded heavy compensation for the ongoing systemic risk posed by Romania's unanchored structural deficits and the inherent depreciation risks associated with a flexible, highly exposed currency.



Figure 2. EMU convergence criterion series - monthly data

Source: Author's own research based on Eurostat data.

Conclusion

Evaluating the macroeconomic trajectory of Romania and Bulgaria between 2015 and 2026 confirms that a nation's institutional architecture fundamentally dictates its resilience during systemic crises. The quantitative evidence reveals a stark macroeconomic reality: monetary flexibility, when untethered from strict fiscal rules, morphs from a theoretical shield into a

structural liability. Because Romania's flexible exchange rate framework lacked hard expenditure limits, domestic political cycles repeatedly ignored growing structural deficits. This chronic lack of fiscal discipline, acknowledged as a persistent transmission vulnerability (National Bank of Romania, 2025), maintained elevated inflationary pressures, drove sovereign borrowing costs up, and effectively delayed Eurozone integration.

In sharp contrast, Bulgaria's rigid currency board functioned as its greatest institutional asset. By legally eliminating the central bank's capacity to finance sovereign debt or devalue the domestic currency, the monetary framework forced the government to maintain a culture of fiscal health that successfully absorbed the 2020 and 2022 global shocks. This institutional constraint anchored inflation, secured low international borrowing rates, and paved a definitive path to the Eurozone (Bulgarian National Bank, 2025). Ultimately, this research demonstrates that for emerging Eastern European economies, surrendering monetary independence in favor of a credible, fixed anchor provides significantly greater macroeconomic stability than the illusion of autonomous flexibility.

These findings carry urgent policy implications. For Romania, achieving sustainable convergence requires immediate, aggressive fiscal consolidation. Because independent monetary policy cannot sustainably offset the inflationary consequences of a massive structural deficit, the sovereign government must implement stringent reforms to the public wage bill and pension systems while maximizing tax collection efficiency. Failure to execute these reforms will force the central bank to maintain restrictive interest rates, subsequently stifling private investment and long-term economic growth. Conversely, Bulgaria's challenge shifts from structural convergence to functional integration. Having successfully utilized its currency board to enter the Eurozone, future macroeconomic shocks must now be absorbed by a highly flexible labor market and highly efficient capital allocation rather than central bank adjustments.

While this study provides a clear comparative analysis, specific methodological limitations must be acknowledged. Relying on aggregate macroeconomic indicators such as consumer price indices and budget deficits can obscure deeper microeconomic structural variations. Romania encompasses a significantly larger domestic market with a diverse industrial makeup compared to Bulgaria, which inherently alters the transmission mechanisms of monetary policy. Furthermore, the 2015 to 2026 observational window was characterized by exceptional global volatility. Massive external shocks, including post pandemic supply chain fractures and the regional energy crisis, may have impacted Romania asymmetrically due to its specific domestic energy dependencies, potentially skewing a direct, one-to-one comparison of their monetary regimes. Finally, because this research evaluates the immediate aftermath of Bulgaria's Eurozone integration in January 2026, the long-term systemic effects remain unmeasured. Future research must evaluate how the Bulgarian economy navigates Eurozone-wide systemic risks and potential price level adjustments stemming from the Balassa-Samuelson effect.

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