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INTEREST RATE AS A DETERMINANT OF FISCAL SUSTAINABILITY IN THE SOUTHEAST EUROPEAN REGION

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Abstract: *This paper analyzes the impact of the interest rates on public debt sustainability in Southeast European countries during the 2008–2024, using a panel of eight countries with a total of 136 annual observations. The methodological approach is based on panel regression models (OLS, FEM, and REM), accompanied by diagnostic tests for autocorrelation, multicollinearity, and heteroskedasticity. Due to the presence of autocorrelation and heteroskedasticity, the pooled OLS model with robust standard errors was selected as the most reliable specification. The results show that the interest rate is by far the most significant determinant of public debt: an increase in the average interest rate by one percentage point raises the debt-to-GDP ratio by approximately 6.9–7.3 percentage points. Real GDP growth and the primary balance are not statistically significant, while inflation exhibits a mildly negative effect on debt, which becomes more pronounced with time lags. The originality of the paper lies in the empirically isolation of the interest rate effect in a region characterized by post-transition structural legacies, limited fiscal capacities, post-crisis instability, and pronounced pressures on public finance sustainability. This provides a new empirical interpretation of debt sustainability, according to which the cost of borrowing is the key mechanism shaping the debt trajectory—stronger than either fiscal consolidation or economic growth. The findings carry important implications for fiscal policy design: stabilizing public debt requires reducing refinancing risk, extending bond maturities, strengthening credibility, and controlling exposure to changes in the international interest rate environment and heightened market volatility.*

Keywords: *Interest rate, public debt, fiscal sustainability, panel analysis, Southeast Europe.*

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1. Introduction

The sustainability of public debt in modern economies is increasingly determined by interest rate dynamics, with the cost of debt servicing emerging as a key transmission channel of fiscal risk. Blanchard (2019) shows that periods of low interest rates significantly reduce the fiscal burden, as governments can refinance their debt without increasing tax pressure, temporarily shifting the sustainability threshold to levels higher than traditionally assumed. However, the empirical findings of Egert (2013) indicate that the negative effect of debt on economic growth appears even at much lower levels of indebtedness when interest rate pressures rise, confirming that sustainability depends more on the price of debt than on its nominal amount. Lian et al. (2020) further conclude that high-debt countries experience shorter episodes of favourable (negative) borrowing costs and that rising interest rates more rapidly deteriorate their debt positions, particularly under the influence of external shocks. In line with this, Wyplosz (2023) and Heimberger (2023) emphasize that the return to higher interest rates after 2021 marks the end of the era of cheap financing, and that the fiscal consequences of rising interest rates will be most visible in countries with limited fiscal space and concentrated debt-servicing obligations.

In this context, examining public debt in Southeast European countries becomes particularly important because the region is characterized by a specific growth model in which economic expansion relies heavily on private consumption and investment, while the capacity for long-term productivity gains is constrained by structural weaknesses in the labour market, export capacities, and technological development (European Commission, 2025a; 2025b; 2025c). Although countries differ in their debt levels—from those with relatively low debt and stable fiscal balances (e.g., Bulgaria, Bosnia and Herzegovina) to those with more pronounced debt-servicing burdens and high dependence on external financing (e.g., Croatia, Montenegro, Albania)—they share the common feature that rising interest rates directly narrow fiscal space, increasing refinancing costs and reducing room for development-oriented expenditures. For this reason, the present study examines the extent to which rising interest rates erode public debt sustainability in the region, and whether factors such as inflation, GDP growth, and fiscal balances can mitigate or delay this effect.

2. Theoretical Framework of the Role of the Interest Rate as a Regressor of Public Debt Dynamics

The interest rate on public debt represents one of the key determinants of debt dynamics. According to the 2020 report by the European Central Bank (ECB), the central issue of fiscal sustainability is the differential between the interest rate and real GDP growth (the i–g differential), adjusted for the value of the primary budget balance. The report suggests that a negative differential may contribute to a reduction in the public debt-to-GDP ratio even in the presence of a primary deficit. This implies that the interest rate is not merely a mechanical borrowing cost, but also an active channel through which financial markets influence the sustainability of public finances and the long-term fiscal position of the state (Checherita-Westphal and Domingues Semeano, 2020). A similar

conclusion is offered by Turner and Spinelli (2011), who show, using OECD countries as an example, that the low value of the i–g differential after the 2000s resulted from cautious monetary policy and inflation remaining within target ranges, thus preventing a dramatic increase in interest rates despite the 2008 global financial crisis.

According to Barrett (2018), currently low interest rates do not guarantee the sustainability of additional borrowing. Examining fiscal space during the global financial crisis, when interest rates fell sharply, the author concludes that the precondition for long-term sustainability lies in maintaining a balance between nominal GDP growth and nominal interest expenditures over time. Using the case of the United Kingdom, Barrett demonstrates that a drastic drop in interest rates during the crisis opened space for an increase in the public debt-to-GDP ratio of only about 5%, while an increase in the interest–growth differential of merely 2.5% caused an equivalent reduction in the sustainable debt threshold. In other words, the author emphasizes that fiscal sustainability depends on the persistence of low interest rates, rather than merely their current level.

A substantial body of recent research shows that capital markets do not form interest rates solely on the basis of the current fiscal position, but also in relation to the institutional framework underlying sovereign debt. During the European debt crisis, adverse interest rate conditions emerged primarily in the "periphery" of the euro area—precisely where confidence in monetary institutions had weakened and uncertainty regarding European Central Bank intervention was present. This implies that interest rates are particularly sensitive to institutional support and to the credibility signals that governments provide to markets, while in periods of crisis the gap between countries with strong and weak institutional capacity manifests itself through greater differentiation in borrowing costs (Heimberger, 2023). Furthermore, studies projecting long-term public debt sustainability from the perspective of interest rate dynamics highlight the importance of technological progress, unemployment fluctuations, demographic trends, and addressing income inequality (Heylen et al., 2024). These findings further justify treating the interest rate as the primary channel through which financial market shocks are transmitted to public debt dynamics.

The latest developments in global debt markets indicate that the favorable financing conditions typical of the pre-2022 period have not re-emerged. Despite reductions in policy rates, yields on government bonds in major economies have continued to rise, while public and corporate debt levels have also increased. This combination of higher borrowing costs and rising indebtedness narrows fiscal space, particularly at a time when investment related to the energy transition, infrastructure, and public policy fields are greater than ever. Debt accumulated after the 2008 financial crisis and the COVID-19 pandemic was used predominantly to cushion shocks and support short-term recovery, leaving unresolved questions regarding long-term investment capacity. Simultaneously, developing economies and the corporate sector face reduced access to financing, confirming that the current environment cannot be interpreted as a stable return to an era of cheap debt. These trends clearly indicate that the interest rate has once again become a binding constraint on fiscal capacity, with borrowing costs potentially becoming a key determinant of debt sustainability in the coming years (OECD, 2025).

Macroeconomic projections for Western Balkan countries (members of the Southeast European region outside the EU) indicate moderate but stable growth over the next three-year period, with an expected average annual growth rate of around 3% annually. Across all observed economies, key drivers of growth remain private consumption, rising real wages, and investment—particularly in infrastructure and energy—alongside substantial public expenditure, including major capital projects financed from budgetary and external sources. Although supportive of short-term progress, this growth structure implies a greater dependence of development sustainability on fiscal conditions and the cost of borrowing. Since the global trend of low interest rates from the previous decade has not returned and financing costs remain elevated, rising interest rates may act as a destabilizing channel, limiting future investment capacity and fiscal space. This suggests that the sustainability of public finances in the region depends not only on the pace of growth, but also on the ability to finance that growth under higher bond yields, making the interest rate one of the central determinants of long-term public debt stability in the region (WB, 2025).

In contrast to the Western Balkan countries, although Romania, Bulgaria, and Croatia also maintain stable medium-term growth—averaging around 3% annually—its structure is more closely shaped by the EU's fiscal framework and budgetary discipline rules. In Romania, accelerated inflation is anticipated in 2025 and 2026, alongside gradual fiscal consolidation, but also an increase in the public debt ratio from roughly 55% to about 63% of GDP by 2027, largely due to higher primary deficits and rising debt-servicing costs. In Bulgaria, the deficit remains within the range of 3–4% of GDP, with increased public spending on wages, pensions, and defense, while public debt rises from 23.8% of GDP in 2024 to more than 32% by 2027, with borrowing costs remaining the primary source of fiscal risk. Croatia projects a mild increase in the deficit to 2.8–2.9% of GDP in 2025–2026 and stabilization at around 2.8% one year later, while the public debt ratio declines toward 56% of GDP under a strong nominal growth scenario. A common denominator across these economies is that fiscal space is shrinking under the pressure of rising expenditures, demographic obligations, energy transition needs, and rising defense costs—implying that borrowing costs and interest rate dynamics will exert increasingly strong influence on public finances. In other words, even in EU member states outside the Western Balkan region, economic growth persists, but its sustainability increasingly relies on fiscal discipline and the ability to service debt in a high-interest-rate environment (European Commission, 2025a; 2025b; 2025c).

3. Data Sources and Descriptive Statistics of the Panel

The data used in this research were retrieved directly from the IMF (2025) website, specifically from the World Economic Outlook (WEO) database, ensuring high source relevance and full methodological consistency in their evaluation. Data on the public debt-to-GDP ratio, inflation, real GDP growth, and the primary balance—expressed as percentages—were directly included in the panel, while the interest rate (annual average) was calculated as a composite measure derived from interest expenditures and the share of public debt in GDP across countries and years.

Interest expenditures were calculated as the absolute difference between the primary balance and the overall budget balance, in line with the methodology defined

in the Government Finance Statistics Manual (IMF, 2014). Data on the budget balance were also obtained from the same source (IMF, 2025).

Below is the formula used to calculate the average interest rate in this study:

$$\text{Interest rate} = \frac{|Primary\ balance - Budget\ balance|}{Public\ debt{-}to{-}GDP\ ratio} \times 100$$

Based on the above-mentioned time series, a balanced panel was constructed, covering eight Southeast European countries over the period 2008–2024, with a total of 136 observations. The balanced structure of the panel allows for the application of panel regression methods without loss of information and eliminates issues arising from an unequal number of observations per unit, thereby increasing the reliability of the coefficient estimates. The panel is temporally complete (T = 17 for each country), spatially homogeneous (N = 8), and methodologically stable, providing the necessary conditions for the application of OLS, FEM, and REM specifications in the subsequent empirical analysis.

Table 1 – Descriptive Statistics of Dependent, Independent, and Control Variables

Variable	Mean	Standard deviation	Minimum	Maximum	N
Public debt	48,08	19,11	13,00	107,30	136
Interest rate	2,86	1,12	0,00	5,82	136
Inflation	3,44	3,72	-1,60	14,20	136
GDP growth	2,32	3,69	-15,30	13,00	136
Primary balance	-1,66	2,47	-8,23	4,33	136

Source: Author's elaboration based on Gretl statistical software.

Descriptive statistics indicate that Southeast European countries during the observed period are characterized by significant differences in debt levels, fiscal positions, and macroeconomic performance. The average public debt stands at 48.08% of GDP, while a standard deviation of 19.11 reflects a high degree of dispersion, indicating the presence of countries with both significantly lower and higher debt levels. The range from 13% to 107.3% of GDP confirms the pronounced heterogeneity of fiscal positions, highlighting economies with low debt as well as cases approaching debt vulnerability thresholds.

The interest rate has an average value of 2.86%, with a relatively low standard deviation (1.12), suggesting limited dispersion and greater stability in debt-servicing costs over time and across countries. Inflation (average 3.44%) exhibits considerable volatility (Std. Dev. = 3.72), reflecting the presence of price shocks, differing monetary policy regimes, and asymmetric economic responses during the crisis and post-crisis recovery periods. Similarly, real GDP growth (2.32% on average) has a high standard deviation (3.69) and a wide range of values (from -15.3% to +13%), confirming cyclical fluctuations and the region's sensitivity to external economic cycles.

The primary balance has a negative average value of -1.66% of GDP, indicating that most countries in the region operate under a primary deficit in the majority of years. However, the standard deviation of 2.47 shows that fiscal outcomes vary significantly over time, ranging from high primary surpluses to deep deficits.

Table 2 – Descriptive Statistics of Public Debt Dynamics by Country over the Observed Period

Country	Mean	Standard deviation	Minimum	Maximum
Serbia	49,91	10,49	29,40	67,10
Montenegro	64,07	17,12	34,20	107,30
North Macedonia	38,79	10,67	20,60	54,80
Bosnia and Herzegovina	38,26	5,64	30,30	47,10
Albania	65,43	7,17	54,50	75,40
Croatia	69,00	13,19	38,90	86,50
Bulgaria	20,23	4,39	14,10	27,00
Romania	38,95	10,99	13,00	54,60

Source: Author's elaboration based on Gretl statistical software.

Table 2 presents the dynamics of public debt as a share of GDP across Southeast European countries during the observed period. It is evident that fiscal indebtedness differs significantly among countries, as reflected in the wide range of average values. The highest levels of public debt are observed in Croatia and Albania, with averages between 65–69% of GDP, while Montenegro exhibits the greatest volatility (Std. Dev. = 17.12), indicating a pronounced debt accumulation trend with strong year-to-year fluctuations. In contrast, Bulgaria records the lowest average debt (20.23% of GDP) along with the smallest deviation from the mean, making it the most fiscally stable country in the group.

Serbia, Romania, and North Macedonia fall within the middle range, with Serbia showing moderately high, yet not negligible, volatility, while Bosnia and Herzegovina displays the most stable public debt trajectory after Bulgaria, combined with low indebtedness. This profile of results indicates that the region is characterized by substantial heterogeneity in fiscal performance, with a clear contrast between countries with stable fiscal dynamics and those with pronounced debt growth, which has direct implications for debt sustainability and financing costs.

Table 3 – Descriptive Statistics of Average Interest Rate Dynamics by Country over the Observed Period

Country	Mean	Standard deviation	Minimum	Maximum
Serbia	3,49	0,79	1,90	4,41
Montenegro	2,93	0,53	1,94	3,61
North Macedonia	2,80	0,35	2,22	3,47
Bosnia and Herzegovina	1,91	0,42	1,40	2,93
Albania	3,93	1,07	2,57	5,82
Croatia	3,00	0,76	1,78	3,88
Bulgaria	1,12	0,76	0,00	2,56
Romania	3,70	0,61	2,66	4,64

Source: Author's elaboration based on Gretl statistical software.

Table 3 presents the average interest rates on public debt for Southeast European countries during the observed period. The values indicate significant differences in borrowing costs, with average interest rates ranging from approximately 1% to nearly 4% per year. Bulgaria exhibits the lowest debt-servicing cost (1.12% on average), along with one of the narrowest value ranges, reflecting a low initial debt level and favorable borrowing conditions. Bosnia and Herzegovina also records

relatively low interest rates (1.91%), with more stable dynamics compared to Bulgaria.

In contrast, Albania and Romania have the highest average interest rates (3.93% and 3.70%) and, together with Montenegro, Croatia, and Serbia, belong to the group of countries with above-average public debt financing costs. North Macedonia, on the other hand, achieves a lower financing cost (2.80%) with minimal fluctuations, suggesting greater predictability of fiscal obligations.

This distribution of values confirms that differences in fiscal position, market reputation, and risk exposure significantly affect the cost of public debt in the region. Countries with lower interest rates generally exhibit lower debt levels and a more stable macroeconomic environment, whereas countries with higher rates face greater servicing costs and potentially higher sensitivity to financial shocks.

4. Methodological Framework and Econometric Estimation of the Impact of Interest Rates on Public Debt in Southeast European Countries

The assessment of the impact of interest rates on public debt in this study is based on the application of panel data regression models, including OLS, REM, FEM. The panel is balanced and includes 136 observations. The temporal scope of the study covers the period from 2008 to 2024 and is based on annual data. The observed countries, according to the classification of the Organisation for Economic Co-operation and Development (OECD, n.d.), constitute the Southeast European region and include: Serbia, Montenegro, North Macedonia, Bosnia and Herzegovina, Albania, Croatia, Bulgaria, and Romania.

Given their shared history of transition processes, similar institutional challenges, and financing patterns, the region provides a suitable basis for a comparative analysis of the determinants of public debt dynamics. Moreover, the homogeneity of institutional frameworks, through full EU membership or EU candidacy, alongside shared macroeconomic challenges, makes this group appropriate for the application of a common-panel model, while differences among countries ensure sufficient variability for valid econometric estimation.

The specification of the applied regression model follows standard econometric practice and can be expressed as follows (Gujarati & Porter, 2009):

$$PUBLICT_DEBT_{it}=\alpha+\beta_1 INTEREST_RATE_{it}+\beta_2 INFLATION_{it}+ \beta_3 GDP_GROWTH_{it}+\beta_4 PRIMARY_BALANCE_{it}+ \upsilon_{it}$$

Where:

- $PUBLICT_DEBT_{it}$ - public debt as a percentage of GDP for country i in year t
- $INTEREST_RATE_{it}$ - average interest rate on public debt
- $INFLATION_{it}$ - annual inflation rate

- GDP_GROWTH_{it} - real GDP growth
- $PRIMARY_BALANCE_{it}$ - primary budget balance
- α - intercept term
- $\beta_1\beta_2\beta_3\beta_4$ - coefficients of the regressors
- υ_{it} - error term

To account for potential lagged effect of inflation on public debt, since inflationary impacts are not necessarily immediate, the study also tests the effect of inflation with a one-year time lag.

4.1. The Impact of Interest Rates on Public Debt in the Region

Before proceeding with the econometric interpretation, it is necessary to conduct a diagnostic validity check of the model. In accordance with standard panel econometric procedures, the presence of autocorrelation, multicollinearity, and heteroskedasticity is examined, as their occurence can lead to biased or inefficient parameter estimates and incorrect statistical inferences. Therefore, appropriate diagnostic tests are applied to the estimated panel model to ensure the reliability of the regression results.

Table 4 – Diagnostic Tests of the Panel Model

Test	Purpose of the Test	Test Statistic	p-value	Conclusion
Wooldridge test for autocorrelation	Autocorrelation Test	5,51	0,00	Autocorrelation is present
Variance inflation factor (VIF)	Multicollinearity Test	max VIF = 1,31	/	No multicollinearity detected
White test	Heteroskedasticity Test	85,38	0,00	Heteroskedasticity is present

Source: Author's elaboration based on Gretl statistical software.

Based on the conducted tests and the results presented in Table 4, it can be concluded that no multicollinearity among the regressors is present in the model, as the maximum VIF value is 1.31, well below the critical threshold. However, the model exhibits the presence of autocorrelation (p-value = 0.00 < 0.05) and heteroskedasticity (p-value = 0.00 < 0.05), indicating that robust standard errors should be applied to ensure the validity of the estimated results.

The selection of the appropriate model was carried out using standard econometric tests: the F-test, the LM Breusch–Pagan test, and the Hausman test. The F-test was used to choose the optimal model between OLS and FEM approaches, the LM Breusch–Pagan test for selection between OLS and REM models, and the Hausman test to determine the appropriate specification between REM and FEM. The application of these complementary tests is an integral part of the panel econometric procedure and allows for the identification of the model that is most consistent with the structure of the observed panel data.

Table 5 – Results of model selection tests

Test	p-value	Conclusion
F-test (OLS vs FEM)	0,99	OLS is preferred
LM test (OLS vs REM)	0,08	OLS is preferred
Hausman test (REM vs FEM)	0,94	REM is preferred

Source: Author's elaboration based on Gretl statistical software.

Based on the presented results, it can be concluded that statistical criteria clearly favor the use of the OLS model. The F-test comparing the OLS and FEM specifications shows an extremely high p-value ($p \approx 1$), unequivocally rejecting the need to introduce fixed effects. Similarly, the LM test (OLS vs. REM) yields a p-value of 0.08, which is above the conventional significance threshold (0.05), indicating that panel effects are not strong enough to justify the use of a random effects model. Finally, although the Hausman test formally indicates the consistency of the REM model ($p=0.94$), this finding has little practical relevance in a situation where the LM test has already shown that the REM model is not statistically justified.

When all tests are considered together, the methodologically most consistent and econometrically justified approach is to use the pooled OLS model with robust standard errors for further analysis. Neither the FEM nor the REM specifications are statistically necessary in this panel structure, while previous tests indicated the presence of autocorrelation and heteroskedasticity. The following section presents the results of the OLS model with robust standard errors, including variants with current and lagged inflation.

Table 6 – Results of the OLS model with robust standard errors

Variable	Model with Current Inflation	p-value	Model with Lagged Inflation	p-value
INTEREST_RATE	6,92	0,00	7,26	0,00
INFLATION	-0,70	0,04	/	/
INFLATION_L1	/	/	-1,05	0,01
GDP growth	-0,11	0,91	-0,45	0,62
Primary balance	0,03	0,98	0,11	0,90
F-statistic	7,63	0,00	8,83	0,00
R2	0,19	/	0,21	/
Adj. R2	0,16	/	0,19	/

Source: Author's elaboration based on Gretl statistical software.

The results presented in Table 6 indicate that the interest rate on public debt is a statistically highly significant determinant of the public debt levels in all model specifications, with a positive and economically strong effect. In contrast, real GDP growth and the primary balance do not show statistical significance during the observed period.

Inflation in the current year has a negative and statistically significant coefficient, while in the model with INFLATION_L1 the negative effect becomes even more pronounced, and this occurs under a stricter criterion of statistical significance (p-value = 0.01). The F-statistic is significant at the 1% level, confirming the joint statistical significance of the regressors, while the explained variance (R^2, Adj. R^2) is relatively moderate, which is typical for macroeconomic panel models of this type.

4.1. Economic Interpretation of the Research Results

The results of the estimated OLS model with robust standard errors indicate that the interest rate on public debt is by far the most significant individual factor explaining the dynamics of the public debt-to-GDP ratio in Southeast European countries. In the model with current-year inflation, the coefficient for the variable INTEREST_RATE is 6.92 (p-value = 0.00), while in the alternative specification with lagged inflation (INFLATION_L1) the coefficient increases to 7.26 (p-value = 0.00). This implies that a one-percentage-point increase in the average interest rate is associated with an increase in the public debt-to-GDP ratio of approximately 6.9 to 7.3 percentage points. For example, if a country with a 50% debt-to-GDP ratio and an average interest rate of 3% moves to a 4% rate, the model suggests that its debt ratio could rise to approximately 57% of GDP in the medium term, assuming other variables remain unchanged. This result clearly indicates that borrowing costs are a far stronger driver of public debt dynamics than any individual real or fiscal indicator included in the model.

The robustness of this finding is further confirmed by the fact that the interest rate coefficient remains stable in magnitude and highly statistically significant in both model specifications—whether inflation is considered in the current year or with a one-year lag. In other words, regardless of whether price effects are captured immediately or with a delay, the main message remains unchanged: higher interest rates accelerate debt accumulation and reduce fiscal space. This is particularly important for countries with already elevated debt levels.

In comparison to the interest rate, other variables in the model play a secondary, control role. Current-year inflation shows a negative and statistically significant effect on public debt (coefficient = –0.70; p = 0.04), suggesting that rising prices slightly reduce the relative debt burden in the short term. However, this effect is moderate and much weaker than the impact of interest rates.

When inflation is included with a one-year lag, its negative effect becomes more pronounced (INFLATION_L1 = –1.05; p = 0.01), consistent with the expectation that inflation fully impacts debt only when it is reflected in nominal GDP and the tax base. Nevertheless, in neither specification does inflation nullify or substantially reduce the effect of interest rates—instead, it acts as a mitigating factor that partially offsets the negative impact of high borrowing costs.

Real GDP growth and the primary balance were included in the model primarily as control variables, to isolate the "pure" effect of interest rates on public debt. Their coefficients are not statistically significant in the observed period, suggesting that neither growth nor temporary primary surpluses were strong enough to reverse the debt trend under conditions of variable but generally elevated borrowing costs. The lack of significance of these control variables does not imply that growth and fiscal policy are unimportant for long-term sustainability, but rather that in the studied sample and period, they were not the main mechanisms driving changes in the debt-to-GDP ratio.

5. Conclusion

The conducted empirical analysis confirms that the interest rate is the key determinant of public debt dynamics in Southeast European countries. The results indicate that a one-percentage-point increase in the interest rate raises the public debt-to-GDP ratio by approximately 7 percentage points. This finding remains robust even when inflation, real GDP growth, and the primary balance are included in the model as control variables, indicating that the interest rate effect is structural, robust, and independent of cyclical economic fluctuations.

Inflation moderately alleviates the debt burden within the same year, but its effect becomes significantly stronger with a time lag. In contrast, GDP growth and the primary balance are not strong enough to statistically or economically alter the debt trajectory. In other words, fiscal sustainability in the region largely depends on the cost of borrowing, while other variables play a secondary role—more as modifiers of the trend than as its primary drivers.

Overall, the results suggest that rising interest rates pose the greatest risk to the long-term stability of public finances, particularly in economies that frequently refinance their debt. Inflation may temporarily ease the debt burden, but primarily with a lag, whereas economic growth and fiscal consolidation remain important but insufficient channels in the absence of favorable borrowing conditions. This implies that debt sustainability in Southeast European countries is determined not only by fiscal discipline, but above all, by capital costs and market access.

References

Barrett, P. (2018). *Interest-growth differentials and debt limits in advanced economies* (IMF Working Paper No. WP/18/82). International Monetary Fund.

Blanchard, O. (2019). *Public debt and low interest rates*. American Economic Review, 109(4), 1197–1229. https://doi.org/10.1257/aer.109.4.1197

Checherita-Westphal, C., & Domingues Semeano, J. (2020). *Interest rate-growth differentials on government debt: An empirical investigation for the euro area* (ECB Working Paper Series, No. 2486). European Central Bank.

Egert, B. (2013). *Public debt, economic growth and nonlinear effects: Myth or reality?* (CESifo Working Paper No. 4157). CESifo.

European Commission. (2025a). European economic forecast: Autumn 2025 – Romania. https://economy-finance.ec.europa.eu/economic-surveillance-eu-member-states/country-pages/romania/economic-forecast-romania_en

European Commission. (2025b). European economic forecast: Autumn 2025 – Bulgaria. https://economy-finance.ec.europa.eu/economic-surveillance-eu-member-states/country-pages/bulgaria/economic-forecast-bulgaria_en

European Commission. (2025c). European economic forecast: Autumn 2025 – Croatia. https://economy-finance.ec.europa.eu/economic-surveillance-eu-member-states/country-pages/croatia/economic-forecast-croatia_en

Gujarati, D. N., & Porter, D. C. (2009). *Basic econometrics* (5th ed.). McGraw-Hill/Irwin.

Heimberger, P. (2023). *Public debt and r-g risks in advanced economies: Eurozone versus stand-alone*. Journal of International Money and Finance, 136, 102877. https://doi.org/10.1016/j.jimonfin.2023.102877

Heylen, F., Mareels, M., & Van Langenhove, C. (2024). *Long-run perspectives on r − g in OECD countries: An empirical analysis*. Journal of International Money and Finance, 145, 103093. https://doi.org/10.1016/j.jimonfin.2024.103093

International Monetary Fund. (2025). *World Economic Outlook Database (October 2025 edition)*. IMF DataMapper. https://www.imf.org

Lian, W., Presbitero, A. F., & Wiriadinata, U. (2020). *Public debt and r–g at risk*. IMF Working Paper, 2020(137). International Monetary Fund. https://doi.org/10.5089/9781513550794.001

OECD. (2025). *Global Debt Report 2025: Financing growth in a challenging debt market environment*. OECD Publishing.

OECD. (2025). *South East Europe*. OECD. https://www.oecd.org/en/regions/south-east-europe.html

Turner, D., & Spinelli, F. (2013). *Explaining the interest-rate-growth differential underlying government debt dynamics* (OECD Economics Department Working Papers, No. 919). OECD Publishing.

World Bank Group. (2025). *Western Balkans regular economic report No. 28: Towards better jobs*. World Bank.

Wyplosz, C. (2023). *Big central banks and big public debts: The next challenges*. Monetary Dialogue Papers, September 2023. European Parliament, EGOV.

KAMATNA STOPA KAO DETERMINANTA FISKALNE ODRŽIVOSTI REGIONA JUGOISTOČNE EVROPE

Apstrakt: *Ovaj rad analizira uticaj kamatne stope na održivost javnog duga u zemljama Jugoistočne Evrope u periodu 2008–2024. godine, primenom panela od osam država sa ukupno 136 godišnjih posmatranja. Metodološki pristup zasnovan je na panel regresionim modelima (OLS, FEM i REM), uz sprovedene dijagnostičke testove autokorelacije, multikolinearnosti i heteroskedastičnosti. Zbog identifikovane autokorelacije i heteroskedastičnosti, kao najpouzdanija specifikacija odabran je Pooled OLS model sa robusnim standardnim greškama. Rezultati pokazuju da je kamatna stopa ubedljivo najznačajnija determinanta javnog duga: povećanje prosečne kamate za jedan procentni poen povećava udeo duga u BDP-u za oko 6,9–7,3 procentna poena. Realni rast BDP-a i primarni bilans nisu statistički značajni, dok inflacija pokazuje blago negativan uticaj na dug koji postaje izraženiji sa vremenskim odlaganjem. Originalnost rada ogleda se u empirijskom izdvajanju efekta kamatne stope u regionu sa post-tranzicionim strukturnim nasleđem, ograničenim fiskalnim kapacitetima, postkriznom nestabilnošću i izraženim pritiscima na održivost javnih finansija. Time se pruža novo empirijsko tumačenje održivosti duga, prema kome je trošak zaduživanja ključni mehanizam koji određuje dugovnu putanju, snažniji od fiskalne konsolidacije ili privrednog rasta. Dobijeni nalazi imaju značajne implikacije za kreiranje fiskalne politike: stabilizacija javnog duga zahteva smanjenje rizika nepovoljnog refinansiranja, produženje ročnosti obveznica, jačanje kredibiliteta i kontrolu izloženosti promenama u međunarodnom kamatnom okruženju i izraženoj tržišnoj nestabilnosti.*

Ključne reči: *Kamatna stopa, javni dug, fiskalna održivost, panel analiza, Jugoistočna Evropa.*