



**THE IMPACT OF FISCAL CONSOLIDATION ON THE
LEVEL OF THE CYCLICALLY ADJUSTED BALANCE
IN THE REPUBLIC OF SRPSKA**

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Abstract: This paper examines the relationship between fiscal consolidation programmes and the cyclically adjusted balance in the Republic of Srpska. The impact of fiscal consolidation on the cyclically adjusted balance is assessed through regression analysis. Numerous studies and empirical data have shown that fiscal consolidation measures can affect the level and structure of the cyclically adjusted balance. Furthermore, there are complex interrelations, highlighting the importance of distinguishing between short-term and long-term effects, i.e., those arising from discretionary fiscal measures versus those resulting from automatic stabilisers. The paper emphasises the significant gap in understanding the influence of cyclically adjusted balances on decision-making processes across various sectors and macroeconomic conditions. This lack of deeper insight limits fiscal policymakers' ability to manage risks, forecast future performance, and make informed decisions. Cyclically adjusted balances play a vital role in economic data analysis, particularly in environments characterised by fluctuations in public revenues and expenditures due to various internal and external factors. However, there is still ambiguity about how adjustments for cyclical variations actually impact fiscal strategies, fiscal consolidation efforts, and their practical implications.

Keywords: Cyclically Adjusted Balance, Fiscal Consolidation, Economic Cyclical Fluctuations, Discretionary Fiscal Measures, Regression Analysis.

JEL classification: H10, H23, E31, E62

Introduction

Balanced public finances and a stable level of public debt are important prerequisites for economic growth. When these conditions are met, it is expected that cyclical fluctuations in economic activity and the occurrence of economic shocks can be

more easily mitigated. However, following major crises, particularly economic ones, public debt levels have shown a significant increase in almost all countries. In this context, it is important to examine how to mitigate the negative effects of such crises. Automatic stabilisers are not strong enough to fully absorb these adverse effects, which is one of the main reasons why most countries resort to implementing a range of discretionary fiscal measures.

Fiscal consolidation represents the process of improving a country's fiscal 'health', with its primary goal in most implementing countries being to reduce the fiscal deficit in an economically and rationally sustainable manner. Fiscal consolidation aims to achieve balance through adjustments on the revenue and/or expenditure side, and often through a combination of both. Given that fiscal consolidation involves applying a set of discretionary measures as a response to imbalances, it is essential to assess its impact on cyclical components—specifically, how it mitigates the negative effects that have led to such cyclical developments.

Fiscal consolidation is a key aspect of public finance management, and the application of the cyclically adjusted balance (CAB) in this context is becoming increasingly relevant. This paper explores the significance of using the CAB in the fiscal consolidation process in the Republic of Srpska. Fiscal consolidation can significantly affect the CAB by potentially distorting monetary expressions of financial variables. The CAB is a mechanism used to neutralise the effects of seasonal or cyclical variations when analysing financial statements.

Fiscal consolidation is a crucial aspect of public financial management, and within this context, the application of the cyclically adjusted balance (CAB) is becoming increasingly significant. This paper analyses the importance of using the CAB in the fiscal consolidation process in the Republic of Srpska. Fiscal consolidation can considerably influence the CAB, as it has the potential to distort the values of financial items expressed in monetary terms. The CAB serves as a mechanism to neutralise the effects of seasonal or cyclical variations when analysing financial statements (Bouthevillain et al., 2021).

The lack of a deep understanding of how cyclically adjusted balances inform policy or business decisions in specific industrial sectors or macroeconomic contexts represents a significant challenge for decision-makers. This includes the absence of research that clearly demonstrates how adjustments to cyclical variations—such as seasonal shifts or economic cycles—directly influence decision-making processes, risk management, or projections of future performance. When faced with internal and external influences, the cyclically adjusted balance absorbs the cyclical changes they induce. These changes are appropriately reflected in the actual state of fiscal performance.

This represents a key research gap, as cyclically adjusted balances are essential for the accurate interpretation and analysis of financial or economic data, yet there is a lack of clarity regarding how such adjustments actually influence decision-

making strategies in practice. Therefore, it is important for analysts using the cyclically adjusted balance to carefully evaluate the effects of fiscal consolidation, in order to interpret financial statements accurately and make decisions based on reliable data. A particular contribution of this paper lies in the fact that only a very limited number of empirical studies have been conducted for the Republic of Srpska, owing to the specific characteristics of its tax system within the framework of Bosnia and Herzegovina.

The cyclically adjusted balance is a tool used to isolate cyclical elements within economic analysis. When applied in the context of fiscal consolidation, this instrument allows for a more precise understanding of fiscal developments (Fedelino et al., 2009). Hence, the aim of this paper is to examine how the application of the cyclically adjusted balance can support the fiscal consolidation process by enhancing the effectiveness of fiscal policy evaluation throughout different phases of the economic cycle.

The first section of the paper provides a theoretical framework for the concept of fiscal consolidation, the cyclically adjusted balance, and the interrelationship between the two. The second section emphasises the importance of applying the cyclically adjusted balance. The objective is to highlight and explain which components of this indicator influence the fiscal consolidation process and how that influence manifests. The third section presents methods for calculating the cyclically adjusted balance and the methodology related to the application of regression analysis. The fourth section contains the empirical analysis focused on the estimation of the cyclically adjusted balance in the Republic of Srpska. This structure enables a thorough examination of the challenges posed by the use of the cyclically adjusted balance in the fiscal consolidation process within this entity. Finally, the concluding remarks will summarise the key findings and conclusions.

1. Literature Review

Fiscal consolidation is an economic strategy focused on reducing a country's fiscal deficit and public debt. It involves the implementation of a series of discretionary measures aimed at responding to adverse economic cycles (Alesina & Ardagna, 2009; Eklou, 2020). Authors Alesina and Ardagna have examined the effects of fiscal consolidation measures on the economy. Their research highlights key aspects and the significance of implementing fiscal consolidation (Alesina & Ardagna, 2009, 2012):

- **Stability of public finances:** Reducing a country's deficit and debt can contribute to maintaining the stability of public finances. This, in turn, may reduce the risk of financial crises and ensure long-term fiscal sustainability.
- **Increased investor confidence:** When a government undertakes fiscal consolidation measures, it may strengthen investor confidence in the

country's economy. This can lead to lower interest rates on debt and attract foreign investment.

- **Growth potential:** Although fiscal consolidation may have short-term negative effects on the economy, in the long run it can lay the foundation for sustainable growth. Reducing public debt can free up resources for investments in infrastructure, education, and other sectors that support economic development.
- **Effects on social policy:** Fiscal consolidation measures can have social consequences, as they often include cuts in public spending or tax increases. This may affect social programmes and income redistribution, requiring careful planning and balance.

It is important to note that Alesina and Ardagna (2009) also emphasise that the effects of fiscal consolidation depend on each country's specific circumstances, as well as the manner in which the measures are implemented. The economic response to particular fiscal policies is complex, and therefore, the approach to consolidation is often tailored to the unique needs and conditions of each country.

The cyclical balance (CB) represents the portion of the fiscal balance that adjusts to cyclical fluctuations in the economy, i.e., it captures the effects of automatic stabilisers on revenues, expenditures, and the overall deficit (Arsić et al., 2012). The cyclically adjusted balance (CAB) refers to the budget balance that excludes the impact of cyclical GDP fluctuations on public revenues and expenditures. Thus, the CAB is used to analyse fiscal policy while accounting for the phases of the economic cycle. The core idea is to adjust budget deficits or surpluses according to the stage of economic activity, thereby achieving a clearer understanding of the true fiscal effect of policy.

In periods of economic expansion or growth, when the economy is strong, the CAB assumes that the government should maintain a surplus or at least a reduced deficit. This allows for the accumulation of financial resources during prosperous times, which should provide a buffer for fiscal policy during recessions or crises. Conversely, during recessions or slowdowns in economic activity, it is expected that the government may incur a higher deficit by utilising previously accumulated surpluses or reserves to stimulate the economy through increased spending or tax cuts.

The CAB helps in understanding the true fiscal impact of government policy on the economy, as it takes into account fluctuations in revenues and expenditures resulting from changes in economic activity. This concept enables better fiscal planning by aligning policy decisions with the current state of the economy in order to maintain stability or support growth throughout different phases of the economic cycle.

The first study that addressed the magnitude of the cyclically adjusted balance in Bosnia and Herzegovina was published by the World Bank in 2018 (Hlivnjak &

Laco, 2018). Considering the civil war that took place in Bosnia and Herzegovina during the 1990s and the significant issue of missing data, only a very limited number of studies are available for this country.

2. The Importance of Applying the Cyclically Adjusted Balance

The cyclically adjusted balance (CAB) is a useful tool for better understanding a country's actual fiscal position, as it eliminates the influence of temporary fluctuations in the economy. Instead of relying solely on nominal values of deficits or surpluses—which may be distorted by the current phase of the business cycle—this approach allows for the separation of permanent, structural components from transient economic movements. It is precisely this ability to distinguish between structural and cyclical changes that makes the CAB highly relevant in the fiscal consolidation process.

When the effects of expansion or recession are removed from fiscal data, it becomes easier to determine whether a country is facing long-term fiscal challenges or merely short-term difficulties. This enables governments to make more informed decisions and respond in a timely manner—without the risk of implementing measures based on erroneous assumptions regarding the state of public finances. For example, during periods of economic growth, increased public revenues may appear to indicate fiscal stability, although they may actually result from cyclical trends rather than improvements in tax policy or public spending efficiency. The CAB helps to identify this distinction and prevents the adoption of decisions that could prove unsustainable in the event of a cyclical downturn.

Furthermore, the use of such adjusted indicators facilitates the comparison of fiscal policies across countries. Once cyclical effects are stripped from the data, it becomes possible to objectively compare their structural performance, which is especially important in international assessments of public finance sustainability and the competitiveness of economic systems.

In summary, the application of the cyclically adjusted balance in the context of fiscal consolidation provides a more accurate view of long-term trends and challenges. It creates space for more precise formulation of strategies aimed at sustainability and stability, rather than reactive responses to temporary fiscal pressures.

3. Methodology and Data

There are several widely accepted methods for calculating the cyclically adjusted balance, and the selection of an appropriate methodology depends on the specific characteristics of the economic analysis and the availability of data. Below are some of the most commonly used methods:

- **Hodrick-Prescott (HP) filter:** This method is frequently used to separate cyclical from trend components in time series data. The HP filter identifies the trend and cyclical component by minimising the sum of squared deviations between the actual value and the estimated trend value.
- **Kalman filter:** This technique is also used to estimate trends and cyclical components. The Kalman filter is an adaptive method that iteratively updates the estimates of series components as new information becomes available.
- **Application of statistical models:** In addition to filters, there are statistical models that explicitly incorporate cyclical components when analysing time series. These models may include ARIMA (Autoregressive Integrated Moving Average) or other specifications that account for periodicity and fluctuations in the data.
- **Econometric-based methods:** These approaches use econometric models to identify and estimate cyclical components in the data. This may involve modelling business cycle movements or applying regression analysis to isolate cyclical variations.

The majority of existing literature highlights the relevance of the Hodrick-Prescott filter (HP filter) (Auerbach & Gorodnichenko, 2012, 2017; Blanchard, 1990; Blanchard et al., 2010; Blanchard & Cottarelli, 2010; James et al., 2006). This statistical method is used to extract long-term trends from time series data, such as GDP values or fiscal deficits. The method employs optimisation to identify a combination of short-term and long-term components of the series, treating short-term fluctuations as cyclical and long-term changes as structural. The HP filter is widely used in academic research and policy analysis and can also be applied in practice, including for assessing fiscal policy and economic developments.

However, it is important to note that the HP filter is not a universal solution and has certain drawbacks, such as potential over-smoothing or sensitivity to parameter changes (Alesina, Barbiero, et al., 2017). For the purposes of this paper, the HP filter was applied using the statistical software package Stata.

To test the stationarity of time series and ensure the validity of regression results, both standard and extended unit root tests were conducted. The accuracy of estimating the dynamics between variables largely depends on the stationarity characteristics of the series included in the model. In this research, the following tests were applied:

Augmented Dickey-Fuller (ADF) test is one of the most commonly used tests for detecting unit roots in time series data (Dickey & Fuller, 1981). The null hypothesis of the ADF test is that the series contains a unit root (i.e. it is non-stationary), while the alternative hypothesis assumes stationarity. The test is based on estimating a regression of the form:

$$\Delta y_t = \alpha + \beta t + \gamma y_{t-1} + \sum_{i=1}^p \delta_i \Delta y_{t-i} + \varepsilon_t$$

Where Δy_t is the first difference of the series, t is a deterministic trend, and p is the number of lags selected based on information criteria (AIC, BIC). A sufficiently negative and significant estimate of the coefficient γ indicates the series is stationary.

KPSS (Kwiatkowski–Phillips–Schmidt–Shin) test serves as a complement to the ADF test, as it tests the opposite null hypothesis—that the series is stationary around a mean (or trend), while the alternative hypothesis suggests the presence of a unit root (Kwiatkowski et al., 1992). This complementarity provides a more robust assessment of stationarity, particularly when ADF results are inconclusive.

Zivot-Andrews unit root test enables the detection of structural breaks within a time series, which is a common issue in macroeconomic data (Zivot & Andrews, 1992). Unlike standard tests that assume a time-invariant structure, this test allows for one endogenous structural break to be identified within the series. This increases the precision of stationarity estimation in the presence of shocks (e.g. fiscal reforms, recessions, crises). The Zivot-Andrews test examines the existence of a unit root under three models: with a break in the intercept, a break in the trend, or a break in both parameters.

The application of these tests enabled accurate model specification and selection of the appropriate methodology for estimating regression parameters. Based on the stationarity test results, further analyses were conducted in accordance with the integration order of the variables, either in levels or first differences, while accounting for potential structural breaks.

The study covers the period from 2006 to 2023. Fiscal data were sourced from official databases of the Ministry of Finance of the Republic of Srpska, the Central Bank of Bosnia and Herzegovina, and the Investment-Development Bank of the Republic of Srpska. Fiscal consolidation efforts were implemented in accordance with specific fiscal rules. The Republic of Srpska has the most developed system of fiscal rules in Bosnia and Herzegovina, based on the Law on Fiscal Responsibility (2015) and the Law on Borrowing, Debt and Guarantees (2012).

The adopted rules include: *Debt and deficit limits*: According to the 2015 law, the total debt of the Republic of Srpska must not exceed 55% of GDP, and the total deficit across all levels of government in the RS must remain $\leq 3\%$ of GDP. These limits apply on a consolidated basis (including the RS budget, municipalities, and social funds). If the debt reaches 50% of GDP or the deficit 2.5% of GDP, the following year's budget must be planned with a surplus (a preventive mechanism). This “warning threshold” obliges the entity to take corrective measures before the main limits are breached; *Short-term debt and guarantee limits*: The Law on Debt (2012) introduced additional fiscal rules: Short-term debt of the RS at year-end must

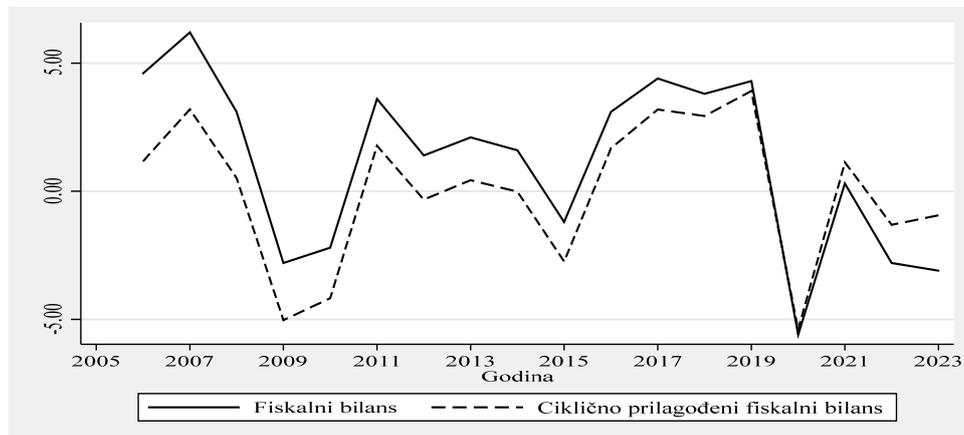
be $\leq 8\%$ of the previous year's regular revenues. Total annual debt repayments must be $\leq 18\%$ of those revenues (similar to the rule in the Federation of BiH). New guarantees issued by the RS during the year must be $\leq 15\%$ of that year's GDP. These limits are designed to protect liquidity—for example, the cap on short-term debt prevents excessive borrowing for budget liquidity purposes, while the guarantee ceiling keeps potential obligations under control; *Rules for local authorities (RS)*: Additionally, in 2015 the RS introduced rules for municipalities of a similar type. A municipality may take on long-term debt only if its debt servicing costs would remain $\leq 18\%$ of its revenues from the previous year; Short-term borrowing by a municipality is limited to $\leq 5\%$ of those revenues; *Total guarantees* issued by a municipality must not exceed 30% of its annual revenues. This internally imposes limits on local government finances as well. The Ministry of Finance of the RS monitors the application of this local rule and may withhold approval of municipal borrowing if the condition would be breached; *Escape clauses*: The National Assembly of the RS adopted clauses allowing for temporary deviations from these rules in exceptional circumstances, such as natural disasters, severe economic recessions, or the implementation of large-scale infrastructure projects. For instance, in order to finance strategic capital investments, the RS may temporarily exceed the deficit limit with the approval of the Assembly; *Institutional implementation*: The RS is the only entity in BiH to have established an independent fiscal body. In 2015, the Fiscal Council of the RS was created by law to report to the National Assembly on the adherence to entity-level fiscal rules. This council (consisting of three experts appointed by the Assembly) operates independently of the executive branch. Its role is to assess the RS's fiscal policy and alert the legislature if the government violates any rules.

Since 2016, the Fiscal Council of the RS has regularly monitored budget execution. Reports indicate that until 2019, the RS mostly complied with the deficit threshold (deficits remained around 2–3% of GDP), while public debt was held between 40–50% of GDP (close to the 55% ceiling, especially after borrowing in 2020) (*Official Gazettes of the Republic of Srpska, various issues*).

4. Results and Discussion

The movement of the fiscal balance and the cyclically adjusted fiscal balance during the observed period reflects significant fluctuations in the fiscal position of the Republic of Srpska, caused by a combination of economic cycles, extraordinary circumstances, and fiscal policy. Figure 1 presents the movement of the fiscal balance and the cyclically adjusted fiscal balance of the Republic of Srpska from 2006 to 2023.

Figure 1. Fiscal balance and cyclically adjusted fiscal balance in the Republic of Srpska, 2006–2023



Source: Author's calculation in Stata 15.1

In the years preceding the global financial crisis, the Republic of Srpska recorded fiscal surpluses, with the highest value in 2007, when the fiscal balance reached 6.20% of GDP and the cyclically adjusted balance was 3.20%. These results indicate the presence of a structural surplus, since a positive result was achieved even after adjusting for cyclical factors.

The global financial crisis led to a deterioration in the fiscal balance. In 2009, the fiscal balance declined to -2.80%, and the cyclically adjusted balance dropped to -5.03%, signalling a substantial weakening of fiscal discipline and the emergence of a structural deficit that exceeded the cyclical downturn in economic activity.

In 2011 and 2013, both the fiscal and cyclically adjusted balances were in surplus. However, by 2015, a deficit emerged and remained at -2.74% even after cyclical correction, indicating deeper structural issues.

From 2016 to 2019, the fiscal position improved significantly. Stable surpluses were achieved, and the cyclically adjusted balance remained positive and grew, reflecting genuine fiscal responsibility and consolidation not solely driven by the business cycle.

The year 2020 saw a sharp decline in both the fiscal balance (-5.60%) and the cyclically adjusted balance (-5.40%), reflecting the severe shock from the COVID-19 pandemic, increased public spending, reduced revenues, and necessary fiscal interventions aimed at mitigating the crisis's impact.

In 2021, a slight surplus was recorded in both balances, suggesting a partial recovery. However, in 2022 and 2023, the fiscal situation deteriorated again, with

deficits in both the fiscal balance and the cyclically adjusted balance, implying renewed structural challenges that go beyond the economic cycle.

Augmented Dickey-Fuller (ADF) Unit Root Test : The ADF test was used to determine whether the cyclically adjusted fiscal balance variable contains a unit root. The optimal number of lags was selected using the Akaike Information Criterion (AIC). The results are presented in Table 1. According to the ADF test, the cyclically adjusted fiscal balance does not have a unit root.

Table 1. ADF Unit Root Test Results

Variable	Optimal Lags (AIC)	Constant	Constant & Trend	Decision
Cyclically Adjusted Fiscal Balance	0	-3.61**	-3.49**	I(0)
	1	-3.09**	-3.31**	

Note: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.10$

Source: Author's calculation in Stata 15.1

Kwiatkowski–Phillips–Schmidt–Shin (KPSS) Stationarity Test: The KPSS test was also used to examine the stationarity of the cyclically adjusted fiscal balance variable. Two specifications were applied: with a constant and with a constant and trend. The results indicate stationarity at the 5% significance level (Table 2).

Table 2. KPSS Stationarity Test Results

Variable	Optimal Lags (AIC)	Constant	Constant & Trend	Decision
Cyclically Adjusted Fiscal Balance	0	0.06***	0.08***	I(0)
	1	0.08**	0.07***	

Note: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.10$

Source: Author's calculation in Stata 15.1

Zivot-Andrews Structural Break Test: Baum (2004) suggests that some unit root tests may be biased as they do not account for potential structural breaks in time series. Considering that the observed period (2006–2023) included the global financial crisis and the COVID-19 pandemic, it was necessary to test whether the series had a structural break. The Zivot-Andrews unit root test was used for this purpose.

The null hypothesis assumes the presence of a unit root with a structural break. Although the test confirmed that the cyclically adjusted fiscal balance does not

contain a unit root, it did identify a structural break in 2020. Consequently, a dummy variable (1 = presence of break; 0 = absence) was included in the further analysis.

Table 3. Zivot-Andrews Test with Structural Break

Variable	t-statistic	Structural Break
Cyclically Adjusted Fiscal Balance	-4.20***	2020

Note: *** p < 0.01; ** p < 0.05; * p < 0.10

Source: Author's calculation in Stata 15.1

As previously mentioned, the variable cyclically adjusted fiscal balance is stationary with a structural break in 2020. To analyse the impact of fiscal consolidation on the cyclically adjusted fiscal balance, regression analysis (OLS) was employed. Accordingly, the following equations were tested:

1. $CAB_t = b_0 + b_1 * fiscalconsolidation_t + b_2 * dummy_sl_t + \varepsilon$
2. $CAB_t = b_0 + b_1 * fiscalconsolidation_{t-1} + b_2 * dummy_sl_t + \varepsilon$
3. $CAB_t = b_0 + b_1 * fiscalconsolidation_{t-2} + b_2 * dummy_sl_t + \varepsilon$

Where: CAB_t – cyclically adjusted fiscal balance of the Republic of Srpska in year t , $fiscalconsolidation$ dummy variable for fiscal consolidation (1 = consolidation implemented in year t , 0 = otherwise); $dummy_sl_t$ – dummy variable for structural break in 2020 (1 = year 2020, 0 = otherwise).

The regression analysis results shown in Table 4 reveal the impact of fiscal consolidation on the cyclically adjusted fiscal balance. Three models were estimated:

- In Model (1), the independent variable is fiscal consolidation in year t ;
- In Model (2), fiscal consolidation in year $t-1$;
- In Model (3), fiscal consolidation in year $t-2$.

The results indicate that fiscal consolidation in year t (Model 1) and in year $t-1$ (Model 2) does not have a statistically significant effect on the cyclically adjusted balance. However, fiscal consolidation in year $t-2$ (Model 3) shows a statistically significant positive impact on the cyclically adjusted balance ($p < 0.05$). This implies that fiscal consolidation measures affect the fiscal position with a two-year lag—i.e. reforms undertaken two years prior are associated with an increase in the current cyclically adjusted balance.

The Breusch-Pagan / Cook-Weisberg test for heteroskedasticity is not statistically significant, suggesting that heteroskedasticity is not a problem in the model. Similarly, the Breusch-Godfrey LM test and Durbin's alternative test confirm the absence of autocorrelation.

Table 4. Regression Results

Variable	Model (1)	Model (2)	Model (3)
Fiscal consolidation _t	2.39 (1.89)		
Fiscal consolidation _{t-1}		3.20 (1.87)	
Fiscal consolidation _{t-2}			3.87** (1.75)
dummy_sl _t	-5.43* (2.59)	-5.27* (2.56)	-4.95* (2.39)
Constant	0.04 (0.65)	-0.14 (0.66)	-0.45 (0.64)
R ²	0.3029	0.3589	0.4402
Adj. R ²	0.2099	0.2673	0.3541
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity	0.02	0.03	0.05
Breusch-Godfrey LM test for autocorrelation	2.50	0.07	0.06
Durbin's alternative test for autocorrelation	2.63	0.05	0.05

Note: *** p < 0.01; ** p < 0.05; * p < 0.10

Source: Author's calculation in Stata 15.1

Through these adjustments, the CAB provides a clearer picture of the government's underlying fiscal position, separated from temporary economic conditions and one-off interventions, thereby enabling more accurate assessments of fiscal policy and decision-making. The CAB is influenced by a wide range of economic indicators, as it is deeply rooted in macroeconomic performance and a country's fiscal framework.

Conclusion

The cyclically adjusted balance (CAB) methodology is a fundamental tool for assessing a country's fiscal position, as it strips out temporary economic fluctuations and one-off interventions. The CAB allows policymakers to gain a deeper insight into the structural components of the fiscal balance, thereby enabling them to make sustainable decisions aligned with long-term economic stability goals.

This study aimed to examine the relationship between fiscal consolidation and the cyclically adjusted fiscal balance in the Republic of Srpska by applying time series econometric methods and regression techniques. The use of ADF, KPSS, and Zivot-Andrews tests provided a reliable assessment of the series' stationarity and

identification of structural breaks, while regression analysis showed that fiscal consolidation has a delayed but statistically significant impact on the CAB.

The empirical findings suggest that fiscal consolidation measures do not produce immediate effects on fiscal performance; rather, their influence becomes evident after a certain lag—specifically, two years following implementation. This insight is particularly important for fiscal policy design, as it highlights the need for patience and continuity in implementing consolidation strategies, along with an analytical framework that accounts for the dynamic nature of fiscal indicators.

The CAB proves to be a valuable instrument in fiscal policy analysis, as it removes short-term economic cycle influences and provides a clearer view of the structural component of fiscal performance. This enhances the transparency of public finances and supports more informed and sustainable decision-making. This approach is especially relevant in the context of the Republic of Srpska, where data availability is limited and the specific nature of the fiscal system demands careful analytical consideration.

Future research should expand the analysis to include other entities and countries in the region in order to enable comparative evaluations of fiscal strategies. The inclusion of additional variables could further improve understanding of the mechanisms through which fiscal consolidation affects fiscal balances. Introducing more time points, discretionary measures, and macroeconomic control variables would contribute to a more comprehensive understanding of the complex relationships under investigation.

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UTICAJ FISKALNE KONSOLIDACIJE NA NIVO CIKLIČNO PRILAGOĐENOG BILANSA U REPUBLICI SRPSKOJ

Rezime: U radu se razmatra veza između delovanja programa fiskalne konsolidacije i ciklično prilagođenog bilansa u Republici Srpskoj. Uticaj fiskalne konsolidacije na ciklično prilagođeni bilans sagledava se kroz regresionu analizu. Veliki broj studija i empirijskih podataka je identifikovano da mere programa fiskalne konsolidacije mogu uticati na visinu i strukturu ciklično prilagođenog bilansa. Isto tako, postoje kompleksne veze između njih pri čemu se ističe važnost razlikovanja kratkoročnih i dugoročnih uticaja, odnosno, onih koji su nastali kao posledica primene niza diskrecionih fiskalnih mera od onih koji su nastali kao posledica automatskih regulatora. U radu se naglašava da postoji značajna praznina u razumevanju uticaja ciklično prilagođenih bilansa na proces donošenja odluka u različitim sektorima i makroekonomskim uslovima. Ovaj nedostatak dubljeg razumevanja ograničava donosilaca fiskalnih odluka da precizno upravljaju rizicima, prave projekcije budućih performansi i donose odluke. Ciklično prilagođeni bilansi imaju veliki značaj u analizi ekonomskih podataka, posebno u okruženju u kome dolazi do promene visine javnih prihoda i javnih rashoda izazvanih raznim unutrašnjim i spoljašnjim uticajima. Empirijski nalazi sugerišu da mere fiskalne konsolidacije ne ostvaruju trenutne efekte na fiskalne performanse, već da njihov uticaj postaje vidljiv tek sa

određenim vremenskim zaostatkom, konkretno dve godine nakon njihove implementacije. Međutim, postoji nejasnoća o tome kako prilagođavanja za ciklične varijacije stvarno utiču na fiskalne strategije, fiskalnu konsolidaciju i njihove implikacije u praksi.

Ključne reči: ciklično prilagođeni bilans, fiskalna konsolidacija, ciklične oscilacije privrede, diskrecione fiskalne mere, regresiona analiza.

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Biljana Stanivuk was born in 1984 in Bijeljina (BiH). She is a senior Teaching Assistant at the Faculty of Business Economics Bijeljina, University of East Sarajevo. Field of research - Fiscal Economics, covering the following subjects: Principles of Economics, Microeconomics, Fiscal Economics, Banking, Taxes and Customs Duties of the EU. The master thesis "Economic justification for introduction of VAT in the fiscal structure of Bosnia and Herzegovina" was defended in September 2013 at the Faculty of Business Economics Bijeljina, University of East Sarajevo. PhD student (Faculty of Economics) University of Belgrade. So far, she has published a large number of articles. Within the Erasmus+ program - she was a participant of the IX International Week 2023 at the University "Lucian Blaga" Romania, whose emphasis was on the development of internationalization in a digitally oriented world and their positive impact on higher education institutions.