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Fiscal Rule Quality and Economic Growth

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Abstract

We study the effect of fiscal rules on short- and medium-term real economic growth, explicitly considering the mediating role of rule quality. Using a panel dataset covering 89 countries from 2000 to 2024, we estimate state-dependent local projections with country fixed effects to assess how fiscal rules influence growth under different quality frameworks. Our results show that the effects on growth associated to fiscal rules enacting depend critically on their quality: implementation of rules within low-quality fiscal frameworks are associated with negative expected growth outcomes. On the contrary, implementation under high-quality frameworks is associated with a positive and sustained growth response, particularly within the first three years after implementation. Our analysis also confirms the importance of controlling for debt dynamics, as the debt-to-GDP ratio is consistently significant at different horizons in our empirical specifications, especially for the low-quality state. Overall, our findings highlight that the effectiveness of fiscal rules extends beyond just their adoption and, critically depends on the strength of the underlying institutional and procedural frameworks. These results carry important policy implications for the design of fiscal frameworks that balance credibility and flexibility, ensuring that fiscal rules contribute both to macroeconomic stability and to sustained growth.

Keywords: State-Dependent Local Projections; Debt Dynamics; Fiscal Policy Design; Fiscal Rules; Fiscal Quality

JEL codes: E32, E61, E62, H30, H63

1. Introduction

Previous studies generally document a positive association between the adoption of fiscal rules and subsequent economic growth. However, this relationship depends critically on the design and implementation of such rules. Well-designed fiscal rules can foster a more stable macroeconomic environment, encouraging investment by reducing uncertainty, lowering government financing costs, and attracting international capital. In contrast, overly rigid rules or those with poorly designed escape clauses may limit fiscal flexibility, impede compliance, restrict public investment, and ultimately undermine growth.

The literature, recently summarized by Potrafke (2025), identifies several mechanisms through which fiscal rules are thought to promote growth, including: fostering fiscal discipline and macroeconomic stability (e.g., Debrun et al., 2008; Grembi et al., 2016); reducing government borrowing costs and easing pressure on domestic capital markets, thereby generating a crowding-in effect for the domestic private sector (e.g., Iara and Wolff, 2014; Heinemann et al., 2014; Thornton and Vasilakis, 2018, 2020; Badinger and Reuter, 2017; Afonso and Jalles, 2019); improving credit ratings and consequently lowering financing costs for both public and private domestic actors (e.g., Fernández and Parro, 2019; Wüste, 2022); reducing output volatility and uncertainty (e.g., Badinger and Reuter, 2017; Sacchi and Salotti, 2015), which is known to have positive effects on firms' investment (Sawadogo, 2024); and protecting public investment, particularly in the case of well-designed expenditure rules (Ardanaz et al., 2021).

This positive growth–rules nexus is further supported by evidence showing that fiscal rules are associated with lower fiscal policy volatility—a factor that helps explain a significant portion of the income gap between emerging and advanced economies (Marioli et al., 2024). Moreover, economies committed to fiscal rules tend to absorb adverse exogenous shocks more effectively, exhibiting greater resilience in GDP and private demand (Grosse-Steffen et al., 2025).

However, the design of these rules is critical as fiscal consolidations may disproportionately affect public investment. Ardanaz et al. (2021) address this by studying public investment behavior during fiscal consolidations in a large set of advanced and emerging economies. Their findings reveal that the design of fiscal rules is a critical determinant of their outcomes. These authors distinguish between *rigid* rules, which set numerical limits without adjustments, and *flexible* rules, which include mechanisms like cyclically adjusted targets or well-designed escape clauses to accommodate shocks. These authors document that in countries with rigid rules or no rules at all, fiscal consolidations are associated with a sizable reduction in public investment. Conversely, in countries with flexible fiscal rules, this negative effect on public investment disappears.

This suggests that well-designed, flexible rules can successfully shield public investment during consolidation episodes. These results also emphasize a crucial trade-off between commitment and flexibility that have been also directly considered in the literature (Halac and Yared, 2018). While rules improve budget sustainability by controlling expenditure (Herrero-Alcalde et al., 2024), they may have adverse effects on output growth, which in turn can be mitigated by the presence of fiscal standards (de Mendonça and Simao, 2025).

The effectiveness of fiscal rules is also dependent on the prevailing economic and political context. Their ability to mitigate debt accumulation can be influenced by the level of political polarization (Piguillem and Riboni, 2021), and their benefits may be reduced during economic crises or in resource-rich countries (Sawadogo, 2024). Finally, it is important that rules are designed to be sustainable under changing economic conditions, as rules linked to growth rates may become counterproductive if trend growth slows permanently (Kulish and Yamout, 2024).

This dual nature of fiscal rules motivates our study. Drawing on a recent strand of literature that emphasizes the quality of fiscal rules (e.g., Davoodi et al., 2022; Ulloa-Suarez and Valencia, 2022; Adrian et al., 2024), we hypothesize that the effect of fiscal rules on economic growth is significantly mediated by their quality. Adrian et al. (2024) conceptualize fiscal rule quality as a broad measure encompassing design features, institutional support, and adaptability to economic conditions. To operationalize this concept, they construct a standardized quality index for a large panel of countries from 1985 to 2021, following the methodological approach advanced by Davoodi et al. (2022). The construction of this index builds on the components of the IMF's Fiscal Rule Strength Index (FRSI), which evaluates the rule's legal basis, the existence and independence of a monitoring body, the presence of enforcement mechanisms for non-compliance, and the design of escape clauses.

In short, we consider rule quality as a state variable conditioning the growth effects of fiscal rules. In our empirical model—based on state-dependent local projections with panel data—we estimate the impact of fiscal rules on growth using the quality indicator as a switching-state variable. Our results reveal that the effects of fiscal rules change markedly depending on quality considerations: while fiscal rules enacted under low-quality frameworks tend to undermine growth prospects, rules operating in high-quality fiscal environments are associated with future stronger and positive growth effects. These findings remain robust when controlling for the debt-to-GDP ratio, a key variable highlighted in the literature as crucial for assessing the fiscal outcomes of policy interventions (Fotiou, 2022).

In addition, we examine the effects of different types of fiscal rules—budget balance, debt, and expenditure rules—using our state-dependent framework. We find that the asymmetric growth effects are most pronounced for budget balance and debt rules, while expenditure rules exhibit weaker and statistically non-significant impacts.

The paper is structured as follows. Section 2 presents the methodology, describing our state-dependent panel local projections framework used to estimate the impact of fiscal rules on economic growth, with a focus on the mediating role of rule quality. Section 3 introduces the dataset, providing a detailed description of the variables, their sources, and a detailed description of the fiscal rule quality indicator. Section 4 presents the empirical results, first reporting the main findings using an average fiscal rule quality measure, and then exploring the effects across different types of fiscal rules—budget balance, debt, and expenditure rules. Finally, Section 5 offers the conclusions, highlighting the main insights and their policy implications, particularly for the design of effective fiscal institutions and frameworks that support sustainable economic growth.

2. Methodology

We employ a state-dependent local projections framework with country fixed effects (see Jordà, 2005, 2023; Jordà et al., 2020; Adämmer, 2019). Jordà (2005) proposes an alternative to traditional VAR models for estimating impulse–response functions. The approach involves running separate OLS regressions for each forecasting horizon, which in our specific case can be described as follows:

$$growth_{i,t+h} = \alpha_{i,h} + rule_{i,t}\beta_h + debt_{i,t}\gamma_h + \varepsilon_{i,t+h}, \quad h = 0,1,\dots,H-1. \quad (1)$$

Where $\alpha_{i,h}$ is a vector of constants denoting vector cross-sectional fixed effects, $debt_{i,t}$ is the debt-to-GDP ratio, which is included as a control variable, and $rule$ corresponds to the adoption of a fiscal rule in a given year by a certain country. The coefficients $(\beta_h\gamma_h)$, correspond to forecast horizon *h*. The vector $\varepsilon_{i,t+h}$ is possibly autocorrelated and heteroscedastic, which requires using a robust standard error framework, in our case we implement a Newey and West (1987) correction.

Moreover, since our analysis focuses on the mediating effect of fiscal rule quality, we extend the panel specification in Equation (1) to a nonlinear framework. Following Auerbach and Gorodnichenko (2012, 2013), we model the economy as operating under two regimes, with transitions between them governed by a logistic function. This approach optimizes the use of information, as both regimes are estimated using the entire sample rather than splitting the data into separate subsamples with distinct parameter estimates. The logistic transition function can be expressed as follows:

$$F(z_t) = \frac{e^{(-\gamma z_t)}}{(1+e^{(-\gamma z_t)})}, \quad (2)$$

$$var(z_t) = 1, E(z_t) = 0, \quad (3)$$

Where z_t is a standardized state variable such that $\gamma(>0)$ is scale-invariant. We set a value of $\gamma = 0.5$, which ensures a smooth transition between the two regimes: high and low quality of the fiscal rule, as measured by the indicator proposed by Adrian et al. (2024). Note that this indicator is designed to

quantitatively assess the effectiveness of fiscal frameworks, encompassing design, institutional support, and adaptability to economic conditions.

To operationalize this concept, Adrian et al. (2024) construct a general standardized quality index for a panel of 93 countries from 1985 to 2021. The construction begins with the components of the IMF's Fiscal Rule Strength Index (FRSI), which includes the rule's legal basis, the existence and independence of a monitoring body, the presence of enforcement mechanisms for non-compliance, and the design of escape clauses. Adrian et al. (2024) normalize each of these components to have a mean of zero and a standard deviation of one. Subsequently, they average these normalized values to create a single, standardized quality index for each country-year observation, allowing for an easy to follow, yet simple analysis of how the robustness of a fiscal framework influences its impact on fiscal outcomes.

In our results we report the Impulse-Response functions using fiscal rules as the *shock* variable that generates the impulse:

$$\widehat{IR}(t,h) = \beta_h, \qquad h = 0,1,\dots,H-1. \tag{4}$$

Where the statistic above is defined for two regimes, the first one at 75th percentile of the rule-quality statistics and the second one at 25th percentile, such that we have $\widehat{IR}(t,h)^{low-qualit}$ and $\widehat{IR}(t,h)^{high-quality}$, governed by switching function with a state parameter $\gamma = 0.5$.

3. Data

We employ data on fiscal rule implementation from the IMF Fiscal Rules Dataset (Alonso et al., 2025), the fiscal rule quality indicator constructed by Adrian et al. (2024), and the debt-to-GDP ratio and real GDP growth rate, both obtained from the World Economic Outlook. The sample covers the period 2000–2024 and includes 89 countries (see the list of country names in Table A1 of the Appendix) for which the average fiscal rule quality indicator, and the idiosyncratic indicators for debt, expenditure and budget, are available from Adrian et al. (2024)

Table 1 presents the summary statistics for the variables used in the analysis. The dependent variable, economic growth (Growth), averages approximately 3.3% across the panel, but exhibits considerable variation, with a standard deviation of 5.2 and an interquartile range from 1.3% to 5.5%, indicating substantial heterogeneity in growth performance.

The primary explanatory variable, the fiscal rule indicator, has a mean value of 0.73, implying that a fiscal rule was in place for about 73% of the country-year pairs in the sample. The fiscal rule quality index averages 0.47, with an interquartile range between –0.60 (low quality) and 1.25 (high quality). The full distribution of this quality indicator is illustrated in Figure 1. The 25th

and 95th percentiles are used to identify the low- and high-quality fiscal rule states employed in our main regressions.

The control variable also displays significant heterogeneity. On average, government debt-to-GDP ratio (debt-to-GDP) is 54.45%, though this figure masks a wide distribution, with some countries having debt levels exceeding 69% of their GDP and other bellow 32%.

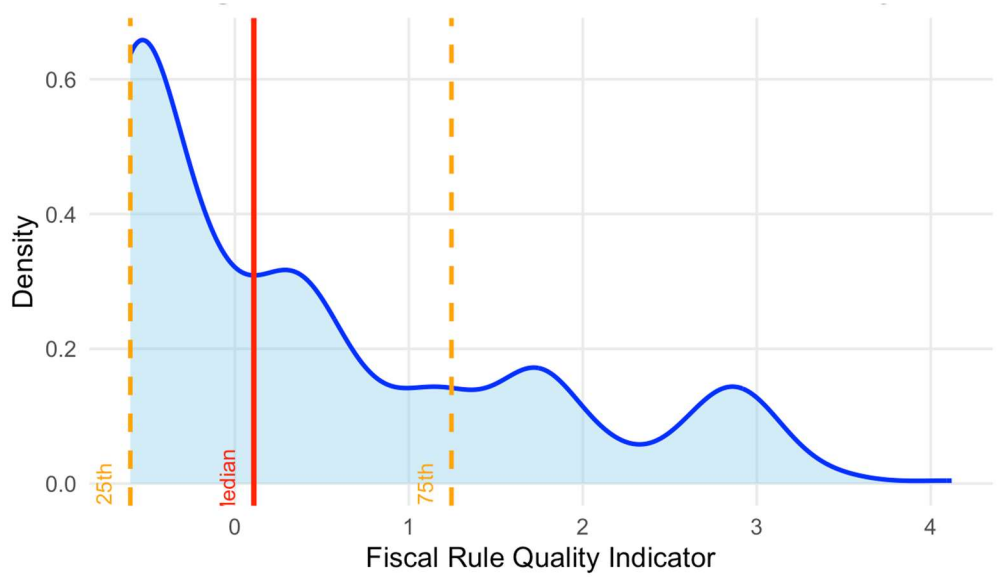
Overall, the statistics indicate substantial cross-country and temporal variation across all variables, making the dataset well-suited for econometric analysis.

Table 1. Summary Statistics

Variable	*Mean*	*Median*	*SD*	*P25*	*P75*
Growth	3.312	3.323	5.199	1.343	5.555
Fiscal Rule	0.727	1	0.445	0	1
Debt-to-GDP	54.446	46.621	35.151	31.576	68.592
Rule Quality	0.473	0.109	1.159	-0.601	1.245

Note: Growth is the annual real GDP growth rate. Rule Quality is the standardized fiscal rule quality index. Debt-to-GDP is the government gross debt as a percentage of GDP. Fiscal Rule is a binary variable that takes the value of one for pair of countries and years with a fiscal rule in operation.

Figure 1. Fiscal Rule Quality Indicator of Countries in our sample



Note: The figure shows the distribution of the fiscal rule quality indicator from 2000 to 2024 of the countries in our sample as constructed by Adrian et al. (2024).

4. Results

4.1. Main Results

Figure 2 presents our main results, showing the local projections with a five-year horizon from our panel model with country fixed effects described in equations 1 to 4, which also includes the debt-to-GDP ratio as a control variable. More detailed results including t-test for significance of the coefficients at each horizon are presented in Table 2.

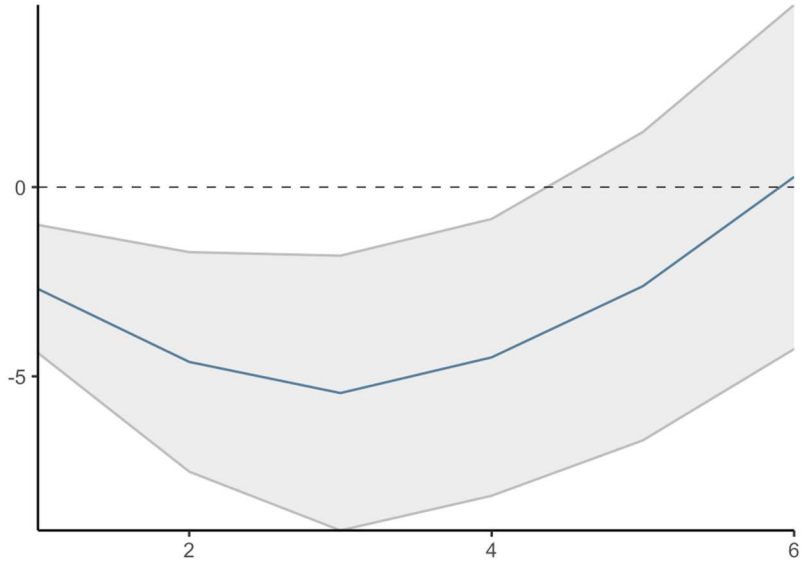
The figure consists of two panels. Panel A depicts local projections of GDP growth following the implementation of fiscal rules, with the fiscal rule quality indicator set at a low level (25th percentile of the standardized indicator- see Figure 1 for the level of the quality indicator). As shown, the effect is negative during the five years following the enactment of the rule (the horizontal axis starts at 1 when the fiscal rule is implemented), indicating that economic growth is reduced for the subsequent three years, where the effect is also significant at 95% level of confidence.

In contrast, Panel B presents the same projections but sets the quality indicator at the 75th percentile. In this case, the effect is positive and statistically significant for up to four years after the fiscal rule is implemented, highlighting the important role of rule quality in shaping growth prospects.

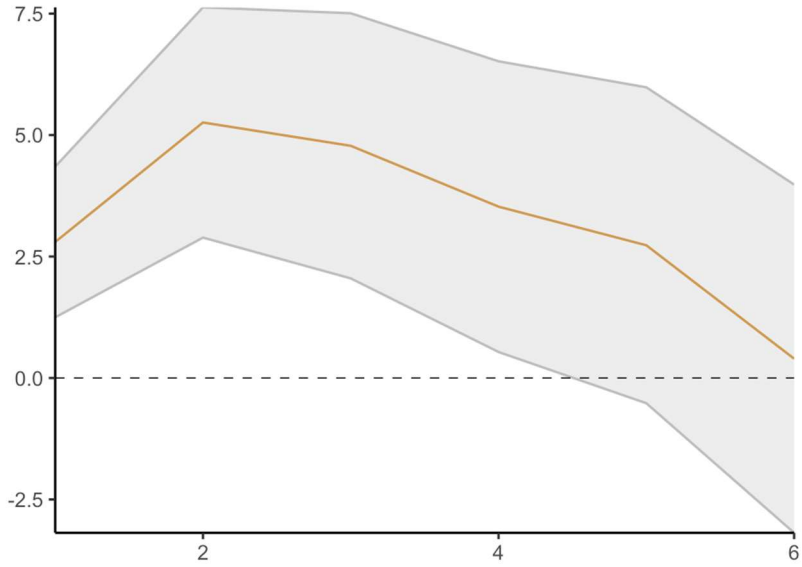
Table 2 presents a more detailed view of our results for different forecast horizons. The table confirms the significance of the fiscal rule variable in both states — the low-quality state (S1) and the high-quality state (S2) — from year 1 to year 4, at the 95% confidence level. As observed, the sign of the effect is consistently opposite across the two regimes: negative in the low-quality state and positive in the high-quality state. The positive effect associated with high-quality rules tends to be somewhat larger than the corresponding negative effect, at least during the first three years. Beyond that point, the magnitudes of the effects become broadly similar.

Figure 2. Response of growth to a rule implementation

Panel A. low quality regime at 25th percentile of quality



Panel B. High quality regime at 75th percentile of quality



Note: Impulse response functions (IRFs) are estimated using local projections, with quality serving as the switching variable, based on the model presented in Equations (1)–(4). The horizontal axis represents forecasting horizons (in years), while the vertical axis shows the estimated effects. Shaded areas denote 95% confidence intervals, with standard errors corrected using the Newey–West procedure. Panel A shows the results for a low-quality state, while Panel B shows the results for a high-quality regime according to the distribution of quality (see Figure 1).

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Table 2. Results Summary

	Estimate	Std. Error	t value	Pr(>|t|)
Year 1 (Contemporaneous Effect)				
Fiscal Rule Low Quality (S1)	-2.691	0.863	-3.119	0.002
Fiscal Rule High Quality (S2)	2.799	0.791	3.538	0.000
Debt S1	-0.367	0.081	-4.516	0.000
Debt Lag S1	0.398	0.079	5.013	0.000
Debt S2	0.058	0.093	0.625	0.532
Debt Lag S2	-0.088	0.092	-0.955	0.340
Year 2 (One-Year-Ahead Effect)				
Fiscal Rule Low Quality (S1)	-4.619	1.480	-3.121	0.002
Fiscal Rule High Quality (S2)	5.259	1.209	4.350	0.000
Debt S1	0.310	0.072	4.296	0.000
Debt Lag S1	-0.216	0.074	-2.914	0.004
Debt S2	-0.199	0.087	-2.276	0.023
Debt Lag S2	0.177	0.089	1.993	0.046
Year 3 (Two Years Ahead Effect)				
Fiscal Rule Low Quality (S1)	-5.442	1.852	-2.939	0.003
Fiscal Rule High Quality (S2)	4.779	1.392	3.433	0.001
Debt S1	0.211	0.063	3.344	0.001
Debt Lag S1	-0.099	0.062	-1.605	0.109
Debt S2	-0.011	0.094	-0.114	0.909
Debt Lag S2	0.007	0.092	0.073	0.942
Year 4 (Three Years Ahead Effect)				
Fiscal Rule Low Quality (S1)	-4.498	1.866	-2.410	0.016
Fiscal Rule High Quality (S2)	3.527	1.526	2.311	0.021
Debt S1	0.217	0.070	3.118	0.002
Debt Lag S1	-0.113	0.066	-1.722	0.085
Debt S2	-0.012	0.097	-0.119	0.906
Debt Lag S2	0.047	0.093	0.506	0.613
Year 5 (Four Years Ahead Effect)				
Fiscal Rule Low Quality (S1)	-2.617	2.079	-1.259	0.208
Fiscal Rule High Quality (S2)	2.732	1.659	1.647	0.100
Debt S1	0.126	0.071	1.771	0.077
Debt Lag S1	-0.033	0.067	-0.491	0.624
Debt S2	0.071	0.096	0.740	0.459
Debt Lag S2	-0.013	0.093	-0.145	0.885

Note: The table reports our local projections results using the fiscal rule quality indicator as the switching variable. Effects are displayed at different forecasting horizons, from year 1to 5. Standard errors were computed using the Newey–West variance-covariance matrix with heteroskedasticity and autocorrelation correction.

The effect of the debt variable, measured as the debt-to-GDP ratio, is also significant, particularly in the low-quality state. In the high-quality state, the debt variable is significant only at the one-year-ahead forecast horizon. Regarding the direction of these effects, and consistent with the cyclical nature of economic growth, the signs alternate: the contemporaneous debt-to-GDP ratio exerts a positive effect on growth, followed by a negative effect from its first lag, which is smaller in magnitude. In the case of the one-year horizon, however, this pattern is reversed. We caution against overinterpreting these results, as the debt-to-GDP ratio is itself directly influenced by GDP (and therefore by its growth)

Overall, our results highlight a contrasting effect of fiscal rules that is strongly mediated by their quality. When rule quality is high — characterized by a solid legal foundation, a well-structured procedural framework, and political stability — the implementation of a fiscal rule is generally followed by a rebound in economic growth, which reaches its peak approximately three years after implementation. Conversely, when rule quality is low — for example, when rules contain broad escape clauses that hinder compliance, particularly during economic downturns — the effect of implementation in subsequent years (especially between one and two years ahead, when the effect peaks) is negative.

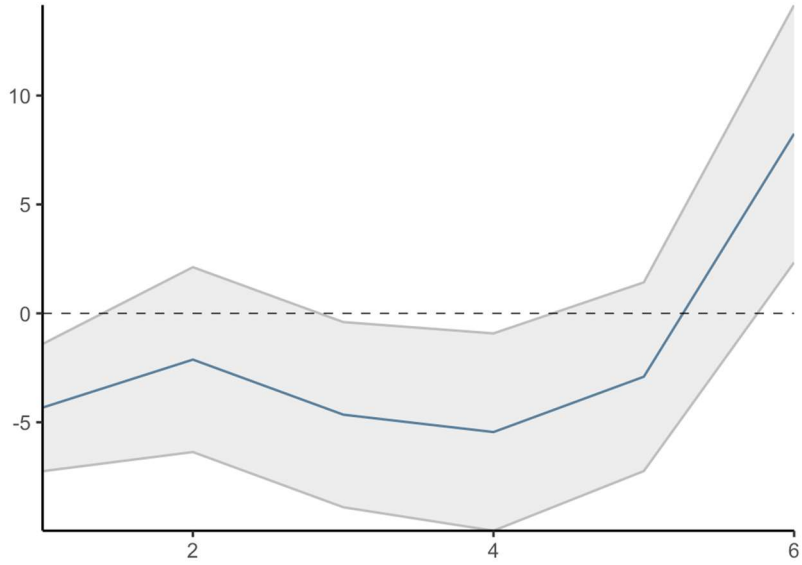
4.2. Evaluating the effects of distinct rules

In this section, we evaluate the effects of different types of fiscal rules. To this end, we estimate our panel local projections model using information for three categories of rules: budget rules, debt rules, and expenditure rules. Figures 3 to 5, constructed in the same manner as Figure 2, present the results for these three sets of rules, respectively. Each figure contains two panels corresponding to the two values of the switching-state variable: low-quality (S1) and high-quality (S2), which are defined specifically for each type of rule. For these analyses, confidence intervals are set at 80% coverage due to the smaller number of observations across each implementation.

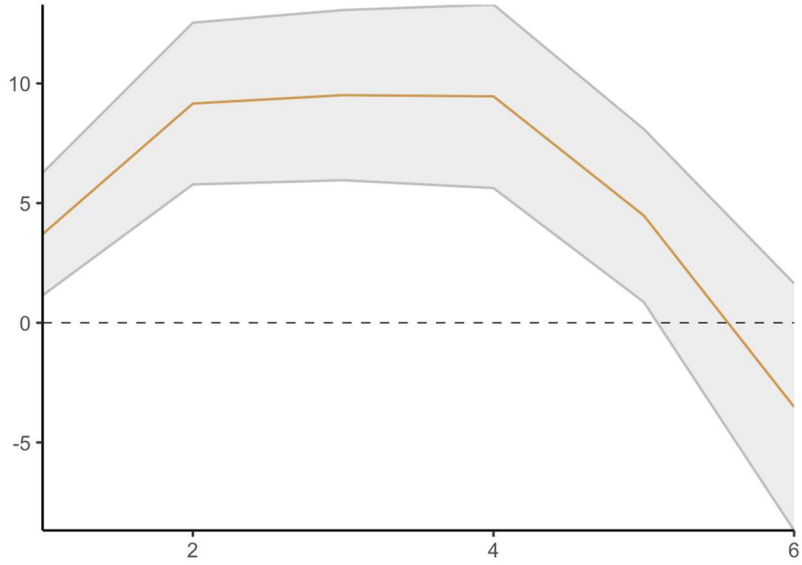
Overall, the results in Figure 3, corresponding to budget balance rules, align closely with the general pattern documented in Figure 2. When budget rules are implemented under a low-quality framework, the effects are primarily negative and statistically significant at the 80% level for up to three years after implementation. In contrast, when a high-quality fiscal framework accompanies the implementation, the effects are positive, persist up to five years, and are significant at the conventional 95% confidence level.

Figure 3. Response of growth to a budged-rule (BBR) implementation

Panel A. low quality regime at 25th percentile of quality



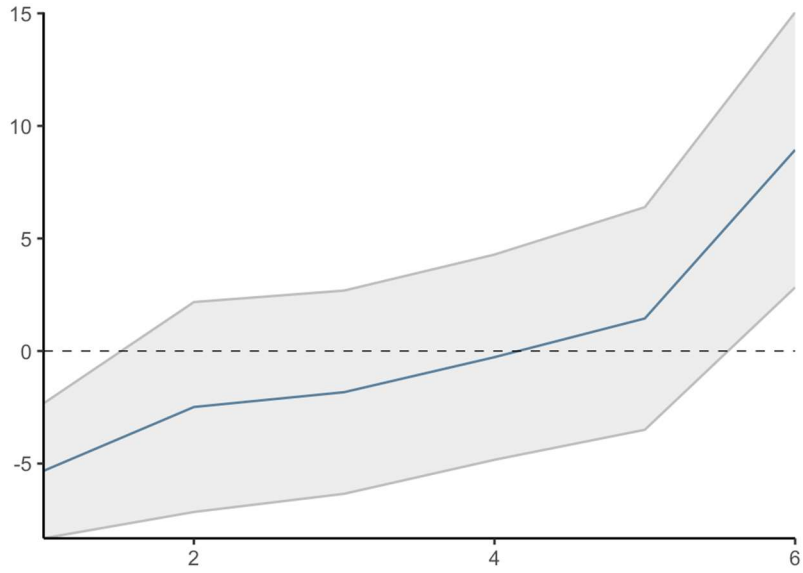
Panel B. High quality regime at 75th percentile of quality



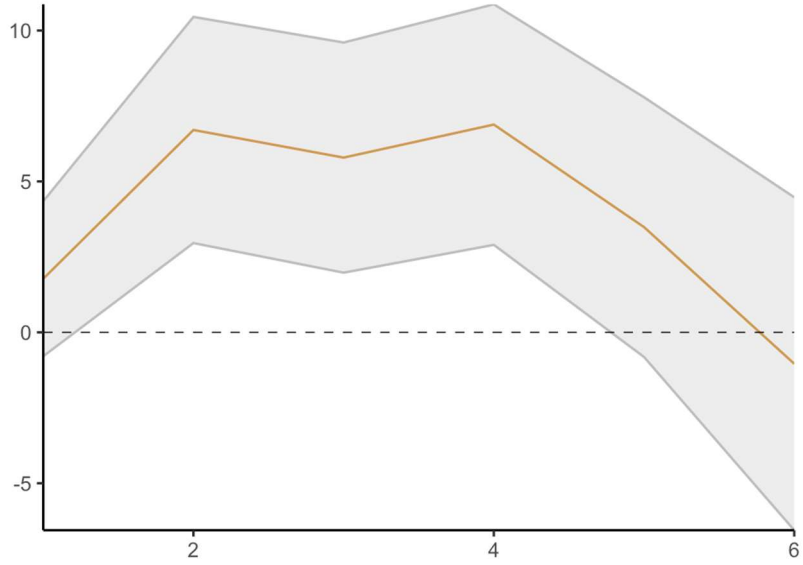
Note: Impulse response functions (IRFs) are estimated using local projections, with quality serving as the switching variable, based on the model presented in Equations (1)– (4). The horizontal axis represents forecasting horizons (in years), while the vertical axis shows the estimated effects. Shaded areas denote 80% confidence intervals, with standard errors corrected using the Newey–West procedure. Panel A shows the results for a low-quality state, while Panel B shows the results for a high-quality regime according to the distribution of quality.

Figure 4. Response of growth to a debt-rule (DR) implementation

Panel A. low quality regime at 25th percentile of quality



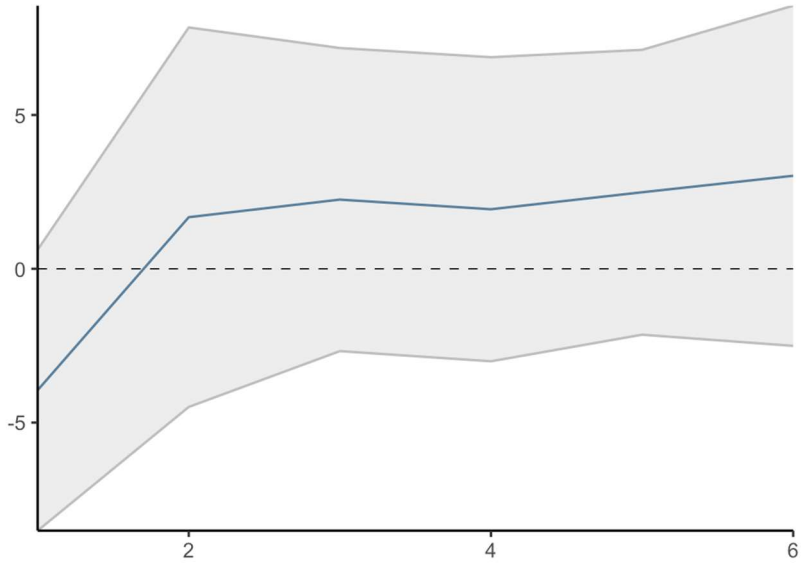
Panel B. High quality regime at 75th percentile of quality



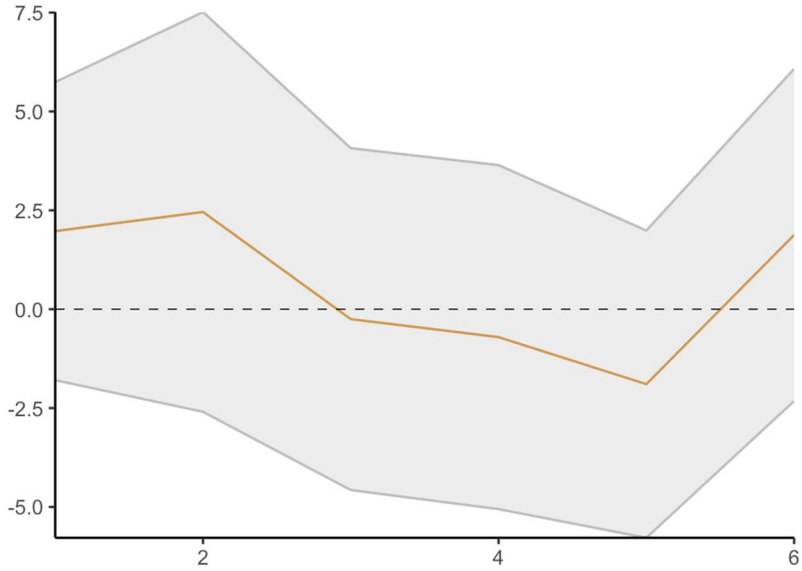
Note: Impulse response functions (IRFs) are estimated using local projections, with quality serving as the switching variable, based on the model presented in Equations (1)–(4). The horizontal axis represents forecasting horizons (in years), while the vertical axis shows the estimated effects. Shaded areas denote 80% confidence intervals, with standard errors corrected using the Newey–West procedure. Panel A shows the results for a low-quality state, while Panel B shows the results for a high-quality regime according to the distribution of quality.

Figure 5. Response of growth to a expenditure-rule (ER) implementation

Panel A. low quality regime at 25th percentile of quality



Panel B. High quality regime at 75th percentile of quality



Note: Impulse response functions (IRFs) are estimated using local projections, with quality serving as the switching variable, based on the model presented in Equations (1)–(4). The horizontal axis represents forecasting horizons (in years), while the vertical axis shows the estimated effects. Shaded areas denote 80% confidence intervals, with standard errors corrected using the Newey–West procedure. Panel A shows the results for a low-quality state, while Panel B shows the results for a high-quality regime according to the distribution of quality.

For debt rules (Figure 4), we observe the same asymmetry: positive effects in high-quality states and negative effects in low-quality states. However, the negative effects under low-quality conditions are short-lived and lose statistical significance after the first year. Regarding expenditure rules (Figure 5), the asymmetry is preserved, but the effects are not statistically significant, even at the 80% confidence level.

All in all, budget balance and debt rules exhibit patterns consistent with the asymmetric effects documented in the previous sections, whereas expenditure rules show weaker and less robust growth effects.

5. Conclusions

This study provides new empirical evidence on the relationship between fiscal rules and economic growth by explicitly considering the mediating role of rule quality. To our knowledge, this is the first study to quantify the short- and medium-term effects of fiscal rules on growth while distinguishing between high- and low-quality states. Using a state-dependent local projection approach with country fixed effects, we show that the impact of fiscal rules on growth is not uniform but strongly conditioned by their quality. Our proposed methodological framework allows us to capture the dynamic nature of fiscal rules, offering a more complete understanding of how institutional strength and design features translate into growth perspectives.

Our empirical results reveal a clear asymmetry: while the implementation of rules in low-quality fiscal framework tend to undermine subsequent economic growth, high-quality environments are associated with positive and persistent effects, particularly within the first three years following implementation. This pattern emphasizes the importance of institutional and procedural robustness—such as a strong legal foundation, credible enforcement mechanisms, and stable political environments—in ensuring that the implementation of fiscal rules promotes rather than hinders economic performance. Conversely, rules characterized by weak enforcement, vague escape clauses, or limited transparency may generate uncertainty and constrain public investment, ultimately dampening growth.

Our analysis of distinct fiscal rules highlights that the asymmetric effects of fiscal rules on economic growth are robust across rule types. Budget balance and debt rules exhibit clear negative impacts under low-quality frameworks and positive, persistent effects under high-quality frameworks, whereas expenditure rules show weaker and statistically non-significant effects.

These findings contribute to the broader debate on the effectiveness of fiscal frameworks by demonstrating that the design and institutional quality of fiscal rules are critical determinants of their economic impact in the economy as a whole. The results suggest that policy discussions should move beyond the binary question of whether fiscal rules are in place and instead focus on how they are designed and embedded within broader institutional contexts. In this sense, fiscal rule quality functions as an

enabling mechanism that transforms formal constraints into credible commitments, thereby reinforcing the sustainability of public finances while supporting growth.

From a policy perspective, the implications are far-reaching. Countries aiming to strengthen their fiscal frameworks should prioritize the creation of rules that are both credible and adaptable, supported by transparent monitoring institutions and clear enforcement provisions. The balance between commitment and flexibility remains central: effective fiscal rules should ensure discipline without unduly constraining countercyclical policy space. By integrating quality considerations into rule design, policymakers can foster institutional environments that safeguard fiscal sustainability and simultaneously enhance the conditions for sustained economic growth. Our findings also reinforce the importance of considering the type of fiscal rule when designing fiscal frameworks.

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Appendix

Table A1. Country List

Argentina	Armenia	Australia
Austria	Azerbaijan	Belgium
Benin	Botswana	Brazil
Bulgaria	Burkina Faso	Burundi
Cabo Verde	Cambodia	Cameroon
Canada	Central African Republic	Chad
Chile	Colombia	Costa Rica
Croatia	Cyprus	Czech Republic
Cote d Ivoire	Denmark	Ecuador
Equatorial Guinea	Estonia	Finland
France	Gabon	Georgia
Germany	Greece	Grenada
Hungary	Iceland	India
Indonesia	Iran	Ireland
Israel	Italy	Jamaica
Japan	Kazakhstan	Kenya
Latvia	Lithuania	Malaysia
Maldives	Mali	Mauritius
Mexico	Mongolia	Namibia
Netherlands	New Zealand	Niger
Nigeria	Norway	Pakistan
Panama	Paraguay	Peru
Poland	Portugal	Republic Of Congo
Romania	Russia	Rwanda
Senegal	Slovak Republic	Slovenia
Spain	Sri Lanka	St. Lucia
Sweden	Switzerland	Tanzania
Thailand	The Bahamas	Togo
Uganda	United Kingdom	United States
Uruguay	Vietnam	

Note: The table shows the countries included in our sample.