

Choosing the European fiscal rule



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We evaluate the properties of two fiscal rules – the structural balance rule and the expenditure growth rule – using a DSGE model. Having just the expenditure growth rule tends to yield more stable macroeconomic outcomes, but more volatile public finances, as compared to having only the structural balance rule. Much of the quantitative differences in relative volatilities can be accounted for by the modifications of the public expenditure definition in the expenditure growth rule, e.g., the removal of debt service payments. Strong-enough debt correction for either fiscal rule contains public debt volatility at little expense to macroeconomic stability in the long run. The households' welfare gain from having the expenditure growth rule instead of the structural balance rule is 4–5%.

Highlights:

- The expenditure growth rule facilitates economic stability but raises public debt volatility.
- An effective way to reduce public debt volatility is raising the strength of the public debt correction term.
- Higher public debt levels make the economy more volatile.
- The golden rule helps protect public investment but incentivizes the governments to misclassify its expenditure.
- After a build-up of debt, the expenditure growth rule tends to postpone fiscal consolidation to future periods.
- Accounting for interest payments in fiscal rules strengthens the co-movement between monetary and fiscal policies but may turn vicious in typical business-cycle frequencies.
- The household welfare is 4–5% higher under the expenditure growth rule than under the structural balance rule.

The European Union (EU) fiscal framework has become overly complex

In addition, the EU fiscal framework has failed to reduce public debt and avoid fiscal procyclicality (European Fiscal Board, 2019).

- The EU fiscal framework has been subject to several reforms, each adding new provisions.
- Currently, there are two operational fiscal rules – the structural balance and the expenditure growth rule.
- The structural balance rule sets limits to the public deficit-to-GDP ratio, adjusted by the output gap.
- The expenditure growth rule stipulates that the public expenditure growth should be in line with long-term potential output growth; public expenditure is subject to exclusion of items out of the control of the government, such as interest payments.
- The two fiscal rules may be in conflict with each other – one rule may allow for more spending, while the other may suggest fiscal consolidation.
- Having two fiscal rules gives rise to the possibility of cherry-picking, a state in which a member state can choose the least stringent fiscal rule.

These issues have triggered discussions on revisiting the EU fiscal framework and simplifying the rules, suggesting having just one operational rule. The literature has identified that the expenditure growth rule may be the preferred fiscal rule (Benassy-Quere et al., 2018; Claeys et al., 2016; Darvas et al., 2018; German Council of Economic Experts, 2017; European Fiscal Board, 2019).

- The structural balance measure can be subject to large ex post revisions which may lead to misguided policy advice (Kamps et al., 2014; Coibion et al., 2017; Kamps and Leiner-Killinger, 2019).
- On the contrary, the expenditure growth rule
 - helps creating buffers in good times, thus allowing automatic stabilizers to operate (Eyraud et al., 2018);
 - improves fiscal discipline, as it is most directly connected to instruments that the policymakers effectively control (Cordes et al., 2015);
 - raises compliance rate (IMF, 2014);
 - is easier to monitor, predict and communicate.

It is easier to communicate to the public that the government expenditure will grow in line with the long-term potential growth rate than explain the output gap and its revisions – the construct entering the structural balance rule.

Yet, a downside of the expenditure growth rule is its dependence on the initial level of public expenditure and its weaker relation to debt stability (among others, due to expenditure exclusions); consequently, having an explicit fiscal medium-term anchor, that is, a government debt target, is recommended (Symansky et al., 2008).

Therefore, several proposals (Benassy-Quere et al., 2018; Claeys et al., 2016; Darvas et al., 2018; German Council of Economic Experts, 2017; European Fiscal Board, 2019) suggest an EU fiscal framework based on a reference value for public debt with an operational annual limit for the public expenditure growth. To improve the quality of public finances and safeguard public investment, the European Fiscal Board (2019) proposes a golden rule by excluding growth-enhancing expenditure from fiscal rules.

We quantitatively examine alternative fiscal rules and their impact on public finances and macroeconomy

For this purpose, in [Bušs, Grüning and Tkačevs \(2021\)](#) we employ a rich New Keynesian small open economy fiscal model (the closest study to ours is Andrlle et al., 2015).

- We compare the structural balance and the expenditure growth rule.
- We pay attention to detailed specifications of fiscal rules.
- We use both deterministic and stochastic simulations.
- Both rules are complemented by a debt correction term to ensure debt stabilization.
- We consider the golden rule version of both fiscal rules.
- We consider both a version of a small open economy in a monetary union and a small open economy with sovereign monetary policy.
- We assess household welfare from having alternative fiscal rules.

The selected key findings are as follows.

The expenditure growth rule facilitates economic stability but raises public debt volatility

Here we stochastically simulate the model economy for a long time (10 thousand quarters) and observe volatility of the economic variables under the alternative fiscal rules (Table 1).

Table 1. Standard deviation of macroeconomic variables for the expenditure growth rule relative to the structural balance rule

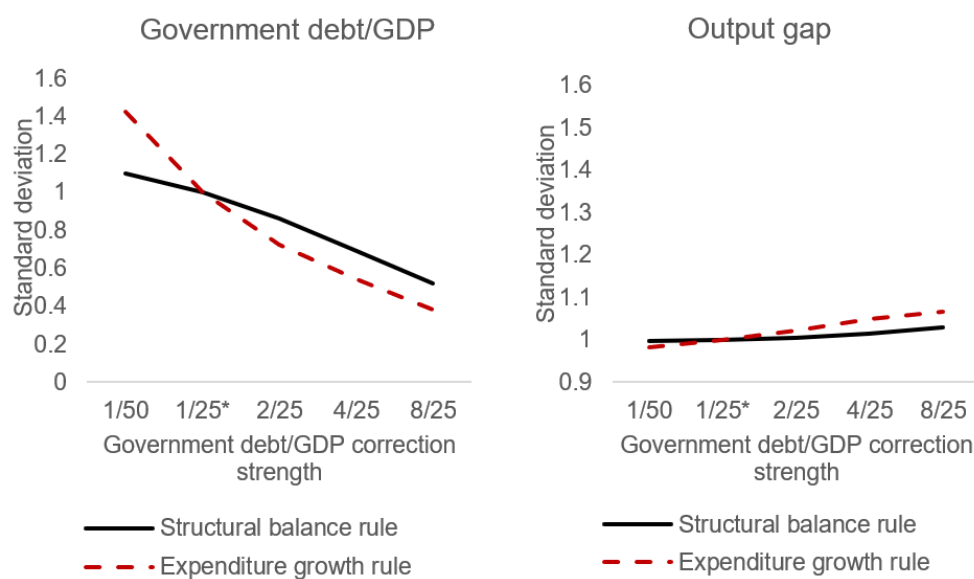
	Benchmark [1]	With interest payments [2]	With constant interest rate in interest payments [3]
Government debt/GDP	1.23	0.99	1.07
Unemployment	0.95	0.96	0.96
GDP	0.98	0.99	0.98
Private consumption	0.94	0.95	0.95
Consumption of restricted households	0.87	0.89	0.88
Government investment	0.92	0.94	0.93
Inflation	0.99	0.99	0.99

Notes: Each number is a relative standard deviation of a particular variable for the expenditure growth rule, compared to the structural balance rule. A number below unity means that the standard deviation of a series is smaller for the expenditure growth rule, and vice versa. GDP, consumption, investment and inflation are in annual growth terms. Source: [Buřs, Grüning and Tkačevs \(2021\)](#).

- The expenditure growth rule tends to yield slightly more stable macroeconomic variables, compared to the structural balance rule.
 - This is because the expenditure growth rule does not account for revenue windfalls/shortfalls and excludes expenditure items out of control of the government such as interest payments.
 - On top of our quantitative results, the expenditure growth rule is more robust to data revisions that play a crucial role in the fiscal policy stance during recessions.
- Yet, the expenditure growth rule yields considerably more volatile public finances than the structural balance rule.
 - The removal of debt service payments from the modified expenditure is the main source of excess public debt volatility under the expenditure growth rule.
- A way to at least partially account for debt service payments and thus to reduce public debt volatility under the expenditure growth rule is to include them using a fixed, long-term rate of interest (column 3 of Table 1).

An effective way to reduce public debt volatility is raising the strength of the public debt correction term

An alternative to accounting for debt service payments in the expenditure growth rule is to strengthen the public debt correction term.

Figure 1. Government debt correction strength, and its effect on macroeconomic stability


Notes: The government debt/GDP correction strength in our benchmark calibration is set to 1/25th of the debt deviation from its target per year. Source: [Bušs, Grüning and Tkačevs \(2021\)](#).

- Having a strong-enough debt correction helps containing public debt volatility for either rule (Figure 1, left panel).
- This comes at a relatively low cost for the economy in the long run (Figure 1, right panel).
 - In the short run, a strong debt correction may imply considerable economic consequences but they average out over the business cycle.
- Having a debt-correction term in the expenditure growth rule is a must, as otherwise this fiscal rule does not ensure public debt convergence.
- A strong-enough debt correction term does not necessarily mean fiscal contraction, as it should be viewed holistically with the operational target in mind.
 - For example, if the expenditure growth rule suggests an increase of nominal government expenditure by 5 percent per annum but the debt correction term implies a reduction of nominal government expenditure by 2 percent per annum, this means the government may still raise its nominal expenditure by 3 percent per annum.

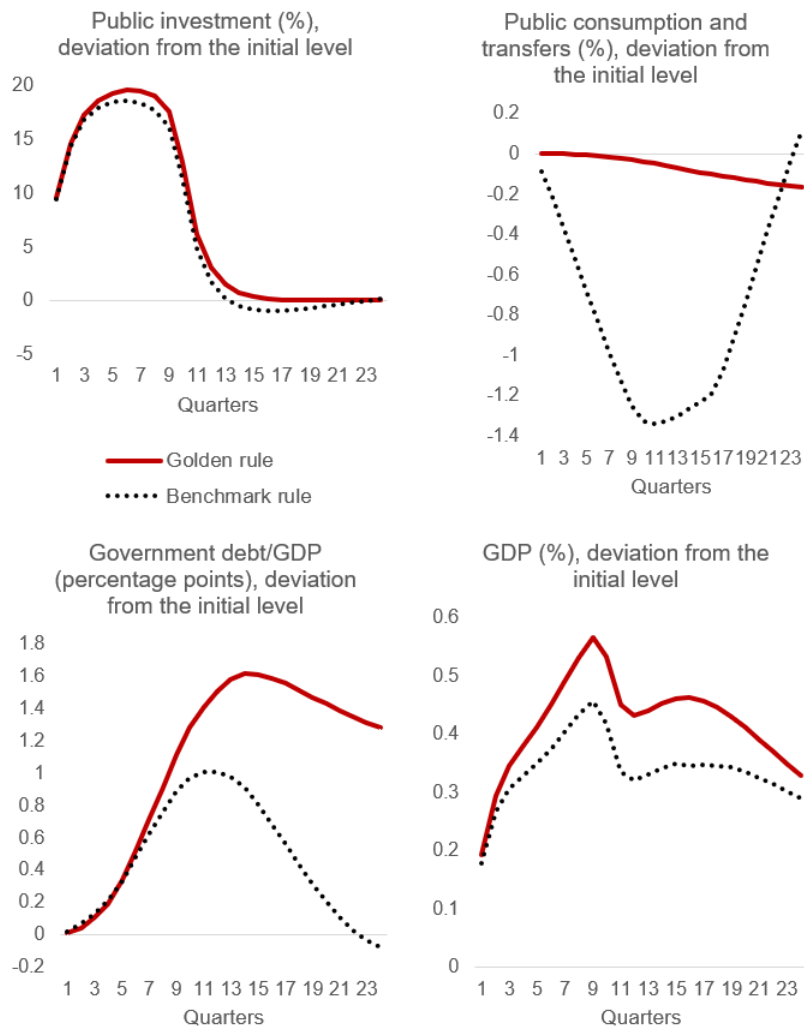
The golden rule helps protect public investment but incentivizes the governments to misclassify its expenditure

Several advanced economies have recently experienced a decline in public investment, which may have deteriorated the state of public infrastructure. Also, tackling the emerging issues related to climate change, digital transformation of the European economy, and post-Covid recovery would benefit from a boost in public investment. An exclusion of public investment from fiscal rules – the so-called *golden rule* – was proposed, among others, by the European Fiscal Board (2019).

In our [paper](#), we compare the golden rule version of both fiscal rules with their benchmark specification in a deterministic simulation of a persistent and sizable increase of public investment of up to 20%.

- The golden rule helps protect public investment and achieve higher growth outcomes during the period of a considerable and persistent boost in public investment (Figure 2).
- However, this comes at the cost of a higher public debt.
- Also, the differences between the golden rule and the benchmark rule are less remarkable for typical public investment shocks.
- Given that the golden rule incentivizes the government to misclassify public investment, the merit of using the golden rule on a permanent basis is not so evident.

Figure 2. The expenditure growth golden rule

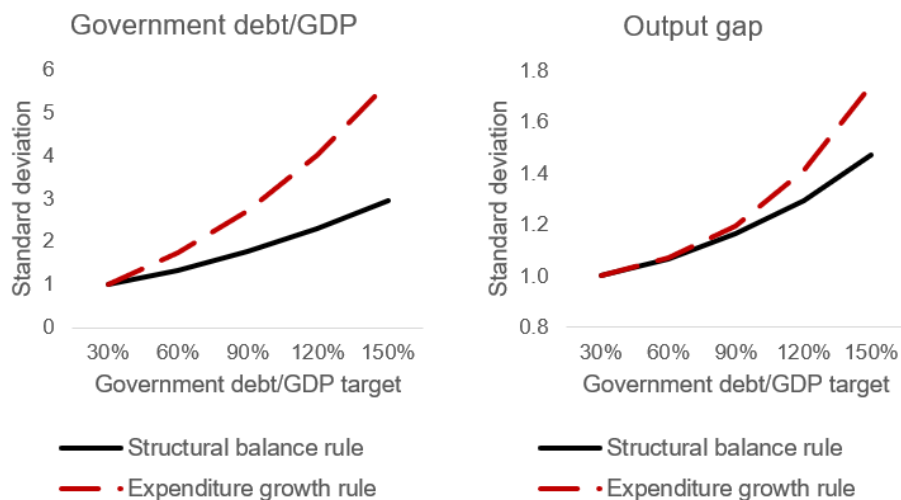


Source: [Bušs, Grüning and Tkačevs \(2021\)](#).

Higher public debt levels make the economy more volatile

- *Ceteris paribus*, the volatility of public debt increases with the public debt target (Figure 3, left panel).
 - This is due to shocks to the bond yield affecting a larger amount of debt as the stock of debt increases.
- The heightened debt volatility feeds into the real economy via the fiscal rules (Figure 3, right panel).
- The volatility slope is steeper under the expenditure growth rule mainly due to the exclusion of debt service payments.

Figure 3. Higher public debt levels raise economic volatility



Source: [Bušs, Grüning and Tkačevs \(2021\)](#).

See the rest of our findings and the details in the [paper](#). Some of our other findings are:

- After a build-up of debt, the expenditure growth rule tends to postpone fiscal consolidation to future periods, as compared to the structural balance rule
- Accounting for interest payments in a fiscal rule strengthens the co-movement between monetary and fiscal policies but may turn vicious in typical business-cycle frequencies
- The household welfare is 4-5% higher under the expenditure growth rule than under the structural balance rule

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